

PN-AAP-276
ISN 33394



SPECIAL SUPPLEMENT NUMBER 1

ISSN 0197-7393

**SHEEP: APPLIED AND BASIC
RESEARCH INFORMATION
PUBLISHED DURING 1979**

INTERNATIONAL GOAT AND SHEEP RESEARCH

EDITORIAL POLICY

International Goat And Sheep Research is an international quarterly publication dealing with original research in all aspects of the biology, management and technology of the goat and sheep. This includes the fields of anatomy, taxonomy, growth, systematics, physiology, reproduction, lactation, metabolism, genetics, infectious diseases, parasitic diseases, metabolic diseases, socio-economic and management principles, products (meat, milk, cheese, skin, mohair, wool, etc.) and technological applications including artificial insemination.

In addition to original research papers, **International Goat And Sheep Research** will have sections devoted to scientific reviews and applied technical bulletins. From time to time papers from significant symposia will be published.

EDITOR

Dr. David R. Lincicome
Box 634, Fort Valley Route
Seven Fountains, VA 22653 U.S.A.
Phone: (703) 459-4787 or 459-3964

ASSOCIATE EDITORS

Dr. Arthur Hoversland
National Institutes of Health
Bethesda, MD 20205 U.S.A.

Dr. Clair E. Terrill
USDA/ARS
Beltsville, MD 20705 U.S.A.

Dr. George F.W. Haenlein
University of Delaware
Newark, DE 19711 U.S.A.

EDITORIAL BOARD MEMBERS

- Dr. R.M. Acharya**, Central Sheep & Wool Research Institute, Via Jaipur (Rajasthan), India
Dr. Jess L. Ayers, P.O. Box 500, Los Olivos, California U.S.A.
Dr. R.L. Blackwell, Dept. of Animal & Range Sciences, Montana State University, Bozeman, Montana U.S.A.
Dr. I.E. Coop, Christchurch, New Zealand
Dr. S. Dovendra, Malaysian Agric. Research & Development Institute, Serdang, Selangor, Malaysia
Dr. John J. Doyle, U.S. Sheep Experimental Station, Dubois, Idaho U.S.A.
Dr. I. Fal, Dairy Production, Ministry of Agriculture, Tel Aviv, Israel
Dr. Warren C. Foote, Dept. of Biology, Utah State University, Logan, Utah U.S.A.
Dr. Miguel Gallina, Universidad Nacional Autonoma de Mexico, Polanco, Mexico
Dr. Christian Gall, Veterinary School, Hannover, West Germany
Dr. Lemuel Goode, Dept. of Animal Science, North Carolina State University, Raleigh, North Carolina U.S.A.
Dr. Tseno Hinkovski, Central Research Institute of Animal Breeding, Kostinbrod, Bulgaria
Dr. Peter Holst, Dept. of Agriculture, Condoblin, N.S.W., Australia
Dr. Pierre Morand-Fehr, Dept. of Animal Science, Institute National Agronomique, Paris, France
Dr. B.A. Rasmusen, Dept. of Animal Science, University of Illinois, Urbana, Illinois U.S.A.
Dr. Harland W. Renshaw, College of Veterinary Medicine, Texas A. & M. University, College Station, Texas U.S.A.
Dr. Knut Ronningen, Dept. of Animal Breeding & Genetics, Agricultural College, Uppsala, Sweden
Dr. Maurice Shelton, Texas A. & M. University, San Angelo, Texas U.S.A.
Dr. Nasrollah Seifidbakht, Dept. of Animal Science, College of Agriculture, Shiraz, Iran
Dr. Don F. Torell, Hopland Field Station, Hopland, California U.S.A.
Dr. Helen Newton Turner, Genetics Research Laboratories, North Ryde, N.S.W., Australia

SUBSCRIPTION AND PUBLICATION OFFICE

International Goat And Sheep Research (IGSR), PO Box 1808, Scottsdale, AZ 85252 U.S.A.
Phone: (602) 991-4628

(Official Publication of the International Goat Association)

SUBSCRIPTION AND MEMBERSHIP RATE:

\$47.00 (U.S. funds) per year (includes **individual person membership** in the International Goat Assn.)
\$95.00 (U.S. funds) per year (includes **institutional membership** in the International Goat Assn.)
\$44.00 (U.S. funds) per year (non-member subscription)
Send remittance to the **Subscription and Publication Office**. Make remittance payable in U.S. funds to "IGSR."

Back copies of each issue are available from Subscription and Publication Office:

- Vol. 1 No. 1 and No. 2 - \$7.50 (U.S. funds) each, postage paid.
- Vol. 1 No. 3 and after - \$11.50 (U.S. funds) each, postage paid.

Reprints of individual articles may be ordered from the **Printer** at the time corrected proof is returned to the **Editor**.

Manuscripts should be sent to the **Editor**. **Manuscripts** must be typewritten, double-spaced and in finished form. The original and two copies are required. "**Instructions to Authors**" - see inside back cover of this issue of IGSR. Complete information regarding **manuscripts** is available from the **Editor**.

International Goat and Sheep Research is published quarterly by **Dairy Goat Journal Publishing Company**, 14415 N. 73rd St., Scottsdale, AZ 85260 U.S.A. and is printed by **Allen Press, Inc.**, 1041 New Hampshire St., Lawrence, KS 66044 U.S.A.

© Copyright 1983 by Dairy Goat Journal Publishing Company.

Second Class mailing permit at Scottsdale, Arizona 85251 and additional mailing office.
ISSN 0197-7393

SPECIAL SUPPLEMENT NO. 1 PRINTED MAY 1983.

SUPPLEMENT NO. 1 to
INTERNATIONAL GOAT AND
SHEEP RESEARCH

***Sheep: Applied and Basic
Research Information
Published During 1979***

Prepared and edited
by
Dr. David R. Lincicome
Editor-in-Chief
International Goat and Sheep Research (IGSR)

© Copyright 1983
by Dairy Goat Journal Publishing Company
Scottsdale, Arizona

Library of Congress
Catalog Card Number: 83-71161

ISSN 0197-7393

This publication funded in part by the
United States Agency for International
Development, Washington, D.C.; American
Breeders Service, DeForest, Wis.; and
Winrock International, Morrilton, Ark.

PRINTED IN THE UNITED STATES OF AMERICA

ii

Sheep: Applied and Basic Research Information Published During 1979

DAVID RICHARD LINCICOME

Frogmoor House, Box 634, Fort Valley Route, Seven Fountains, Virginia 22653, USA

SUMMARY: The principal informational sources dealing with applied and basic research on the biology of sheep published during 1979 are alphabetically arranged according to the name of the senior author. Each source was described in indexing terms which were then arranged alphabetically to provide an entre to specific subject matter.

Several bibliographic tools were employed in harvesting this information: 1) Computer printouts from the National Agricultural Library, U.S. Department of Agriculture, Beltsville, Maryland, U.S.A.; 2) The weekly printouts of Current Contents (Agriculture, Biology and Environmental Sciences), Volumes 10 and 11 for 1979 and 1980, of the Institute for Scientific Information, Philadelphia, Pa. 19104, U.S.A.; and 3) The computer printout lists from the Automatic Subject Citation Alert (ASCA) of the Institute for Scientific Information.

More than 3350 literature citations were collected which provided more than 11,000 index terms for retrieval of specific information. This informational bank on sheep for the year 1979 should be useful to the professional and lay public interested in sheep production.

ZUSAMMENFASSUNG: Die hauptsächlichen Informationsquellen an der Biologie von Schafen in Grundlagenforschung und angewandter Forschung veröffentlicht im Jahre 1979 sind alphabetisch geordnet nach dem ersten Autor. Jede Quelle ist ausserdem im alphabetisch geordneten Index nach Sachgebieten aufgeführt. Diese Quellen stammen von (1) der landwirtschaftlichen Bundesbibliothek elektronischer Informationsdienst USDA Beltsville, Md., USA; (2) wöchentlich erscheinende Referatliste Current Contents Band 10 und 11, 1979 und 1980, Institut fuer wissenschaftliche Information, Philadelphia, Pa. 19104, USA; (3) elektronischer Informationsdienst ASCA desselben Instituts. Ueber 3350 Literaturstellen wurden zusammengestellt mit ueber 11,000 Sachindexstellen, die fuer Experten und allgemein von Interesse sein duerften.

RESÚMEN: Las principales fuentes de información concernientes con investigaciones básicas y aplicadas sobre la biología de los ovinos publicada en 1979 se ordeno alfabeticamente de acuerdo al apellido del autor principal. Cada fuente fue descrita en un indice en el cual los terminos fueron ordenados en forma alfabetica para proveer un matieral especifico de materias.

Varias herramientas bibliograficas fueron utilizadas para recolectar esta información: 1) Impresos de Computadora de la Biblioteca Nacional de Agricultura del Departamento de Agricultura de los Estados Unidos, Beltsville, Maryland; 2) La información semanal de "Current Contents" (Agricultura, Biología y Ciencias Medicambientales), Volumen 10 y 11 de 1979 y 1980 del Instituto de Información Científica, Filadelpia, Pensilvania 19104, U.S.A., y 3) Los impresos computarizados enlistados por el "Automatic Subject Citation Alert (ASCA) del Instituto de Información Científica.

Mas de 3350 citas bibliográficas se recolectaron que proveen mas de 11,000 palabras indice para recoleccion especifica. Este banco de información para ovinos del año de 1979 debe ser util para profesionistas y publico interesado en producción ovina.

Introduction

In the face of a coming world shortage of food and fibre there has been a renaissance in interest in small ruminant husbandry both in the United States and other countries (Lincicome, 1981). In view of this it seemed appropriate to organize informational sources on small ruminants with the hope that bringing together the more important references accompanied by an in depth index to the subject material, would facilitate dissemination of the results of research among not only professional animal scientists and especially among groups of those,

who, by virtue of their geographic location, do not have immediate access to literature searching services, but to the interested producer as well.

Thus this treatment of 1979 scientific literature on small ruminants is concerned with sheep.

Materials and Methods

Three sources have been utilized in compiling the 1979 literature on sheep. The first was provided by the Science and Education Administration Current Awareness Literature Service of the National Agricultural Library, U.S. Department of Agriculture, Beltsville, Maryland 20705, U.S.A. The second was by the Institute for Scientific Information's Current Contents (Agriculture, Biology and Environmental Sciences), Volumes 10 and 11 for 1979 and 1980. The third was by the Institute of Scientific Information's Automatic Subject Citation Alert (ASCA). The address for the Institute for Scientific Information is 3501 Market Street, University City Science Center, Philadelphia, PA 19104, U.S.A.

Index descriptors (or keywords) were prepared for each reference based upon either the title of the article or upon a summary of the paper appearing in the computer printouts from the National Agricultural Library. These index terms indicate the chief ideas embodied in each paper and provide a means of retrieval. Perusal of the alphabetically arranged index descriptors will provide clues to the research which has been reported on sheep for 1979.

The references are arranged alphabetically by senior author. In most instances the names of all authors are included, but in some the literature source banks supplied only the name of the senior author. Each reference is numbered to facilitate its identification in the subject section.

For convenience of ready recognition, the names of journals have been fully written out except in some instances where it was not feasible. The first page only of the article is cited.

Results

In the Reference Section (Section I) are listed alphabetically all the 1979 references to sheep. Since all material was published during 1979, the year of publication is omitted in each entry.

In the Subject Section (Section II), index descriptors or key words describing the research material in the references, are arranged alphabetically. The numbers associated with each key word refer to references in Section I.

Inspection of any specific subject of interest in Section II will provide an immediate overview of the category giving not only the number of references but a more detailed informational breakdown within the chosen subject area. Key words represent both pinpointed subjects as well as broader areas, e.g., angiotensin II vs. Physiology or Metabolism.

Section I: References

- | | | |
|---|---|--|
| A | <ol style="list-style-type: none"> 1. Abbott, G. M. Rugging of sheep with polyolefin fabrics—the benefits and economics. <i>Wool Technology and Sheep Breeding</i> 27 (2): 29. 2. Abbott, G. M. Benefits and economics of | <ol style="list-style-type: none"> the rugging of sheep with polyolefin fabrics. <i>World Textile Abstracts</i> 11: 3248. 3. Abd-el-Hafiz, G., El-Hommosi, F. F., and M. A. El-Alamy. Nutritional and physiological studies in sheep. 1. Effect of plane of nutrition and number of motile spermatozoa per insemination on fertil- |
|---|---|--|

- ity and lamb crop of Ossimi ewes. *Alexandria Journal of Agricultural Research* 27 (3): 553.
4. Abdo, M. S., Eltayeb, I. B., Elmanna, M. M., Eltayeb, F. A., and M. M. Ibrahim. Effects of prostaglandin, F-2 alpha on blood constituents and certain hormones in Najdi sheep. *Zentralblatt für Veterinärmedizin* 26 (9): 704.
 5. Abdullaev, K. A. Influence of some physico-chemical factors on *Chlamydia* of ovine abortion. *Byulleten Vsesoyuznogo Instituta Eksperimental'noi Veterinarii* 35: 25.
 6. Abe, A. Application of neutral detergent cellulase system to the detailed analysis of the changes in digestibility of orchard grass during growth. *Japanese Journal of Zootechnical Science* 50 (1): 28.
 7. Abraham, W. M., Januszkiewicz, A. J., Mingle, M., Welker, M., Wanner, A., and Sackner, M. A. The sensitivity of broncho provocation and tracheal mucous velocity in detecting airway irritation after ozone exposure in conscious sheep. *American Review of Respiratory Diseases* 119 (4, part 2): 198.
 8. Accardi, F., Leto, G., Giaccone, P., and M. L. Alicata. Non-extracted unkernelled olive-cake investigation on the chemical composition, the digestibility and the nutritive value with heavy lambs. *Zootechnica E Nutrizione Animale* 5 (1): 233.
 9. Acharya, R. M., and M. Mohan. Genetic considerations in crossbreeding for evolving new breeds of sheep—results of a crossbreeding experiment. *Indian Journal of Animal Genetics and Breeding* 1 (1): 37.
 10. Achenbach, C., Hauswirth, O., and R. Ziskoven. Kinetic model of the electrophysiological effects of tinofedrin of sheep purkinje fibers. *Journal of Molecular and Cellular Cardiology* 11 (supp. 1): 1.
 11. Acosta, J., Zamora, S., and M. A. Lopez. Influence of some technological processes on lucerne digestion by sheep—sites of digestion of dry matter, organic matter and energy. *Revista de Agroquímica y Tecnología de Alimentos* 19 (3): 401.
 12. and 13. Acritopoulou, S. Progesterone and LH concentrations in ewes after ICI 80996, an analogue of PGF2 alpha, at two different stages of the breeding season. *Theriogenology* 11 (6): 411.
 14. Adair, B. M., Curran, W. L., and J. B. McFerran. Light and electron microscope studies of the growth of ovine adenoviruses in primary lamb kidney cell cultures. *Veterinary Microbiology* 4 (4): 293.
 15. Adair, T. H., Thomson, P. D., and D. L. Traber. Gram negative sepsis in terminally injured sheep. In: Schumer, W., Spitzer, J. J., and B. E. Marshal. *Advances in Shock Research*, Vol. 2, Alan R. Liss Inc., New York.
 16. Adalsteinsson, S. The independent effects of live weight and body condition on fecundity and productivity of Icelandic ewes. *Animal Production* 28 (1): 13.
 17. Adalsteinsson, S., and T. Arnason. Experience with index selection in Icelandic sheep. Paper, 30th annual meeting, European Association for Animal Production, No. GS3.9.
 18. Adam, L., Aizinbud, E., Tadmor, A., and H. Schindler. Impedometric properties of genitalia tissue in ewes. *Refuah Veterinarith* 36 (2): 95.
 19. Adams, D. B. 1979. Local antibody responses and infection by *Trichostrongylus colubriformis* in sheep. Abstracts of papers at 23rd Conference of Australian Society for Parasitology, Leura, NSW, Australia, VI + 57 pp.
 20. Adams, J. M. Immunology of slow infections. In: Dick, G. *Immunological Aspects of Infectious Diseases*. University Park Press, Baltimore, Md.
 21. Adams, N. R. Altered response of cervical and vaginal epithelia to oestradiol benzoate in ewes after prolonged exposure to oestrogenic pasture. *Journal of Reproduction and Fertility* 56 (2): 611.
 22. Adams, N. R. Masculination of the external genitalia in ewes with clover disease. *Australian Veterinary Journal* 55 (1): 22.
 23. Adams, N. R. Depressed incidence of oestrus in ewes with clover disease at the beginning of the breeding season. *Australian Veterinary Journal* 55 (10): 481.
 24. Adams, N. R. Seasonal variation in the nature of cervical mucus response to oestradiol benzoate in normal and clover-affected ovariectomized ewes. *Biology of Reproduction* 21 (5): 1203.
 25. Adams, N. R., and B. Y. Tang. Changes in ovine cervical mucus in response to estrogen treatment. *Journal of Reproduction and Fertility* 57 (2): 261.
 26. Adams, T. E., and T. M. Nett. Interaction of GNRH with anterior pituitary. III. Role of divalent cations, microtubules, and microfilaments in the GNRH activated gonadotroph. *Biology of Reproduction* 21 (5): 1073.
 27. Adams, T. E., Wagner, T. O. F., Sawyer, H. R., and T. M. Nett. GNRH interaction with anterior pituitary. II. Cyclic AMP as an intracellular mediator in the GNRH activated gonadotroph. *Biology of Reproduction* 21 (3): 735.
 28. Adamson, P. B. Domestic sheep and the use of wool in the ancient near east. *Veterinary History* 1 (1): 26.

29. Addo, P. B. Bacteriology and pathology of corynebacterial diseases of cattle, sheep and goats in Nigeria. Dissertation Abstracts International 39B: 11: 5256.
30. Addo, P. B. Pathology and bacteriology of abortion in sheep experimentally infected with *Corynebacterium pseudotuberculosis*. Bulletin of Animal Health and Production in Africa 27 (4): 257.
31. Adekeye, J. D. Role of animals in human staphylococcosis in Nigeria. Dissertation Abstracts International 40B (4): 1522.
32. Adeyanju, S. A. Maize replacement value of fermented cassava in rations for sheep. Turrialba 29 (3): 203.
33. Adlan, A. M. An observation on staphylococcal infection of sheep in the Sudan. Bulletin of Animal Health and Production in Africa 27 (2): 155.
34. Adu, I. F., and E. A. Olaloku. A note on nutrition during late pregnancy in West African Dwarf sheep. Animal Production 28 (1): 123.
35. Adzvic, N. Milk production and duration of lactation in Piva ewes. Stocarstvo 33 (5/6): 163.
36. Agricultural Gazette of New South Wales. Some wool industry figures. Agricultural Gazette of New South Wales 90 (1): 14.
37. Agriculture, U.S. Department of. Blue-tongue bibliography. Hyattsville, Md. 20782, USA, Animal and Plant Health Inspection Service, 6505 Belcrest Rd., 53 pp.
38. Agriculture, Fisheries and Food, Ministry. Sheep dipping and spraying. Pinner, Middlesex HA5 2DT, UK, Maff Publications, 7 pp.
39. Agriculture, Western Australia Department. Erosion risks with high stocking rate on kojonup trial. Journal of Agriculture, Western Australia 20 (1): 24.
40. Ahmed, F. A., Pollott, G. E., and O. M. Mohamed. The performance of Watish lambs when fed different levels of energy and protein concentrate supplement to berseem grazing. Um Banein Livestock Research Bulletin No. 7, 11 pp.
41. Ahmed, O. M. M., and S. E. I. Adam. Toxicity of *Jatropha-Curcas* in sheep and goats. Research in Veterinary Science 27 (1): 89.
42. Ahmed, T., Januszkiwicz, A. J., Landa, J. F., Brown, A., Bondick, J., Sackner, M. A., Chapman, G. A., Kenny, P. J., and R. D. Fine. Effect of local radioactivity on tracheal mucous velocity of sheep. American Review of Respiratory Diseases 120 (3): 567.
43. Ainson, K., and E. Ainson. Histamine induced shifts in circulatory and tissue homeostasis of proteins and their causes. Eesti NSV Tead. Akad. Toim. Biol. 28 (2): 81.
44. Ainsworth, S. K., Brostoff, S., Sharbaugh, R. J., and C. T. Fitts. Induction of experimental allergic encephalomyelitis in sheep with purified bovine basic protein and adjuvant. Pathology 11 (3): 457.
45. Aitchison, G. U. Method for the measurement of the gingival sulcus of sheep. Research in Veterinary Science 27 (3): 381.
46. Aitchison, G. U., and J. A. Spence. A morphometric method for quantifying the trabecular bone in sheep vertebrae. Medical Laboratory Science 36 (3): 269.
47. Ajeani, Y. J., Owens, F. N., Holbert, D., and K. B. Poling. Whey-grown yeast as a protein source for lambs. Oklahoma Agricultural Experiment Station Miscellaneous Publication 104: 201.
48. Akerejola, O. O., Van Veen, T. W. S., and C. O. Njoku. Ovine and caprine diseases in Nigeria: a review of economic losses. Bulletin of Animal Health and Production in Africa 27 (1): 65.
49. Akhmedov, M. M., Amaev, K. G., Salikhov, Y. S., and M. P. Makhmudov. Epizootiology of leptospirosis of animals. Veterinariya 0 (1): 42.
50. Akhmetshiev, A. S. Growth and development of inbred lambs. Ovtsevodstvo, No. 5: 22.
51. Akhtar, M. H., and T. S. Foster. Comparative in vitro metabolism of tetrachlorvinphos by the soluble fraction (10500 g) from sheep, pig and cow liver homogenates. Journal of Agricultural and Food Chemistry 27 (1): 113.
52. Al-Azzawi, I. I., Alwash, A. H., Farhan, S. M. A., and A. R. Al-Rawi. Use of broiler excretion in fattening Awassi lambs. Mesopotamia Journal of Agriculture 14 (1): 51.
53. Al-Bagdadi, F., and C. Seger. The ultrastructure of cytoplasmic and intronuclear structures in plasma cells in ovine hemalymph nodes. Anatomical Record 193 (3): 468.
54. Alderman, G. Cattle, sheep: experience of the metabolisable energy system. Veterinary Record 104 (18): 403.
55. Aldini, A., Bucci, G., Garasto, G., and A. Luppi. Diffusion of brucellosis, toxoplasmosis and particularly hydatidosis among shepherds' families in Ferrara province. Igiene Moderna 72 (3): 239.
56. Aleksandrov, I. D. Glucocorticoids in veterinary medicine. Veterinariya No. 7: 63.
57. Alexander, G., and D. Stevens. Discrimination of colours and grey shades by Merino ewes-tests using coloured lambs. Applied Animal Ethology 5 (3): 215.

58. Alfranca, I. S. Improvement of the reproductive characters in the "Rasa Aragonesa" sheep breed crossed by Romanov. *Zootechinia* 28 (1-3): 9.
59. Ali, C. S., and A. N. Sorensen. Effect of level of urea-N on its utilization in alkali-treated wheat straw in pelleted rations by sheep. *Acta Agriculturae Scandinavica* 29 (1): 17.
60. Ali, M. H., Ranjhan, S. K., and N. N. Pathak. Dry-matter intake and nutrient digestibility in Muzaffarnagari lambs fed diets with varying concentrate-roughage rations. *Indian Journal of Animal Sciences* 49 (1): 48.
61. Ali, M. H., Ranjhan, S. K., and N. N. Pathak. Effect of different dietary energy levels supplied through various roughage to concentrate ratios on the mutton production and carcass quality of intensively fed Muzaffarnagari lambs. *Indian Journal of Animal Sciences* 39 (9): 717.
62. Ali, S. A., Jabir, M. H., and K. S. Singh. Serum-protein changes in lambs given *Dictyocaulus filaria* vaccine. *Indian Journal of Animal Sciences* 49 (5): 373.
63. Ali, S. A., Kadhim, J. K., and K. S. Singh. Effect of gamma-rays on migrating juveniles of *Dictyocaulus filaria*. *Indian Journal of Animal Science* 49 (5): 365.
64. Aliev, A. A., and K. M. Galimova. Dehydrogenase activity in fatty tissue of lambs given diets of different physical structure with fatty acid supplements. *Doklady Vsesoyuznoi Ordena Lenina Akademii Sel'Skokhozyaistvennykh Nauk* No. 2: 32.
65. Ali-Khan, Z. Humoral response to sheep red blood cells in C57L/J mice during early and chronic stages of infection with *Echinococcus multilocularis* cysts. *Zeitschrift für Parasitenkunde* 59 (3): 259.
66. Al-Khsahli, M. N., and K. I. Altaif. The response of Awassi and Merino sheep to primary infection with *Haemonchus contortus*. *Tropical Animal Health and Production* 11 (3): 164.
67. Allden, W. G. Undernutrition of the Merino sheep and its sequelae. V. The influence of severe growth restriction during early postnatal life. *Australian Journal of Agricultural Research* 30 (5): 939.
68. Allen, J. D., and D. G. Harrison. Effect of the dietary addition of Monensin upon digestion in the stomachs of sheep. *The Proceedings of the Nutrition Society* 38 (2): A32.
69. Allen, J. G., and H. G. Masters. The prevention of ovine lupinosis by oral zinc sulphate therapy. *Australian Advances in Veterinary Science*, edited by M. G. Cooper, p. 53.
70. Allen, J. G., Masters, H. G., and S. R. Wallace. The effect of lupinosis on liver copper, selenium and zinc concentrations in merino sheep. *Veterinary Record* 105 (19): 434.
72. Allen, J. G., and F. K. Nottle. Spongy transformation of the brain in sheep with lupinosis. *Veterinary Record* 104 (2): 31.
73. Allen, J. G., Wood, P. M., Croker, K. P., and J. Hamblin. Lupinosis, a disease still with us. *Journal of Agriculture Western Australia* 20 (1): 10.
74. Allen, N. L. Some economic implications of dosing lowland ewes prelambling with anthelmintics. *Animal Production* 28 (3): 450.
75. Allen, P., McCarthy, J. C., and J. P. Hanrahan. The development of fat depots in sheep. *Faculty of General Agriculture, Research Report 1976-1977*: Dublin, Irish Republic.
76. Alley, M. R., and J. K. Clarke. The experimental transmission of ovine chronic non-progressive pneumonia. *New Zealand Veterinary Journal* 27 (10): 217.
77. Allison, A. J. Field trials with ¼ booroola merino ewes. *Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries, Annual Report of Research Division 1977-1978*. Hamilton, New Zealand, 252 pp.
78. Allison, J. C., and I. A. M. Lucas. Response of Welsh Mountain ewes to flushing and to housing for all or part of the winter. *Animal Production* 28 (2): 257.
79. Allsop, T. F., and J. A. F. Rook. The effect of diet and blood-plasma magnesium concentration on the endogenous faecal loss of magnesium in sheep. *Journal of Agriculture Science* 92 (2): 403.
80. Al-Mallah, M. Y., Mohammed, A. S., and K. N. Darwash. Effects of breed and castration on performance of Iraqi lambs. *Mesopotamia Journal of Agriculture* 14 (1): 91.
81. Alouf, J. E., Tixier, G., and A. Kerambun. Purification and properties of *Clostridium perfringens* type C delta toxin. *Toxicon* 17 (suppl 1): 1.
82. Altaif, K. I. Effect of anthelmintic treatment on the performance of Awassi sheep in Iraq. *Tropical Animal Health and Production* 11 (4): 241.
83. Alvi, A. S. Influence of sex status on growth and carcass characteristic of sheep. *Die Fleischwirtschaft* 59 (11): 1721.
- 83A. Alwachi, S. N., Bland, K. P., and N. L. Poyser. Uterine prostaglandin F2 alpha and E2 production and content during the second half of the oestrous cycle of the sheep-possible local control of the

- uterus by the ovary. *Prostaglandins and Medicine* 3 (1): 23.
84. Alzubaidy, A., and S. M. Sokkar. Studies on ovine pulmonary adenomatosis in Iraq. *Indian Veterinary Journal* 56 (5): 360.
 85. Amaniyazov, K., Nigarov, A., and O. Uzakov. Petrified animal tracks in an ancient desert. *Probl Osvo Pustyn' 0* (5): 80.
 86. Amos, H. E., and J. J. Evans. Influence of glucose addition and formaldehyde treatment of forage diets on nitrogen metabolism and fiber digestion in wethers. *Journal of Animal Science* 49 (suppl. 1): 354.
 87. Amos, H. E., Evans, J. J., and D. Burdick. Influence of formaldehyde treatment and energy additions in microbial metabolism of coastal Bermudagrass protein in wethers. *Journal of Animal Science* 48 (3): 666.
 88. Amundson, B. E., and J. E. Wheaton. Effects of chronic LHRH treatment on brain LHRH content, pituitary and plasma LH and ovarian follicular activity in the anestrous ewe. *Biology of Reproduction* 20 (3): 633.
 89. Anand, R. S., Sperling, M. A., and S. Ganguli. Effect of insulin infusion to mother on placental transfer of glucose and its turnover in sheep. *Federation Proceedings* 38 (3), II: 1188.
 90. Anand, R. S., Sperling, M. A., Ganguli, S., and P. W. Nathanielsz. Bidirectional placental transfer of glucose and its turnover in fetal and maternal sheep. *Pediatric Research* 13 (6): 783.
 91. Ande, M., Grun, M., Briedermann, L., Missbach, K., Hennig, A., and H. Kronemann. Supply of major and trace elements to wild ruminants. I. Cadmium content of winter grazings and the cadmium status of red, fallow and roe deer and wild sheep. *Archiv für Tierernährung* 29 (12): 829.
 92. Anderson, D. F. Placental drug transfer in sheep. *Dissertation Abstracts International* 40B 6: 2544.
 93. Anderson, D. F., Stock, M. K., and J. H. G. Rankin. Placental transfer of dexamethasone in near term sheep. *Journal of Developmental Physiology* 1 (6): 431.
 94. Anderson, P. H., Berrett, S., and D. S. P. Patterson. The biological selenium status of livestock in Britain as indicated by sheep erythrocyte glutathione peroxidase activity. *The Veterinary Record* 104 (11): 235.
 95. Andreani, E., Prosperi, S., Arush, M. A., and A. H. Salim. Salmonella carriers among cattle, sheep, goats and dromedaries in Somali Democratic Republic. *Annali della Facolta di Medicina Veterinaria di Pisa*, 1978, published 1979. 31: 65.
 96. Andreou, K. Epidemiological survey of paratuberculosis in three mixed sheep and goat flocks after vaccination. *Hellenike Kteniatrike (Hellenic Veterinary Medicine)* 22 (1): 1.
 97. Andrews, J. F., Lynch, M., and R. E. Moore. The early metabolic response of lambs to small doses of 3,3', 5-triiodothyronine. *Journal of Physiology* 293: 49P.
 98. Angelovski, T., and A. Iliev. Fascioliasis in cattle and sheep in SR Macedonia. XXI World Veterinary Congress, 1-7 July 1979, Moscow, Summaries, Volume 2, Section III: Parasitology: Moscow, USSR, 1979, 63 pp.
 99. Angus, K. W., Coop, R. L., and A. R. Sykes. Rate of recovery of intestinal morphology following anthelmintic treatment of parasitized sheep. *Research in Veterinary Science* 26 (1): 120.
 100. Angus, K. W., and A. C. Gardiner. Mesangiocapillary glomerulonephritis in Dorset-Finnish landrace cross lambs. *The Veterinary Record* 105 (20): 471.
 101. Angus, K. W., and A. Greig. Renal and hepatic calcification in a lamb poisoned by an anthelmintic dose of carbon tetrachloride. *Journal of Comparative Pathology* 89 (4): 605.
 102. Anke, M., Groppe, B., Grun, M., Kronemann, H., and R. Riedel. Local supplies of trace elements for cattle and sheep in the German Democratic Republic. *Archiv für Tierernährung* 29 (7/8): 513.
 103. Anil, H., Forbes, J. M., and M. J. McMahon. Feeding responses to intraportal propionate in sheep following denervation of the liver. *Journal of Physiology* 290: 19P.
 104. Anonymous. Regional agricultural science service annual report 1978. Report, Agricultural Development and Advisory Service, United Kingdom.
 105. Anonymous. A control for cheesy gland experimental caseous lymphadenitis vaccine. *Rural Research, Australia* No. 102: 9.
 106. Anon. Benefits accruing from anthelmintic treatment. *Australian Veterinary Journal* 55 (8): 399.
 107. Anon. Caseous lymphadenitis on the increase? *Surveillance, New Zealand* 6 (4): 8.
 108. Anon. Copper deficiency in Northland. *Surveillance, New Zealand* 6 (4): 2.
 109. Anon. Dairying in Greece. *Zuivelzicht* 71: 26.
 110. Anon. Decree of 30th May 1979 on technical and administrative procedures for control of brucellosis among sheep and

- goats. *Revue de Medecine Veterinaire* 130 (8/9): 1219.
111. Anon. Economic aspects of milk and milk products in Greece. *Landwirtschaftliche und milchwirtschaftliche Aspekte, Deutsche Molkerei-Zeitung* 100 (3): 60.
 112. Anon. Genetic resistance to facial eczema. *Surveillance, New Zealand* 6 (4): 10.
 113. Anon. Immunising sheep from parasites. *New Zealand Journal of Agriculture* 138 (3): 34.
 114. Anon. Ketosis in ruminants. *Bulletin des Groupements Techniques Veterinaires, No. 5*: 37.
 115. Anon. Nematodirosis in lambs following an exceptionally cold spring. *Tijdschrift voor Diergeneeskunde* 104 (12): 521.
 116. Anon. On the whole few changes in the EC market for lamb. *Informationsdienstkartei (Aglbo), Bonn No. D-79-02183*.
 117. Anon. Ovine salmonellosis. *Surveillance, New Zealand* 6 (4): 5.
 118. Anon. Prevention of hypomagnesaemia. *Bulletin des Groupements Techniques Veterinaires, No. 5*: 35.
 119. Anon. Record price for two Romney rams. *New Zealand Journal of Agriculture* 138 (1): 23.
 120. Anon. Sarcocystis: recent advances in knowledge. *Surveillance, New Zealand* 6 (4): 7.
 121. Anon. Sheep: toxoplasmosis is a problem. *Veterinary Record* 105 (13): 309.
 122. Anon. The screw-worm fly threat (*Chrysomya bezziana*). *Rural Research, Australia No. 102*: 4.
 123. Anosa, V. O., Isoun, T. T., and L. A. Oladosu. Splenectomy in sheep-technique, haematological changes and the haematology of the precipitated anaplasmosis and babesiosis. *Zentralblatt für Veterinärmedizin* 26 (4): 327.
 124. Anosa, V. O., and D. A. Ogbogu. Effect of parturition on the blood picture of sheep. *Research in Veterinary Science* 26 (3): 380.
 125. Ansari, M. Z., and K. S. Singh. In vitro action of immune lamb serum on the larvae of *Gaigeria pachyscelis*. *Indian Veterinary Medical Journal* 3 (2): 73.
 126. Ansari, M. Z., Singh, K. S., and P. K. R. Iyer. A note on histological studies on the experimental infection of *Gaigeria pachyscelis* in natural and laboratory animals. *Indian Journal of Animal Science* 49 (6): 491.
 127. Answegen, C. H. van, Vermeulen, N. M. J., and D. J. J. Potgieter. Inhibition of oxidative phosphorylation by sesquiterpene lactones from *Geigeria aspera*. *South African Journal of Science* 75 (2): 84.
 128. Antoniewicz, A. M., Heinemann, W. W., and E. M. Hanks. Factors affecting allantoin excretion in sheep urine. *Annales de Recherches Veterinaires* 10 (2/3): 300.
 129. Antonov, S. Activity and characteristics of alkaline phosphatase in organs of cattle and sheep. *Veterinarnomeditsinski Nauki* 16 (10): 41.
 130. Antonova, V., and V. Lazarov. The results of using Romanov and Ile-de-France rams for the production of hybrid lambs from different ewes. *Zhivotnov'dni Nauki* 16 (7): 28.
 131. Apgar, J. Alkaline phosphatase activity and zinc level in plasma as indicators of zinc status in pregnant and lactating sheep. *Nutrition Reports International* 19 (3): 371.
 132. Apgar, J., and H. F. Travis. Effect of a low zinc diet on the ewe during pregnancy and lactation. *Journal of Animal Science* 48 (5): 1234.
 133. Archer, J. F., and K. H. Walker. Sarcosporidiosis research sheds new light on an old problem in the sheep industry. *Agricultural Gazette of New South Wales* 90 (3): 11.
 134. Archer, K. A., Rogan, I. M., and R. W. Bowen. A comparison of potatoes with grain sorghum in feedlot diets for production of prime lambs. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (101): 679.
 135. Arcus, A. C., Beaven, D. W., Hart, D. S., and G. W. Holland. Long-term hormonal secretion from the auto transplanted sheep pancreas. *Diabetologia* 16 (5): 325.
 136. Ardehali, M., and H. Darakhshan. Isolation and typing of *Clostridium oedematiens* (*C. novyi*) from cases of black disease of sheep in Iran. *Comparative Immunology, Microbiology and Infectious Diseases* 2 (1): 107.
 137. Arendt, J. Radioimmunoassayable melatonin-circulating patterns in man and sheep. *Pineal Gland of Vertebrates Including Man. Progress in Brain Research* 52: 323.
 138. Arendt, J., Symons, A. M., and A. Marston. Annual variations of radioimmunoassayable melatonin in the ewe. *Acta Endocrinologica* 91 (225): 239.
 139. Ark. Breed of the month: Hebridean sheep. *Ark* 6 (7): 205.
 140. Arkhangel'skii, I. I., Karavaev, Y. D., Lyaushkin, A. V., and M. A. Bektimirov. Biological properties of the causal agent of foot rot in sheep, *Fusiformis* (*Bacteroides*) *nodosus*. *Trudy Vsesoyuznogo Instituta Eksperimental'noi Veterinari* 49: 76.
 141. Arkhangel'skii, I. I., Sidorckuk, A. A., and Yu. D. Karavaev. Allergic diagnosis of salmonellosis in sheep. *Byulleten*

- Vsesoyuznogo Instituta Eksperimental'noi Veterinarii 34: 37.
142. Arkhangel'skii, I. I., Sidorchuk, A. A., Karavaev, Y. D., Kreinin, L. A., Kaverina, K. G., and I. N. Vasil'eva. Preparation and testing of a chemically treated vaccine against salmonellosis in sheep. *Trudy Vsesoyuznogo Instituta Eksperimental'noi Veterinarii* 49: 69.
 143. Armour, J. Recent advances in the epidemiology of sheep endoparasites. In: *British Council. The Management and Diseases of Sheep*. Farnham Royal, Slough, UK.
 144. Arnaudov, D. Diagnostics of toxoplasmosis in sheep. XXI World Veterinary Congress, Moscow. Summaries, Vol. 2 (III) Parasitology, 63 pp.
 145. Arndt, D. L., and C. R. Richardson. Mineral balance and digestibility in lambs consuming NaOH-treated crop residue. *Journal of Animal Science* 49 (suppl. 1): 16.
 146. Arnold, G. W., Wallace, S. R., and R. A. Maller. Some factors involved in natural weaning processes in sheep. *Applied Animal Ethology* 5 (1): 43.
 147. Arnsdorf, M. F., and G. J. Sawicki. Effects of lysophosphatidyl choline on the excitability of cardiac purkinje fibers. *Circulation supplement* 60 (2): II-108.
 148. Aroeira, L. J. M., Moreira, H. A., Rodriguez, N. M., Sampaio, I. B. M., and M. Martins. Use of phosphorus from three different supplements from ruminants. *Arquivos da escola de Veterinaria da Universidade Federal de Minas Gerais* 31 (2): 243.
 149. Arora, A. L., and K. P. Pant. Quantitative analysis of sperm dimensions in relation to fertility of Soviet Merino rams. *Indian Veterinary Journal* 56 (6): 478.
 150. Arora, C. L., Balgopal, P. N., Shukla, S. K., and D. L. Bapna. A note on the combining ability of Rambouillet and Russian Merino rams with Chokla and Nali ewes with respect to preweaning (0-3 months) survivability and growth up to six months. *Indian Journal of Animal Sciences* 49 (5): 400.
 151. Arpenti, C., Bonaduce, D., Martone, F., and E. Palomba. Presence and distribution of HI antibodies to arboviruses in the serum of domestic animals in Basilicata. *Igiene Moderna* 72 (7): 686.
 152. Arsov, R., Vodas, K., and N. Georgieva. Treatment of tetanus in farm animals (antitoxin, antibiotics and surgical treatment). *Veterinarnomeditsinski Nauki* 16 (7): 91.
 153. Artal, R., Glatz, T. H., Lam, R., Nathanielsz, P. W., and C. J. Hobel. The effect of acute maternal hemorrhage on the release of catecholamines in the pregnant ewe and the fetus. *American Journal of Obstetrics and Gynecology* 135 (6): 818.
 154. Artykov, C. The inheritance of the content of pigmented fibres in the wool of Saraja sheep. *Zhivotnovodstvo* No. 8: 30.
 155. Arumagam, M. P., Subramaniam, N., and K. Kandavel. Economics of sheep rearing in Mecheri tract of Salem District. *Cheiron* 8 (1): 1.
 156. Arumagam, M. P., Thangaraju, P., Radhakrishnan, K. T., and E. Kandavel. Relationship of physical measurements with cold dressed carcass weights and carcass grades of Mecheri and Mandya lambs. *Cheiron* 8 (2): 104.
 157. Arundel, J. H. Hydatid disease of animals in Australia. *Australian Veterinary Journal* 55 (3): 126.
 158. Arya, S. S., and D. B. Parihar. Changes in free nucleotides, nucleosides and bases during thermal processing of goat and sheep meats. Part 1. Effect of temperature. *Die Nahrung* 23 (1): 1.
 159. Asamov, S. A., and N. A. Ibadov. Amide concentrate supplement in diets for sheep. *Ovtsevodstvo*, No. 10: 24.
 160. Asamov, S. A., and B. M. Stepanov. Biological aspects of development of lambs from multiple births. *Ovtsevodstvo*, No. 4: 35.
 161. Asato, G., and R. D. Wilbur. 4, 5, 6, 7-tetra hydro-7 oxo benzo B thien-4-yl urea sulbenox, a novel animal growth stimulant. *Experientia* 35 (11): 1458.
 162. Asghar, A., and N. T. M. Yeates. Muscle characteristics and meat quality of lambs grown on different nutritional planes. I. Effect on carcass morphology. *Agricultural and Biological Chemistry* 43 (3): 429.
 163. Asghar, A., and N. T. M. Yeates. Muscle characteristics and meat quality of lambs grown on different nutritional planes. II. Chemical and biochemical effects on muscle. *Agricultural and Biological Chemistry* 43 (3): 437.
 164. Asghar, A., and M. F. Yeates. Muscle characteristics and meat quality of lambs grown on different nutritional planes. III. Effect on muscle ultrastructure. *Agricultural and Biological Chemistry* 45 (3): 445.
 165. Asghar, A., and N. T. M. Yeates. Muscle characteristics and meat quality of lambs grown on different nutritional planes. IV. Effect on meat quality. *Agricultural and Biological Chemistry* 43 (3): 455.
 166. Ashwal, S., Vain, N., Macher, J., and L. D. Longo. Patterns of fetal lamb regional cerebral blood flow during and after prolonged hypoxia. *Pediatric Research* 13 (4, part 2): 979.

167. Assoku, R. K. G. A study of the incidence of blood-borne parasites of livestock in southern Ghana. *Bulletin of Animal Health and Production in Africa* 27 (1): 29.
168. Atai, P. Anatomical study of the arteries of the fatty tail of sheep breeds in Iran. *Journal of Veterinary Faculty, University of Tehran* 35 (1/2): 112.
169. Atef, M. Trimethoprim in sheep, influence of pH and protein binding on mammary and renal excretion. *Zentralblatt für Veterinärmedizin* 26 (1): 37.
170. Atef, M., Alsamarai, S. A., and Y. M. A. Hamid. Half-life and volume of distribution of trimethoprim and sulphadoxine in sheep and its relation to age and weight. *Zentralblatt für Veterinärmedizin* 26 (1): 31.
171. Atempa Lopez, E. Antigenic relationship between two parasites of sheep: *Fasciola hepatica* and *Cysticercus tenuicollis*. *Veterinaria (Mexico)* 10 (2): 141.
172. Atkins, K. D. Recording in sheep improvement. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England, Armidale, N.S.W., Australia*, p. 373.
173. Atkins, K. D., and B. J. McGuirk. Selection of Merino sheep for resistance to fleece-rot and body strike. *Wool Technology and Sheep Breeding* 27 (3): 15.
174. Atkins, K. D., and J. M. Thompson. Carcass characteristics of heavyweight crossbred lambs. I. Growth and carcass measurements. *Australian Journal of Agricultural Research* 30 (6): 1197.
175. Atroshi, F. Phenotypic and genetic association between production/reproduction traits and blood biochemical polymorphic characters in Finnsheep. *Annales Agricolturae Fenniae* 18 (1): 4.
176. Atroshi, F., Lindstrom, G., and S. Osterberg. Abnormal hemoglobin in Finnish sheep. *Medical Biology (Helsinki)* 57 (1): 66.
177. Atroshi, F., and S. Osterberg. The behaviour of Finnsheep during and shortly after lambing. *Acta Agriculturae Scandinavica* 29 (3): 258.
178. Austin, S. A., and M. Wallis. Identification and characterization of a biosynthetic precursor (preprolactin) of ovine pituitary prolactin. *Biochimica et Biophysica Acta* 564 (3): 534.
179. Australia, Commonwealth Scientific and Industrial Research Organization. Division of Animal Health Annual Report 1978. Parkville 3052, Victoria, Australia. 124 pp.
180. Australia, James Cook University. Tropical veterinary science report 1978. Townsville, Queensland, Australia, 40 pp.
181. Australia Sheep and Wool Information Service. Current awareness bulletin. Biology and production, Number 4, July 1979. East Melbourne, Australia: CSIRO, 100 pp.
182. Australian Meat Research Committee 1979. Cysticercosis: epidemiology and immunology. Australian Meat Research Committee Review No. 57: 1.
183. Australian Meat Research Committee 1979. Thirteenth Annual Report. Year Ended June 30, 1979. Sydney, N.S.W. 2001, Australia, P.O. Box 4129, 180 pp.
184. Australian Meat Research Committee 1979. Daylength and lamb drops. Thirteenth Annual Report, Year Ended June 30, 1979. Sydney, Australia. 180 pp.
185. Australian Sheep and Wool Information Service. Current awareness bulletin. Biology and production. No. 1, April 1979. East Melbourne, Victoria, Australia. Central Information Service, CSIRO. 314 Albert St., 90 pp.
186. Australian Veterinary Association. Symposium on hydatidosis, May 1978. *Australian Veterinary Journal* 55 (3): 93.
187. Avon, L. A French Survey. *Ark* 6 (8): 252.
188. Avram, M., Dogaroiu, G., and V. Ionescu. Growth and fattening of young male Turcana sheep with different methods in a mountain area. *Revista de Cresterea Animalelor* 29 (6): 30.
189. Ayalon, N., and M. Shemesh. Use of milk progesterone measurement for determining pregnancy and ovarian activity in cattle and sheep. *Refuah Veterinarith* 36 (2): 79.
190. Ayrton, H. New Zealand farmers "ripped off" for lamb. *New Zealand Journal of Agriculture* 138 (4): 59.
191. Ayromlooi, J., Tobias, M., Berg, P. D., and D. Desiderio. Effects of ethanol on the circulation and acid base balance of pregnant sheep. *Obstetrics and Gynecology* 54 (5): 624.
192. Azimov, D. A., Sultanov, M. A., Dadaev, S., Gekhtin, V. I., and D. T. Isakova. The helminths of domestic ungulates in the Dzhezakskaya region. *Uzbekskii Biologicheskii Zhurnal* No. 6: 54.

B

193. Baber, K. A., Meyers, K. M., Clemmons, R., and R. Peters. Regional concentrations of serotonin, tryptophan, 5-hydroxyindolacetic acid, dopamine, and norepinephrine in the ovine brain. *American Journal of Veterinary Research* 40 (10): 1378.
194. Baber, K. A., Meyers, K. M., Clemmons, R., and R. Peters. Effects of trypto-

- phane loading on the metabolism of serotonin in the central nervous system of the sheep. *American Journal of Veterinary Research* 40 (10): 1381.
195. Bachmann, H. Combination of chlordimeform with an acaricide to control *Psorptes communis* var. *ovis* in a single dip. *Gaceta Veterinaria* 41 (337): 39.
 196. Badawy, A. B. A., Habib, A. M., and K. Zaki. Seasonal and cyclical changes in the ovaries of Libyan ewes. *Assiut Veterinary Medical Journal* 1978, published 1979. 5 (9/10): 257.
 197. Badman, R. T. Pulmonary damage in sheep caused by a grain fumigant dibromoethane. *Australian Advances in Veterinary Science*, edited by M. G. Cooper, p. 54.
 198. Bae, D. H., Welch, J. G., and A. M. Smith. Forage intake and rumination by sheep. *Journal of Animal Science* 49 (5): 1292.
 199. Baer, A., Oroz, M., and B. Blanc. Isolation and partial characterization of ovine lactoferrin. *Experientia* 35 (12): 1554.
 200. Baeta, A. L., Faidley, T. D., and M. J. Allison. Automated enzymatic method for the determination of ammonia: application to rumen fluid, gut fluid, and plasma. *Applied and Environmental Microbiology* 38 (2): 212.
 201. Baile, C. A., Reyea, J. S., Krabill, L. F., and M. A. D. Fera. Intracranial injections of 5-HT and db c-A₂DP and feeding in sheep and cattle. *Journal of Animal Science* 49 (4): 1076.
 202. Baile, C. A. and C. L. McLaughlin. A review of the behavioral and physiological response to elfazepam, a chemical feed intake stimulant. *Journal of Animal Science* 49 (5): 1371.
 203. Bailey, D. E. Preventive medicine in sheep and goat medicine. *Journal of the American Veterinary Medical Association* 174 (4): 388.
 204. Baillie, B. Skin fold can affect lambing percentage. *Agricultural Gazette of New South Wales* 90 (3): 4.
 205. Bairakova, L. Retention of nitroxylin in tissues and body fluids of cattle and sheep treated with "Fasciolid" injectable solution of nitroxylin. *Veterinarnomeditsinski Nauki* 16 (5): 18.
 206. Baker, B. S., Lewis, P. E., and M. R. Faussett. West Virginia University USA Allegheny Highlands project. 1. A delivery system for forage livestock production. *Journal of Animal Science* 49 (suppl. 1): 131.
 207. Baker, B. S., Lewis, P. E., and M. R. Faussett. West Virginia University USA Allegheny Highlands project. 2. Effects of technological adaptation on beef and sheep farms. *Journal of Animal Science* 49 (suppl. 1): 131.
 208. Baker, G. F., Segal, M. B., and H. Llewellyn. The electrical potential across the ovine nasal mucosa. *Journal of Physiology* 293: 34P.
 209. Baker, J. A. F. Resistance to ixodicides by ticks in Africa south of the equator with some thoughts on tick control in this area. In: Wilde, J. K. H. Tick-borne diseases and their vectors: Proceedings of an International Conference, Edinburgh, Scotland. University of Edinburgh Centre for Tropical Veterinary Medicine, pp. 101-113.
 210. Baker, R. L. Genetic and phenotypic parameters in Romney sheep. *Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries, Annual Report of Research Division 1977-1978*, Hamilton, New Zealand, 252 pp.
 211. Baker, R. L., Clarke, J. N., Carter, A. H., and G. D. Diprose. Genetic and phenotypic parameters in New Zealand Romney sheep. I. Body weights, fleece weights, and oestrous activity. *New Zealand Journal of Agricultural Research* 22 (1): 9.
 212. Baker, R. M., Boston, R. C., Boyes, T. E., and D. D. Leaver. Variations in the response of sheep to experimental magnesium deficiency. *Research in Veterinary Science* 26 (2): 129.
 213. Bakke, J. E., and C. E. Price. Metabolism of 2-chloro-N-isopropylacetanilide (propachlor) in the sheep and milk goat. *Journal of Environmental Science and Health* 14 (3): 291.
 214. Bakke, J. E., and C. E. Price. Metabolism of crufomate (4-tert-butyl-2-chlorophenyl methyl methylphosphoramidate) administered topically to a sheep. *Journal of Environmental Science and Health, Part B*, 14 (4): 417.
 215. Balascak, J., Augustinsky, V., Cizmar, J., Benko, G., and P. Zubricky. Aetiology of sheep pneumonia. *Veterinarstvi* 29 (4): 177.
 216. Balascak, J., Chyla, M., Vrzgula, L., Brestansky, I., Korim, M., and M. Kovalcik. Occurrence of outbreaks of acute metabolic disorders in sheep. *Veterinarstvi* 29 (9): 402.
 217. Balascak, J., Vojtechovsky, K., Halasa, M., Bugarsky, A., Hurtik, E., and Z. Macenauer. Course of stachybotryotoxicosis in sheep and economic losses. *Veterinarstvi* 29 (9): 400.
 218. Baldry, A. F. Sheep behaviour and welfare. *Applied Animal Ethology* 5 (3): 292.
 219. Baldwin, B. A. Operant studies on the be-

- hav. r of pigs and sheep in relation to the physical environment. *Journal of Animal Science* 49 (4): 1125.
220. Baldwin, B. A., Hutchison, J. B., Parrott, R. F., and T. Steimer. Hypotalamic uptake of tritium labeled testosterone in the sheep following intra cerebroventricular infusion. *Journal of Neuroscience Methods* 1 (3): 243.
221. Baldwin, R. L., and S. C. Denham. Quantitative and dynamic aspects of nitrogen metabolism in the rumen. *Journal of Animal Science* 49 (6): 1631.
222. Ball, P. J. H., Simkin, M. E., and R. H. Foote. Effect of cannulae in ampulla of the oviduct and in the tubo-uterine junction on reproductive phenomena in sheep. *Theriogenology* 12 (6): 389.
223. Ballesteros, E., Bregante, M. A., Graus, J., Murillo, D., and P. Vergara. Spontaneous in vitro motility and contractile response to periarterial and transmural electrical stimuli in preparations of the longitudinal muscular layer of the omasum of sheep. *Archives of Farmacologia et Toxicologia* 5 (3): 299.
224. Bamidele, O. Clinico-pathological studies of anemia in domestic ruminants. *Bulletin of Animal Health and Production in Africa* 27 (3): 181.
225. Banerjee, M., and P. P. Gupta. Note on Maedi and Jaagziekte in sheep and goats in Ludhiana area of Punjab. *Indian Journal of Animal Sciences* 49 (12): 1102.
226. Banerjee, M., and P. P. Gupta. Viral pneumonia in sheep and goats in Punjab. *Indian Journal of Veterinary Pathology* 3: 43.
227. Banerjee, M., Singh, N., and P. P. Gupta. Isolation of mycoplasmas and achleplasmas from pneumonic lesions in sheep and goats in India. *Zentralblatt für Veterinärmedizin* 26 (9): 689.
228. Bankov, D. Trials for therapy and chemoprophylaxis of coenurosis in sheep praziquantel. *Veterinary Medical Review* No. 1: 79.
229. Banks, K. L. In vitro binding of *Trypanosoma congolense* to erythrocytes. *Journal of Protozoology* 26 (1): 103.
230. de L. Banting, A. Foot rot in sheep. *Veterinary Record* 105 (15): 359.
231. 194. Banting, A. de L., and M. Bellanger. Preliminary studies of the effects of a preparation containing freeze dried rumen fluid on the growth of fattening lambs. *Recueil de Medecine Veterinaire de l'Ecole d'Alfort* 155 (3): 239.
232. Baran, M., Marcanik, J., Kocisova, J., Zelenak, I., and M. Belak. The relationship between fermentation and the morphological structure of rumen epithelium in sheep given pelleted feeds. *Veterinari Medicina* 24 (10): 587.
233. Baran, M., Zelenak, I., and K. Boda. Motorial function of the rumen after feeding sheep with pelleted rations. *Archiv für Tierernährung* 29 (4): 251.
234. Baran, M., Zelenak, I., and D. Jalc. Water intake, pH and ammonia levels in the rumen contents of sheep fed pelleted feeds. *Veterinari Medicina* 24 (5): 285.
235. Baran, J., Zelenak, I., and M. Piatkova. The effect of feeding pelleted feed on the level of votatile fatty acids in the digestive tract of sheep. *Veterinari Medicina* 24 (1): 49.
236. Barber, D. M. L. Foot rot in sheep. *Veterinary Record* 105 (9): 194.
237. Barber, T. L. Temporal appearance, geographic distribution and species of origin of bluetongue virus serotypes in the USA. *American Journal of Veterinary Research* 40 (11): 1654.
238. Barej, W., and J. Harmeyer. Effect of hyper ammonemia on blood glucose and plasma insulin levels in sheep. *Quarterly Journal of Experimental Physiology and Cognate Medical Sciences* 64 (1): 31.
239. Barger, I. A., and L. F. Le Jambre. The role of inhibited larvae in the epidemiology of ovine haemonchosis. *Australian Veterinary Journal* 55 (12): 580.
240. Barker, J. E., and A. W. Nienhuis. Mechanism of hemoglobin switching in sheep. *In Vitro* 15 (3): 200.
241. Barlet, J. P. Inhibition of the hypercalcaemia inducing effect of 1, 25 dihydroxy cholecalciferol by calcitonin. *Journal of Physiology (Paris)* 75 (5): 25A.
242. Barlet, J. P., Davicco, M. J., Moncaup, M., and J. Lefavre. Foetal plasma magnesium levels during maternal hypomagnesaemia or hypermagnesaemia in ewes. *British Journal of Nutrition* 42 (3): 559.
243. Barlow, R. M., Vantsis, J. T., Gardiner, A. C., and K. A. Linklater. The definition of Border Disease: problems for the diagnostician. *Veterinary Record* 104 (15): 334.
244. Barmoshe, B., and E. Rapapport. Outbreak of contagious caprine pleuropneumonia caused by *Mycoplasma mycoides* subsp. *mycoides* (Ovine-caprine serogroup-8). *Refuah Veterinarith* 36 (2): 53.
245. Barnard, B. J. H. Symptoms of rabies in pets and domestic animals in South Africa and South West Africa. *Journal of the South African Veterinary Association* 50 (2): 109.
246. Barnes, M. F. Changes in trypsin and chymotrypsin occurring during storage of sheep pancreata. *Mauri Ora* 7 (0): 95.
247. Barnhart, J. L., and D. W. Upson. Bile flow and electrolyte composition of bile associated with maximum bilirubin excretion in sheep. *Canadian Journal of*

- Physiology and Pharmacology 57 (7): 710.
248. Barowicz, T. Inhibitory effect of adrenaline on oxytocin release in the ewe during the milk-ejection reflex. *Journal of Dairy Research* 46 (1): 41.
 249. Barowicz, T. Changes of blood catecholamine levels in the sheep during machine milking. *Journal of Dairy Research* 47 (3): 555.
 250. Barrell, G. K., and K. R. Lapwood. Effects of various lighting regimens and pinealectomy on semen production in Romney rams. *Journal of Reproduction and Fertility* 57 (2): 273.
 251. Barrell, G. K., and K. R. Lapwood. Seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin levels in Romney, Merino and Polled Dorset rams. *Animal Reproduction Science* 1 (3): 213.
 252. Barrell, G. K., and K. R. Lapwood. Effects of modifying olfactory and pineal gland function on the seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin levels in rams. *Animal Reproduction Science* 1 (3): 229.
 253. Barrowman, P. R., and J. A. Roos. Iymph node pathology in *Trypanosoma brucei*-infected sheep. *The Onderstepoort Journal of Veterinary Research* 46 (1): 9.
 254. Bars, H. Le, and A. de L. Banting. Comparison of pathological effects of experimental *Fasciola hepatica* infection in rabbits, sheep and cattle. *Revista Portuguesa da Ciencias Veterinarias* 74 (449): 5.
 255. Bar-Sagie, D., Bartoov, B., and A. Mayevsky. Objective evaluation of collective ram spermatozoan motility under various physiological and pharmacological conditions. *Israel Journal of Medical Science* 15 (7): 621.
 256. Bartenschlagerblassing, E. M. Technical, organoleptic and bacteriological properties and histological characteristics of sausages in natural casings (sheep small intestine) and in synthetic casings (bovine corium). 1. *Die Fleischwirtschaft* 59 (3): 293.
 257. Bartenschlagerblassing, E. M. Technical organoleptic and bacteriological properties and histological characteristics of sausages in natural casings (sheep small intestine) and in synthetic casings (bovine corium). 2. *Die Fleischwirtschaft* 59 (4): 493.
 258. Barth, K. M., and S. Gelaye. Nutritive value of some vegetable-waste silages for ruminants. *Tennessee Farm and Home Science Progress Report No. 111*: 8.
 259. Bartko, J. Toxoplasmosis in sheep in the lowland region of western Slovakia. *Veterinarni Medicina* 24 (5): 285.
 260. Barton, N. J. A comparison of anthelmintic strategies for weaner sheep in East Gippsland. Abstracts of papers at 23rd Conference of Australian Society for Parasitology, Leura, N.S.W., Australia, VI + 57 pp.
 261. Barza, H., Fromunda, V., and S. Diaconu. Wool-eating (Mallophaga, Trichophagia) in sheep. *Revista de Cresterea Animalelor* 29 (6): 49.
 262. Bassett, J. W., and B. F. Craddock. Methods of estimating clean fleece weights. *Journal of Animal Science* 49 (suppl. 1): 182.
 263. Bath, G. F. Enzootic icterus. A form of chronic copper poisoning. *Journal of South African Veterinary Association* 50 (1): 3.
 264. Bath, G. F., and T. Bergh. Specific form of abomasal phyto bezoar in goats and sheep. *Journal of South African Veterinary Association* 50 (2): 69.
 265. Bauchop, T. Rumen anaerobic fungi of cattle and sheep. *Applied and Environmental Microbiology* 38 (1): 148.
 266. Bauchop, T. The rumen ciliate *Epidinium* in primary degradation of plant tissues. *Applied and Environmental Microbiology* 37 (6): 1217.
 267. Bauchop, T. The rumen anaerobic fungi colonizers of plant fibers. *Annales de Recherches Veterinaires* 10 (2-3): 246.
 268. Bauer, S. Residue formation and concentration relationships of hexachlorbenzene in the blood and tissues of slaughter animals. Inaugural Dissertation. Tierärztliche Fakultät. München. 99 pp.
 269. Bayfield, R. F., and L. F. Romalis. An improved method for the determination of alpha tocopherol in sheep liver. *Analytical Biochemistry* 97 (2): 264.
 270. Bazer, F. W., Roberts, R. M., Basha, S. M. M., Zavy, M. T., Caton, D., and D. H. Barron. Method for obtaining ovine uterine secretions from unilaterally pregnant ewes. *Journal of Animal Science* 49 (6): 1522.
 271. Beal, A. M. Renal calcium and magnesium excretion during vasopressin administration into sheep with acid or alkaline urine. *Journal of Physiology* 294: 223.
 272. Beal, A. M. Parotid salivary flow and composition during infusion of acetylcholine and atropine into the carotid artery of conscious sodium replete sheep. *Quarterly Journal of Experimental Physiology and Cognate Medical Sciences* 64 (2): 89.
 273. Beal, A. M. Plasma insulin concentrations during infusion of potassium and sodium chloride solutions into conscious sple-

- nectomized sheep. *Australian Journal of Biological Sciences* 32 (3): 353.
274. Beal, A. M., and J. Bligh. Effect of intraventricular injection of transmitter substances and temperature on autonomic functions of conscious sheep. *Journal of Physiology* 294: 239.
275. Beasley, S. J., Campbell, J. A., and H. W. Reid. Threshold problems in infection of *Ixodes ricinus* with the virus of louping ill. In: Wilde, J. K. H., Tick-borne Diseases and their Vectors. University of Edinburgh Centre for Tropical Veterinary Medicine, Edinburgh, Scotland, p. 497.
276. Becanin, M. Effects of various altitudes and diets on blood values in the progeny of merinized sarplanina ewes. *Veterinaria, Yugoslavia* 28 (1): 27.
277. Becker, B., Mehlhorn, H., and A. O. Heydorn. Light and electron microscopic studies on gamogony and sporogony of 5 sarcocystis species in vivo and in tissue cultures. *Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene. Erste Abteilung Originale* 244A (2/3): 394.
278. Beckmann, G. E. III, Bell, M. C., Bacon, J. A., and G. R. Bratton. Magnesium depletion and repletion effects on Mg, Ca and K in bone, muscle, cerebrospinal fluid and plasma of sheep. *Journal of Animal Science* 49 (suppl. 1): 15.
279. Beerwinkle, D. L., Whiteman, J. V., Walters, L. E., and J. E. Fields. Feed efficiency and carcass characteristics of ram lambs slaughtered at four weights. *Oklahoma Agricultural Experimental Station Miscellaneous Publication* 104: 229.
280. Beh, K. J., Husband, A. J., and A. K. Lascelles. Instestinal response of sheep to intra peritoneal immunization. *Immunology* 37 (2): 385.
281. Behrens, H. Problems due to antagonism of characteristics in sheep breeding. *Zuchtungskunde* 51 (6): 468.
282. Behrens, H. *Lehrbuch der Schafkrankheiten*. Verlag Paul Parey, Berlin, German Federal Republic, 2nd Edition.
283. Behrens, H. Studies on the epididymis of rams. *Zuchthygiene* 14 (2): 78.
284. Beisembaeva, R. U., Abilova, G. M., and O. V. D'Yachenko. Haptoglobin in sheep during development. *Ontogenez* 10 (5): 513.
285. Bektemirov, M. A. Diagnosis of foot rot in sheep. *Veterinariya* 0 (1): 46.
286. Belchev, L. An outbreak of *Listeria* infection in newborn lambs. *Veterinarnomeditsinski Nauki* 16 (3): 57.
287. Belenky, D. A., Standaert, T. A., and D. E. Woodrum. Maturation of hypoxic ventilatory response of the new born lamb. *Journal of Applied Physiology, Respiratory, Environmental Exercise Physiology* 47 (5): 926.
288. Beletskii, V. I., and V. G. Govyadin. The causes of tin arsenate poisoning in sheep. *Veterinariya* No. 9: 43.
289. Bell, F. R., Dennis, B., and J. Sly. Olfaction and gustatory senses in sheep after olfactory bulbectomy. *Physiological Behaviour* 23 (5): 919.
290. Bell, J. U. A renal hepatic comparison of metallothionein in the sheep fetus. *Toxicology Letters* 4 (5): 407.
291. Belousova, R. V., Bokshstein, F. M., Zabov, V. A., Voronin, E. S., Usmanova, G. M., and V. I. Kis. Ecology of certain viruses of mammals and birds, particularly influenza virus. *Veterinariya* No. 4: 28.
292. Benedictis, G. de. Immunochemistry of two polymorphic antigens identified in sheep serum. *Molecular Immunology* 16 (5): 347.
293. Benedictis, G. de. Immunogenetics of an antigen identified in both sheep and cattle sera. *Genetical Research* 34 (1): 41.
294. Benes, J., Hrusovsky, J., and M. Proksova. Treatment of farm animals poisoned with alkyl phosphates. *Veterinari Medicina* 24 (1): 623.
295. Benz, E. J. Jr., Kretschmer, P. J., Geist, C. E., Kantor, J. A., Turner, P. H., and A. W. Nienhuis. Hemoglobin switching in sheep. Synthesis, cloning and characterization of DNA sequences coding for the beta B-, Beta C and NU-globin Mrnas. *Journal of Biological Chemistry* 254 (15): 6880.
296. Berardinelli, J. G., and Butcher, R. L. Source of progesterone in prepuberal ewes. *Biology of Reproduction* 20 (suppl. 1): 114A.
297. Berecky, I. Levels of some depot sulfonamides in the blood of sheep and calves. *Folia Veterinaria* 20 (1/2): 79.
298. Bergen, W. G. Free amino acids in blood of ruminants—physiological and nutritional regulation. *Journal of Animal Science* 49 (6): 1577.
299. Bergen, W. G., Mostafavi, M. S., Merkel, R. A., and H. A. Henneman. The effect of growth potential, sex and age on ovine skeletal muscle growth and development. *Journal of Animal Science* 49 (suppl. 1): 212.
300. Berger, J. Social ontogeny and behavioural diversity: consequences for Bighorn sheep *Ovis canadensis* inhabiting desert and mountain environments. *Journal of Zoology* 188 (2): 251.
301. Berger, J. Weaning, social environments and the ontogeny of spatial associations in bighorn sheep. *Biology of Behaviour* 4 (4): 363.

302. Berger, J. C. A., Fontenot, J. P., Kornegay, E. T., and Webb, K. E. Jr. Digestibility and palatability of ensiled swine waste and corn grain. *Journal of Animal Science* 49 (suppl 1): 175.
303. Berger, L., Klopfenstein, T., and R. Britton. Effect of sodium hydroxide on efficiency of rumen digestion. *Journal of Animal Science* 49 (5): 1317.
304. Bergmann, V. Electron microscopical findings in nutritional myopathy. *Archiv für Tierernährung* 29 (7/8): 516.
305. Bergner, H., and R. Gorsch. Metabolism of labelled isobutyridene diurea in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 382.
306. Bergstrom, R. C., Armstrong, D. A., and H. A. Hancock. Evaluation of albendazole as a thysanosomicide in sheep. *Veterinary Medicine and Small Animal Clinician* 74 (4): 549.
307. Berlyn, A. D. The effect of diet on the lifespan and egg maturation of caged adult sheep headflies (*Hydrotaea irritans*). *Bulletin of Entomological Research* 69 (2): 299.
308. Berman, M. I. Presence of a large molecular weight follicle stimulating hormone and luteinizing hormone fraction and free alpha subunit in sheep pituitary. *Biology of Reproduction* 20 (suppl. 1): 107A.
309. Berman, W. Jr., and J. Musselman. Myocardial performance in the newborn lamb. *American Journal of Physiology* 237 (1): H66.
310. Berman, W. Jr., and J. P. Musselman. Myocardia performance in the newborn lamb. *Pediatric Research* 13 (4, part 2): 340.
311. Berrett, S., and C. N. Hebert. A semi-quantitative spot test for glutathione peroxidase in blood of cattle and sheep for the assessment of biological selenium status. *Veterinary Record* 105 (7): 145.
312. Bertocchi, D., and G. Bersani. Salmonella serotypes isolated from animals and animal products in the Venetian region in 1974-75. *Igiene Moderna* 72 (7): 715.
313. Berzins, R. Sorbitol induced hypoglycemia in sheep. *Journal of Dairy Science* 62 (suppl. 1): 234.
314. Berzins, R., and J. G. Manns. How concentrate feeding affects gluco regulatory hormones in ruminants. Implications in bovine ketosis. *Journal of Dairy Science* 62 (11): 1739.
315. Bestetti, G., and R. Fankhauser. Comparative light- and electron-microscopic investigations on cerebrocortical necrosis in ruminants. *Schweizer Archiv für Tierheilkunde* 121 (9): 457.
316. Betancourt, E. A., and M. T. Julio. The capillary tube centrifugation technique in the diagnosis of natural *Trypanosoma* spp. infections. *Rev Inst Colomb Agropecu* 14 (2): 105.
317. Betteridge, K. An evaluation of mixed kikuyu and ryegrass pastures grazed by sheep. *New Zealand Journal of Experimental Agriculture* 7 (1): 53.
318. Bevez, A. S. Effect of some technological parameters on the efficiency of raising Romanovskii sheep. *IZV Timiryazev S-KH Akad O* (3): 192.
319. Bezubik, B., Borowik, M. M., and W. Brozowska. Investigations on the new anthelmintic, fenbendazole, in sheep in Poland. *Wiadomosci Parazytologiczne* 25 (1): 83.
320. Bhadula, S. K., Bhat, P. N., and R. C. Garg. Prediction of body weight from body measurements in sheep. *Indian Journal of Animal Sciences* 49 (10): 775.
321. Bhaik, N. L., and I. S. Kohli. Reproductive performance of Chokla and Magra ewes in the subtropical area of North-eastern arid zone of Rajasthan—Gestation length of ewes and birth weight etc. of newborn lambs. *Indian Veterinary Journal* 56 (12): 1027.
322. Bhargave, B., Katiyar, U. C., and R. P. Saxena. Effect of feeding formaldehyde-treated concentrate mixture on growth, wool yield and utilization of nutrients in growing lambs. *Indian Journal of Animal Sciences* 49 (10): 802.
323. Bhargave, B., Katiyar, U. C., and R. P. Saxena. Effect of feeding creep mixture on growth rate and mortality in Merino lambs. *Indian Journal of Animal Sciences* 49 (11): 921.
324. Bhaskaran, B., and U. S. Krishnamurthy. Genetics of erythrocyte glutathione in Mandrya Madras Red and their crossbred sheep. *Cheiron* 8 (2): 125.
325. Bhat, P. N., Abid, M. A., and S. K. Koul. A note on the performance of Awassi sheep. *Indian Journal of Animal Sciences* 49 (7): 581.
326. Bhatia, D. R., Patnayak, B. C., and R. Ratan. A note on nutritive value of *Cenchrus* and *Cenchrus*-legume mixed pastures for cross-bred lambs. *Indian Journal of Animal Sciences* 49 (9): 765.
327. Biedermann, P. Ram fighting in Tunisia. Thesis, Ecole Nationale Veterinaire, Alfort, France, 74 pp.
328. Bielanski, A. Practical significance of progesterone estimation and the use of a prostaglandin F2 alpha analogue (Cloprostenol) in sheep reproduction. *Medycyna Weterynaryjna* 35 (3): 173.
329. Biggerstaff, R. H., and J. C. Rose. The effects of induced prenatal hypothyroidism on lamb mandibular third primary

- molars. *American Journal of Physical Anthropology* 59 (3): 357.
330. Bigham, M. L. Wool evaluation of exotic sheep breeds. *Annual Report 1978-79*, Hamilton, New Zealand. Ministry of Agriculture and Fisheries. 34 pp.
331. Biktimirov, I. V. Antibody neutralization test for infectious enterotoxemia of sheep. *Veterinariya* No. 7: 72.
332. Bilteuv, S. I. Growth intensity and meat characters of crossbreeds from fine/coarse-wooled ewes mated with rams of mutton-wool type. *Maucno-Tekhnicheskii Byulleten' Sibirskii Nauchno-Institut Zhivotnovodstva; Referativnyi Zhurnal* (1980) 2 (58): 301; 1979, No. 32: 11.
333. Binder, A. S., Nakahara, K., Ohkuda, K., Kageler, W., and N. C. Staub. Effect of heparin or fibrinogen depletion on lung fluid balance in sheep after emboli. *Journal of Applied Physiology, Respiration, Environmental Exercise Physiology* 47 (1): 213.
334. Bird, M. Caring for lambs. *New Zealand Journal of Agriculture* 138 (3): 15.
335. Bird, S. H., Hill, M. K., and R. A. Leng. Effect of defaunation of the rumen on the growth of lambs on low-protein-high energy-diets. *British Journal of Nutrition* 42 (1): 81.
336. Black, W. J. M., and T. Nolan. Winter grazing of pasture by sheep. 3. The effect on ewe performance of a range of intensive winter stocking densities. *Irish Journal of Agricultural Research* 18 (2): 183.
337. Black, W. K. M., Fitzsimons, J., Ferguson, J. A., Khalaf, A. M., Doxey, D. L., and J. T. Baxter. Late pregnancy ewe feeding and perinatal mortality. *Animal Production* 28 (3): 450.
338. Blackmore, D. Recent findings of the efficacy of slaughter techniques. *New Zealand Veterinary Journal* 27 (3): 54.
339. Blackmore, D. K. Non-penetrative percussion stunning of sheep and calves. *The Veterinary Record* 5 (16): 372.
340. Blackmore, D. K., Newhook, J. C., and G. V. Petersen. Electrical stunning and humane slaughter. *New Zealand Veterinary Journal* 27 (10): 224.
341. Blair-West, J. R., Brook, A. H., Gibson, A., Morris, M., and P. T. Pullan. Renin, antidiuretic hormone and the kidney in water restriction and rehydration. *Journal of Physiology* 294: 181.
342. Blair-West, J. R., Coghlan, J. P., Denton, D. A., Hardy, K. J., Scoggins, B. A., and R. D. Wright. Effect of adrenal arterial infusion of P-113 on aldosterone secretion in Na-deficient sheep. *American Journal of Physiology* 236 (4): F333.
343. Blanc, M. R., Dacheux, J. L., Cahoreau, C., Courrot, M., Hochereau-de Reviere, M., Lacroix, A., and C. Pisselet. The role of testicular fluid on blood plasma levels of FSH and LH in the ram. *Annales de Biologie, Animale, Biochimie, Biophysique* 19 (4A): 1027.
344. Blanc, M. R., and J. C. Poirier. A new homologous radioimmunoassay for ovine follicle stimulating hormone: development and characterization. *Annales de Biologie Animale, Biochimie, Biophysique* 19 (4A): 1011.
345. Bland, R. D., and M. A. Bressack. Lung fluid balance in awake new born lambs with pulmonary edema from rapid intravenous infusion of isotonic saline. *Pediatric Research* 13 (9): 1037.
346. Bland, R. D., Bressack, M. A., and C. M. Haberkern. Pulmonary microvascular permeability to protein in unanesthetized fetal and newborn lambs. *Pediatric Research* 13 (Part 2, No. 4): 531.
347. Blaxter, K. L., and J. C. Gill. Voluntary intake of feed and equilibrium body weight in sheep. *Proceedings of the Nutrition Society* 38 (3): A150.
348. Blayney, L., Benning, S., Middleton, K., and A. Henderson. Species differences in isolated cardiac sarcoplasmic reticulum function. *Journal of Molecular and Cellular Cardiology* 11 (suppl. 2): 4.
349. Blayney, L., Stephens, M., Benning, S., Middleton, K., and A. Henderson. Biochemical changes in hypertrophy. *Journal of Molecular and Cellular Cardiology* 11 (suppl. 2): 4.
350. Bligh, J., Silver, A., and C. A. Smith. A central excitatory serotonergic or serotonergic-like synapse on the pathway to heat production in the sheep. *Journal of Thermal Biology* 4 (4): 259.
351. Bligh, J., Silver, A., Smith, C. A., and M. J. Bacon. The effects on thermoregulation in the sheep of intracerebroventricular injections of taurine, glycine, GABA and muscimol. *Journal of Thermal Biology* 4 (1): 9.
352. Bligh, J., Smith, C. A., and I. Baumann. Central gamma amino butyric acid and thermo regulation in sheep. In: Cox, B. et al. *Thermoregulatory Mechanisms and Their Therapeutic Implications*. S. Karger, Basel, Switzerland.
353. Blivin, R., Bost, J., Peyrard, C., Camier, Y., and F. Almorice. Urea feeding and ketogenesis in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 408.
354. Block, E., and L. D. Muller. Brown midrib vs. normal corn plants harvested as whole plant or stover and preserved as silage or frozen fresh. Digestibility and intake by sheep. *Journal of Animal Science* 49 (suppl. 1): 138.
355. Blockey, M. A. D. B., Holst, P. J., Makin,

- A. W., and L. P. Cahill. Oestrus, ovulation and ovum transport in young Merino ewes. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (97): 150.
356. Blood, D. C., Henderson, J. A., and O. M. Radostits. *Veterinary Medicine: a textbook of the disease of cattle, sheep, pigs and horses*. London, UK, Bailliere Tindall, 5th Ed. 1135 pp.
357. Blum, J. W., Gingins, M., Schnyder, W., Kunz, P., Thomson, E. F., Vitins, P., Blom, A., Burger, A., and H. Bickel. Effect of energy supply of ruminants on hormone and metabolite concentrations in the blood. *Zeitschrift für Tierphysiologie, Tierernährung und Futtermittelkunde* 42 (1): 31.
358. Bobowiec, R. Influence of interruption of the enterohepatic circulation of bile acids on their content in bile of sheep. *Acta Physiologica Polonica* 30 (1): 41.
359. Bocheva, E., Ganev, G. I., Khristova, G., and N. Todorov. Ammonia and hydrogen ion concentration in the rumen contents of wethers given diets with different nitrogen sources. *Zhivotnov'dni Nauki* 16 (2): 96.
360. Boccard, P. Meat and carcass quality. *Patre* No. 267: 9.
361. Boch, J., Bierschenck, A., Erber, M., and G. Weiland. Sarcocystis- and Toxoplasma-infections in sheep of Bavaria. *Berliner und Münchener Tierärztliche Wochenschrift* 92 (7): 137.
362. Boda, K., and M. Greksak. A study of liver mitochondria of fasted sheep. *Annales de Recherches Veterinaires* 10 (2-3): 417.
363. Bodin, L. Estimation of the genetic parameters of Lacaune ewe lamb size after fecundation on natureel-litte and induced oestrus. *Annales de Genetique et de Selection Animale* 11 (4): 413.
364. Boech, A., Petzet, A., and W. Piepersberg. Ribosomal ambiguity ram mutations facilitate dihydrostreptomycin binding to ribosomes. *Federated European Biochemical Societies Letter* 104 (2): 317.
365. Bohra, S. D. J., Nagarcenkar, R., and K. N. S. Sharma. Factors affecting pre-weaning body weights in Malpura sheep. *Indian Veterinary Journal* 56 (2): 125.
366. Bohs, C. T., Fish, J. C., Miller, T. H., and D. L. Traber. Pulmonary vascular response to endotoxin in normal and lymphocyte depleted sheep. *Circulation and Shock* 6 (11): 13.
367. Boivin, R., Bost, J., Peyrard, C., and Y. Camier. The effects of non-protein-nitrogen additives on lipid and carbohydrate metabolisms in sheep. *Annales de Recherches Veterinaires* 10 (4): 519.
368. Boivin, R., Bost, J., Peyrard, C., Camier, Y., and F. Almoríc. Urea feeding and ketogenesis in sheep. *Annales de Recherches Veterinaires* 10 (2/3): 341.
369. Boland, M. P., and P. J. Caffrey. Use of a new growth promoter for the intensive finishing of lambs. Faculty of General Agriculture. Research Report 1976-77. Dublin, Irish Republic.
370. Boland, M. P., and I. Gordon. Effect of timing of ram introcution on fertility in progestagen-PMSG treated anoestrous ewes. *Journal of Agricultural Science* 92 (1): 247.
371. Boland, M. P., and I. Gordon. Effect of administration of oestradiol to oestrous ewes on conception rate to a single insemination. Faculty of General Agriculture, Research Report 1976-77. Dublin, Irish Republic.
372. Boland, M. P., and I. Gordon. Effect of ram mating system on fertility in progestagen-PMSG treated anoestrous ewes. Faculty of General Agriculture, Research Report 1976-77. Dublin, Irish Republic.
373. Boland, M. P., Gordon, I., and D. L. Kelleher. Effect of prostaglandin or progestagen treatment on ovulation and fertilization in the cyclic ewe bred by artificial insemination. Faculty of General Agriculture, Research Report 1976-77. Dublin, Irish Republic.
374. Boland, M. P., Kelleher, D., and I. Gordon. Comparison of control of oestrus and ovulation in sheep by an ear implant (SC-21009) or by intravaginal sponge (Cronolone or MOP). *Animal Reproduction Science* 1 (4): 275.
375. Boland, M. P., Lemainque, F., and I. Gordon. Lambing outcome in cyclic ewes bred by natural service after synchronization by progestagen or prostaglandin treatment. Faculty of General Agriculture, Research Report 1976-77. Dublin, Irish Republic.
376. Boland, M. P., Lemainque, F., and I. Gordon. Superovulation and egg transfer in the ewe. Faculty of General Agriculture, Research Report 1976-77. Dublin, Irish Republic.
377. Boland, M. P., Lemainque, F., and I. Gordon. Effect of prostaglandin additives in diluted ram semen on fertilization and lambing outcome in sheep bred by AI. Faculty of General Agriculture, Research Report 1976-77. Dublin, Irish Republic.
378. Boland, M. P., Smith, P. A., and I. Gordon. Application of single insemination technique at a predetermined time in sheep. Faculty of General Agriculture, Research Report 1976-77. Dublin, Irish Republic.

379. Bolbol, A. E., and N. A. Misk. The role of the spleen for the blood circulation of sheep after sedation with rompun. *Veterinary Medical Review*, No. 1: 40.
380. Bolt, D. J. Reduction by human chorionic gonadotropin of the luteolytic effect of prostaglandin F-2 alpha in ewes. *Prostaglandins* 18 (3): 387.
381. Bonhomme, A., Durand, M., and C. Quintana. Effect of zinc on the ciliary micro population of the rumen. *Journal of Protozoology* 26 (3, part 1): 54A.
382. Bordas, C. Cattle and sheep parasitism study by coproscopy in the Nièvre district. *Revue de Médecine Veterinaire* 130 (4): 575.
383. Bordjovski, A., Conic, V., Savin, Z., Katic, S., and H. M. Khanfar. Some aspects of the serological diagnosis of sarcosporidiosis. XXI World Veterinary Congress, Moscow. Summaries, Vol. 2 (III) Parasitology, 63 pp.
384. Borgsteede, F. H. Y., and C. D. W. König. *Nematodirus battus* is definitely established in the Netherlands. *Tijdschrift voor Diergeneeskunde* 104 (21): 825.
385. Borth, R., Benoit, H. J., and C. A. Woolver. Transducer probe for the measurement of estradiol induced changes in the vagina of ovariectomized ewes. *Acta Endocrinologica* 91 (1): 167.
386. Bortolami, R., Callegari, E., and M. L. Lucchi. Ultrastructural observations on the tapetum lucidum fibrosum. *Anatomia Histologia Embryologia* 8 (1): 72.
387. Bosc, M. J., Durand, P., Locatelli, A., Nicolle, A., Ravault, J. P., and M. Terqui. Plasma steroids, prolactin and placental lactogen in intact or hypophysectomized pregnant ewes with an hypophysectomized foetus. Effect of foetal perfusion of dexamethasone. *Annales de Biologie, Animale, Biochimie, Biophysique* 19 (A4): 1099.
388. Boshoff, P. J., Oosthuysen, D., and L. Koekemoer. Nitrogen supplementation to maize silage for early weaned lambs. *South African Journal of Animal Science* 9 (2): 73.
389. Boss, P. H., Gerber, H., and F. Tschudi. Haematological and clinical-chemical investigations concerning Swiss sheep breeds. *Schweizer Archiv für Tierheilkunde* 121 (2): 57.
390. Bostedt, H. The effect of intramuscular injections of Fedextran on the haemogram of lambs. *Berliner und Münchener Tierärztliche Wochenschrift* 92 (12): 236.
391. Bostedt, H. Application of hormones during the reproductive period in small ruminants and pigs. *Praktische Tierarzt* 60 (7): 602.
392. Bottomley, G. A. Taking fibre diameter into account in ram selection. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, New England University*, 404 pp.
393. Bottomley, G. A., and R. R. Hows. Selection for uniformity between sheep. *Wool Technology and Sheep Breeding* 27 (1): 17.
394. Boundy, T. No foot, no sheep. *In Practice* 1 (3): 30.
395. Bourdin, P. Sheep viral diseases in the Soudano-Sahelian area. *Revue d'Elevage et de Médecine vétérinaire des Pays tropicaux* 32 (2): 123.
396. Boutonnet, J. P., and P. Martinand. Intensification of production and world trade in sheepmeat: contradictions affecting France. *Series Etudes et Recherches. Institut National de la Recherche Agronomique Economie et Sociologie Rurales* No. 47: 18 pp.
397. Bowers, R. E., McKeen, C. R., Park, B. E., and K. L. Brigham. Increased pulmonary vascular permeability follows intracranial hypertension in sheep. *American Review of Respiratory Disease* 199 (4): 637.
398. Bowes, G., Wilkinson, M. H., Ritchie, B. C., and J. E. Maloney. Hypercapnic stimulation of respiratory activity in unanesthetized fetal sheep in utero. *Federated Proceedings* 39 (3): 544.
399. Bowman, J. C. Breeding for improvement. In: *The Management and Diseases of Sheep*. Edited by British Council, Slough, UK, Commonwealth Agricultural Bureaux.
400. Boyazoglu, J. G., Casu, S., and J. C. Flament. Crossbreeding the Sardinian and East Friesian breeds in Sardinia. *Annales de Genetiques et de Selection Animale* 11 (1): 23.
401. Boyd, H. Pregnancy diagnosis. In: *Laing, J. A. Fertility and Infertility in Domestic Animals*, Bailliere Tindall, London, England.
402. Boyd, J. S. The ever-changing ovary—an endoscopic view. *Anatomia Histologia Embryologia* 8 (2): 182.
403. Boyle, R., Stonestreet, B., Millard, R., and Oh, W. Hemodynamic effects of indomethacin in preterm lambs with respiratory distress and patent ductus arteriosus. *Pediatric Research* 13 (4, part 2): 341.
404. Bozhinova, O., Dimitrova, R., Najdenov, T., and I. Zhelyazkov. Biologic evaluation of ensilaged and dehydrated maize. 7. Influence of drying temperatures. *Zhivotnov'd Nauki* 16 (5): 91.
405. Bozhinova, O., Zhelyazkov, T., Najdenov, T., and R. Dimitrova. Biological evaluation of ensilaged and dehydrated maize whole plant. 6. Trials with fatten-

- ing lambs and weaned lambs. *Zhivotnov'd Nauki* 16 (4): 91.
406. Brackett, B. G. In vitro fertilization and its assessment with embryo culture. *Beltsville Symposia in Agricultural Research* 3. *Animal Reproduction*, pp. 171-193, John Wiley and Sons, New York.
407. Bradley, B. D., Alderson, N. E., Knight, W. M., Colaienne, J. J., and H. H. Bryant. Oxytetracycline absorption and excretion in wethers. *Journal of Animal Science* 48 (6): 1464.
408. Bradley, B. D., Knight, W. M., and R. J. Condon. A market system to monitor drug exposure in ruminants. *Journal of Animal Science* 49 (suppl. 1): 357.
409. Bradley, M. P., Van Eerten, M. T. W., Rayns, F. G., and I. T. Forrester. Membrane integrity and the regulation of calcium in mammalian spermatozoa. *Biology of Reproduction* 20 (suppl. 1): 61A.
410. Bradley, R. M., Mistretta, C. M., and D. Suh. Development of taste buds on the sheep soft palate. *Journal of Dental Research* 58 (Special issue A): 115.
411. Braithwaite, G. D. The effect of dietary intake of calcium and phosphorus on their absorption and retention by mature Ca-replete sheep. *Journal of Agricultural Science* 92 (2): 337.
412. Braithwaite, G. D. Calcium and phosphorus metabolism in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 359.
413. Brandon, M. R., Hemmings, W. A., Jones, R. E., and E. W. Williams. Characterization of breakdown products in blood and tissues of sheep following injection of labeled immunoglobulin G into the duodenum. *International Research Communications System Medical Science Library Compendium* 7 (2): 76.
414. Brandon, M. R., Hemmings, W. A., Jones, R. E., and E. W. Williams. The absorption of iodine labeled immunoglobulin G from the small intestine and the rumen of sheep. *International Research Communications System Medical Science Library Compendium* 7 (2): 76.
415. Brandt, H. M. P. V. D. Sheep breeding in the Netherlands. *Bedrijfsontwikkeling* 10 (10): 901.
416. Brasher, S., and D. F. Perkins. Grazing intensity and productivity of sheep in the grassland ecosystem. In: O. W. Heal and D. F. Perkins. *Production ecology of British Moors and montane grasslands* 27: 354.
417. Bratanov, K. T., Dikov, V., Vulchov, V. H., Tornyov, A., and S. Pavlova. Immunodiffusion data on the antigenic relationship between bull, boar, ram and human spermatozoa. *Proceedings of Bulgarian Academy of Science* 32 (7): 977.
418. Brelin, B. Mixed grazing with sheep and cattle compared with single grazing. *Swedish Journal of Agricultural Research* 9 (3): 112.
419. Brent, H., Pence, D. B., and C. J. Simpson. Serological studies on sympatric barbary sheep and mule deer from Palo Duro Canyon, Texas. *Journal of Wildlife Diseases* 15 (3): 443.
420. Bressack, M. A. and R. D. Bland. Direct relationship between pulmonary vascular resistance and lung fluid filtration in hypoxemic lambs given intravenous tolazoline. *Clinical Research* 27 (1): 123A.
421. Bressack, M. A., McMillan, D. D., and R. D. Bland. Pulmonary oxygen toxicity, increased neovascular permeability to protein in unanesthetized lambs. *Immunology* 12 (3): 133.
422. Bressack, M. A., McMillan, D. D., and R. D. Bland. Prolonged oxygen breathing increases lung micromuscular permeability to protein in lambs. *Clinical Research* 27 (1): 130A.
423. Breves, G., Harmeyer, J., Holler, H., and H. Martens. Experimental feedings with fodder containing urea in North German Moorland sheep. Digestibility of dry masses and nitrogen in single gastrointestinal sections. *Zeitschrift für Tierphysiologie, Tierernährung und Futtermittelkunde* 42 (1): 29.
424. Breves, G., Hoeller, H., Harmeyer, J., and H. Martens. Gastro-intestinal passage and balance of thiamin in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 465.
425. Brevet, A., Kellermann, O., Tonetti, H., and J. P. Waller. Macromolecular complexes of aminoacyl transfer RNA synthetases from eukaryotes. 2. Agarose gel filtration behavior of the extensively purified high molecular weight complexes of 7 aminoacyl transfer RNA synthetases from sheep liver. *European Journal of Biochemistry* 99 (3): 551.
426. Brewer, D., McLachlan, J., Neish, A. C., Taylor, A., and T. M. MacIntyre. Effects of feeding of *Chondrus crispus* (Irish moss) during the grazing season on the condition and fertility of Shropshire ewes. *Canadian Journal of Animal Science* 59 (1): 95.
427. Brice, G. Artificial insemination of sheep in France. *Patre* No. 268: 40.
428. Brigham, K. L., Bowers, R. E., and J. Haynes. Increased sheep lung vascular permeability caused by *Escherichia coli* endotoxin. *Circulation Research* 45 (2): 292.
429. Brinsmead, M. W., and G. C. Liggins. Serum somatomedin activity after hypophysectomy and during parturition in fetal lambs. *Endocrinology* 105 (1): 297.

430. British Veterinary Association. BVA policy on animal welfare and mutilations. *Veterinary Record* 105 (1): 18.
431. Britt, J. H. Prospects for controlling reproductive processes in cattle, sheep, and swine from recent findings in reproduction. *Journal of Dairy Science* 62 (4): 651.
432. Broadbent, P. J., Prescott, J. H. D., and J. Walker-Love. Feeding the farm animal—sheep. Publication, Scottish Agricultural Colleges No. 43, 39 pp.
433. Brockman, R. P. Glucagon responses to exercise in sheep. *Australian Journal of Biological Sciences* 32 (2): 215.
434. Brockman, R. P. Roles for insulin and glucagon in the development of ruminant ketosis—a review. *Canadian Veterinary Journal* 20 (5): 121.
435. Brockman, R. P. Effect of somatostatin suppression of glucagon secretion on glucose production in sheep. *Canadian Journal of Physiology and Pharmacology* 57 (8): 848.
436. Brockman, R. P. Effect of somatostatin on plasma glucagon and insulin and glucose turnover in exercising sheep. *Journal of Applied Physiology: Respiratory, Environmental and Exercise Physiology* 47 (2): 273.
437. Brockman, R. P., and C. Greer. Effect of somatostatin suppression of glucagon secretion on glucose production in sheep. *Federation Proceedings* 38 (3): 555.
438. Brooks, D. E. Carnitine acetyl carnitine and the activity of carnitine acyl transferases (EC 2.3.1.7) in seminal plasma and spermatozoa of men, rams and rats. *Journal of Reproductive Fertility* 56 (2): 667.
439. Brown, C. G. D. Propagation of Theileria. In: Maramorosch, K. and H. Hirumi. *Practical Tissue Culture Applications: Proceedings of a conference*. Nairobi, Kenya, 1978. Academic Press, New York, N.Y.
440. Brown, D. F., and P. C. Harrison. The effect of opioids and beta sympathetic antagonists on decreased uterine blood flow in the pregnant ewe during heat stress. *Journal of Animal Science* 49 (suppl. 1): 281.
441. Brown, E. R. B., Nielsen, H. C., Torday, J. S., and H. W. Taesch. Reversible induction of surfactant production in fetal lambs treated with glucocorticoid. *Pediatric Research* 13 (4, part 2): 491.
442. Brown, W. B., Forbes, J. M., Goodall, E. D., Kay, R. N. B., and A. M. Simpson. Effects of photoperiod on food intake, sexual condition and hormone concentrations in stags and rams. *Journal of Physiology* 296: 58P.
443. Bruere, A. N., and P. M. Ellis. Cytogenetics and reproduction of sheep with multiple centric fusions, Robertsonian translocations. *Journal of Reproductive Fertility* 57 (2): 363.
444. Bruce, L. B. Effects of dietary cadmium chloride on digestive functions and short-term mineral balance in sheep and on growth of albino rats as modified by dietary silicic acid. *Dissertation Abstracts International* 40B: 6: 2447.
445. Bruce, L. B., and G. S. Smith. Cadmium retention by sheep fed silicic acid. *Journal of Animal Science* 49 (suppl. 1): 184.
446. Bruere, A. N., West, D. M., Orr, M. B., and M. W. O'Callaghan. A syndrome of dental abnormalities of sheep: 1. Clinical aspects on a commercial sheep farm in the Wairarapa. *New Zealand Veterinary Journal* 27 (8): 152.
447. Bruere, A. N. and D. M. West. Ram soundness examination. *New Zealand Veterinary Journal* 27 (3): 45.
448. Brugere-Picoux, J., Brugere, H., and H. Le Bars. Disorders in microbial digestion in ruminants: etiology, pathogeny, clinical examination, therapeutic deductions. *Recueil Medecine Veterinaire de l'Ecole d'Alfort* 155 (5): 479.
449. Bruggemann, A., Glasenapp, P., Gohler, H., and H. Wohlmann. Breeding of mutton sheep and the change in the production of crossbred fat lambs. *Tierzucht* 33 (7): 300.
450. Bruns, M., Straub, O. C., Weiland, F., and S. Feiler. Detection of antibodies against glycoprotein of Maedi-Visna virus released as soluble antigen in cell cultures. *Zentralblatt für Veterinärmedizin* 26B (6): 461.
451. Bryan, K. B., Dickey, J. F. and J. R. Hill Jr. The ultrastructure of the developing ovine seminiferous tubules. *Journal of Dairy Science* 62 (suppl. 1): 211.
452. Bryant, F. C., Kothmann, M. M., and L. B. Merrill. Diets of sheep, Angora goats, Spanish goats and white-tailed deer under excellent range conditions. *Journal of Range Management* 32 (6): 412.
453. Bryant, M. J. The flock-mating of progestagen-synchronized ewes. 3. A note on the influence of flock size upon mating behaviour and lambing performance. *Animal Production* 28 (1): 127.
454. Bryden, J. M. Deer versus sheep. A reply. *Journal of Agricultural Economics* 30 (1): 71.
455. Bryson, R. W., and G. F. Zumpt. An outbreak of white muscle disease in lambs born of ewes on a zero grazing system in Natal. *Journal of the South African Veterinary Association* 50 (3): 159.
456. Buchenauer, D. Behaviour of wild and domesticated sheep. In: Lachenmaier, F.,

- and M. C. Schlichting. Aktuelle Arbeiten zur Artgemassen Tierhaltung 1978. Bericht über die Tagung der Deutschen Veterinärmedizinischen Gesellschaft E. V. Fachgruppe Verhaltensforschung vom 2-4 November 1978. Kuratorium für Technik und Bauwesen in der Landwirtschaft E.V., p. 64-77.
457. Buchhop, K. Movement of thiamine (vitamin B-1) through the rumen wall of sheep in vivo. Inaugural Dissertation. Tierärztliche Hochschule. Hannover, 41 pp.
458. Buczek, J., Krzyzanowski, J., and H. Mouallem. Isolation of *Neisseria ovis* from sheep with infectious keratoconjunctivitis. *Medycyna Weterynaryjna* 35 (3): 136.
459. Bueno, L. Orotic acid and non-protein nitrogen overload in sheep. *Annales de Recherches Veterinaires* 10 (1): 1.
460. Bueno, L., and F. Praddaude. Electrical activity of the gallbladder and biliary tract in sheep and its relationships with antral and duodenal motility. *Annales de Biologie, Animale, Biochimie, Biophysique* 19 (A4): 1109.
461. Bueno, L., and Y. Ruckabus. Ingestive behaviour in sheep under field conditions. *Applied Animal Ethology* 5 (2): 179.
462. Bueno, L., and Y. Ruckabus. Perinatal development of intestinal myoelectrical activity in dogs and sheep. *American Journal of Physiology* 237 (1): E61.
463. Bukshytynov, V. I. Identification of sheep affected by warble fly. *Veterinariya* No. 9: 42.
464. Buldakov, Yu. V., Tyupin, A. V., and Yu. A. Kolosov. Productivity of lambs reared on milk substitutes with protein and vitamin concentrates. *Ovtsevodstvo* No. 6: 36.
465. Bunnett, N. W., and F. A. Harrison. Endocrine cells in the alimentary tract of the sheep. *Annales de Recherches Veterinaires* 10 (2-3): 197.
466. Burba, L. G., Filatov, P. V., Valikhov, A. F., Knyazeva, L. A., and V. G. Baranov. Experimental reproduction of leukosis in farm animals (calf, lamb, piglet). *Etiologiya i Immunodiagnostika Leikozia Krupnogo Rogatogo*, Edited by R. A. Kukain, Riga, Latvian SSR, USSR.
467. Burlacu, G., Baia, G., Rus, V., and J. Stavri. Energy utilization of maize silage fodder rations by growing sheep. *Archiv für Tierernährung* 29 (3): 189.
468. Burlingham, B. T., and J. E. Akers. Interaction of adenovirus type 2 with cultured sheep lymphocytes. Abstracts of Annual Meeting of the American Society of Microbiologists, 266 pp.
469. Burrell, D. H. Conditions for in vitro hemolytic activity by *Corynebacterium ovis* exotoxin. *Research in Veterinary Science* 26 (3): 333.
470. Burrells, C., Wells, P. W., and A. M. Dawson. The quantitative estimation of antibody to *Pasteurella haemolytica* in sheep sera using a micro-enzyme-linked immunoabsorbent assay (ELISA). *Veterinary Microbiology* 3 (4): 291.
471. Burrows, G. E. Methylene blue or toluonium chloride antagonism of sodium nitrite induced methemoglobinemia. *Journal of Veterinary Pharmacology and Therapeutics* 2 (1): 81.
472. Burrows, G. E., and J. L. Way. Cyanide intoxication in sheep: enhancement of efficacy of sodium nitrate, sodium thio-sulfate and cobaltous chloride. *American Journal of Veterinary Research* 40 (5): 613.
473. Busboom, J. R., Field, R. A., and M. L. Riley. Effect of breed and feed level on dressing percentage body parts and fill. *Journal of Animal Science* 49 (suppl. 1): 214.
474. Butcher, P. D., and C. M. Hawkey. The nature of erythrocyte sickling in sheep. *Comparative Biochemistry and Physiology A, Comparative Physiology* 64 (3): 411.
475. Butkus, A., Coghlan, J. P., Denton, D. A., Graham, W. F., Humphery, T. J., Scoggins, B. A., and J. A. Whitworth. Adrenocortical steroid hormones in production of hypertension in sheep. *Journal of Steroid Biochemistry* 11 (1, part C): 21.
476. Butler, J. L., Stewart, J. C., Vanderzant, C., Carpenter, Z. L., and G. C. Smith. Attachment of microorganisms to pork skin and surfaces of beef and lamb carcasses. *Journal of Food Protection* 42 (5): 401.
477. Butler, L. G., and B. R. Wilkinson. Efficiency of wool production and the mechanics of wool follicle production. *New Zealand Journal of Agricultural Research* 22 (4): 543.
478. Buttgerit, H. Formation of outposts in state-controlled collective veterinary practices for more efficiency in work organization. *Monatshefte für Veterinärmedizin* 34 (19/20): 764.
479. Buxton, D. Toxoplasmosis: is it a problem? *Veterinary Record* 105 (9): 190.
480. Byers, F. M., and S. R. Goodall. Effect of energy level on ruminal D (-) and L (+) lactic acid metabolism. *Journal of Animal Science* 48 (3): 624.
481. Byford, M. J. Ryegrass staggers: what causes it, and how to control it through pasture management. *New Zealand Journal of Agriculture* 139 (6): 33, 35.

C

482. Cabaret, J. *Haemonchus contortus* populations, qualitative and quantitative variations in the sheep in 2 Moroccan areas. *Revue Medecine Veterinaire* 130 (7): 1017.
483. Cabaret, J., Ouhelli, H., and A. Dakkak. Efficacy of fenbendazole against ovine helminthiasis. II. Helminths of the digestive tract. *Recueil Medecine Veterinaire de l'Ecole d'Alford* 155 (10): 785.
484. Caffrey, J. L., Fletcher, P. W., Diekman, M. A., O'Callaghan, P. L., and G. D. Niswender. The activity of ovine luteal cholesterol esterase during several experimental conditions. *Biology of Reproduction* 21 (3): 601.
485. Caffrey, J. L., Nett, T. M., Abel, J. H., and G. D. Niswender. Activity of 3 beta hydroxy delta 5-steroid dehydrogenase/delta 5- delta 4-isomerase in the ovine corpus luteum. *Biology of Reproduction* 20 (2): 279.
486. Cahill, L. P., and J. Dufour. Follicular populations in the ewe under different gonadotrophin levels. *Annales de Biologie, Animale, Biochimie, Biophysique* 19 (5): 1475.
487. Cahill, R. N. P., Poskitt, D. C., Heron, I., and Z. Trnka. Collection of lymph from single lymph nodes and the intestines of fetal lambs in utero. *International Archives of Allergy and Applied Immunology* 59 (1): 117.
488. Cahill, R. N. P., and Z. Trnka. Growth and development of recirculating lymphocytes in the sheep fetus. In: Trnka, Z., and R. N. P. Cahill. *Monographs in Allergy*, Vol. 16: 38.
489. Cahoreau, C., Blanc, M. R., Dacheux, J. L., Pisselet, C., and M. Courot. Inhibin activity in ram rete testis fluid: depression of plasma FSH and LH in the castrate and cryptorchid ram. *Journal of Reproduction and Fertility* 26: 97.
490. Cakala, S., and T. Borkowski. Observations on the use of clovax vaccine against foot rot in sheep. *Medycyna Weterynaryjna* 35 (12): 743.
491. Calamel, M., Villemin, P., and F. Leimbacher. The effectiveness of diamphenethide in the treatment of ovine dicrocoeliosis. *Ruceil Medecine Veterinarie* 155 (1): 37.
492. Calhoun, M. C. Encapsulated methionine supplementation of feeder lamb diets varying in energy and protein. *Journal of Animal Science* 49 (suppl. 1): 46.
493. Calhoun, M. C., Carroll, L. H., Livingston, C. W. Jr., and M. Shelton. Effect of dietary monensin of coccidial oocyst numbers, feedlot performance and carcass characteristics of lambs. *Journal of Animal Science* 49 (1):10.
494. Callahan, G. N., Pellegrino, M. A., Ferrone, S., Haubrich, L., and R. A. Reisfeld. Expression of a sheep red blood cell receptor by a murine lymphoma. *Journal of Immunology* 123 (6): 2725.
495. Callinan, A. P. L. The ecology of the free-living stages of *Trichostrongylus vitrinus*. *International Journal for Parasitology* 9 (2): 133.
496. Callinan, A. P. L. Estimation of the development and death rate parameters of parasite life cycles. *Victorian Veterinary Proceedings* 37: 42.
497. Callinan, A. P. L., and N. J. Barton. Efficacies of thiabendazole and levamisole against sheep nematodes in western Victoria. *Australian Veterinary Journal* 55 (5): 255.
498. Callow, C. The comprehensive service offered by sheeplan, the New Zealand flock recording scheme. *Proceedings of the Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England*, 404 pp.
499. Calvo, R., Carlos, R., and S. Erill. Etomidate and plasma esterase activity in man and experimental animals. *Pharmacology* 18 (6): 294.
500. Cammell, S. B., Spooner, M. C., and D. J. Thomson. A note on the use of electronic doors for individual feeding of group-housed lambs. *Animal Production* 29 (3): 407.
501. Campbell, J. K., and C. F. Mills. The toxicity of zinc to pregnant sheep. *Environmental Research* 20 (1): 1.
502. Campbell, M. J., Dineen, J. K., and J. D. Kelly. Effect of *Taenia hydatigena* infection on existing and concurrent infections of *Fasciola hepatica* in sheep. *Research in Veterinary Science* 26 (3): 391.
503. Campbell, N. J., and C. A. Hall. Anthelmintic efficacy of albendazole against *Fasciola hepatica* and benzimidazole resistant strains of *Haemonchus contortus* and *Trichostrongylus colubriformis* in sheep. *Research in Veterinary Science* 26 (1): 90.
504. Campbell, R. S. F., Rae, A., Sharp, J. M., and W. Smith. Infection of tracheal organ cultures with ovine adenovirus type 2. *Journal of Comparative Pathology* 89 (1): 107.
505. Canada, Agriculture Canada, Policy, Planning and Economics Branch. *Animals and animal products. Market Commentary, Animals and Animal products, December*, p. 5.
506. Cankovic, M., Milka, R., and S. Gradanin. Examination of snails and ants for *Di-*

- crocoelium lanceolatum* larvae on the island of Cres. *Veterinaria* 28 (3): 349.
507. Cankovic, M., Nur, A. H., and M. S. Hassan. Effect of levamisole on gastrointestinal strongyles in Somali sheep. *Praxis Veterinaria* 27 (3/4): 147.
 508. Capistrak, A., and J. Laurincik. Improvement of milk production in Tsigai and Valachian breeds. *Nas Chov* 39 (10): 433.
 509. Caple, I. W., and T. J. Heath. Effect of chronic liver damage caused by ingestion of *Heliotropium europaeum* on bile formation in sheep. *Journal of Comparative Pathology* 89 (1): 83.
 510. Caprarin, A., and A. Purcherea. Effects of *Moniezia expansa* extracts on blood values of sheep. *Lucrari Stiintifice Institut Agronomic N. Balcescu. Seria C: 1977/1978 20/21*: 81.
 511. Cardasol, V., Constantaide, C., and G. Oprea. Nutritive value of green fodder and hay of *Dactylis glomerata* and *Phleum pratense*. *Revista de Cresterea Animalelor* 29 (2): 36.
 512. Care, A. D., Dutton, A., Mott, J. C., Robinson, J. S., and R. Ross. Studies of the transplacental calcium gradient in the sheep. *Journal of Physiology* 290: 19P-20P.
 513. Care, A. D., Pickard, D. W., Weatherley, A., and D. Appleby. Measurement of transplacental magnesium fluxes in sheep. *Research in Veterinary Science* 27 (1): 121.
 514. Care, A. D., Ross, R., Pickard, D. W., Robinson, J. S., Mott, J. C., and A. Dutton. Calcium homeostasis in the ovine fetus. *Calcified Tissue International* 29 (suppl.): A5.
 515. Carlyle, W. J. The changing distribution of breeds of sheep in Scotland, 1795-1965. *The Agricultural History Review* 27 (1): 19.
 516. Carmen, M. G., Rush-Munro, F. M., and M. E. Carter. Dermatophytes isolated from domestic and feral animals. *New Zealand Veterinary Journal* 27 (7): 136: 143-144.
 517. Carmeliet, E. Voltage dependent block of inward going rectification in cardiac purkinje fibers by external cesium ions. *International Archives of Pharmacodynamics and Therapeutics* 142 (2): 294.
 518. Carmeliet, E. Induction of inward going rectification in sheep cardiac purkinje fibers. *International Archives of Pharmacodynamics and Therapeutics* 242 (2): 296.
 519. Carmona, E., and J. Bodes. Comparison of solutions of different density for coprological diagnosis of ovine parasitoses. *Anales del Instituto Nacional de Investigaciones Agrarias, Higiene y Sanidad Animal. No. 4*: 111.
 520. Carmona, E., and J. Bodes. Contributions to the national parasitological map. The most frequent parasitic species in sheep of the Estremadura. *Anales del Instituto Nacional de Investigaciones Agrarias, Higiene y Sanidad Animal No. 4*: 115.
 521. Carmona, E., and A. Serrano. Comparison of treatments for muscular dystrophy in lambs. *Anales del Instituto Nacional de Investigaciones Agrarias, Higiene y Sanidad Animal* 4: 107.
 522. Carne, H. R., and E. O. Onon. Action of *Corynebacterium ovis* exotoxin on endothelial cells of blood vessels. *Nature* 271 (5642): 246.
 523. Carr, D. H., Scott, P. C., and D. A. Titchen. Sheep oesophageal reactions during eructation. *Annales de Recherches Veterinaires* 10 (2-3): 168.
 524. Carr, W. R., and R. B. Land. The effect of season of birth on testis diameter and response to luteinizing hormone releasing hormone in the lamb. *Biology of Reproduction* 20 (suppl. 1): 135A.
 525. Carreau, S., Drosdowsky, M. A., and M. Courot. Age related effects on androgen bringing protein in sheep testis and epididymis. *International Journal of Andrology* 2 (1): 49.
 526. Carson, R. S., Findlay, J. K., Burger, H. G., and A. O. Trounson. Gonadotropin receptors of the ovine ovarian follicle during follicular growth and atresia. *Biology of Reproduction* 21 (1): 75.
 527. Carson, R. S., Findlay, J. K., and H. G. Burger. Receptors for gonadotrophins in the ovine follicle during growth and atresia. In: *Ovarian Follicular and Corpus luteum Function*, Plenum Press, N.Y.
 528. Carter, A. H. Inherited taillessness in sheep. *Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries, Annual Report of Research Division 1977-78*, Hamilton, New Zealand, 262 pp.
 529. Carter, A. W. Markets. The humane treatment of food animals in transit. *Proceedings of a symposium on 20th July 1979*, Potters Bar, Herts, UK, Universities Federation for Animal Welfare, 8 Hamilton Close: 7.
 530. Caruthers, J. M. S., and M. A. Bonneville. Comparative parameters in the isolation of luminal plasma membranes from sheep urothelia. *Biology of Cell* 35 (3): 259.
 531. Caso, L. V. Histochemical studies of mucous substances and keratins of thymic corpuscles. *Australian Journal of Experimental Biology and Medical Science* 57 (5): 493.

532. Cassidy, K., Brodsky, B., and E. Eikenberry. Low angle X-ray diffraction of dermatoparasitic lamb skin. *Biophysical Journal* 25 (2, part 2): 238A.
533. Castillo Hernandez, J. A., Sanchez Acedo, C., and J. F. Gutierrez Galindo. The prevalence of various parasites in coprological surveys of sheep. Second National Congress on Parasitology, October, 1979. Leon, Spain, 202 pp.
534. Cathala, F., Brown, P., Bouchard, N., Court, L., and J. Doucet. Creutzfeldt-Jakob disease and sheep scrapie. *Bulletin de L'Academie Veterinaire de France* 52 (1): 99.
535. Cathala, F., Chatelain, J., Brown, P., Court, L., Bouchard, N., and J. C. Messtries. Is scrapie in sheep the cause of Creutzfeldt-Jakob disease in man? *Bulletin Mensuel de la Societe Veterinaire Pratique de France* 63 (2): 99.
536. Caton, D., Crenshaw, C., Wilcox, C. J., and D. H. Barron. Oxygen delivery to the pregnant uterus, its relationship to oxygen consumption. *American Journal of Physiology* 237 (1): R52.
537. Cattaneo, P., Bianchi, M. A., Beretta, G., and C. Cantoni. Lambs meats conservability and their nutritive value. *Industria Alimentari* 18 (9): 641.
538. Cebrian, M., and H. Swan. The digestion of protein in ensiled brewers grains by sheep. *Animal Production* 28 (3): 429.
539. Cederblad, G., Holm, J., Lindstedt, G., Lindstedt, S., Nordin, I. and T. Schersten. Gamma butyrolactone hydroxylase activity in human and ovine liver and skeletal muscle tissue. *Federated European Biochemical Societies Letter* 98 (1): 57.
540. Cerini, J. E., Cerini, M., Findlay, J. K., and R. A. S. Lawson. Localization of prostaglandin-F in the ovine uterus during early pregnancy. *Animal Reproduction Science* 2 (4): 363.
541. Cetinkaya, K. Determination of the duration of oestrus. The oestrous cycle and the optimal insemination time in the Karacebey merino ewes. *Lalahan Zootečni Arastirma Enstitüsü Dergisi* 19 (3/4): 103.
542. Chad, Laboratoire de Farcha. Research on respiratory diseases of sheep and goats in Chad. *Rapport Annuel* 1978. *Region de Recherches Veterinaires et zootechniques d'Afrique Centrale N'Djamena* BP 433.
543. Chahal, A. S., Rattan, P. J. S., and O. Parshad. Some physico-chemical studies on semen and their interrelationships during different seasons in Corriedale rams. *Indian Journal of Animal Sciences* 49 (6): 433.
544. Chakrabarty, A. K., Dutta, P. K., Boro, B. R., and P. N. Mahanta. Seasonal prevalence of foot and mouth disease in Assam, India. *Tropical Animal Health Production* 11 (2): 115.
545. Challis, J. R. G. Prostaglandins. In: Austin, C. R. and R. V. Short. *Reproduction in Mammals. Vol. 7. Mechanisms of hormone action.* Cambridge University Press, England.
546. Challis, J. R. G., Carson, G. D., Glickman, J. A., MacLennan, E. A., Manchester, L., Patrick, J. E., and J. Workewych. The periparturient endocrine system in sheep. *Animal Reproduction Science* 2 (1-3): 29.
547. Chalmers, K. The efficacy of oxfendazole against naturally acquired *Dictyocaulus* spp. in sheep and cattle. *New Zealand Veterinary Journal* 27 (1-2): 8.
548. Chalmers, K. Evaluation of the efficacy of the anthelmintic oxfendazole against artificial infections of gastrointestinal nematodes in sheep and cattle. *Journal of Experimental Agriculture* 7 (2): 111.
549. Chamberlain, D. G., and P. C. Thomas. Ruminant nitrogen metabolism and the passage of amino acids to the duodenum in sheep receiving diets containing hay and concentrates in various proportions. *Journal of the Science of Food and Agriculture* 30 (7): 677.
550. Champredon, C., Pion, R., and W. Martin-Rosset. Effects of dietary protein levels on blood free amino-acidemia in lambs. *Comptes Rendu des Seances de la Societe de Biologie et de ses Filiales* 172 (5): 927.
551. Chamukha, M. D., and B. M. Charkovich. Method of evaluating rams. *Ovtsevodstvo* No. 9: 8.
552. Chan, J. S. D. Studies on ovine placental lactogen. *Dissertation Abstracts International* 40B (2): 612.
553. Chandler, K. D., Mau, S. L., and A. W. Bell. Maternal and foetal glucose metabolism in the exercising pregnant ewe. *Proceedings of the Nutrition Society* 38 (3): A118.
554. Chandrasena, L. G., Emmanuel, B., and H. Gilanpour. A comparative study of glucose metabolism between the camel and the sheep. *Comparative Biochemistry and Physiology* 62A (4): 62A.
555. Chandrasena, L. G., Emmanuel, B., Hammar, D. W., and B. R. Howard. A comparative study of ketone body metabolism between the camel (*Camelus dromedarius*) and the sheep (*Ovis aries*). *Comparative Biochemistry and Physiology B Comparative Biochemistry* 64 (1): 109.
556. Ch'ang, T. S. Livestock production in China with particular reference to

- sheep. *Wool Technology and Sheep Breeding* 27 (2): 19.
557. Channing, C. P., Hillensjo, T., and F. W. Schaerf. Hormonal control of oocyte meiosis, ovulation, and luteinization in mammals. *Clinical Endocrinology and Metabolism* 7 (3): 601.
558. Chapman, H. W., Grovum, W. L., and J. C. Newhook. The site of action of pentagastrin induced inhibition of the reticulum. *Annales de Recherches Veterinaires* 10 (2-3): 200.
559. Chappel, R. W., and R. J. Hudson. Energy cost of standing in Rocky Mountain Big-horn sheep. *Journal of Wildlife Management* 43 (1): 261.
560. Chappell, G. L. M., Ely, D. G., and W. P. Deweese. The Kentucky ewe profit schools. *Journal of Animal Science* 49 (suppl 1): 206.
561. Charlton, C. V., and A. M. Rudolph. Digestion and absorption of carbohydrates by the fetal lamb in utero. *Pediatric Research* 13 (9): 1018.
562. Charkovich, B. S. Comparative evaluation of inheritance in 8- to 9-month-old and adult rams. *Nauchno-Tekhnicheskii Byulleten' Sibirskii Nauchno-Issledovatel'skii 1 Proektno-Tekhnologicheskii Insitit Zhivotonovodstva. Referativnyi Zhurnal* (1980) 2 (58): 316; 1979, No. 32: 42.
563. Charlton, C. V., and A. M. Rudolph. Digestion and absorption of carbohydrates by fetal lamb in utero. *Pediatric Research* 13 (9): 1018.
564. Charlton, V. E., Reis, B. L., and D. J. Lofgren. Nutrient loss across the fetal intestinal circulation. *Pediatric Research* 13 (4, part 2): 356.
565. Charlton, V. E., Reis, B. L. and D. J. Lofgren. Consumption of carbohydrates, amino acids and oxygen across the intestinal circulation in the fetal sheep. *Journal of Developmental Physiology* 1 (4): 329.
566. Charyev, O. Ch. Variability in virulence of the causal agents of babesiosis and piroplasmiasis in sheep. *Izvestiya Akademii Nauk Turkmenskoi SSR (Turmenistan SSR Ylymlar Akademijasynyn Habarlary) Biologicheskie Nauki* No. 1: 82.
567. Chatterjee, A., and D. N. Sengupta. Ringworm in domestic animals. *Indian Journal of Animal Health* 18 (2): 37.
568. Chattera, D. K., Bose, A. N., Sen, M., and P. Chatterjee. Physico-chemical studies of model meat emulsions in relation to the preparation of stable sheep and goat meat sausage. *Journal of Food Science* 44 (6): 1695.
569. Chaudhry, N. I. Rupture of the vagina in a pregnant ewe. *The Veterinary Record* 104 (10): 220.
570. Cheng, K. J., McCowan, R. P., and J. W. Costerton. Adherent epithelial bacteria in ruminants and their roles in digestive tract function. *American Journal of Clinical Nutrition* 32 (1): 139.
571. Cheng, K. J., and R. J. Wallace. The mechanism of passage of endogenous urea through the rumen wall and the role of ureolytic epithelial bacteria in the urea flux. *British Journal of Nutrition* 42 (3): 553.
572. Chi, C. W. and H. Isseroff. Fascioliasis: nitrogen balance studies and the disposition of excessive proline in rats. *Journal of Nutrition* 109 (7): 1299.
573. China, Scientific Research Group on Frozen Sheep Semen. A study of the freezing of sheep semen. *Scientia Agricultura Sinica* No. 3: 82.
574. Chineme, C. N., Bida, S. A., and S. Nuru. Sarcoptic mange of sheep in Kaduna State, Nigeria. *Bulletin of Animal Health and Production in Africa* 27 (1): 41.
575. Chioffi, V. Chemical-physical survey on milk from sheep bred in Polesine. *Industria Alimentari* 18 (1): 35.
576. Chopra, I. J., Hollingsworth, D. R., Davis, S. L., Berlin, R. P., and M. C. Reid. Fetal microsurgical thyroidectomy. Amniotic fluid 3,3'- and 3',5'-diiodothyronine in fetal hypothyroidism in sheep. *Endocrinology* 104 (3): 596.
577. Christensen, E. Stress syndrome in sheep transported by sea. *Dansk Veterinaertidsskrift* 62 (9): 456.
578. Chrobocinska, M., Dzierzawski, A., Amudzki, J., and J. Lubiarz. Outbreak of chronic copper poisoning in a flock of sheep. *Medycyna Weterynaryjna* 35 (3): 164.
579. Chu, T. T., Edey, T. N., and J. K. Findlay. Pituitary response of prepuberal lambs to oestradiol-17 beta. *Australian Journal of Biological Sciences* 32 (4/5): 463.
580. Church, D. C., and R. P. Randall. Effects of diet and feeding level on taste responses of sheep and calves to sucrose solutions. *Journal of Animal Science* 48 (5): 1177.
581. Church, D. C., Randall, R. P., and E. Ortega. Relationship between eating rate and gastrointestinal tract fill within animal performance in sheep. *Journal of Animal Science* 49 (suppl. 1): 362.
582. Ciolca, A., and C. Zarzara. Cutaneous myiasis in sheep. *Revista de Cresterea Animalelor* 29 (6): 55.
583. Ciucchini, F., Piccininno, G., Lillini, E., and C. Pistoia. Serological study on ovine leptospirosis in Province of Rome.

- Archivio Veterinario Italiano 31 (1-2): 37.
584. Ciurus, J. and D. Gajda. The use of Polish mountain sheep in crossbreeding with Polish longwool rams of the Olkusz type. *Roczniki Naukowe Zootechniki* 6 (2): 109.
585. Clapp, J. F. Effect of epinephrine infusion on maternal and uterine oxygen uptake in the pregnant ewe. *American Journal of Obstetrics and Gynaecology* 133 (2): 208.
586. Clark, B. L., and M. J. Monsbrough. The prevalence of *Campylobacter fetus* in the gall bladder of sheep. *Australian Veterinary Journal* 55 (1): 42.
587. Clark, D. A. Effect of pasture reserves and stocking rate on ewe and lamb performance from mid-pregnancy to weaning. *Proceedings of New Zealand Grassland Association* 40: 81.
588. Clark, F. L. Field aspects of selenium deficiency in ruminants in New South Wales. *Australian Advances in Veterinary Science*, Edited by M. G. Cooper, p. 48.
589. Clark, J. G. Whorled milkweed poisoning. *Veterinary and Human Toxicology* 21 (6): 431.
590. Clarke, I. J. Induction of male behaviour in ovariectomized ewes and ovariectomized-androgenized ewes chronically implanted with oestradiol-17 B or testosterone. *Animal Reproduction Science* 1 (4): 305.
591. Clarke, J. K., McFerran, J. B., McKillop, E. R., and W. L. Curran. Isolation of an adeno associated virus from sheep. *Archives of Virology* 60 (2): 171.
592. Clarke, J. N. Providing flexibility in the choice of breeding objectives and recording options in centralized recording programs for breeders of dual-purpose sheep. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England*, 404 pp.
593. Clarke, P. G. H., Martin, K. A. C., Ramachandran, V. S., Rao, V. M., and D. Whitteridge. Development and plasticity of neuronal connections in the lamb visual system. *Developmental Neurobiology of Vision. NATO Advanced Study Institute on Developmental Neurobiology of Vision. NATO Advanced Study Institutes Series A*, Vol. 27: 403.
594. Clarke, P. G. H., Ramachandran, V. S., and D. Whitteridge. The development of the binocular depth cells in the secondary visual cortex of the lamb. *Proceedings of Royal Society of London, B. Biological Sciences* 204 (1157): 455.
595. Clements, B. W., Gleeson, A. R., and P. J. Nicholls. Survival feeding pregnant and lactating ewes with combinations of wheat and lucerne hay. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (99): 419.
596. Clyman, R. I. Ductus arteriosus developmental response to endogenous prostaglandins, oxygen and indomethacin. In: Samuelsson, B., Ramwell, P., and R. Paoletti. *Advances in Prostaglandin and Thromboxane Research*, Vol. 7, Raven Press, New York, p. 887.
597. Coates, P. W., and S. L. Davis. The sheep 3rd ventricle. Correlated scanning electron microscopy and transmission electron microscopy and plasma luteinizing hormone in wethers and testosterone propionate treated wethers. *Scanning Electronmicroscopy 1979* (3): 497.
598. Coceani, F., Bishai, I., Bodach, E., White E. P., and P. M. Olley. Evidence implicating prostaglandin E-2 rather than prostacyclin in the patency of the fetal ductus arteriosus. In: Vane, J. R., and S. Bertram. *Prostacyclin*. Raven Press, N.Y.
599. Coceani, F., and P. M. Olley. Considerations on the role of prostaglandins in the ductus arteriosus. In: Samuelsson, B., Ramwell, P., and R. Paoletti. *Advances in Prostaglandin and Thromboxane Research*, Vol. 7, Raven Press, New York, p. 871.
600. Coceani, F., White, E., Bodach, E., and P. M. Olley. Age dependent changes in the response of the lamb ductus arteriosus to oxygen and ibuprofen. *Canadian Journal of Physiology and Pharmacology* 57 (8): 825.
601. Coghlan, J. P., Butkus, A., Denton, D. A., McDougall, J. G., Scoggins, B. A., and J. A. Whitworth. Blood pressure and metabolic effects of 9-alpha fluoro hydrocortisone in sheep. *Clinical and Experimental Hypertension* 1 (5): 629.
602. Coimbra Filho, A., Lebouté, E. M., and C. M. M. de Moraes. Effect of two different lambing seasons on the survival and development of lambs and new wool production. *Revista da Sociedade Brasileira de Zootecnia* 8 (3): 448.
603. Colas, G. Fertility in the ewe after artificial insemination with fresh and frozen semen at the induced oestrus, and influence of the photoperiod on the semen quality of the ram. *Livestock Production Science* 6 (2): 153.
604. Cole, B. C. Mycoplasma lymphocyte interactions. *In Vitro* 15 (3): 186.
605. Cole, D. J. W. Parasite-free lambs for sarcocystis research. *New Zealand Journal of Zoology* 6 (4): 648.
606. Coleman, D. A., Murdoch, W. J., and R. A. Dailey. Interval to next estrus or ovulation after removal of the preovu-

- latory follicle and ovary in ewes. *Journal of Animal Science* 49 (suppl. 1): 137.
607. Coleman, G. S., and D. C. Sandford. The engulfment and digestion of mixed rumen bacteria and individual bacterial species by single and mixed species of rumen ciliate protozoa grown in vivo. *Journal of Agricultural Science* 92 (3): 729.
608. Coles, G. C., Briscoe, M. G., and K. G. Simpkin. The activity of levamisole against benzimidazole resistant *Haemonchus contortus* and *Trichostrongylus colubriformis*. *Veterinary Record* 105 (2): 470.
609. Colling, D. P., Britton, R. A., Farlin, S. D., and M. K. Nielsen. Effects of adding sodium bentonite to high grain diets for ruminants. *Journal of Animal Science* 48 (3): 641.
610. Collins, G. H., Atkinson, E., and W. A. G. Charleston. Studies on *Sarcocystis* species. III. The macrocystic species of sheep. *New Zealand Veterinary Journal* 27 (10): 204.
611. Collins, J. C., Harris, T. R., McKeen, C. R., and K. L. Brigham. Increased lung lymph transport without heart failure after coronary ligation in sheep. *Journal of Applied Physiology, Respiratory, Environmental Exercise Physiology* 47 (4): 792.
612. Collis, S. C., Kimberlin, R. H., and G. C. Millson. Immunoglobulin G concentrations in the sera of Herdwick sheep with natural scrapie. *Journal of Comparative Pathology* 90 (3): 389.
613. Collison, C. H. Controlling insects and mites on sheep and goats. Pennsylvania State University Extension Service Special Circular No. 244, pp. 1-11.
614. Combe, E., Attaix, D., and M. Arnal. Protein turnover in the digestive tissues of the lamb throughout development. *Annales de Recherches Veterinaires* 10 (2-3): 436.
615. Commonwealth Bureau of Animal Health. Anthelmintics for sheep, excluding prevention and treatment of fascioliasis (1976-77). An annotated bibliography, No. 13B. Weybridge, Surrey, UK; Commonwealth Bureau of Animal Health, 57 pp.
616. Coop, R. L. The effect of different rates of *Ostertagia* intake on the performance and skeletal growth of lambs. *Parasitology* 79 (3): xlv.
617. Coop, R. L. Production loss in subclinical helminth infections. *Veterinary Record* 105 (9): 179.
618. Coop, R. L., Angus, K. W., and A. R. Sykes. Chronic infection with *Trichostrongylus vitrinus* in sheep—pathological changes in the small intestine. *Research in Veterinary Science* 26 (3): 363.
619. Coop, I., Clark, V. R., and N. F. Jay. Fat content of heavy-weight lamb carcasses of several breeds and crosses. *Journal of Experimental Agriculture* 7 (2): 103.
620. Cooper, K. E., Kasting, N. W., Lederis, K., and W. L. Veale. Evidence supporting a role for endogenous vasopressin in natural suppression of fever in the sheep. *Journal of Physiology* 295: 23.
621. Cooper, M. G. *Australian Advances in Veterinary Science*. Artarmon, N.S.W. 2064, Australia, Australian Veterinary Association, 87 pp.
622. Cooper, R. A. Effects of the growth promoter Zeranol on reproductive characteristics in ewe lambs. *Animal Production* 28 (3): 418.
623. Corba, J., Lietava, P., Duewel, D., and R. Reisenleiter. Efficacy of fenbendazole against the most important trematodes and cestodes of ruminants. *British Veterinary Journal* 135 (4): 318.
624. Corbett, J. L., Furnival, E. P., Inskip, M. W., and F. S. Pickering. Measurement of digesta flows in grazing sheep. *Annales de Recherches Veterinaires* (2-3): 160.
625. Corbett, J. L., and C. J. Perez. Nitrogen intake, digestion and retention by grazing lambs. *Proceedings of the Nutrition Society* 38 (3): A143.
626. Corbett, J. L., Pickering, F. S., and C. J. Perez. Ruminal and post-ruminal digestion of pasture herbage by grazing lambs. *Proceedings of the Nutrition Society* 38 (3): A142.
627. Cordero del Campillo, M., Rojo Vazquez, F. A., Diez Banos, P., and R. Hidalgo Arguello. New results with albendazole against *Dicrocoelium dendriticum* and *D. lanceolatum* in naturally infected sheep. *Second National Congress on Parasitology*, October, 1979, Leon, Spain, 202 pp.
628. Coser, A. M. L., Godinho, H. P., and V. O. Fonseca. Effect of high temperatures on the spermatogenesis of the Brazilian white woolless sheep under experimental conditions. *Arquivos da Escola de Veterinaria* 31 (2): 147.
629. Cotterill, P. P., and E. M. Roberts. Crossbred lamb growth and carcass characteristics of some Australian sheep breeds. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (99): 437.
630. Cottew, G. S. *Caprine-ovine mycoplasmas*. *Mycoplasmas*, Vol. 2. Human and Animal Mycoplasmas. Academic Press, New York.
631. Cottew, G. S. Pathogenicity of the subspecies *mycoides* of *Mycoplasma mycoides*

- for cattle, sheep and goats. Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene, Erste Abteilung Originale 245A: (1/2): 164.
632. Courrot, M., Hochereau-de Reviers, M. T., Monet-Kuntz, C., Locatelli, A., Pisselet, C., Blanc, M. R., and J. O. Dacheaux. Endocrinology of spermatogenesis in the hypophysectomised ram. *Journal of Reproduction and Fertility*, supplement, 26: 165.
633. Courrot, M., de Reviers, M. T. H., Monet-Kuntz, C., Locatelli, A., Pisselet, C., Blanc, M. R., and J. L. Dacheaux. Endocrine control of spermatogenesis in the ram. *Research on Steroids* 8: 303.
634. Courteas, J. L. The appearance of new electrical properties in the plasma membrane of ram spermatids. *Annales de Biologie, Animale, Biochimie, Biophysique* 19 (3A): 689.
635. Courtens, J. L., and S. Fournier-Delpech. Modifications in the plasma membranes of epididymal ram spermatozoa during maturation and incubation in utero. *Journal of Ultrastructure Research* 68 (2): 136.
636. Couvaras, S., and I. P. Vosloo. Simulation studies with lambs. 1. Efficiency of feed utilization. *Agroanimalia* 11 (3): 33.
637. Cowan, R. T., Robinson, J. J., and C. Fraser. Effect of protein content of the diet on feed intake and milk yield of ewes in early lactation. *Animal Production* 28 (3): 453.
638. Cowan, R. T., Robinson, J. J., Greenhalgh, J. F. D., and I. McHattie. Body composition changes in lactating ewes estimated by serial slaughter and deuterium dilution. *Animal Production* 29 (1): 81.
639. Coward, B. J., and P. J. Buttery. Catabolism of branched chain amino acids by ruminant muscle. *Proceedings of Nutrition Society* 38 (3): 139A.
640. Craft, J. B., Co, E. G., Yonekura, M. L., and R. M. Gilman. Nitroglycerin effect in the hypertensive pregnant ewe. *Anesthesiology* 51 (suppl. 3): S308.
641. Craft, J. B. Jr., Co, E. G., Yonekura, M. L., Roizen, M. F., Mazel, P., Gilman, R. M., and J. L. Johnson. Intravenous injection of bupivacaine in the pregnant ewe. *Anesthesiology* 51 (suppl. 3): S309.
642. Craig, P. S., and M. D. Richard. Studies on the serological diagnosis of cysticercosis in cattle and sheep. Abstracts of papers at 23rd Conference of Australian Society for Parasitology, Leura, N.S.W., Australia, VI + 57 pp.
643. Cran, D. G., Hay, M. F., and R. M. Moor. The fine structure of the cumulus oophorus during follicular development in sheep. *Cell Tissue Research* 202 (3): 452.
644. Crandali, E. D., Critz, A. M., and K. J. Kim. Transport properties of sheep visceral pleura. *American Review of Respiratory Diseases* 119 (4, part 2): 500.
645. Creed, P. G., Bailety, C., James, S. J., and C. D. Harding. Air thawing of lamb carcasses. *Journal of Food Technology* 14 (2): 181.
646. Cripps, A. W., Steel, J. W., and A. K. Lascelles. Kinetic behaviour of radiolabelled IgG1 derived from different sources in adult sheep and neonatal lambs. *Australian Journal of Experimental Biology and Medical Science* 57 (2): 147.
647. Crista, G., Gatto, I., Garici, I., and S. Spatariu. Effect of abomasal added oils on glucose tolerance in lambs. *Annales de Recherches Veterinaires* 10 (2/3): 371.
648. Croker, K. P., Allen, J. G., Masters, H. G., and D. S. Petterson. The effect of residual grain on the utilization of sweet lupin stubbles and concurrent changes associated with lupinosis, in particular changes in liver copper and zinc, in weaner sheep. *Australian Journal of Agricultural Research* 30 (5): 929.
649. Croker, K. P., Allen, J. G., Petterson, D. S., Masters, H. G., and R. F. Frayne. Utilization of lupin stubbles by Merino sheep: studies of animal performance, rates and time of stocking, lupinosis, liver copper and zinc, and circulating plasma enzymes. *Australian Journal of Agricultural Research* 30 (3): 551.
650. Cross, M. J., and P. D. Jaxton. Serological classification of Australian strains of *Erysipelothrix rhusiopathiae* isolated from pigs, sheep, turkeys and man. *Australian Veterinary Journal* 55 (2): 77.
651. Croston, D., Hanrahan, J. P., and S. Trodahl. Survey of sheep recording schemes in Europe, a group report. Paper, 30th annual meeting, European Association for Animal Production, No. S5.1.
652. Croston, D., Jones, D. W., and A. J. Kempster. A comparison of the performance and carcass characteristics of lambs by 9 sire breeds. *Animal Production* 28 (3): 456.
653. Crutchley, D. J., Hawkins, H. J., Eling, T. E., and M. W. Anderson. Covalent binding of prostaglandin G-2 and prostaglandin H-2 to components of ram seminal vesicle microsomal fraction. *Biochemical Pharmacology* 28 (9): 1519.
654. Cryer, A., and H. M. Jones. The distribution of lipoprotein lipase (E. C. 3.1.1.34). Clearing factor lipase activity in the adiposal muscular and lung tissues of 10 animal species. *Comparative Biochemistry and Physiology B Comparative Biochemistry* 63 (4): 501.

655. Cullinson, A. E. Feeds and Feeding. Reston Publishing Co., Reston, Virginia, USA, 2nd Edition.
656. Cumlivski, B. Breeding standard of reproduction in the improved Shumava sheep breed. *Zivocisna vyroba (Animal Husbandry)* 24 (1): 65.
657. Cumlivski, B. Sexual maturity of lambs and fertility of sheep with the highest reproduction efficiency. Paper, 30th annual meeting, European Association for Animal Production, No. MS 4.5.
658. Cummins, P., Littler, W. A., and B. McGurk. Radioimmunoassay of cardiac contractile proteins in diagnosis of myocardial infarction. *Journal of Molecular and Cellular Cardiology* 11 (suppl. 2): 9.
659. Cunningham, J. M. M., and A. J. F. Russell. The technical development of sheep production from hill land in Great Britain. *Livestock Production Science* 6 (4): 379.
660. Cupo, C. Sheep farming and the development of central Abruzzo. *Rassegna Economica* 43 (1): 155.
661. Cuppage, F. E., McGavin, M. D., and A. C. Straffuss. Animal model of human disease: intrarenal obstructive uropathy with proximal actasia. Cystic kidney disease, Animal model: Gilbert's syndrome in Southdown sheep. *American Journal of Pathology* 97 (1): 207.
662. Cuppage, F. E., Shimamura, T., and M. D. McGavin. Nephron obstruction in mutant Southdown sheep. *Veterinary Pathology* 16 (4): 483.
663. Curca, D., Cambir, S., and Mihai, M. Changes in blood ascorbic acid in lambs experimentally infected with *Salmonella* and *Escherichia coli*. *Lucrari Stiintifice Institutul Agronomic "N. Balcescu."* Seria C: 1977/1978, pub. 1979. 20/21:55-60.
664. Curnock, R. M. Potential semen production of Suffolk rams during breeding and nonbreeding seasons. *Animal Production* 28 (3): 447.
665. Currie, B. Parturition in the sheep and goat: Actions of steroid hormones on myometrical contractile function. In: *Developments in Animal and Veterinary Sciences*, 5. Elsevier, Amsterdam, Netherlands.
666. Cushnie, G. H., Richardson, A. J., Lawson, W. J., and G. A. M. Sharman. Cerebrocortical necrosis in ruminants: effect of thiaminases type 1-producing *Clostridium sporogenes* in lambs. *The Veterinary Record* 105 (21): 480.
667. Cutfield, S. M., Dodson, G. G., Schwertner, F., and H. Zahn. X-ray diffraction of crystals of half synthetic sheep insulin. *Hoppe-Seyler's Zeitschrift für Physiologische Chemie* 360 (6): 783.
668. Cuthbertson, A., and A. J. Kempster. Sheep carcass and eating quality. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureau, Slough, UK, 469 pp.
669. Cutlip, R. C., Jackson, T. A., and H. D. Lehmkuhl. Lesions of ovine progressive pneumonia: interstitial pneumonitis and encephalitis. *American Journal of Veterinary Research* 40 (10): 1370.
670. Cutlip, R. C., and H. D. Lehmkuhl. Lesions in lambs experimentally infected with bovine respiratory syncytial virus. *American Journal of Veterinary Research* 40 (10): 1479.
671. Cyprus, Agricultural Research Institute. Estimation of total lactation from part-lactation records. *Annual Report for 1973*. Nicosia, Cyprus, Ministry of Agriculture and Natural Resources.
672. Cyprus, Agricultural Research Institute. Performance of lambs in crosses with the east Friesian sheep. *Annual Report for 1978*. Nicosia, Cyprus Ministry of Agriculture and Natural Resources.
673. Cyprus, Agricultural Research Institute. Milk performance of purebred and crossbred sheep under different feeding-management systems. *Annual Report for 1978*. Nicosia, Cyprus, Ministry of Agriculture and Natural Resources.
674. Cyprus, Agricultural Research Institute. The effect of three milking methods on the milk yield of Chios sheep. *Annual Report for 1978*. Nicosia, Cyprus, Ministry of Agriculture and Natural Resources.
675. Cyprus, Agricultural Research Institute. Environmental factors affecting udder conformation in Chios ewes. *Annual Report for 1978*. Nicosia, Cyprus, Ministry of Agriculture and Natural Resources.
676. Czako, J., Gaal, M., and T. Santha. Data on the grazing behaviour of sheep. *Al-lattenyesztes* 28 (4): 363.
677. Czernek, S., and J. Luchowicz. Performance of the first generation of progeny sired by Romney Marsh rams during the formation of an improved type of mountain sheep. *Roczniki Naukowe Zootechniki* 6 (1): 89.

D

678. Dada, B. J. O., and E. D. Belino. Prevalence of bovine cysticercosis and hydatid disease in food animals slaughtered in Sokoto State, Nigeria. *International Journal of Zoonoses* 6 (2): 115.
679. Daddow, K. N. *Eperythrozoon ovis*. A cause of anaemia. Reduced production and decreased exercise tolerance in sheep. *Australian Veterinary Journal* 55 (9): 433.

680. Daddow, K. N. The transmission of a sheep strain of *Eperythrozoon ovis* to goats and the development of a carrier state in the goats. *Australian Veterinary Journal* 55 (12): 605.
681. Daflapurkar, D. K., Kaushik, S. N., and B. G. Katpatal. Comparative studies on wool production and quality traits in Patanwadi and Deccani crosses. *Indian Veterinary Journal* 56 (9): 764.
682. Dahmen, J. J., Hinman, D. D., Jacobs, J. A., and D. O. Everson. Performance and carcass characteristics of Suffolk sired lambs from Panama and Finn × Panama dams. *Journal of Animal Science* 49 (1): 55.
683. Dakkak, A., Cabaret, J., and H. Ouhelli. Comparative efficacy of fendendazole and tetramisole on *Protostrongylus* and *D. filaria* parasites of the lung in sheep, in Morocco. *Recueil Medecine Veterinaire de l'Ecole d'Alfort* 155 (9): 703.
684. Dale, J., and R. E. Hughes. Sheep population studies in relation to the Snowdonian environment. In: O. W. Heal and D. F. Perkins. *Production ecology of British Moors and montane grasslands* 27: 348.
685. Dally, M. R., Thomas, D. L., Hohenboken, W., and A. M. Craig. The relationship between hemoglobin type and production traits in cross bred ewes. *Journal of Animal Science* 49 (suppl. 1): 154.
686. Daly, P. J. An outbreak of vulvitis in ewes: a possible association with *Lyperosia irritans*. *Irish Veterinary Journal* 33 (11): 187.
687. Danek, J., Strosova, Z., Kiriška, H., Kinelorova, J., and J. Corba. Helmisán premix-another galenic form of a combined antihelmintic preparation for sheep and cattle. *Biologizace a Chemizace Veterinaria* 15 (6): 553.
688. Danell, O., Croston, D., Elsen, J. M., Flamant, J. C., Jakubec, V., and G. Nitter. Evaluation of breeding animals in sheep. A group report. Paper, 30th annual meeting, European Association for Animal Production No. GS 3.1.
689. Daniel, M. Ixodid ticks of Barun Glacier region, Nepal, Himalaya. *Folia Parasitologia* 26 (4): 337.
690. Daniel, R. C. W. The effect of reducing plasma calcium levels on some plasma enzyme levels in cows and sheep. *British Veterinary Journal* 135 (1): 39.
691. Daniel, R. C. W., and E. W. Moodie. Induced hypocalcaemia in cows and sheep. I. Changes in plasma inorganic phosphorus levels. *British Veterinary Journal* 135 (5): 440.
692. Daniel, S. S., Morishima, H. O., Herzlinger, R., and L. S. James. Effect of rapid bicarbonate infusion on blood and cerebrospinal acid base in the acidotic newborn lamb. *Pediatric Research* 13 (4, part 2): 493.
693. Daniel, S. S., Stark, R. I., Baxi, L., Bruce, S., and L. S. James. Dose response to vasopressin in the fetal lamb. *Pediatric Research* 13 (4, part 2): 512.
694. Darbeida, H., and R. Brudieux. Seasonal variations in plasma concentrations of testosterone and dihydrotestosterone in the ram in Algeria. *Journal of Physiology (Paris)* 75 (5): 27A.
695. Darcy, B., Falempin, M., LaPlace, J. P., and J. P. Rousseau. The role of vagal afferences: development of a deafferentation technique in pigs and sheep. *Annales de Biologie Animale Biochimie Biophysique* 19 (B3): 881.
696. Dargie, J. D., and C. I. Berry. The hypoalbuminaemia of ovine fascioliasis: the influence of protein intake on the albumin metabolism of infected and of pair-fed control sheep. *International Journal for Parasitology* 9 (1): 17.
697. Dargie, J. D., Berry, C. I., and J. J. Parkins. Pathophysiology of ovine fascioliasis. Studies on the feed intake and digestibility, body weight and nitrogen balance of sheep given rations of hay or hay plus a pelleted supplement. *Research in Veterinary Science* 26 (3): 289.
698. Darie, P. C. Frequency and role of *Listeria monocytogenes* in etiology of abortions in ruminants. In: I. Ivanov, *Problems of Listeriosis*. Sofia, Bulgaria, National Agroindustrial Union Center for Scientific Information, p. 205.
699. Darnell-Bauer, M. A., and T. A. Gorell. Assay and characterization of the ovine uterine progesterone receptor. *American Zoologist* 19 (3): 876.
700. Darton, P. J., and G. H. McDowell. The effect of oestrogen on selective transfer of IgG1 into mammary secretion of ewes. *Australian Journal of Experimental Biology and Medical Science* 57 (6): 617.
701. Darvill, F. M. Cost benefit analysis of the use of anthelmintics in sheep. *Australian Veterinary Journal* 55 (3): 152.
702. Darvill, F. M. Benefits accruing from anthelmintic treatment. *Australian Veterinary Journal* 55 (8): 399.
703. Dash, K. M. The role of seasonal inhibition of development in the epidemiology of Haemochosis and oostertagiosis. Abstracts of papers presented at the 23rd conference of Australian Society for Parasitology, Leura, NSW, Australia.
704. Datta, I. C., Meur, S. K., Shrivastava, A. M., Najpande, P. G., and M. N. Jamdar. Biochemical and histochemical changes in the placental attachments of the sheep during different stages of gestation. In-

- dian Journal of Experimental Biology 17 (8): 833.
705. Dattilo, M., and F. Congin. Utilization of feed energy for milk production in ewes of the Sardinian breed. *Rivista di Zootecnia E Veterinaria*, No. 3: 183.
706. Dattilo, M., and F. Congin. Effects of feeding and housing on milk yield of sheep and goats. *Rivista di Zootecnia E Veterinaria* No. 4: 274.
707. Dauv-Pedersen, L., and D. Stolberg. Reproduction in sheep. *Tidsskrift for Faareavl* 44 (11): 4.
708. Davies, A. What the Cambridge sheep has to offer. *Big Farm Management*. December: 48.
709. Davies, F. G., Walker, A. R., Ochieng, P., and T. Shaw. Arboviruses isolated from *Culicoides* midges in Kenya. *Journal of Comparative Pathology* 89 (4): 587.
710. Davies, G. Animal disease surveillance in Great Britain UK. U.S. Department of Agriculture Miscellaneous Publication 1381: 67.
711. Davies, R. V., Main, S. J., and B. P. Setchell. Inhibin in ram rete testis fluid. *Journal of Reproduction and Fertility* 26: 87 (suppl.).
712. Davis, D. C., Mullen, J. D., and Bryant, M. J. Farmer income and expenditure patterns in a wheat-sheep region. *Review of Marketing and Agricultural Economics* 47 (1): 27.
713. Davis, S. L., Ohlson, D. L., Klindt, J., and D. O. Everson. Estimates of repeatability in the temporal patterns of secretion of growth hormone (GH), prolactin (PRL) and thyrotropin (TSH) in sheep. *Journal of Animal Science* 49 (3): 724.
714. Davis, G. B., Stevenson, B. J., and M. C. Price. Inherited goitre in sheep. *New Zealand Veterinary Journal* 27 (6): 126.
715. Davison, R. M. Sheep breeds and export lamb grades, October-December 1975. *New Zealand Agricultural Science* 13 (1): 37.
716. Davletova, L. V., Sheyanova, G. M., and T. V. Demidova. Enzyme activity in the forestomach of lambs. *Doklady Vsesoyuznoi Ordena Lenina Akademii Sel'Skokhozyaistvennykh Nauk* No. 2: 33.
717. Davydov, I. A. Amide concentrate supplement in diets for suckling ewes. *Ovtsevodstvo*, No. 11: 24.
718. Dawes, G. S. Fetal breathing movements, a natural history in animals and man. In: Chef, R. Contributions to Gynecology and Obstetrics, Vol. 6, p. 62.
719. Dawson, M. et al. The demonstration of maed/visna virus in sheep in Great Britain. *The Veterinary Record* 105 (10): 220.
720. Deas, D. W., Laing, J. A., Melrose, D. R., Reed, H. C. B., and M. Vandeplassche. The management of ovarian function. In: Laing, J. A. Fertility and Infertility in Domestic Animals. 3rd Edition. Bailliere Tindall, London, England.
721. Deas, D. W., Melrose, D. R., Reed, H. C. B., Vandeplassche, M., and H. Pidduck. Other noninfectious abnormalities. In: Laing, J. A., Fertility and Infertility in Domestic Animals. 3rd Edition. Bailliere Tindall, London, England.
722. De Benedictis, G., Capalbo, P., and E. Gallina. Immunogenetics of an antigen identified in both sheep and cattle sera. *Genetic Research* 34 (1): 41.
723. Deboer, G. F., Terpstra, C., Houwers, D. J., and J. Hendriks. Studies in epidemiology of Maedi-Visna in sheep. *Research in Veterinary Science* 26 (2): 202.
724. Debouck, P. Contagious ecthyma in sheep and goat. *Vlaams Diergeneeskundig Tijdschrift (Flemish Veterinary Journal)* 48 (3): 212.
725. Degen, A. A., and A. Shkolnik. Thermoregulation in fat-tailed Awassi, a desert sheep, and in German mutton merino, a mesic sheep. *Physiological Zoology* 51 (4): 333.
726. Degen, A. A., and B. A. Young. Body fluid changes with cold exposure. *Journal of Animal Science* 49 (suppl. 1): 188.
727. Degregorio, R. H., Tucker, R. E., Mitchell, G. E. Jr., and G. T. Schelling. Renal clearance of magnesium in sheep receiving oral KCl and/or citric acid. *Journal of Animal Science* 49 (suppl. 1): 16.
728. Dejneka, J., Lukaszewska, J., and K. Romanski. Effect of synthetic prostaglandin F-2-alpha on the volume acidity and proteolytic activity of the abomasum juice on sheep. *Acta Physiological Polonica* 30 (2): 299.
729. Dejneka, J., Nowosad, R., and J. Simoni. Distribution of 75 SE in tissues and rumen content and its excretion in bile, urine and feces in sheep. *Polskie Archiwum Weterynaryjne* 21 (2): 237.
730. Deka, B. C., and A. R. Rao. Semen characteristics of cross-bred rams. *Indian Veterinary Journal* 56 (9): 748.
731. Delatour, P., and D. Roizard. Parturition-inducing activity of N-AB 365. Use in controlling parturition in the ewe. *Dossiers de l'Elevage* 3 (4): 57.
732. Delforno, G., and A. Losi. Cacioricotta cheese. *Mondo del Latte* 33 (1): 29.
733. Delfosse-Debusscher, J., Hoof, F., Van Hellings, P., and D. Thines-Sempoux. Hydrolytic activities of rumen ciliates. *Annales de Recherches Veterinaires* 10 (2/3): 502.
734. Delfosse-Debusscher, J., Van Hoof, F., Hellings, P., and D. Thines-Sempoux.

- Hydrolytic activities of rumen ciliates. *Annales de Recherches Veterinaires* 10 (2-3): 258.
735. Delfosse-Debusscher, J., LeFebvre, V., Latteur, B., and Thines-Sempoux, D. Electron microscopic study of cellulose degradation by rumen ciliates. *Journal of Protozoology* 26 (3, part 1): 56A.
736. Delfosse-Debusscher, J., Thines-Sempoux, D., Vanbelle, M., and B. Latteur. Contribution of protozoa to the rumen cellulolytic activity. *Annales de Recherches Veterinaires* 10 (2/3): 502.
737. Delgado, A. Structure of production, processing and consumption of milk and milk products in Spain. *Landwirtschaftliche und Milchwirtschaftliche Aspekte. Deutsche Molkerei-Zeitung* 100 (13): 60.
738. Delivoria-Papadopoulos, M., Martens, R. J., Klein, M. S., Sacks, L. M., and E. K. Anday. Limiting factors of oxygen consumption in newborn anemic lambs. *Pediatric Research* 13 (4, part 2): 431.
739. Della Fera, M. A., and C. A. Baile. CCK-octapeptide injected in CSF causes satiety in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 234.
740. Della Fera, M. A., and C. A. Baile. Cholecystokinin octapeptide. Continuous picomole injections into the cerebral ventricles of sheep suppress feeding. *Science* 206 (4417): 471.
741. DeLong, W. J., Waldhalm, D. G., and R. F. Hall. Bacterial isolates associated with epididymitis in rams from Idaho and eastern Oregon flocks. *American Journal of Veterinary Research* 40 (1): 101.
742. Demling, R., Manohar, M., and J. Will. Effect of untreated hemorrhagic shock on lung fluid and protein dynamics in the unanesthetized sheep. *Microvascular Research* 17 (3, part 2): S136.
743. Demeyer, D. I., and C. J. van Nevel. Effect of defaunation on the metabolism of rumen microorganisms. *British Journal of Nutrition* 42 (3): 515.
744. Demling, R. H., Manohar, M., Will, J. A., and F. O. Belzer. The effect of plasma oncotic pressure on the pulmonary microcirculation after hemorrhagic shock. *Surgery* 86 (2): 323.
745. Denev, I. Immunity, immunodiagnosis and immunoprophylaxis of dictyocauliasis in sheep. Sofia, Bulgaria, "Zemizdat", Abstracts of Bulgarian Scientific Literature B 24 (3): 416.
746. Denev, I., and B. Georgiev. Study of some physiological and biochemical indicators in trichostrongylid infections in sheep. *Khelminologiya* No. 8: 43.
747. Denham, S. C., Morris, J. G., and R. L. Baldwin. Sensitivity analysis of a simulation model of post-ruminal non-protein nitrogen dynamics in sheep. *Journal of Animal Science* 49 (suppl. 1): 364.
748. Denney, G. D., Hogan, J. P., and J. R. Lindsay. The digestion of barrel medic (*Medicago truncatula*) hay and seed pods by sheep. *Australian Journal of Agricultural Research* 30 (6): 1177.
749. Dennis, S. M. Hypospadias in Merino lambs. *Veterinary Record* 105 (5): 94.
750. Dennis, S. M. Urogenital defects in sheep. *Veterinary Record* 105 (15): 344.
751. Dennis, S. M., and H. W. Leipold. Ovine congenital defects. *Veterinary Bulletin* 49 (4): 233.
752. Dent, A. C., Richards, R. B., and M. E. Nairn. Congenital progressive ovine muscular dystrophy in Western Australia. *Australian Veterinary Journal* 55 (6): 297.
753. Depiazzi, L. J., and R. B. Richards. A degrading proteinase test to distinguish benign and virulent ovine isolates of *Bacterioides rodosus*. *Australian Veterinary Journal* 55 (1): 25.
754. Derosayro, M., Nahrwold, M. L., Hill, A. B., Tait, A. R., Taylor, M. D., and M. M. Kirsh. Nitroglycerin plasma levels and effects in pregnant ewes. *Anesthesiology* 51 (3 suppl.): S312.
755. Deshpande, K. S., Diwan, J. G., Wakankar, C. C., and B. R. Deshpande. Varicocele in a Merino ram. *Indian Veterinary Journal* 56 (3): 236.
756. Deswysen, A., and H. J. Ehrlein. Radiography of intake and pseudoruminant behaviour. *Annales de Recherches Veterinaires* 10 (2-3): 208.
757. Desyainikova, O. I., Koz'mina, E. P., Porozhkina, T. P., and I. B. Chekmareva. Effect of various techniques of heating on ewes' milk cheese lipids. *Izvestiya Vysshikh Uchebnykh Zavedenii. Pishchevaya Tekhnologiya* No. 4: 59.
758. Devendra, C. Goat and sheep production in the ASEAN region. *World Animal Review* No. 32: 33.
759. Devendra, C., and J. K. Camoens. Conservation and utilization of the indigenous animal genetic resources in Malaysia. *Malaysian Applied Biology* 8 (1): 73.
760. Devine, C. E., Chrystall, B. B., and C. L. Davey. Studies in electrical stimulations: effect of neuromuscular blocking agents in lamb. *Journal of the Science of Food and Agriculture* 30 (10): 1007.
761. Dhar, D. N., and R. L. Sharma. A note on the prevalence of lungworm infections in sheep and goats in Tehsil Kargil of District Ladakh (Jammu and Kashmir). *Indian Journal of Animal Sciences* 49 (7): 585.
762. Dhar, D. N., Sharma, R. L., and Bansal, G. C. Occurrence of *Mullerius* sic sp. in

- sheep in India. *Indian Journal of Parasitology* 3 (2): 187.
763. Dhennin, L., and J. M. Gourreau. Epidemic of foot and mouth disease in Normandy, March–April 1979. *Bulletin de L'Academie Veterinaire de France* 52 (2): 311.
764. Dhillon, J. S., Acharya, R. M., and R. N. Singh. Factors affecting libido and fertility in rams. *Indian Journal of Animal Sciences* 49 (3): 196.
765. Dhingra, M. M., Singh, B. N., and C. M. Taylor. Protein polymorphism in sheep. *Livestock Adviser* 4 (6): 13.
766. Dickinson, F. M., and S. Berrieman. The separation of sheep liver cytoplasmic and mitochondrial aldehyde dehydrogenases by isoelectric focusing and observations on the purity of preparations of the cytoplasmic enzyme and their sensitivity towards inhibition by disulfiram. *Biochemical Journal* 179 (3): 709.
767. Diez Banos, P., Cordero del Campillo, M., Rojo Vazquez, F., and L. Castanon Ordonez. The activity of albendazole against various ovine trichostrongyles. Second National Congress on Parasitology, October 1979, Leon, Spain.
768. Dikov, G. I., and V. I. Kuznetsov. Chemoprophylaxis and pathogenetic therapy of helminthiasis in sheep. *Vestnik Sel'Skokhozaistvennoi Nauki Kazakhstana* No. 9: 54.
769. Dilks, P. J., and P. R. Wilson. Feral sheep and cattle and royal albatrosses on Campbell Island—population trends and habitat changes. *New Zealand Journal of Zoology* 6 (1): 127.
770. Dillman, R. C., and S. M. Dennis. Sequential sterile autolysis in the ovine fetus: microscopic changes. *American Journal of Veterinary Research* 40 (3): 321.
771. Dillon, J., and D. Scott. Digesta flow and mineral absorption in lambs before and after weaning. *Journal of Agricultural Science* 92 (2): 289.
772. Dimitrov, B. Spreading and epizootiology of the gastrointestinal strongylatoses in sheep. XXI World Veterinary Congress, 1–7 July 1979, Moscow. Summaries, Vol. 2, Section III: Parasitology, Moscow, USSR, 63 pp.
773. Dimitrov, D. P., Marinov, K., and I. Vladimirov. Phase feeding of fattening lambs. *Zhivotnov'dni Nauki* 16 (3): 38.
774. Dimitrov, I. Fattening performance and meat production of hybrid lambs. A comparison. *Zhivotnov'dni Nauki* 16 (2): 23.
775. Dimov, V. Prostaglandin F-2-alpha metabolism in sheep. I. Urinary and milk excretion of labeled metabolites. *Zhivotnov'dni Nauki* 16 (5): 75.
776. Dimov, V. N., Petkov, Z. Z., Georgiev, G. S., and M. F. Marinov. Investigations into the fertilization capacity of frozen ram semen treated with prostaglandins. *Proceedings of the Bulgarian Academy of Science* 32 (3): 361.
777. Dittrich, A. Intakes of feed by highly fertile ewes. *Archiv für Tierernährung* 29 (7/8): 515.
778. Dixit, S. N., and D. S. Kalra. A note on the isolation of *Chlamydia* from feces of apparently healthy sheep. *Indian Journal of Animal Sciences* 49 (10): 863.
779. Dixmieras, J., and Y. Valleix. Production of lambs for slaughter on alpine pasture. *Patre*, no. 266: 17.
780. Dixon, G. M., and P. J. Gerard. Effect of stocking rate on emergence, dispersal and behaviour of soldier fly adults in pasture. *New Zealand Journal of Agricultural Research* 22 (3): 507.
781. Dobson, A. The choice of models relating tritiated water absorption to subepithelial blood flow in the rumen of sheep. *Journal of Physiology* 297: 111.
782. Dochevski, D. Ts., Solomonov, Kh., and A. Stoyanov. The effect of early weaning on milk production of ewes and growth of lambs. *Zhivotnov'dni Nauki* 16 (7): 21.
783. Dogterom, J., Pevet, P., Buijs, R. M., Snijedewint, F. G. M., and D. F. Swaab. Vasopressin, oxytocin and vasotocin in pineal gland, subcommissural organ and foetal pituitary: failure to demonstrate vasotocin in mammals. *Acta Endocrinologica* 91 (225): 413.
784. Dohy, J. Genetic possibilities of improving reproductive performance in cattle and sheep. *Allattenyesztes* 28 (2): 103.
785. Doichev, S., Petrov, P. S., and V. Antonova. Induction of oestrus in sheep injected with colostrum at various phases of the oestrus cycle. *Veterinarnomeditsinski Nauki* 16 (3): 40.
786. Doize, F., Bouchat, J. C., and R. Paquay. Diurnal changes in blood ketone bodies, glucose and lipids according to energy intake in adult sheep. *Annales de Biologie Animale Biochimie Biophysique* 19 (A2): 393.
787. Doize, F., Dewilde, R., and R. Paquay. Estimation of the chemical composition of adult sheep and variations according to feeding. *Annales de Zootechnie* 28 (4): 393.
788. Dokov, V., and D. S. Dobrev. Development of digestive organs in lambs on milk substitute from 24 hours after birth. *Zhivotnov'dni Nauki* 16 (6): 16.
789. Dokov, V., Tsonchev, D., Donchev, P., and R. Kasabova. Structural potentialities of the gastrointestinal mucosa of

- weaned lambs to absorb non-protein nitrogen. *Zhivotnov'dni Nauki* 16 (5): 84.
790. Dokov, V., Tsonchev, D., and R. Kasabova. Skin morphology and wool quality of sheep fed urea and urea preparation supplemented ration. *Zhivotnov'dni Nauki* 16 (4): 48.
791. Dolinskii, A. S., and I. A. Makar. Structure and chemical composition of the wool cortex of fine-wooled sheep. *Prikl Biokhim Mikrobiol* 15 (3): 458.
792. Dolling, M., McIntosh, J. E. A., and R. F. Seamark. Sex differences in the kidney weight of fetal lambs. *IRCS (International Communications System) Medical Science Library Compendium* 7 (8): 426.
793. Dolling, M., and R. F. Seamark. Progesterone metabolites in fetal sheep plasma. The effect of fetal nephrectomy. *Journal of Developmental Physiology* 1 (5): 399.
794. Donald, H. P. The question of purpose in sheep production. In: *The Management and Diseases of Sheep*. Edited by British Council, Commonwealth Agricultural Bureau, Slough, UK.
795. Donaldson, I. A., Lomax, M. A., and C. I. Pogson. Viability and glucagon responsiveness of isolated hepatocytes from adult sheep. *Proceedings of the Nutrition Society* 38 (2): A88.
796. Donaldson, R. J. *Parasites and western man*. MTP Press, Lancaster, UK, 220 pp.
797. Donaldson, W. A. D., and K. M. Down. Annual Report 1978. Hurley, Maidenhead, UK, Grassland Research Institute, 1979. 133 pp.
798. Doneen, B. A., Bewley, T. A., and C. H. Li. Studies on prolactin. Selective reduction of the disulfide bonds of the ovine hormone. *Biochemistry* 18 (22): 4851.
799. Doney, J. M. Nutrition and the reproductive function in female sheep. In: *The Management and Diseases of Sheep*. Edited by British Council, Commonwealth Agricultural Bureau, Slough, UK.
800. Doney, J. M., Peart, J. N., Smith, W. F., and F. Louda. A consideration of the techniques for estimation of milk yield by suckled sheep and a comparison of estimates obtained by two methods in relation to the effect of breed, level of production and stage of lactation. *Journal of Agricultural Science* 92 (1): 123.
- 800A. Donnelly, F. Skin folds affect Merino production. *Agricultural Gazette of New South Wales* 90 (3): 2.
801. Dorchies, P. Treatment of gastrointestinal trichostrongylid infections. Value and limitation of anthelmintics. *Bulletin des Groupements Techniques Veterinaires* No. 3: 43.
802. Dott, H. M., Hay, M. F., Cran, D. G., and R. M. Moor. Effect of exogenous gonadotrophin (PMSG) on the antral follicle population in the sheep. *Journal of Reproduction and Fertility* 56 (2): 683.
803. Dotta, U., Abate, O., Guglielmino, R., Zimmerman, S., and C. Ponzetto. Determination of erythrocyte glutathione peroxidase in a flock of sheep with selenium dependent myopathy. *Clinica Veterinaria* 102 (2): 166.
804. Douch, P. G. C. The metabolism of the anthelmintics cloxanide and resorantel and related compounds in vitro by *Moniezia expansa*, *Ascaris suum* and mouse- and sheep-liver enzymes. *Xenobiotica* 9 (4): 263.
805. Douch, P. G. C., and L. L. Buchanan. The metabolism of nitrophenolic and 5-arylazorhodanine anthelmintics by *Ascaris suum*, *Moniezia expansa* and by mouse- and sheep-liver enzymes. *Xenobiotica* 9 (8): 467.
806. Dove, H., and M. Freer. The accuracy of tritiated water turnover rate as an estimate of milk intake in lambs. *Australian Journal of Agricultural Research* 39 (4): 725.
807. Downing, S. E., and J. C. Lee. Myocardial and coronary vascular responses to insulin in the diabetic lamb. *American Journal of Physiology* 237 (4): H514.
808. Doyle, J. J. The effect of nitrogen, phosphorus and potassium fertilization on chemical content of sheep diets. *Journal of Range Management* 32 (2): 162.
809. Doyle, J. J. Toxic and essential elements in bone, a review. *Journal of Animal Science* 49 (2): 482.
810. Doyle, P. T., and R. J. Moir. Sulfur and methionine metabolism in sheep. I. First approximations of sulfur pools in and sulfur flows from the reticulo-rumen. *Australian Journal of Biological Sciences* 32 (1): 51.
811. Doyle, P. T., and R. J. Moir. Sulfur and methionine metabolism in sheep. II. Quantitative estimates of sulfur metabolism in the sheep's stomach. *Australian Journal of Biological Sciences* 32 (1): 65.
812. Doyle, P. T., and R. J. Moir. Sulfur and methionine metabolism in sheep. III. Excretion and retention of dietary and supplemented sulfur, and production responses to intraruminal infusions of DL-methionine. *Australian Journal of Agricultural Research* 30 (6): 1185.
813. Dozet, N., Stanisic, M., and S. Bijeljic. Effect of cows' and ewes' milk on cheese quality. *Mljekarstvo* 29 (4): 87.
814. Drane, H. M., and N. Saba. Oestrogenic activity in pastures and other feeds. Proceedings of a 3rd meeting on Mycotoxins in animal disease, April 1978, edited

- by G. A. Pepin, D. S. P. Patterson, and B. J. Shreeve. Pinner, Middlesex HA 5 2DT, UK Ministry of Agriculture, Fisheries and Food. Tocarne Drive, p. 45-50.
815. Dransfield, E., Nute, G. R., MacDougall, D. B., and D. N. Rhodes. Effect of sire breed on eating quality of cross-bred lambs. *Journal of the Science of Food and Agriculture* 30 (8): 805.
816. Drawer, K. Slaughter of sheep according to Islamic ritual. Animal welfare is secondary to religious practice protected by statute. *Schlachten und Vermarkten* 79 (9): 283.
817. Driver, P. M., Adams, G. B., and J. M. Forbes. Response of plasma growth hormone to short-term fasting and spontaneous meals in sheep. *Journal of Endocrinology* 83 (1): 50P.
818. Driver, P. M., Forbes, J. M., and C. G. Scanes. Hormones feeding and temperature in sheep following cerebroventricular injections of neurotransmitters and carbachol. *Journal of Physiology* 290: 399.
819. Dshurov, A. Histological changes in organs of sheep in chronic simazine poisoning. *Zentralblatt für Veterinärmedizin* 26 (1): 44.
820. Ducharme, J. R., Catin-Savoie, S., Tache, Y., Bourel, B., and R. Collu. Sequential hormonal changes and activation of the hypothalamic-pituitary-gonadal axis. *Journal of Steroid Biochemistry* 11 (1B): 563.
821. Dudzinski, M. L., and G. W. Arnold. Factors influencing the grazing behaviour of sheep in a Mediterranean climate. *Applied Animal Ethology* 5 (2): 125.
822. Dufour, J., Cahill, L. P., and Mauleon, P. Short term and long term effects of hypophysectomy and unilateral ovariectomy on ovarian follicular populations in sheep. *Journal of Reproduction and Fertility* 57 (2): 301.
823. Duifhuizen, M., Egberts, J., Grommers, F. J., and L. Elving. Relationship between the presence of meconium in newborn lambs and postnatal pH and blood gas tension levels. *Netherlands Journal of Veterinary Science* 104 (15-16): 614.
824. Dukes, T. W., Greig, A. S., and A. H. Corner. Maedi-Visna in Canadian sheep. *Canadian Journal of Comparative Medicine* 43 (3): 313.
825. Dunlop, L. B., and G. Duff. Pizzle dropping on wethers at Canaway Downs. *Queensland Agricultural Journal* 105 (1): 35.
826. Dunlop, R. H., and L. Bueno. Molasses neuro-toxicity and higher volatile fatty acids in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 462.
827. Dunn, B. H., Emerick, R. J., and L. B. Embry. Sodium bentonite and sodium bicarbonate in high-concentrate diets for lambs and steers. *Journal of Animal Science* 48 (4): 764.
828. Duquette, P. F., and L. A. Muir. Monitoring the effects of selected compounds on feeding behaviour of sheep. *Journal of Animal Science* 49 (4): 1120.
829. Durand, P. ACTH receptor levels in lamb adrenals at late gestation and early neonatal stages. *Biology of Reproduction* 20 (4): 837.
830. Durfee, P. T. Experimental infection of calves and sheep with *Leptospira interrogans* serovar *balkanica*. *Australian Journal of Experimental Biology and Medical Science* 57 (5): 447.
831. Durham, P. J. K., Stevenson, B. J., and B. C. Farquharson. Rotavirus and coronavirus associated diarrhea in domestic animals. *New Zealand Veterinary Journal* 27 (3): 30.
832. Durst, J., and F. Kemenes. New data to the epizootiology of ovine listeriosis due to serotype. In: I. Ivanov. Problems of Listeriosis. National Agroindustrial Union Center for Scientific Information, Sofia, Bulgaria.
833. Dutton, A., and J. C. Mott. Hypernatraemia in sheep pregnancy. *Journal of Physiology* 290: 33P.
834. Duwel, D. The ovidical and larvicidal activity of panacur. *Blauen Hefte für den Tierarzt* 59: 441.
835. Duwel, D. Ovicidal and larvicidal action of panacur. *Blue Book for the Veterinary Profession*, No. 29: 351.
836. Dvalishvili, V. G. Effect of methionine and sulphur-containing amino acids on productivity and wool quality of lambs. *Ovtsevtvo*, No. 11: 32.
837. Dvorakova, D. Detection of *Chlamydia* by the immunofluorescence method. *Veterinarni Medicina* 24 (10): 603.
838. Dwaraknath, P. K., and L. B. Singh. Significance of plasma 5'-nucleotidases in sheep. *Indian Journal of Animal Health* 18 (2): 770.
839. Dwyer, R. J., and H. A. Robertson. Patterns of sulfo transferase and sulfatase activities in the endometrium of the sheep and pig during pregnancy. *Biology of Reproduction* 20 (suppl. 1): 16A.
840. Dymond, A. J. Minority breeds at the National Agricultural Centre, England. *Ark* 6 (9): 277.
841. Dyrmondsson, O. R. Natural factors affecting puberty and reproductive performance in ewe lambs. Paper, 30th annual meeting, European Association for Animal Production, No. MS 4.1.
842. Dyrmondsson, O. R. The breeding season of Iceland sheep. In: *The Management*

- and Diseases of Sheep. Edited by British Council, Commonwealth Agricultural Bureaux, Slough, UK.
843. Dzhurov, A. Pathology of chronic copper poisoning in sheep. *Obshcha I Sravnitelna Patologiya* 7: 110.
844. Dyson, D. A., and K. A. Linklater. Problems in the diagnosis of acute coenurosis in sheep. *Veterinary Record* 104 (23): 528.
845. Dyson, D. A., and J. A. Spence. A cystic jaw lesion in sheep. *The Veterinary Record* 105 (20): 467.
846. Dzakuma, J. M., Whiteman, J. V., and J. E. Fields. Summer lambing performance of crossbred ewes of Finnsheep, Dorset and Rambouillet breeding when mated in January to purebred or crossbred rams. Oklahoma Agricultural Experiment Station Miscellaneous Publication 104: 195.
847. Dziegielewska, K. M., Evans, C. A. N., Malinowska, D. H., Moellgard, K., Reynolds, J. M., Reynolds, M. L., and N. R. Saunders. Studies of the development of brain barrier systems to lipid insoluble molecules in fetal sheep. *Journal of Physiology* 292: 207.
- E
848. Eccles, T. R., and D. M. Shackleton. Recent records of twinning in North American Mountain sheep. *Journal of Wildlife Management* 43 (4): 974.
849. Echterkamp, S. E. Effects of exogenous estradiol and progesterone on estradiol receptors in ovine uterus. *Biology of Reproduction* 20 (suppl. 1): 127A.
850. Edelstone, D. I., and A. M. Rudolph. Preferential streaming of ductus venosus blood to the brain and heart of fetal lambs. *American Journal of Physiology* 237 (6): H724.
851. Edmunds, H. Management and behaviour of rams. *Journal of the Royal Agricultural Society of England* 140: 88.
852. Edwards, E. B. A multivariate analysis of the rumen overload syndrome and a preliminary model of acid-base balance in sheep blood. *Dissertation Abstracts International* 39B 11: 5267.
853. Edwards, G. T., Hackett, F., and I. V. Herbert. *Taenia hydatigena* and *Taenia multiceps* infections in Snowdonia, U.K. II. The role of hunting dogs and foxes as definitive hosts, and of sheep as intermediate hosts. *British Veterinary Journal* 135 (5): 433.
854. Eccles, T. R., and D. M. Shackleton. Recent records of twinning in North American Mountain sheep. *Journal of Wildlife Management* 43 (4): 974. See also #848.
855. Efremov, A. N., Dikukin, A. P., and A. Z. Grebennyuk. Composition of pelleted feeds. *Ovtsevodstvo*, No. 10: 22.
856. Efremov, A. N., and P. I. Klimenko. Chemicals in sheep feeding. *Khimiya V Sel'Skom Khozyaistve* 17 (11): 48.
857. Egan, A. R., and J. C. Macrae. Amino acid catabolism and gluconeogenesis in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 376.
858. Egan, A. R., and M. J. Ulyatt. Quantitative digestion of fresh herbage by sheep. VI. Utilization of nitrogen in five herbage. *Journal of Agricultural Science* 94 (1): 47.
859. Egerton, J. R. Treatment of ovine foot-rot by vaccination with the specific aetiological agent *Bacteroides nodosus*. *Comparative Immunology, Microbiology and Infectious Diseases* 2 (1): 61.
860. Egerton, J. R., Ostlind, D. A., Blair, L. S., Eary, C. H., Suhayda, D., Cifelli, S., Riek, R. F., and W. C. Campbell. Avermectins, new family of potent anthelmintic agents: efficacy of the BLA component. *Antimicrobial Agents and Chemotherapy* 15 (3): 361.
861. Egerton, K., and R. Hawkins. Sheep and lambs. *Minnesota Agricultural Extension Service Extension Bulletin* No. 442: N1.
862. Eichhorn, R., Hess, E., and H. Heurlich. Artificial insemination of ewes. A crucial requisite for a further increase in wool and mutton production. *Tierzucht* 33 (7): 309.
863. Eikje, E. D. Modern developments and selection schemes in sheep breeding. Paper, 30th annual meeting, European Association for Animal Production, No. GS 3.2.
864. Eikje, E. D. Optimum size of the active breeding population in the sheep industry. *Meldinger fra Norges Landbrukshogskole* 58 (36): 2.
865. and 866. Eikje, E. D., and D. L. Johnson. Adjustment factors for lamb weaning weight. 2. Sources of variation in adjustment factors. *Oklahoma Current Farm Economics* 52 (2): 391.
867. Eisa, M., Karrar, A. E., and Abd Elrahim, H. Incidence of bluetongue virus precipitating antibodies in sera of some domestic animals in the Sudan. *Journal of Hygiene* 83 (3): 539.
868. Eisner, D. A., Lederer, W. J., and D. Noble. Caffeine and tetracaine abolish the slow inward calcium current in sheep cardiac purkinje fibers. *Journal of Physiology* 293: 76P.
869. Ekici, A. Freezing of ram semen in pellets in liquid nitrogen using various methods. *Lalahan Zootekni Arastirma Enstitusu Dergisi* 19 (3/4): 75.

870. El-Badawi, E. K. S., Eisa, A. M., Slepenev, N. K., and M. B. A. Saad. Hydatidosis of domestic animals in the central region of the Sudan. *Bulletin of Animal Health and Production in Africa* 27 (4): 249.
871. Elemesov, K. E., and B. Aktuov. Pregnancy duration in Karakul sheep of the broadtail type. *Ovtsecodstvo* No. 4: 37.
872. Elhag, G. A., and A. M. S. Mukhtar. Varying levels of concentrates in the rations of Sudan Desert sheep. *World Review of Animal Production* 14 (4): 73.
873. Eliot, R. J., Klein, A. H., Glatz, T. H., Lam, R., Nathanielsz, P. W., and D. A. Fisher. Norepinephrine, epinephrine and dopamine responses to parturition in premature and full-term fetal sheep. *Pediatric Research* 13 (4, part 2): 357.
874. Eliot, R. J., Klein, A. H., Glatz, T. H., Lam, R., Palmer, S., Nathanielsz, P. W., and D. A. Fisher. Norepinephrine, epinephrine and dopamine levels in response to hypoxia in neonatal lambs. *Pediatric Research* 13 (4 part 2): 357.
875. Eliot, R. J., Klein, A. H., Glatz, T. H., Lam, R., Palmer, S., Padgett, D., and D. A. Fisher. Norepinephrine, epinephrine and dopamine levels in response to hypoxia in neonatal lambs. *Clinical Research* 27 (1): 124A.
876. Eljack, A. H., and F. Hrudka. Pattern and dynamics of teratospermia induced in rams by parenteral treatment with ethylenedibromide. *Journal of Ultrastructural Research* 67 (2): 124.
877. Ellendorff, F., Taverne, M., and D. Smidt. Physiology and control of parturition in domestic animals. A symposium held from 25 to 28 February 1979 at the Institut für Tierzucht und Tierverhalten, Mariensee, 3057 Neustadt 1, Federal Republic of Germany. *Animal Reproduction Science* 2 (1/3): 342 pp.
878. Ellinwood, W. E. Maternal recognition of pregnancy in the ewe and the rabbit. *Dissertation Abstracts International* B39 (12): Pt. 1: 5778.
879. Ellinwood, W. E., Nett, T. M., and G. D. Niswender. Maintenance of the corpus luteum of early pregnancy in the ewe. 1. Lutetotropic properties of embryonic homogenates. *Biology and Reproduction* 21 (2): 281.
880. Ellinwood, W. E., Nett, T. M., and G. D. Niswender. Maintenance of the corpus luteum of early pregnancy in the ewe. 2. Prostaglandin secretion by the endometrium in vitro and in vivo. *Biology of Reproduction* 21 (4): 845.
881. Elliot, K. H., Rae, A. L., and G. A. Wicham. Analysis of records of a Perendale flock. I. The phenotypic relationships of hogget characteristics to lifetime performance. II. Genetic and phenotypic parameters for immature body weights and yearling fleece characteristics. *New Zealand Journal of Agricultural Research* 22 (2): 259 and 267.
882. Ellwood, D. A., Mitchell, M. D., Anderson, A. B., and A. C. Turnbull. Prostaglandins and cervical ripening during parturition in the sheep. *Acta Endocrinologica* 91 (225): 117.
883. El-Oksh, H. A., Kadry, A. E. H., Gbanem, Y. S., and E. S. E. Galal. Estimates of some physical wool characteristics of Barki sheep under semi-arid desert conditions. *Beitrage zur tropischen Landwirtschaft und Veterinärmedizin* 17 (4): 391.
884. El-Oksh, H. A., Kadry, A. E. H., Galal, E. S. E., and Y. S. Gbanem. Phenotypic and genetic correlations between some physical wool characteristics of Barki sheep under semi-arid desert conditions. *Beitrage zur tropischen Landwirtschaft und Veterinärmedizin* 17 (4): 397.
885. Elphick, M. C., Hull, D., and F. B. Pipkin. The transfer of fatty acids across the sheep placenta. *Journal of Developmental Physiology* 1 (1): 31.
886. El-Sebae, A. H., Soliman, S. A., and N. S. Ahmed. Delayed neuropathy in sheep by the phosphorothioate insecticide cyanofenphos. *Journal of Environmental Science and Health* 14 (3): 247.
887. El-Sherif, M. M., and A. A. Salem. Studies on metabolic profile test in sheep and its relation to infertility. *Assiut Veterinary Medical Journal* (1978) 5 (9/10): 77.
888. Ely, D. G., Deweese, W. P., Glenn, B. P., Robb, T. W., and R. J. Thomas. Dietary energy levels for lactating ewes. *Journal of Animal Science* 49 (suppl. 1): 68.
889. Ely, D. G., Glenn, B. P., Mabyuddin, M., Kemp, J. D., Thrift, F. A., and W. P. Deweese. Drylot vs pasture: early-weaned lamb performance to two slaughter weights. *Journal of Animal Science* 48 (1): 32.
890. Emmanuel, B. Comparative metabolic studies between ruminant species. *Annales de Recherches Veterinaires* 10 (2-3): 480.
891. Engelking, L. R., and R. Gronwall. Bile acid clearance in sheep with hereditary hyperbilirubinemia. *American Journal of Veterinary Research* 40 (9): 1277.
892. Engels, E. A. N., and A. Malan. Feed intake of non-pregnant, pregnant and lactating ewes on native pasture and lucerne hay. *South African Journal of Animal Science* 9 (1): 27.
893. English, P. G., and A. E. Hogan. A comparison of urinary specific gravity and

- osmolality in sheep. *Australian Veterinary Journal* 55 (12): 584.
894. Enright, F. M., and B. I. Osburn. Cytokine production by blue tongue virus-infected fetal sheep cells. *Infection and Immunity* 25 (1): 403.
895. Enzie, F. D., Rew, R. S., and M. L. Colglazier. Chemoprophylaxis with diamfenetide against experimental infections of *Fasciola hepatica* in ruminants. *American Journal of Veterinary Research* 41 (2): 179.
896. Ephraim, M., Alemshet, W. A., Tesfaye, L., Lemma, A., Legesse, W. Y., and G. Chaltu. Studies on the toxicity of *Phytolacca dodecandra* to Ethiopian highland sheep. *Bulletin of Animal Health and Production in Africa* 27 (1): 79.
897. Ercanbrack, S. K., Hulet, C. V., Doyle, J. J., and T. R. Kellom. Post weaning management to increase fertility of range ewe lambs. *Journal of Animal Science* 49 (suppl. 1): 188.
898. Erenberg, A. The effect of epidural anesthesia and surgery on serum thyroid hormone and cortisol levels in the pregnant ewe. *Pediatric Research* 13 (4 part 2): 357.
899. Erenberg, A., and M. L. Rhodes. The effect of thyroxine on lung maturation in the hypothyroid ovine fetus. *Pediatric Research* 31 (4, part 2): 533.
900. Erhan, M., Ergin, H., and B. Onar. Determination of the immunity in sheep inoculated with freeze-dried sheep pox vaccine. *Pendik Veteriner Mikrobiyoloji Enstitüsü Dergisi* 11 (2): 17.
901. Eriksson, A., Thornell, L. E., and T. Stigbrand. Skeletin immuno reactivity in heart purkinje fibers from several species. *Journal of Histochemistry and Cytochemistry* 27 (12): 1604.
902. Ernst, L. K., Dmitriev, N. G., and A. I. Zhigachev. Modern problems of animal selection for disease resistance. *S-KH Biol.* 14 (3): 345.
903. Eslami, A., Meydani, M., Maleki, S., and A. Zargarzadeh. Gastrointestinal nematodes of wild sheep (*Ovis orientalis*) from Iran. *Journal of Wildlife Disease* 15 (2): 263.
904. Espiner, E. A., and L. Lun. Permissive effect of ACTH on aldosterone response to potassium stimulation in sheep with adrenal transplants. *Acta Endocrinologica* (suppl. 0) (225): 343.
905. Estaev, B. Z. Factors affecting feed utilization in sheep. *Zhivotnovodstvo* No. 3: 53.
906. Esterhuizen, A. C., Muller, F. A., and E. J. Visser. Effect of endogenous insulin and glucagon on the free fatty acids in circulating blood plasma. *South African Medical Journal* 55 (23): 929.
907. European Communities Commission. Draft decision of the Council concerning the negotiations of autolimitation arrangements with non-member countries in the sheep meat sector. Publication, Commission of the European Communities 1979, No. COM (79): 763.
908. Eustachiewicz, R. Cyto architectonics of the cortex of the lobus piriformis of the sheep. *Polski Archiwum Weterynaryje* 21 (3): 405.
909. Euzeby, J., and J. Gevrey. Programme for anthelmintic prophylaxis in sheep on natural pasture, whether artificially irrigated or not. *Revue de Medecine Veterinaire* 130 (8/9): 1149.
910. Evans, H. B., and P. W. Wells. A mouse model of *Pasteurella haemolytica* infection and its use in assessment of the efficacy of *P. haemolytica* vaccines. *Research in Veterinary Science* 27 (2): 213.
911. Evans, J. M., and J. A. Boling. Incorporation of ¹⁴C-valine into plasma proteins of young and old ewes fed two levels of dietary protein. *Journal of Animal Science* 49 (suppl. 1): 45.
912. Evans, R. W., and B. P. Setchell. Lipid changes during epididymal maturation in ram spermatozoa collected at different times of the year. *Journal of Reproduction and Fertility* 57 (1): 197.
913. Evans, W. B., Munro, J. M. M., and R. V. Scurlock. Comparative pasture and animal production from cocksfoot and perennial ryegrass varieties under grazing. *Grass and Forage Science* 34 (1): 64.
914. Evrim, M. Possibility of improving production characters in Daglic sheep through selection. 3. Phenotypic and genetic parameters of important production character. *Istanbul Universitesi Veteriner Fakultesi Dergisi* 5 (1): 65.
915. Ewer, T. K. Review of animal husbandry. Future of livestock production in Great Britain. *The Veterinary Annual*. 19th issue. Edited by C. S. G. Grunsell and F. W. G. Hill. Bristol, UK, Scientifica, John Wright and Sons.
916. Eyre, P. Regional differences in airway function. *Anatomia Histologia Embryologia* 8 (2): 183.

F

917. Fabre-Nys, C. Effect of progesterone on steroid-induced male and female sexual behaviour in adult ovarioectomized ewes. *Comptes Rendus Academie des Sciences Series D*, 289 (6): 1319.
918. Faensen, M., Rahmanzadeh, R., Hahn, F., and R. Steldinger. Scintigraphic and histological findings on corticalis defects in sheep after treatment with electromagnetic potentials according to Kraus

- Lechner. Langenbecks Archive für Chirurgie 349 (1): 628.
919. Fagbamigbe, A. H. JOS virus infection in domestic animals and primates. Pathogenicity and immunological studies. Acta Virologica 23 (3): 261.
920. Fagundesdonascimento, E., Reis, R., Ultimodecarvalho, A., Cerqueiraleite, R., and A. Alvessimplicio. Endemic ethomoturbinate tumors in sheep. Arquivos da Escola de Veterinaria 31 (3): 337.
921. Fabey, G. C. Jr., McLaren, G. A., and J. E. Williams. Lignin digestibility by lambs fed both low quality and high quality roughages. Journal of Animal Science 48 (4): 941.
922. Faichney, G. J., and W. F. Colebrook. A simple technique to establish a self-retaining rumen catheter suitable for long-term infusions. Research in Veterinary Science 26 (3): 385.
923. Faichney, G. J., and G. A. White. Formaldehyde treatment of concentrated diets for sheep. III. Absorption of amino acids from the small intestine. Australian Journal of Agricultural Research 30 (6): 1163.
924. Faichney, G. J., and G. A. White. Net utilization of inorganic sulfur by rumen microbes. Annales de Recherches Veterinaires 10 (2-3): 280.
925. Fairclough, R. J., and J. F. Smith. Inhibition of prostaglandin F release following the administration of progesterone around luteolysis. Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries. Annual Report of Research Division 1977-78. Hamilton, New Zealand, 252 pp.
926. Fairnie, I. J. The export of breeding sheep from Australia. The urgent need for veterinary involvement. Australian Advances in Veterinary Science, edited by M. G. Cooper, p. 82.
927. Falaschini, A. F., Rizzi, L., and P. Bellezza. Use of single cell proteins (*Candida lipolytica*) in lamb feeding: experimental research. Zootechnia 28 (10-12): 427.
928. Falcon, W. P. Asia, kids, calories and poverty. Agenda 2 (10): 16.
929. Falconer, J., Forbes, J. M., Hart, I. C., Robinson, J. S., and G. D. Thorburn. Somatomedin-like activity in plasma after fetal hypophysectomy or nephrectomy and in experimental intrauterine growth retardation in sheep. Journal of Endocrinology 83 (1): 119.
930. Falconer, J., Forbes, J. M., Jones, R., and D. Rose. Changes in somatomedin-like activity and concentrations of growth hormone and prolactin in the plasma of castrated growing lambs. Journal of Developmental Physiology 1 (5): 337.
931. Falempin, M., and J. P. Rousseau. Vagal digestive deafferentiation in sheep. Annales de Recherches Veterinaires 10 (2/3): 186.
932. Falvey, J. L. A review of sheep in the Highlands of North Thailand. World Review of Animal Production 15 (1): 39.
933. Falvey, L., and P. Hengmichai. Carcass studies of small ruminants in the northern highlands, Thailand. Thai Journal of Agricultural Science 12 (4): 301.
934. Fameree, L., and C. Cotteleer. Hygiene and antitoxoplasmic alimentary antibodies in domestic animals in Belgium. Journal of Protozoology 26 (3, part 1): 59A.
935. Fameree, L., and C. Cotteleer. Food hygiene implications of the occurrence of toxoplasma antibodies among domestic animals in Belgium. Journal of Protozoology 26 (3): 1.
936. Fargeas, J. Transfer to sheep of bovine rumino-reticular micropopulations: effects on the plasma electrolytes and on feeding. Bulletin de la Societe des Sciences Veterinaires et de Medecine Comparee de Lyon 81 (2): 125.
937. Farias, C. L., and J. M. Asplund. Response to infusion of graded levels of histidine in sheep. Journal of Animal Science 49 (suppl. 1): 125.
938. Farneli, P. J. A field test method for the estimation of gamma-hexachlorocyclohexane in sheep dips. Journal of the Association of Public Analysts 17 (2): 71.
939. Farries, E. Use of food rations with high straw and NPN content in various breeds of sheep. Zeitschrift für Tierphysiologie Tierernährung und Futtermittelkunde 42 (1): 28.
940. Faure, A. S., Boshoff, D. A., and F. J. L. Burger. Comparison between intravaginal sponges and subcutaneous implants for synchronising oestrus in Karakul ewes. Agroanimalia 11 (3): 29.
941. Faye, P. Visna and Maedi syndromes in sheep. Bulletin Mensuel de la Societe Veterinaire Pratique de France 63 (6): 411.
942. Fayer, R., and R. G. Leek. Sarcocystis transmitted by blood transfusion. Journal of Parasitology 65 (6:1): 890.
943. Fedorov, Y. N. Separation of immunoglobulins from blood serum and colostrum of ewes. Byulleten Vsesoyuznogo Instituta Eksperimental'noi Veterinarii 34: 18.
944. Fedorov, Y. N. Transfer of immunoglobulins from ewe to lamb. Trudy Vsesoyuznogo Instituta Eksperimental'noi Veterinarii 49: 34.
945. Fedorov, Yu. N., and N. A. Likhotina. Immunosuppressive effect of immune serum against ovine salmonellosis in relation to time of administration and the

- classes of immunoglobulin present. Byulleten Vsesoyuznogo Instituta Eksperimental'noi Veterinarii 37: 19.
946. Fedosenko, A. K. Behavior of the Argali ovis-ammon during reproduction in the northern Tien-Shan and Dzhungarsky-Alatau USSR. Zoologicheskyy Zhurnal 58 (6): 903.
947. Fell, H. Intensive sheep management. Ipswich, UK, Farming Press.
948. Fera, M. A., Della, and C. A. Baile. Intracerebroventricular injections of cholecystokinin octapeptide and feeding in sheep. Federation Proceedings 38 (3): 1309.
949. Ferencz, G., Balla, E., Horvath, Z., and T. Kassai. Detection of bovine leucosis virus infection in cattle and sheep by the enzymelinked immunoassorbent assay (Elisa). Hungarian Veterinary Journal (Magyar Allatoruosok Lapja) 34 (12): 799.
950. Fernley, R. T., Wright, R. D., and Coghlan, J. P. A novel carbonic anhydrase from the ovine parotid gland. Federated European Biochemical Societies Letter 105(2): 299.
951. Ferrell, C. L., Crouse, J. D., Field, R. A., and J. L. Chant. Diet and stage of growth upon energy utilization by lambs. Journal of Animal Science 49 (3): 790.
952. Fevrier, C. Whey: from different origins of variable composition. Elevage Porcin, No. 80: 27.
953. Field, A. C. Mineral metabolism. In: The Management and Diseases of Sheep. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
954. Field, C. R. Preliminary report on ecology and management of camels, sheep and goats in Northern Kenya. Integrated Project in Arid Lands (IPAL) Technical Report No. E-1a, 1979.
955. Field, D. E., Gow, C. G., McDowell, G. H., and J. M. Gooden. Artificial induction of lactation in ewes: the importance of prolactin and growth hormone for initiation of lactation induced with prostaglandin F_{2a}. New Zealand Journal of Agricultural Research 22 (2): 233.
956. Field, R. A., Kruggel, W. G., and D. D. Deane. Characteristics of meat from mechanically desinewed lamb breasts. Journal of Animal Science 49 (suppl. 1): 219.
957. Filippov, Yu. I. Intramedullary osteosynthesis with polymer pins in dogs and sheep. Effect on blood cells and blood chemistry. Sbornik Nauchnykh Trudov Moskovskaya Veterinarnaya Akademiya 105: 109.
958. Findlay, J. K., Cerini, M., Sheers, M., Staples, L. D., and I. A. Cumming. The nature and role of pregnancy associated antigens and the endocrinology of early pregnancy in the ewe. In: Whelan, J. CIBA Foundation Symposium, No. 64. Maternal Recognition of Pregnancy, Elsevier North Holland Inc.
959. Fioramonti, J., and Y. Ruckebusch. Diet and caecal motility in sheep. Annales de Recherches Veterinaires 10 (4): 593.
960. First, N. L. Mechanisms controlling parturition in farm animals. In: Hawk, H. W., Beltsville Symposia in Agricultural Research, Vol. 3, Animal Reproduction, Allanheld, Osmun and Co., Montclair, NJ.
961. Fiser, P. S. New extenders for freezing ram semen. Cryobiology 16 (6): 614.
962. Fisher, J. M., Dube, A. J., and Watson, C. M. Distribution in South Australia of *Anguina funesta*, the nematode associated with annual rye grass toxicity. Australian Journal of Experimental Agriculture and Animal Husbandry 19 (96): 48.
963. Fitt, T. J. Anthelmintic feed blocks. A new development in worm control. Span 22 (2): 83, 90, 92, 95.
964. Fitt, T. J., Hutton, K., and D. G. Armstrong. Site of absorption of magnesium from the ovine digestive tract. Proceedings of the Nutrition Society 38 (2): A 65.
965. Fitzgerald, R. D. A comparison of four pasture types for the wheat belt of southern New South Wales. Australian Journal of Experimental Agriculture and Animal Husbandry 19 (97): 216.
966. Fitzgerald, S. Replacement of concentrates with roots in the diet of early weaned lambs. Animal Production 28 (3): 455.
967. Fitzpatrick, R. J. Parturition in the sheep and goat: The cervix of the sheep and goat during parturition. In: Developments in Animal and Veterinary Sciences, 5. Elsevier, Amsterdam, Netherlands.
968. Fitzpatrick, R. J., and H. Dobson. The cervix of the sheep and goat during parturition. Animal Reproduction Science 2 (1-3): 209.
969. Fix, H. P., Beck, A., and F. Hoffman. Possibilities of forecasting the digestibility of crude nutritive substances by fully grown and growing sheep from the rations' content of crude nutritive substances. 1. Rations with a low content of crude fibers (sole fodder on the basis of concentrated feed). Archiv für Tierernährung 28 (11-12): 759.
970. Fix, H. P., Legel, S., and M. Hoffmann. Possibilities of predicting the digestibility of crude nutrients by fullgrown and

- growing sheep from the rations content of crude nutrients. 2. Rations with a higher content of crude fibers (mixtures of straw and concentrated feed as sole feed). *Archiv für Tierernährung* 29 (4): 259.
971. Flamant, J. C., Bibe, B., Boyazoglu, J., Casu, S., Espejo Diaz, M., Valls Ortiz, M., and N. Zervas. A crossbreeding experiment between north European and local breeds for the production of fat lambs carried out with the cooperation of five research stations in Mediterranean countries. *Comptes Rendus des Seances de l'Academie d'Agriculture de France* 65 (12): 1018.
972. Flamant, J. C., and B. Bonaiti. Evaluation of milking abilities of purebred or crossbred Romanov ewes. *Annales de Genetique et de Selection Animale* 11 (3): 223.
973. Flanagan, S., Hanrahan, J. P., Grennan, E., and T. Thomas. Intensive mid-season lamb production. *Animal Production, Report from Dunsinea, Moorepark and Western Research Centre, Research Report 1977, Dublin, 190 pp.*
974. Flanagan, S. P., Hanrahan, J. P., and P. O'Malley. Prolific ewes increase cash income. *Farm and Food Research* 10 (3): 88.
975. Flechon, J. E. Sperm glycoproteins of the boar, bull, rabbit, and ram. I. Acrosomal glycoproteins. *Gamete Research* 2 (1): 43.
976. Flechon, J. E. Sperm glycoproteins of the boar, bull, rabbit, and ram. II. Surface glycoproteins and free acidic groups. *Gamete Research* 2 (1): 43.
977. Flick, M. R., Perel, A., Kageler, W., and N. C. Staub. Regional extravascular lung water in normal sheep. *Journal of Applied Physiology: Respiratory, Environmental and Exercise Physiology* 46 (5): 932.
978. Flioger, S. Investigations on the localization of the nerve centres of the mammary gland in the sheep. *Annales Universitatis Mariae Curie-Sklodowska DD, Veterinary Bulletin* 49: 6343, 1976, but published 1979, 31: 57.
979. Flint, A. P. Parturition in the sheep and goat: the control of placental steroid synthesis at parturition in domestic animals. In: *Developments in Animal and Veterinary Sciences 5*, Elsevier, Amsterdam, Netherlands.
980. Flint, A. P. F., Mitchell, M. D., and E. L. Sheldrick. Delayed luteal regression in ewes immunized against oxytocin. *Journal of Physiology* 296: 85P.
981. Flint, A. P. F., Ricketts, A. P., and V. A. Craig. The control of placental steroid synthesis at parturition in domestic animals. *Animal Production Science* 2 (1/3): 239.
982. Fogarty, N. M. Dorset horn sheep: their origin and development in Australia. *Journal of the Australian Institute of Agricultural Science* 45 (1): 14.
983. Foix, J. Cambendazole efficiency against *Moniezia* and gastrointestinal lamb strongyles. *Revue de Medecine Veterinaire* 130 (11): 1511.
984. Folch, J., and G. Colas. Seminal characteristics and fecundating power of the ram of the breeds, *De France and Berrichon-du-Cher*. *An Inst Nac Invest Agrer Ser Prod Anim* 0 (10): 117.
985. Fontenot, J. P., Kornegay, E. T., Webb, K. I. Jr., and J. C. A. Berger. Digestibility and palatability of ensiled swine waste and corn grain. *Journal of Animal Science* 49 (suppl. 1): 175.
986. Food and Agriculture Organization. World production statistics. *FAO Monthly Bulletin of Statistics* 2 (11): 44.
987. Food and Agriculture Organization. Production: cattle, buffaloes, pigs, sheep, goats and chickens; cow, buffalo, sheep, goat milk; butter and ghee, cheese, dry milk, hen eggs, evaporated/condensed milk, and honey. *FAO Monthly Bulletin of Statistics* 2 (5): 12.
988. Food and Agriculture Organization. The present position of bluetongue virus in Australia. *World Animal Review* No. 32: 49.
989. Foot, J. Z., and A. J. F. Russel. The relationship in ewes between voluntary food intake during pregnancy and forage intake during lactation and after weaning. *Animal Production* 28 (1): 25.
990. Foot, J. Z., Skedd, E., and D. N. McFarlane. Body composition in lactating sheep and its indirect measurement in the live animal using tritiated water. *Journal of Agricultural Science* 92 (1): 69.
991. Foote, R. H. Hormones in milk that may reflect reproductive changes. In: *Hawk, H. W., Beltsville Symposia in Agricultural Research, Vol. 3 Animal Reproduction*, Allanheld, Osmun and Co., Montclair, NJ.
992. Forbes, J. M., Driver, P. M., Brown, W. B., Scanes, C. G., and I. C. Hart. The effect of day length on the growth of lambs. 2. Blood concentrations of growth hormone, prolactin, insulin and thyroxine, and the effect of feeding. *Animal Production* 29 (1): 33.
993. Forbes, J. M., El Shahat, A. A., Jones, R., Duncan, J. G. S., and T. G. Boaz. The effect of day length on the growth of lambs. 1. Comparisons of sex, level of

- feeding, shearing and breed of sire. *Animal Production* 29 (1): 33.
994. Ford, E. J. H., Samad, A. R., and H. Pursell. The effect of trienbolone acetate on glucose metabolism in normal and ketotic sheep pregnant with twins. *Journal of Agricultural Science* 92 (2): 323.
995. Ford, J. J. Postpartum reproductive performance of Finnsheep-crossbred ewes. *Journal of Animal Science* 49 (4): 1043.
996. Ford, S. P., Christenson, R. K., and J. R. Chenault. Patterns of blood flow to the uterus and ovaries of ewes during the period of luteal regression. *Journal of Animal Science* 49 (6): 1510.
997. Foreyt, W. J., Gates, M. L., and R. B. Wescott. Effects of lasalocid and monensin against experimentally induced coccidiosis in confinement-reared lambs from weaning to market weight. *American Journal of Veterinary Research* 40 (1): 97.
998. Forsling, M. L., Maconald, A. A., and F. Ellendorff. The neurohypophysial oxytocin, vasopressin. *Animal Reproduction Science* 2 (1/3): 43.
999. Foster, D., and K. Ryan. Mechanisms governing onset of ovarian cyclicity at puberty in the lamb. *Annales de Biologie Animale, Biochimie, Biophysique* 19 (4B): 3169.
1000. Foster, D. L. Is the mechanism for resumption of ovulation following parturition in the sheep similar to that for onset of puberty or onset of the adult breeding season. *Biology of Reproduction* 20 (suppl. 1): 25A.
1001. Foster, D. L., and K. D. Ryan. Endocrine mechanisms governing transition into adulthood. A marked decrease in inhibitory feedback action of estradiol on tonic secretion of luteinizing hormone in the lamb during puberty. *Endocrinology* 105 (4): 896.
1002. Foster, G. G., and R. H. Maddern. Genetic methods of controlling the Australian sheep blowfly *Lucilia cuprina*. *Genetics* 91 (4, part 2 suppl.): S35.
1003. Foster, G. S., Tarnavsky, G. K., and J. J. Reeves. Evaluation of pregnancy diagnosis in the ewe based on pituitary responsiveness to LHRH. *Journal of Animal Science* 49 (suppl. 1): 298.
1004. Foster, M. A. FBIC building report 110: plastic sheep house for 200 ewes. *Farm Buildings Digest* 14 (3): 12.
1005. Fournier-Delpech, S., Colas, G., Courrot, M., Ortavant, R., and G. Brice. Epididymal sperm maturation in the ram: motility, fertilizing ability and embryonic survival after uterine artificial insemination in the ewe. *Annales de Biologie Animale Biochimie Biophysique* 19 (A3): 597.
1006. Fowden, A. L. Factors affecting insulin release in the sheep fetus. *Journal of Physiology* 293: 51P.
1007. Franc, M., Dorchies, P., Tainturier, D., and J. D. de Lahitte. Mycotic abortion of ruminants. Difficulty in confirming a diagnosis. *Recueil de Medecine Veterinaire* 155 (12): 913.
1008. France, Ministere de l'Agriculture, Service Central des enquetes et etudes statistiques. Sheep in mountain regions. Paris, France, Chambres d'Agriculture, Documentation agriculture 106, No. 46.
1009. France, Ministry of Agriculture. 1978 Annual Report. Paris, France, Ministere de l'Agriculture, 159 pp.
1010. Francis, J., Hayward, T., Green, J., and S. Weston. Farm animals charts: pigs, sheep, cattle, poultry. London, WCI UK Frederick Warne Ltd.
1011. Fraser, J., and N. J. L. Gilmour. Identification of *Moraxella bovis* and *Neisseria ovis* from the eyes of cattle and sheep. *Research in Veterinary Science* 27 (1): 127.
1012. French, L. R. Effect of intrauterine threads on fertilization rate in ewes. *Journal of Animal Science* 48 (6): 1429.
1013. Frenkel, J. K., and G. D. Wallace. Transmission of toxoplasmosis by tachyzoites: possibility and probability of a hypothesis. *Medical Hypotheses* 5 (5): 529.
1014. Frenzel, E., and E. Pfeffer. Digestibility of straw treated with ammonia or caustic soda. *Wirtschaftseigene Futter* 25 (4): 193.
1015. Frigeri, F., and M. A. Arush. Antibodies to parainfluenza-3 virus in cattle, sheep, goats and dromedaries in Somalia. *Clinica Veterinaria* 102 (5): 372.
1016. Fudalewicz-Niemczyk, W., Nowosad, B., and A. Malczewski. Interrelationship between the gastro-intestinal nematode infestation and sheep management system. XXI World Veterinary Congress, 1-7 July 1979, Moscow, Summaries, Vol. 2, Section III: Parasitology, Moscow, USSR, 63 pp.
1017. Fukui, Y. Effects of different diluents, thawing, temperatures and materials of thawing containers on survival of ram spermatozoa frozen by the pellet method. *Japanese Journal of Animal Reproduction* 25 (4): 160.
1018. Furia, A., Carsana, A., and M. Libonati. Studies on DNA protein interactions. Destabilizing action of ovine pancreatic RNase. *Boll. Soc. Ital. Biol. Sper.* 55 (3): 261.
1019. Furmaga, S., Grundlach, J. L., Zadziokowski, A., and Uchacz. Efficacy of bromfenofos in controlling *Fasciola hepatica* infection in sheep. *Bulletin Men-*

suel de la Société vétérinaire pratique de France 63 (7): 533.

G

1020. Gabbedy, B. J. The current understanding of selenium responsive condition in Western Australia. Australian Advances in Veterinary Science. Edited by M. G. Cooper, p. 134.
1021. Gabril'yants, G. E., and N. F. Skripova. The results of work on selection and breeding for the creation of a flock of karakul sheep with broad tail pelts. Referativnyi Zhurnal 9.58.283: 53.
1022. Gaili, E. S. E. Effect of breed-type on carcass weight and composition in sheep. Tropical Animal Health and Production 11 (4): 191.
1023. Gaillard, Y. Reproduction characteristics of Oudah ewe. Revue d'Élevage et de Médecine Vétérinaire des Pays Tropicaux 32 (3): 285.
1024. Gaillard, Y. Sexual behaviour of Oudah ram. Revue d'Élevage et de Médecine Vétérinaire des Pays Tropicaux 32 (4): 379.
1025. Gamcik, P., Mesáros, P., and F. Schvarc. Effect of the year season on some values of the semen of rams of the Slovak-Merino breed. Zivocisna výroba (Animal Husbandry) 24 (8): 625.
1026. Ganev, G., Orskov, E. R., and R. Smart. The effect of roughage or concentrate feeding and rumen retention time on total degradation of protein in the rumen. Journal of Agricultural Science 93 (3): 651.
1027. Garcia, F. Crossbreeding with sheep. Advances en Produccion Animal 4 (1): 3.
1028. Garcia de Siles, J. L., Carbonell, E., Wilson, L., and R. W. Stricklin. Utilization of concomitant variables in the design of animal husbandry experiments. An Inst. Nac. Invest. Agrer. Ser. Prod. Anim. O (10): 11.
1029. Garcia Olmedo, R., and L. Coll Hellin. Study of Spanish ewes' milk fat, composition of the unsaponifiable material. I. Sterol and hydrocarbon fractions. Anales de Bromatologia 31 (1): 38.
1030. Garfield, R. E., Rabideau, S., Challis, J. R., and E. E. Daniel. Hormonal control of GAP function formation in sheep myometrium during parturition. Biology of Reproduction 21 (4): 999.
1031. Garg, D. N., and V. K. Sharma. The detection of nasal carriers of *Salmonella* and other enterobacteria among young farm animals. Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene, Erste Abteilung Originale 243 A (4): 542.
1032. Garouachi, M., Braun, J. P., Rico, A. G., Bernard, P., and V. Burgatsacaze. Enzymatic semiology in the sheep. Recueil de Médecine Vétérinaire publiée avec le Concours du corps enseignant de l'école d'Alfort 154 (1): 901.
1033. Garwacki, S., and J. Harmeyer. Effect of intravenous glycine infusions on plasma amino acid levels in sheep. Zentralblatt für Veterinärmedizin 26 (9): 694.
1034. Garwacki, S., Krasicka, B., and M. Wiechetek. Influence of fasting upon the volatile fatty acid and ammonia level in the rumen of sheep. Zeszyty Naukowe Szkoły Główniej Gospodarstwa Wiejskiego Akademii Rolniczej W. Warszawa, Weterynaria 9: 67.
1035. Garwacki, S., Wiechetek, M., and W. Barez. Comparison of metabolic effect of ammonia and adrenaline infusions in sheep. Quarterly Journal of Experimental Physiology and Cognate Medical Sciences 64 (1): 23.
1036. Gates, N. L., Rich, J. E., Myers, L. L., and J. A. Harp. Efficacy of selected antimicrobial agents in treating diarrheal disease in neonatal lambs. Veterinary Medicine and Small Animal Clinician 74 (5): 707.
1037. Gattioni, L., and M. Samaja. Acid base equilibrium in the blood of sheep. Experimentia 35 (10): 1347.
1038. Gaur, D. Performance of purebred Nali and their crosses with Corriedale for important economic traits. Thesis Abstracts, Haryana Agricultural University 5 (1): 20.
1039. Gautam, O. P., Chhabra, M. B., and R. M. Bhardwaj. Current status of toxoplasmosis research in India. Haryana Veterinarian 18 (2): 89.
1040. Gawthorne, J. M. Extracellular carbohydrate complex from rumen contents. Annales de Recherches Vétérinaires 10 (2-3): 249.
1041. Gaye, P., and J. C. Mercier. Study of the precursors of ovine lactoproteins: primary structures of the signals and enzymic processing of pre-lactoproteins by mammary microsomal membranes. Journal of Dairy Research 46 (2): 175.
1042. Gazimagomedov, O. O. Effective utilization of feed. Ovtsevodstvo, No. 10: 26.
1043. Geenty, K. Sheepmilk's export potential. New Zealand Journal of Agriculture 139 (5): 57.
1044. Geenty, K. G. Lactation performance, growth, and carcass composition of sheep. I. Milk production, milk composition, and live weights of Romney, Corriedale, Dorset, Romney × Dorset, and Dorset × Romney ewes in relation to the growth of their lambs. New Zealand Journal of Agricultural Research 22 (2): 241.
1045. Geenty, K. G. Sheep dairy production.

- Agricultural Research in New Zealand Ministry of Agriculture and Fisheries. Annual Report of Research Division 1977-78. Hamilton, New Zealand, 252 pp.
1046. Geenty, K. G. Sheep dairying. *New Zealand Agricultural Science* 13 (3): 118.
1047. Geenty, K. G., Clarke, J. N., and K. E. Jury. Carcass growth and development of Romney, Corriedale, Dorset, and crossbred sheep. *New Zealand Journal of Agricultural Research* 22 (1): 23.
1048. Geisler, P. A., and J. S. Fenlon. The effects of body weight and its components on lambing performance in some commercial flocks in Britain. *Animal Production* 28 (2): 245.
1049. Geisler, P. A., and C. M. Jones. A model for calculation of the energy requirements of the pregnant ewe. *Animal Production* 29 (3): 339.
1050. Geisler, P. A., and H. Neal. A model for the effects of energy nutrition on the pregnant ewe. *Animal Production* 29 (3): 357.
1051. Geisler, P. A., Newton, J. E., Sheldrick, R. D., and A. E. Mohan. A model of lamb production from an autumn catch crop. *Agricultural Systems* 4 (1): 49.
1052. Gemmell, M. A. Hydatidosis control, a global view. *Australian Veterinary Journal* 55 (3): 118.
1053. Gemmell, R. T., and B. D. Stacy. Effect of cycloheximide on the ovine corpus luteum: the role of granules in the secretion of progesterone. *Journal of Reproduction and Fertility* 57 (1): 87.
1054. Gemmell, R. T., and B. D. Stacy. Granule secretion by the luteal cell of the sheep: the fate of the granule membrane. *Cell and Tissue Research* 197 (3): 413.
1055. Gennser, G., and K. Marsal. Fetal breathing movements monitored by real time, B. mode ultrasound, basal appearance and response to challenges. In: Chef, R. *Contributions to Gynecology and Obstetrics*, Vol. 6, p. 66.
1056. Genovski, Kh. Methods of studying the biological and physiological processes of digestion and metabolism in farm animals. *Veterinarnomeditsinski Nauki* 16 (6): 3.
1057. Genstler, C. C., Gilbert, R. D., and G. G. Power. Vascular compliance of the fetal sheep liver. *Clinical Research* 27 (1): 4A.
1058. Georgiev, B., and I. Denev. Seasonal and age dynamics of gastrointestinal strongyle infections in sheep (in Bulgaria). *Khelmitologiya* No. 7: 36.
1059. Georgiev, B., and A. Gruev. Effectiveness of levamisole and oxytetracycline against paramphistomids in sheep and cows. *Summaries, 21st World Veterinary Congress*, Vol. 2, Section III, 15.
1060. Georgiev, G. S., and V. Dimov. Prostaglandins and the fertilizing ability of ram semen. 3. Correlation between 9 keto prostaglandins concentration and conception rate. *Zhivotnov'dni Nauki* 16 (5): 79.
1061. Georgiev, S. Absorption of colostral immunoglobulins and bactericidal activity of blood serum in the developing lamb. *Veterinarnomeditsinski Nauki* 16 (1): 59.
1062. Georgoulas, J., and G. Jones. Greek dairy plants, an application of the Cobb Douglas production function to data from 1967-73. *Oxford Agrarian Studies* 8: 132.
1063. Georgsson, G., Martin, J. R., Pálsson, P. A., Nathanson, N., Benediktsdóttir, E., and G. Petursson. An ultrastructural study of the cerebrospinal fluid in Visna. *Acta Neuropathology* 48 (1): 39.
1064. Gerin, G., and F. Coignoul. *Muellerius capillaris*, a lungworm of sheep (brief review). *Annales de Médecine Vétérinaire* 123 (3): 217.
1065. Gerrits, R. J., Blosser, T. H., Purchase, H. G., Terrill, C. E., and E. J. Warwick. Economics of improving reproductive efficiency in farm animals. In: Hawk, H. W., *Beltsville Symposia in Agricultural Research* Vol. 3, Animal Reproduction. Allanheld Osmun and Co., Montclair, NJ.
1066. Gettinby, G., and S. McClean. A matrix formulation of the life cycle of liver fluke. *Proceedings of the Royal Ireland Academy, Sect. B. Biological, Geological and Chemical Sciences* 79 (12): 155.
1067. Gezondheidsdienst voor Dieren in Noord-Holland. Nematodirose in lambs following an exceptionally cold spring (in North Holland province). *Tijdschrift voor Diergeneeskunde* 104 (12): 521.
1068. Ghergariu, S. Congenital cerebrospinal hypomyelination (Border disease) in sheep—a review. *Revista de Cresterea Animalelor* 29 (6): 41.
- 1068-A. Ghosal, A. K., Dwaraknath, and P. R. Jatkar. Note on effect of zinc supplementation on canary colouration in Nali sheep. *Indian Veterinary Journal* 56 (5): 437.
1069. Ghosh, T. K., Verma, D. N., Singh, U. B., and S. K. Ranjhan. Studies on the body composition of different species of animals measured by isotope dilution technique. *Journal of Nuclear Agriculture and Biology* 8 (3): 89.
1070. Gibb, M. J., and T. T. Treacher. The performance of grazing twin lambs at 6, 8, 10 or 14 weeks of age. *Animal Production* 29 (3): 455.
1071. Gibbs, E. P. J., Lawman, M. J. P., and K. A. J. Herniman. Preliminary observations on transplacental infection of blue-

- tongue virus in sheep. Possible overwintering mechanism. *Research in Veterinary Science* 27 (1): 118.
1072. Gibbs, E. P. J., Taylor, W. P., Lawman, M. J. P., and J. Bryant. Classification of peste-des-petits ruminants virus as the 4th member of the genus *Morbillivirus*. *Intervirology* 11 (5): 268.
1073. Giesecke, D., Beck, U., Wiesmayr, S., and M. Stangassinger. The effect of rumen epithelial development on metabolic activities and ketogenesis by tissue in vitro. *Comparative Biochemistry and Physiology* 62B (4): 459.
1074. Giesecke, P. R., Lanigan, G. W., and A. L. Payne. Fungal tremorgens associated with ryegrass staggers in South Australia. *Australian Veterinary Journal* 55 (9): 444.
1075. Gihad, E. A. Intake, digestibility and nutrient utilization by sheep of sodium hydroxide-treated tropical grass supplemented with soybean or urea. *Journal of Animal Science* 48 (5): 1172.
1076. Gilanpour, H. Anatomic and radiographic studies of the lacrimal drainage system in sheep (*Ovis aries*). *American Journal of Veterinary Research* 40 (8): 1177.
1077. Gilchrist, F. M. C., Henning, P. A., Van der Linden, Y., Mattheyse, M. E., Hauhaus, W. K., and H. M. Schwartz. Factors affecting digestion of grain supplemented straw. *Annales de Recherches Veterinaires* 10 (2-3): 320.
1078. Gill, C. O. A review: intrinsic bacteria in meat. *Journal of Applied Bacteriology* 47 (3): 367.
1079. Gill, C. O., and N. Penney. Microbiology of bruised tissue. *Applied and Environmental Microbiology* 38 (6): 1184.
1080. Gill, M., and M. J. Ulyatt. Metabolism of methionine in silage-fed sheep. *British Journal of Nutrition* 41 (3): 605.
1081. Gill, M., Ulyatt, M. J., and T. N. Barry. Effect of treatment of silage with a formaldehyde-formic acid mixture on its digestion by sheep. *New Zealand Journal of Agricultural Research* 22 (2): 221.
1082. Gill, R. D., and I. C. Hart. Changes in the binding of insulin and glucagon to hepatocyte receptors in lactating and non-lactating ewes. *Journal of Endocrinology* 81 (2): 120P.
1083. Gilmour, J. L., Jones, G. E., and A. G. Rae. Experimental studies of chronic pneumonia of sheep. *Comparative Immunology, Microbiology and Infectious Diseases* 1 (4): 285.
1084. Gilmour, J. S., Angus, K. W., and G. E. Jones. Diagnosis of Maedi. *Veterinary Record* 104 (26): 611.
1085. Gilmour, N. J. L., et al. The development of vaccines against pneumonic pasteurellosis in sheep. *Veterinary Record* 104 (1): 15.
1086. Gings, M., Bickel, H., and A. Schurch. Energy metabolism of ruminants during experimental underfeedings and refeedings. *Zeitschrift für Tierphysiologie, Tierernährung und Futtermittelkunde* 42 (1): 30.
1087. Girard, A., Boulanger, P., and G. C. Dulac. Maedi-Visna: evaluation of complement fixation methods for detection of antibodies in some Canadian sheep flocks. *Proceedings of American Association of Veterinary Laboratory Diagnosticians* 21: 411.
1088. Girginov, G., Vodas, K., and B. Kozhilov. Inactivated saponin vaccine against *Salmonella* abortion in ewes. *Veterinarnomeditsinski Nauki* 15 (8): 91.
1089. Givens, D. I. Cobalt deficiency in growing lambs: a comparison of three forms of treatment. *Veterinary Record* 104 (22): 508.
1090. Glasnak, V., and A. Stratil. An unusual transfer R in variant in sheep. *Animal Blood Groups and Biochemical Genetics* 10 (2): 115.
1091. Glatz, T. H., Weitzman, R., Eliot, R. J., Klein, A. H., Nathanielsz, P. W., and D. A. Fisher. Maternal and fetal oxytocin in parturition. *Pediatric Research* 13 (4, part 2): 379.
1092. Glatzel, P., and A. Lahloukassi. Some parameters in reproduction of a Moroccan sheep breed (Race Man). *Deutsche Tierärztliche Wochenschrift* 86 (1): 16.
1093. Glazko, V. I., Serov, O. L., Stakan, G. A., and L. I. Korochkin. An analysis of production characters and the possibilities of using biochemical blood markers in the early stages of breed formation in sheep. 2. Analysis of biochemical markers. *Genetika* 15 (9): 1661.
1094. Glazko, V. I., Serov, O. L., Stakan, G. A., and L. I. Korochkin. Analysis of production characteristics and biochemical markers of sheep blood at early stages of breed formation. 3. Heterozygosity of sheep groups studied and breed differentiation. *Genetika* 15 (9): 1123-1129.
1095. Glenn, B. P., Ely, D. G., Dewese, W. P., Thomas, R. J., and T. W. Robb. Digestible protein/digestible energy ratios for finishing lambs. *Journal of Animal Science* 49 (suppl. 1): 48.
1096. Gluckman, P. D., Kaplan, S. J., Rudolph, A. M., and M. M. Grumbach. Hormone ontogeny in the ovine fetus. 2. Ovine chorionic somatomammotropin in mid and late gestation in the fetal and maternal circulations. *Endocrinology* 104 (6): 1828.
1097. Gluckman, P. D., Marti-Henneberg, C.,

- Kaplan, S. L., Li, C. H., Rudolph, A. M., and M. M. Grumbach. Beta endorphin stimulates growth hormone secretion in the ovine fetus in vivo. *Clinical Research* 27 (1): 99A.
1098. Gluckman, P. D., Martin-Henneberg, C., Thomsett, M. J., Kaplan, S. L., Rudolph, A. M., and M. M. Grumbach. Hormone ontogeny in the ovine fetus. 6. Dopaminergic regulation of prolactin secretion. *Endocrinology* 105 (5): 1173.
1099. Gluckman, P. D., Marti-Henneberg, C., Kaplan, S. L., Li, C. H., Rudolph, A. M., and M. M. Grumbach. The ontogeny of beta endorphin mediated growth hormone secretion in the ovine fetus. *Pediatric Research* 13 (4, part 2): 379.
1100. Gluhovschi, N., and R. Palicca. Oestrus synchronisation in ewes and economic efficiency of reproduction. *Revista de Cresterea Animalelor* 29 (1): 27.
1101. Gohary, G. S., and K. Bickhardt. Influence of blood sampling stress on blood values of sheep. *Deutsche Tierärztliche Wochenschrift* 96 (6): 225.
1102. Gohler, H. About some problems of the ascertainment of the carcass value of fattened lambs. *Fleisch* 33 (12): 236.
1103. Goldstein, D. J., and H. Harris. Evolution of placental alkaline phosphatases. *Human Genetics* 31 (6): 48A.
1104. Gonzalez, H., Plaza, J., and F. Aguirre. Anthelmintic activity of oxfendazole in gastrointestinal parasitism in sheep. *Boletin Chileno Parasitologie* 34 (3-4): 72.
1105. Gonzalez, J. S., Guada, J. A., and F. J. Ovejero. Protein requirements for maintenance in Churra sheep breed. *Zootecnia* 29 (1-3): 47.
1106. Gonzalez, J. S., Guada, J., and F. J. Ovejero. Protein requirements of gestating Churra sheep. 1. Effect of ingestion of energy and protein on the weight of lambs at birth and weight gains of sheep. *An. Inst. Nac. Invest. Agrar. Ser. Prod. Anim. O* (10): 95.
1107. Gonzalez, J. S., Guada, J. A., and F. J. Ovejero. Protein requirements of gestating Churra sheep. 2. Effect of energy and protein ingestion during the last third of gestation on the production of milk in the subsequent lactation. *An. Inst. Nac. Invest. Agrar. Ser. Prod. Anim. O* (10): 197.
1108. Gonzalez, J. S., Robinson, J. J., and I. Mchattie. The effect of source and level of dietary protein on milk production in ewes. *Animal Production* 29 (3): 453.
1109. Gonzalez, J. S., Robinson, J. J., Mchattie, I., and A. Z. Mehrez. Use of lactating ewes in evaluating protein sources for ruminants. *Proceedings of the Nutrition Society* 38 (3): A145.
1110. Gonzalez, J., Salmeron, V., Acosta, J., and J. Silva. Influence of kanamycin on the rumen bacteria and ammonia production in supplemented sheep rumen liquor in vitro. *Veterinary Microbiology* 4 (3): 247.
1111. Gonzalez, S. S., Farlin, S. D., and C. A. Baile. Effect of elfazepam on apparent digestibility, intake and gain in sheep. *Journal of Animal Science* 49 (4): 1096.
1112. Good, B., Burke, C., Cooper, E., Kingston, E. J., McMillen, I. C., Robinson, J. S., and G. D. Thorburn. The development of pituitary-thyroid function in the sheep fetus in late gestation. *Acta Endocrinologica* 91 (225): 31.
1113. Goode, L., and R. W. Harvey. Performance of steers and lambs fed corn stover ensiled with broiler litter or soybean meal. *Journal of Animal Science* 49 (suppl. 1): 73.
1114. Gooden, J. M., Fraser, R., Bosanquet, A. G., and R. Bickerstaffe. Size of lipoproteins in intestinal lymph of sheep and suckling lambs. *Australian Journal of Biological Sciences* 32 (6): 533.
1115. Goodman, R. L., Gegan, S. J., and K. D. Ryan. Importance of variations in behavioral and feedback actions of estradiol to control of seasonal bleeding in the ewe. *Biology of Reproduction* 20 (suppl. 1): 28A.
1116. Goodwin, D. H. Sheep management and production. London WIP 6JD, UK, Hutchinson and Co., 2nd Edition, 224 pp.
1117. Gooneratne, S. R., and J. M. Howell. Copper, zinc and iron levels in the cerebrospinal fluid of copper poisoned sheep. *Research in Veterinary Science* 27 (3): 384.
1118. Gooneratne, S. R., Howell, J. M., and J. Gawthorne. Intracellular distribution of copper in the liver of normal and copper loaded sheep. *Research in Veterinary Science* 27 (1): 30.
1119. Goot, H., Eyal, E., Folman Y., and W. C. Foote. Contemporary comparisons between progeny by Finnish Landrace and Romanov rams out of mutton Merino and Awassi ewes. *Livestock Production Science* 6 (3): 283.
1120. Gootwein, E., and H. Goot. Relationship between haemoglobin types and some production traits in Finnish crosses of sheep in Israel. Special Publication, Institute of Animal Science, Agricultural Research Organization, Israel, No. 132, p. 9.
1121. Gordon, A. J., and J. B. Donnelly. The potential for harvesting weakened wool:

- a comparison of several sheep breeds in terms of staple strength and depilation force after cyclophosphamide treatment. *Australian Journal of Agricultural Research* 30 (5): 949.
1122. Gorin, A. B., and J. Gould. Immunoglobulin synthesis in the lungs and caudal mediastinal lymph node of sheep. *Journal of Immunology* 123 (3): 1339.
1123. Gorin, A. B., Stewart, P., and J. Gould. Concentrations of immunoglobulin classes in subcompartments of the sheep lung. *Research in Veterinary Science* 26 (1): 126.
1124. Goscicka, D., and E. Tomasik. Developmental transformations of fetal kidney in pig and sheep. *Folia Morphologie* 39 (3): 411.
1125. Goshev, I., and P. Nedkov. Extending the range of application of the biuret reaction, quantitative determination of insoluble proteins. *Analytical Biochemistry* 95 (2): 340.
1126. Goshtasebpour-Parsi, G. G., Farid, A., and M. Makarechian. Dried sugar-beet pulp with molasses as a concentrate feed for feedlot Karakul lambs. *Journal of Animal Science* 49 (suppl. 1): 55.
1127. Gouet, Ph., Riou, Y., Contrepois, M., and H. C. Dubourguiér. The effectiveness of a simple technique of decontamination at birth for the production of axenic lambs and oligoxeric calves (in French). *Annales de Recherches Veterinaires* 10 (1): 49.
1128. Graber, M. Treatment, in tropical Africa, of sheep and cattle fascioliasis with Rafoxanide. *Revue d'Elevage et de Médecine Veterinaire des Pays tropicaux* 32 (1): 11.
1129. Grace, N. D., and D. R. Body. Dietary lipid and the absorption of Mg and Ca. Effect of corn oil infused via the rumen on the absorption of Mg and Ca in sheep fed white clover. *Oklahoma Current Farm Economics* 52 (2): 405.
1130. Grace, N. D., and N. F. Suttle. Some effects of sulphur intake on molybdenum metabolism in sheep. *British Journal of Nutrition* 41 (1): 125.
1131. Graham, A. G., Eustace, J. J., and V. H. Powell. A new method for improving carcass hygiene. *Schlachten und Vermarkten* 79 (3): 78.
1132. Graham, N. M., and T. W. Searle. Studies of weaned lambs before, during and after a period of weight loss. I. Energy and nitrogen utilization. *Australian Journal of Agricultural Research* 30 (3): 513.
1133. Grain, J., Groliere, C. A., Senaud, J., Puytorac, P., Zainab, B., and J. P. Jouany. Ciliate implantation in the rumen: influence of inoculated genus and type of diet. *Annales de Recherches Veterinaires* 10 (2/3): 502.
1134. Granzer, W., Graunke, W. D., and A. Sendke. The epidemiology of the parasites of sheep in Bavaria. *Bayerisches Landwirtschaftliches Jahrbuch* 56 (4): 398.
1135. Grau, F. Fresh meats: bacterial association. *Archiv für Lebensmittelhygiene* 30 (3): 87.
1136. Gray, A. R., and A. G. Luckins. Early development and antigenicity of *Trypanosoma congolense* in vertebrate hosts. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 73 (2): 129.
1137. Gray, G. G., and D. B. Pence. Ectoparasites of sympatric Barbary sheep and Mule Deer in the Texas Panhandle, USA. *Journal of Medical Entomology* 16 (5): 448.
1138. Great Britain, Ministry of Agriculture, Fisheries and Food. Fluke of liver rot in sheep. Leaflet, Agricultural Development and Advisory Service, Ministry of Agriculture, Fisheries and Food, LSD 52 (revised), 8 pp.
1139. Great Britain, see also United Kingdom.
1140. Grebenyuk, A. Z., Kil'pa, A. V., and Yu. D. Kvitko. Protein and vitamin concentrate for fattening lambs. *Ovisevodstvo* No. 5: 23.
1141. Green, D. M., and L. Rabinowitz. Renal components of feed dependent potassium excretion in sheep. *Kidney International* 16 (6): 833.
1142. Green, G. L., Closs, L. E., Desombre, E. R., and E. V. Jensen. Immunochemistry of estrophilin. In: Hamilton, T. H., Clark, J. H., and W. A. Sadler, *Ontogeny of Receptors and Reproductive Hormone Action*, Raven Press, New York, p. 13.
1143. Green, L. W., Harvey, R. W., Barrick, E. R., and A. C. Linnerud. The effect of including hydrolyzed feather meal in liquid supplements when fed with low quality roughages. *Journal of Animal Science* 49 (suppl. 1): 72.
1144. Green, R., Rojas, J., and H. Sundell. Pulmonary vascular response to prostacyclin in fetal lambs. *Prostaglandins* 18 (6): 927.
1145. Green, T. P., O'Dea, R. F., and L. L. Mirkin. Determinants of drug disposition and effect in the fetus. In: George, R., Okun, R., and A. K. Cho. *Annual Review of Pharmacology and Toxicology* 19: 285.
1146. Greenhalgh, J. F. D. Utilisation of roughages. In: *The Management and Diseases of Sheep*. Edited by British Council, Commonwealth Agricultural Bureaux, Slough, UK.

1147. Gregory, G., Lister, G., and M. Heymann. The effects of tolazoline on blood flow and pressures in hypoxic lambs. *Pediatric Research* 13 (4, part 2): 495.
1148. Gregory, P. C. Reticulo-rumen motility in the chronically vagotomized sheep. *Journal of Physiology* 296: 30P.
1149. Greve, T., Christiansen, I. J., Lehn-Jensen, H., Schmidt, M., Jensen, A. M., and R. Hoff-Joergensen. Ovum transplants in sheep. Preliminary report. *Arsberetning. Institut for Sterilitetsforskning. Kongelige Veterinaer-OG Landbohøjskole* 22: 25.
1150. Greyling, J. P. C., and J. M. van der Westhuysen. The synchronisation of oestrus in sheep. 2. Dose effect of prostaglandin in the double injection regime. *South African Journal of Animal Science* 9 (3): 193.
1151. Greyling, J. P. C., Westhuysen, J. M. van der, and C. H. Van Niekerk. The synchronisation of oestrus in sheep. I. Dosage and time of prostaglandin administration following progestagen pretreatment. *South African Journal of Animal Science* 9 (3): 185.
1152. Griffin, L., and E. W. Allonby. Disease syndromes in sheep and goats naturally infected with *Trypanosoma congolense*. *Journal of Comparative Pathology* 89 (4): 457.
1153. Griffin, L., and E. W. Allonby. Studies on the epidemiology of trypanosomiasis in sheep and goats in Kenya. *Tropical Animal Health and Production* 11 (3): 133.
1154. Griffin, L., and E. W. Allonby. The economic effects of trypanosomiasis in sheep and goats at a range research station in Kenya. *Tropical Animal Health and Production* 11 (3): 127.
1155. Griffin, L., and E. W. Allonby. Trypanotolerance in breeds of sheep and goats with an experimental infection of *Trypanosoma congolense*. *Veterinary Parasitology* 5: 97.
1156. Griffith, B. P., Borovetz, H. S., Hardesty, R. L., Hung, T-K., and H. T. Bahnson. Arteriovenous extracorporeal membrane oxygenation for neo natal respiratory support. A study in perigestational lambs. *Journal of Thoracic, Cardiovascular Surgery* 77 (4): 595.
1157. Grisham, C. M. Characterization of essential arginyl residues in sheep kidney sodium potassium ATPase. *Biochemical, Biophysical Research Communications* 88 (1): 229.
1158. Grizard, J., Tissier, M., Champredon, C., Prugnaud, J., and R. Pion. Glucose, urea, amino acids in the blood of ewes during pregnancy and lactation. Effect of nutritional state during late pregnancy. *Annales de Biologie animale, biochimie, biophysique* 19 (1): 55.
1159. Grizard, J., Tissier, M., Theriez, M., and R. Pion. Plasma insulin in ewes during pregnancy and lactation. Effect of nutritional state during late pregnancy. *Annales de Biologie animale, biochimie, biophysique* 19 (1): 73.
1160. Grizard, P. P., and M. Tissier. Effect of energy intake during late pregnancy on plasma insulin and blood free amino acids in ewes and their lambs. *Annales de Biologie animale, biochimie, biophysique* 19 (B1): 199.
1161. Groenstoel, H. Excretion of *Listeria monocytogenes* in healthy sheep. In: Ivanov, I. Problems of Listeriosis. National Agroindustrial Union Center for Scientific Information, Sofia, Bulgaria.
1162. Gronstol, H. Listeriosis in sheep. *Listeria monocytogenes* excretion and immunological state in healthy sheep. *Acta Veterinaria Scandinavica* 20 (2): 168.
1163. Gronstol, H. Listeriosis in sheep. *Listeria monocytogenes* excretion and immunological state in sheep in flocks with clinical listeriosis. *Acta Veterinaria Scandinavica* 20 (3): 417.
1164. Gronstol, H. Listeriosis in sheep. Isolation of *Listeria monocytogenes* from grass silage. *Acta Veterinaria Scandinavica* 20 (4): 492.
1165. Gross, L. Cancer and slow virus diseases: some common features. *New England Journal of Medicine* 301 (8): 432.
1166. Grovum, W. L. Factors affecting voluntary food intake by sheep. *Annales de Recherches Veterinaires* 10 (2-3): 216.
1167. Grovum, W. L. Factors affecting the voluntary intake of food by sheep. 2. Role of distension and tactile input from compartments of the stomach. *British Journal of Nutrition* 42 (3): 425.
1168. Gruber, K. A., Whitaker, J. M., Plunkett, W. C., and V. M. Buckalow, Jr. Detection of an endogenous digoxin like substance endoxan in plasma of dog, sheep and man. *Kidney International* 16 (6): 817.
1169. Gudding, R. Dnaes in milk and blood sera from different species. *Acta Veterinaria Scandinavica* 20 (3): 404.
1170. Gadev, D. Glucocorticoid hormones in the blood of normally and early weaned lambs. *Zhivotnov'dni Nauki* 16 (2): 103.
1171. Gueguen, L. Mineral content of milk and milk products. *La Place du Lait et des Produits laitiers en Alimentation humaine. Cahiers de Nutrition et de Dietetique* 14 (3): 181.
1172. Guerra-Pereira, M. L., and D. J. Coetzer. Evaluation of techniques for studying the arterial system of the brain of do-

- mestic ruminants. *Journal of South African Veterinary Association* 50 (2): 101.
1173. Guettner, J. Spontaneous autoimmune diseases in experimental animals. *Zentralblatt für Allgemein Pathologie und Pathologische Anatomie* 123 (1-2): 105.
1174. Guilhon, J., and M. Graber. Anthelmintic properties of bithinol sulfoxide and its use against various internal parasites of domestic ruminants (cattle, zebu, sheep). *Bulletin de L'Academie Veterinaire de France* 52 (2): 225.
1175. Guillet, D. Aujeszky's virus strain modified in cell culture. Thesis. Ecole Nationale Veterinaire, Alfort, France, 72 pp.
1176. Guirgis, R. A. Birthcoat fibre type arrays of lambs and some adult fleece traits. *Journal of Agricultural Science* 93 (1): 195.
1177. Guirgis, R. A., El Gabbas, H. M. H., Galal, E. S. E., and K. E. Ghoneim. Birthcoat-adult fleece relationship: a study of kemp succession in a coarse wool breed of sheep. *Journal of Agricultural Science* 92 (2): 427.
1178. Guirgis, R. A., Kazzal, N. T., and A. M. Zaghoul. The study of kemp succession in the adult fleece of two coarse-wool breeds of sheep in relation to the birthcoat. *Journal of Agricultural Science* 93 (3): 531.
1179. Gumbatov, M. G., and N. I. Bagirov. The elimination of blood-parasitic diseases on the farms of Apsheron. *Veterinariya* No. 8: 51.
1180. Gumbrell, B. John's disease in sheep and other animals. *New Zealand Veterinary Journal* 27 (3): 48.
1181. Gumenyuk, V. V., Makar, I. A., and V. V. Svinchuk. Pyruvate metabolism in sheep skin. *Dokl Akad Nauk UKR SSR Ser B, Geol Khim Biol Nauki* O (11): 947.
1182. Gunawan, M., Sangster, N. C., Kelly, J. D., Griffin, D., and H. V. Whitlock. Efficacy of fendendazole and albendazole against immature and adult stages of benzimidazole-resistant sheep trichostrongylids. *Research in Veterinary Science* 27 (1): 111.
1183. Gunn, R. G., and J. M. Doney. Ewe management for control of reproductive performance. *Agricultural Development and Advisory Service Quarterly Review* No. 35: 231.
1184. Gunn, R. G., and J. M. Doney. Fertility in Cheviot ewes. 1. The effect of body condition at mating on ovulation rate and early embryo mortality in North and South Country cheviot ewes. *Animal Production* 29 (1): 11.
1185. Gunn, R. G., Doney, J. M., and W. F. Smith. Fertility in cheviot ewes. 2. The effect of level of pre-mating nutrition on ovulation rate and early embryo mortality in North and South Country Cheviot ewes in moderately good condition at mating. *Animal Production* 29 (1): 17.
1186. Gunn, R. G., Doney, J. M., and W. F. Smith. Fertility in cheviot ewes. 3. The effect of level of nutrition before and after mating on ovulation rate and early embryo mortality in South Country Cheviot ewes in moderate condition at mating. *Animal Production* 29 (1): 25.
1187. Gunn, R. G., Doney, J. M., and W. F. Smith. The effect of time of mating on ovulation rate and potential lambing rate of Greyface ewes. *Animal Production* 29 (2): 277.
1188. Gunnarsson, E. Isolation of *Mycobacterium paratuberculosis* from sheep and cattle in Iceland. *Acta Veterinaria Scandinavica* 20 (2): 191.
1189. Gunnarsson, E., and F. H. Fodstad. Analysis of antigens in *Mycobacterium paratuberculosis*. *Acta Veterinaria Scandinavica* 20 (2): 200.
1190. Gupta, B. L., Sharma, S. N., and S. K. Tanwani. Serological prevalence of listeriosis in animals and birds. *Haryana Veterinarian* 18 (2): 145.
1191. Gupta, N. K., and L. S. Sneha. Studies on two tapeworms of the genus *Moniezia* from northern India. *Research Bulletin of the Punjab University* 1976 published in 1979. 27 (3/4): 135.
1192. Gupta, N. K., and L. S. Sneha. Studies on tapeworms of the genus *Stilesia* from India. *Research Bulletin of the Punjab University* 1976, published 1979. 27 (3/4): 129.
1193. Gupta, P. P. Note on Jaagziekte (pulmonary adenomatosis) in a sheep. *Indian Veterinary Journal* 56 (2): 155.
1194. Gupta, P. P., and S. K. Nagpal. Spontaneous aortic atherosclerosis in sheep. *Veterinary Pathology* 16 (5): 548.
1195. Gupta, P. P., and P. D. Malik. Anthelmintic activity of trodax in sheep. *Indian Veterinary Journal* 56 (10): 834.
1196. Gupta, R. P., Malik, P. D., and O. P. Gautam. The effect of fenbendazole on gastrointestinal nematodes and *Dictyocaulus filaria* in naturally infected sheep. *Haryana Agricultural University Journal of Research* 1979, published 1980. 9 (4): 349.
1197. Gupta, S. C., Gupta, C. D., and S. B. Gupta. Arterial segmentation in the spleen of the sheep. *Journal of Anatomy* 129 (2): 257.
1198. Gupta, S. L. Studies on the isolation, serodiagnosis and irradiated vaccine in toxoplasmosis. *Thesis Abstracts* 5 (2): 138.

1199. Gupta, S. L., Gautam, O. P., and R. M. Bhardwaj. Isolation of *Toxoplasma gondii* from sheep. *Indian Journal of Parasitology* 3 (1): 103.
1200. Gupta, S. L., Gautam, O. P., and R. M. Bhardwaj. A note on prevalence of *Sarcocystis* infection in sheep from Hissar area as studied by peptic-digestion technique. *Indian Journal of Animal Sciences* 49 (1): 971.
1201. Gupta, S. L., Gautam, O. P., and R. M. Bhardwaj. Isolation of toxoplasma from sheep. *Indian Journal of Public Health* 23 (4): 225.
1202. Gurel, A. Studies on the pathogenesis of experimental sheep pox by the fluorescent antibody technique and on the histopathology. *Pendik Veteriner Mikrobiyoloji Enstitüsü Dergisi* 11 (2): 54.
1203. Gusakoi, V. K., and Y. I. Mikitsin. Effect of protein, medium reaction and intestinal microflora on activity of digestive enzymes. *Vestsi Akademii Nauk BSSR Biyalgichnykh Nauk*, No. 6: 90.
1204. Guseinov, Z. A. A milking machine for ewes. *Milchwissenschaft* 34 (5): 267.
1205. Guseinov, Z. A. Definition of characteristics of milking machine for ewes. *Zhivotnovodstvo*, No. 1: 59.
1206. Guslavskii, I. I. Effectiveness of ways of preventing listeriosis among sheep in the Pavlodar region of Kazakhstan. *Veterinariya* No. 9: 36.
1207. Gutierrez Galindo, J., Sanchez Acedo, C., and J. A. Castillo Hernandez. The efficacy of febantel against natural infections of sheep with protostrongyles. *Second National Congress on Parasitology*, October 1979, Leon, Spain, 202 pp.
1208. Gutierrez Galindo, J., Sanchez Acedo, C., and J. A. Castillo Hernandez. The efficacy of febantel against natural infections of sheep with *Dicrocoelium* and *Fasciola* spp. *Second National Congress on Parasitology*, October 1979, Leon, Spain, 202 pp.
1209. Gutsche, H. J. Experiences with cross-breeding for the production of ewes with a good reproductive performance. *Tierzucht* 33 (7): 304.
1210. Gyang, E. O., et al. Microcephaly associated with kyphoscoliosis and cleft palate in a Yankassa lamb. *Veterinary Record* 105 (11): 255.
1211. Gyang, E. D., and D. I. Saror. Cobalt supplementation in Yankasa sheep in Zaria, Northern Nigeria. A preliminary report. *Bulletin of Animal Health and Production in Africa* 27 (3): 195.
1212. Habib, A. M., Badawy, A. B., and K. Zaki. Studies on the genital tract of Libyan ewes. *Assiut Veterinary Medical Journal*, 1978, published 1979, 5 (9/10): 273.
1213. Habvostiak, J. Possibilities of lamb and wool production on natural and sown grass swards. *Ved. Pr. Vysk. Ustavu Luk Pastienkov Banskej Bystrici* O (14): 73.
1214. Hackett, A. J., Inskeep, E. K., Robertson, H. A., Shrestha, J. N. B., and M. S. Wolynetz. Comparison of artificial insemination and natural mating on reproductive performance of five strains of sheep during the anestrus season in an intensive system. *Canadian Journal of Animal Science* 59 (4): 675.
1215. Hackett, A. J., Robertson, H. A., Penner, P., and G. R. McLaughlin. Comparison of two methods of synchronizing estrus in a commercial sheep flock. *Journal of Animal Science* 49 (suppl. 1): 300.
1216. Hackett, M. R., and J. K. Hillers. Effects of artificial lighting on feeder lamb performance. *Journal of Animal Science* 49 (1): 1.
1217. Hafeez, M., and B. V. Rao. Viability of amphistome metacercariae (*C. indicae* XXVI) after irradiation. *Indian Veterinary Journal* 56 (7): 622.
1218. Hafez, S. M., and H. Krauss. Detection of antibodies against some respiratory pathogens in the sera of domestic animals in Egypt. *Bulletin of Animal Health and Production in Africa* 27 (3): 209.
1219. Hakim, T. S., Van der Zee, H., and A. B. Malik. Effects of sympathetic nerve stimulation on lung fluid and protein exchange in sheep. *Journal of Applied Physiology, Respiratory Environmental Exercise Physiology* 47 (5): 1025.
1220. Halagan, J., and J. Arendarcik. Changes in total oestrogen concentration of the blood of sheep given medroxyprogesterone acetate and PMS. *Folia Veterinaria* 20 (1/2) 59 (1976 but published in 1979).
1221. Halagan, J., and J. Arendarcik. Concentrations of estrone, oestradiol and oestriol in the blood and amniotic fluid of sheep from the 50th to 90th days of pregnancy. *Folia Veterinaria* 20 (1/2): 69 (1976 but published in 1979).
1222. Halagan, J., and J. Arendarcik. Concentration of free 17-beta estradiol in the blood plasma of ewes after treatment with chlormadinone acetate (CAP) in two synchronized cycles. *Veterinarni Medicina* 25 (2): 73.
1223. Hall, C. A., Campbell, N. J., and S. N. Carroll. Resistance to thiabendazole in a field population of *Ostertagia circumcincta* from sheep. *Australian Veterinary Journal* 55 (5): 229.
1224. Hall, H. L. Economic data systems for livestock production in developing

H

- countries. Proceedings of International Symposium on Animal Health and Disease Data Banks, Washington, D.C. 1978. U.S. Department of Agriculture Miscellaneous Publications O (1381): 295.
1225. Hallgrímsson, S., and J. V. Jonmundsson. Estimation of breeding value in Icelandic sheep. Paper, 30th annual meeting, European Association for Animal Production, No. GS 3.8.
1226. Halliday, R., and M. R. Williams. The absorption of immunoglobulin from colostrum by bottle-fed lambs. *Annales de Recherches Veterinaires* 10 (4): 549.
1227. Halman, R. D., Dickey, J. F., Bodine, A. B., and J. R. Hill. A probable example of aflatoxin stress-induced pasteurellosis in male lambs. *Journal of Dairy Science* 62 (suppl. 1): 217.
1228. Harpin, C. G. Serum vitamin B-12. Its estimation and levels in sheep and cattle in Victoria. *Victorian Veterinary Proceedings* 37: 43.
1229. Hamilton, C. D., and A. W. Lishman. Reducing the partum-to-mating period in autumn lactating ewes through the use of exogenous hormones. *South African Journal of Animal Science* 9 (2): 59.
1230. Hamilton, C. D., Lishman, A. W., and P. A. Lamb. Effect in ewes of oestrogen priming and GnRH on LH release and luteal function during early lactation in spring. *South African Journal of Animal Science* 9 (3): 197.
1231. Hammerstedt, R. H., Keith, A. D., Hay, S., Deluca, N., and R. P. Amann. Changes in ram sperm membranes during epididymal transit. *Archives of Biochemistry and Biophysics* 196 (1): 7.
1232. Hampy, B., Pence, D. B., and C. D. Simpson. Serological studies on sympatric Barbary sheep (*Ammotragus lervia*) and mule deer (*Odocoileus hemionus*) from Palo-Duro Canyon, Texas USA. *Journal of Wildlife Disease* 15 (3): 443.
1233. Hamra, A. M., and M. J. Bryant. Reproductive performance during mating and early pregnancy in young female sheep. *Animal Production* 28 (2): 235.
1234. Hancock, T. W., Mayo, O., and R. E. Brady. Response to partial selection on clean fleece weight in South Australian strong-wool Merino sheep. IV. Genetic parameters. *Australian Journal of Agricultural Research* 30 (1): 173.
1235. Hanna, M. O., Stewart, J. C., Carpenter, Z. L., Zink, D. L., and C. Vanderzant. Isolation and characteristics of *Yersinia enterocolitica*-like bacteria from meats. In: Carter, P. B., Lafleur, L., and Toma, S., Contributions to microbiology and immunology, Vol. 5, S. Karger, Basel, Switzerland.
1236. Hanrahan, J. P. Genetic effects on carcass composition and feed intake. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Research Report 1977, Dublin. 190 pp.*
1237. Hanrahan, J. P. Comparative aspects of the fecundity of Texel and Texel-cross ewes. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Research Report 1977, Dublin, 190 pp.*
1238. Hanrahan, J. P. Galway flock recording scheme. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Research Report 1977, Dublin, 190 pp.*
1239. Hanrahan, J. P. Feed intake and carcass composition of lambs sired by Texel, Suffolk, Lleyn and Galway rams. *Animal Production* 28 (3): 457.
1240. Hanrahan, J. P. Breed differences in carcass grade. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Research Report 1977, Dublin 190 pp.*
1241. Hanrahan, J. P. Bodyweight fecundity relationships in different ewe breeds. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Dublin, Irish Republic, 212 pp.*
1242. Hanrahan, J. P. Heritability and repeatability of ovulation rate in Finnish Landrace ewes. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Dublin, Irish Republic, 212 pp.*
1243. Hanrahan, J. P., Allen, P., and J. L. L'Estrange. Effect of Finnish Landrace and Galway breeds on carcass composition fat distribution and fatty acid composition of different fat depots in lambs. In: De Boer, H., and J. Martin. *Current Topics in Veterinary Medicine*, vol. 2: 277.
1244. Hanrahan, J. P., and J. F. Quirke. Performance of super-ovulated donor ewes in egg-transfer experiments. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Research Report 1977, Dublin. 109 pp.*
1245. Hanrahan, J. P., and J. F. Quirke. Hormonal indicators of genetic variation in fecundity. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Dublin, 212 pp.*
1246. Hanrahan, J. P., and J. F. Quirke. Reproductive activity of Lleyn × Galway ewe lambs and other breeds. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Research Report, 1977, Dublin. 190 pp.*
1247. Hansen, L. G. Selective accumulation and depletion of polychlorinated biphenyl

- components: food animal implications. In: Nicolson, W. J., and J. A. Moore. Health effects of halogenated aromatic hydrocarbons. *Annals of New York Academy of Sciences* 32: 238.
1248. Hardin, G. B. Hungarian Komondar guard sheep. *Agricultural Research* 27 (7): 6.
1249. Harding, R., Henderson-Smart, D. J., Johnson, P., and M. E. McClelland. Posturally related tonic activity recorded from the peripheral diaphragm in awake and sleeping lambs. *Journal of Physiology* 292: 57.
1250. Hare, W. C. D., and E. L. Singh. Cytogenetics in animal reproduction. Farnham Royal, Slough, UK, Commonwealth Agricultural Bureaux, 96 pp.
1251. Haresign, W. Physiology of reproduction. In: *The Management and Diseases of Sheep*. Edited by British Council, Commonwealth Agricultural Bureaux, Slough, UK.
1252. Harris, A. J., and M. J. Hickey. Intensive systems of pasture use by sheep in Southland. *Proceedings of New Zealand Grassland Association* 40: 34.
1253. Harris, P. S. A study of the grazing behaviour of sheep on a high country summer range. Thesis, Lincoln College, University of Canterbury, New Zealand. *Proceedings of the New Zealand Grassland Association* 40: 187.
1254. Harrison, D. G., Beaver, D. E., and D. F. Osborun. Contribution of protozoa to the protein entering the duodenum of sheep. *British Journal of Nutrition* 41 (3): 521.
1255. Harrison, G. B. L. Immune response of sheep to gastrointestinal nematodes. *New Zealand Journal of Zoology* 6 (4): 650.
1256. Harrison, R. A. P., and C. R. Brown. The zymogen form of acrosin in testicular epididymal and ejaculated spermatozoa from ram. *Gamete Research* 2 (1): 75.
1257. Hart, R. J., Cavey, W. A., Ryan, K. J., Moore, R. B., and M. B. Strong. Technical details of a new sheep blowfly insecticide. *Wood Technology and Sheep Breeding* 27 (4): 23.
1258. Hartridge, F., and R. Parkin. Pastoral research on the northern tablelands of New South Wales. NSW Department of Agriculture, P.O. Box K220, Sydney, Australia, 99 pp.
1259. Harumoto, T., and M. Kato. Effect of different amounts of hay intake on ruminating behavior of sheep. *Japanese Journal of Zootechnical Science* 50 (3): 155.
1260. Haschek, W. M., Furr, A. K., Parkinson, T. F., Heffron, C. L., Reid, J. T., Bache, C. A., Wszolek, P. C., Guttenmann, W. H., and D. J. Lisk. Element and polychlorinated biphenyl deposition and effects in sheep fed cabbage grown on municipal sewage sludge. *Cornell Veterinarian* 69 (3): 302.
1261. Hashiguchi, Y. Congenital abnormalities in new-born lambs following Akabane virus infection in pregnant ewes. *National Institutes of Animal Health Quarterly* 19 (1-2): 1.
1262. Hasselmann, L., and H. Bergner. Investigations concerning the feed value of straw materials in the in vitro system. 4. Influence of the additional pre-incubation with the rumen fluid of animals deprived of food on the in vitro rate of protein synthesis. *Archiv für Tierernährung* 29 (9): 589.
1263. Hathaway, S. C., and R. B. Marshall. Experimental infection of sheep with *Leptospira interrogans serovars hardjo* and *balcanica*. *New Zealand Veterinary Journal* 27 (9): 197.
1264. Hatjiminaoglou, I., Alifaktiotis, T., and N. Zervas. The effect of exogenous oxytocin on estrous cycle length and corpus luteum lysis in ewes. *Annales de Biologie Animale, Biochimie, Biophysique* 19 (A2): 355.
1265. Haugwitz, R. D., Maurer, B. V., Jacobs, G. A., Narayanan, V. L., Cruthers, L., and J. Szanto. Antiparasitic agents. 3. Synthesis and antihelminthic activities of novel 2 pyridinyl-5-isothiocyanato benzimidazoles. *Journal of Medicinal Chemistry* 22 (9): 1113.
1266. Hawk, H. W. Beltsville symposia in agricultural research. Volume 3, Animal Reproduction, Beltsville, Md. Allanheld, Osmun and Co., Montclair, New Jersey.
1267. Hawker, J. R. Measurement in sheep and goat improvement. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England, Armidale, N.S.W., Australia*, p. 364.
1268. Hay, R. J. M., Brougham, R. W., and A. J. Harris. The importance of rotational grazing of pasture for intensive animal production in New Zealand. *Grass and Forage Science* 34 (1): 62.
1269. Hayashi, M., Bourne, D. W. A., Beville, R. F., and G. D. Koritz. Disposition of sulfonamides in food-producing animals: pharmacokinetics of sulfamerazine in ewe lambs. *American Journal of Veterinary Research* 40 (11): 1578.
1270. Hayden, A. R. Immunochemical detection of ovine, porcine and equine flesh in beef products with antisera to species myoglobin. *Journal of Food Science* 44 (2): 494.
1271. Hayes, T. J., and M. Mitrovic. The fasciolicidal activity of a halogenated benzenesulfonanilide. *Experientia* 35 (3): 325.

1272. Hayman, J. M., and R. A. Moss. Grazing irrigated pasture with sheep. Effect of winter management on pasture regrowth. *New Zealand Journal of Experimental Agriculture* 7 (3): 277.
1273. Hayward, D. Market comment: wool clip sellout likely. *New Zealand Journal of Agriculture* 138 (4): 56.
1274. Hayward, D. NZ lamb may be under pressure. *New Zealand Journal of Agriculture* 139 (3): 73.
1275. Hazlewood, G., and R. M. C. Dawson. Characteristics of a lipolytic and fatty acid requiring *Butyrivibrio* sp. isolated from the ovine rumen. *Journal of General Microbiology* 112 (1): 15.
1276. Healy, P. J., and D. Dinsdale. Protein transmission in the intestine of the new born lamb. The involvement of acid and alkaline phosphatase activity. *Histochemistry Journal* 11 (3): 289.
1277. Heaney, D. P. Sheep as pilot animals. Standardization of analytical methodology for feeds. International Development Research Centre (Ottawa) 1980, 128 pp.
1278. Heap, R. B., and A. P. F. Flint. Progesterone. In: Austin, C. R., and R. V. Short. *Reproduction in Mammals*. Vol. 7. Mechanisms of Hormone Action. Cambridge University Press, England.
1279. Heath, A. C. G. Ectoparasites of feral sheep on Campbell Island. *New Zealand Journal of Zoology* 6 (1): 141.
1280. Heath, D. D. Specific and non-specific reactions to *Taenia ovis* in sheep and dogs. *New Zealand Journal of Zoology* 6 (4): 650.
1281. Heath, D. D., Lawrence, S. B., and W. K. Yong. Cross-protection between the cysts of *Echinococcus granulosus*, *Taenia hydatigena*, and *T. ovis* in lambs. *Research in Veterinary Science* 27 (2): 210.
1282. Heath, D. D., Osborn, P. J., Parmeter, S. N., and S. B. Lawrence. Immunizing potential of various stages of *Taenia ovis* eggs injected subcutaneously into neonatal or sixteen-week-old lambs. *Veterinary Parasitology* 5 (1): 51.
1283. Heath, D. D., Yong, W. K., Osborn, P. J., Parmeter, S. N., Lawrence, S. B., and H. Twaalfhoven. The duration of passive protection against *Taenia ovis* larvae in lambs. *Parasitology* 79 (2): 177.
1284. Heckl, E. Development of the omental bursa of the sheep and its significance for the topography of the abdominal cavity. *Zentralblatt für Veterinärmedizin* 8 (1): 10.
1285. Heffron, C. L., Reid, J. T., Haschek, W. M., Telford, J. N., Stoewsand, G. S., Bache, C. A., Wszolek, P. C., and D. J. Lisk. Toxicologic studies with sheep fed colored magazines and newsprint. *The Cornell Veterinarian* 69 (4): 356.
1286. Heflin, A. C., Bomboy, J., Graber, S., and K. L. Brigham. Sheep lung vascular responses to endotoxin are accompanied by increased blood and lung lymph cyclic AMP and cyclic GMP. *American Review of Respiratory Diseases* 119 (4, part 2): 374.
1287. Heitzman, R. J. The efficacy and mechanism of action of anabolic agents as growth promoters in farm animals. *Journal of Steroid Biochemistry* 11 (1, Part C): 927.
1288. Heitzman, R. J., Harwood, D. J., and I. P. Reynolds. What hazards are associated with the use of anabolic agents for meat production? *ARC Research Review* 5 (2): 63.
1289. Hemingway, R. G., and A. M. McLaughlin. Retention by sheep of magnesium, phosphorus and fluorine from magnesium and calcium phosphates. *British Veterinary Journal* 135 (5): 411.
1290. Hemken, R. W., Bull, L. S., Boling, J. A., Kane, E., Bush, L. P., and R. C. Buchner. Summer fescue toxicosis in lactating dairy cows and sheep fed experimental strains of ryegrass-tall fescue hybrids. *Journal of Animal Science* 49 (3): 641.
1291. Henderson, A. E. Review of research on specialty carpet wools at Lincoln College. *World Textile Abstracts* 11: 4064.
1292. Henderson, L. M., and A. N. Bruere. Conservation of nucleolus organizer regions during evolution in sheep, goat, cattle and aoudad. *Canadian Journal of Genetics and Cytology* 21 (1): 1.
1293. Hendricks, J., and D. J. Houwers. Studies on the epizootiology of Maedi/Visna in sheep. *Tijdschrift voor Diergeneeskunde* 104 (23): 928.
1294. Hennessy, D. R., and R. K. Prichard. Influence of the oesophageal groove reflex on pharmacokinetic behaviour and efficacy of oxfendazole against benzimidazole resistant nematodes. Abstracts of papers at 23rd Conference of Australian Society for Parasitology, Leura, NSW, Australia. vi + 57 pp.
1295. Henrikson, S. A. *Psoroptes ovis*—sheep scab. *Dansk Veterinaertidsskrift* 6: 301.
1296. Hershov, V. S., and V. S. Ershov. Prophylaxis of helminthoses of young animals on the large scale cattle breeding farms (without application of anthelmintics). XXI World Veterinary Congress, Moscow, 2 (III) Parasitology, 63 pp.
1297. Hertrampf, B., and B. von Mickwitz. Stunning of slaughter animals. II. CO₂ stunning. *Deutsche Tierärztliche Wochenschrift* 86 (11): 444.
1298. Hespell, R. B., and M. P. Bryant. Effi-

- ciency of rumen microbial growth: influence of some theoretical and experimental factors in YATO. *Journal of Animal Science* 49 (6): 1640.
1299. Heurich, H., and H. Riegler. Recent results in the breeding of Merino longwool sheep. *Tierzucht* 33 (7): 294.
1300. Hewson, R., and C. J. Wilson. Home range and movements of Scottish Blackface sheep in Lochaber, North-West Scotland. *Journal of Applied Ecology* 16 (3): 743.
1301. Heydenrych, H. J., and D. J. B. Meissenheimer. Sex differences in the heritabilities of economic traits in South Africa Merino sheep. *South African Journal of Animal Science* 9 (2): 69.
1302. Heydon, R. A., and N. K. Adams. Comparative morphology and mucus histochemistry of the ruminant cervix. Differences between crypt and surface epithelium. *Biology of Reproduction* 21 (3): 557.
1303. Hicks, L. L., and J. M. Elder. Human disturbance of Sierra Nevada bighorn sheep. *Journal of Wildlife Management* 43 (4): 909.
1304. Hidaka, S., Tamate, H., and K. Hikosaka. The fine structure of endocrine cells in the sheep pancreas. *Tohoku Journal of Agricultural Research* 30 (2): 66.
1305. Hidalgo Arguello, R., Cordero del Campillo, M., Reguera Feo, A., and M. Diez Banos. The epizootiology of ovine coccidiosis in Leon. Second National Congress on Parasitology, October 1979, Leon, Spain.
1306. Hidari, H. Estimation of the rumen load of sheep through measuring the consistency of rumen contents. *Japanese Journal of Zootechnical Science* 50 (6): 402.
1307. Hidari, H. The relationships between the feeding behaviour and the rumen contents in the ruminant. *Japanese Journal of Zootechnical Science* 50 (12): 835.
1308. Hidioglou, M. Trace element deficiencies and fertility in ruminants: review. *Journal of Dairy Science* 62 (8): 1195.
1309. Hidioglou, M., Williams, C. J., Ho, S. K., and L. Tryphonas. Zinc and manganese in accessory genital glands of male sheep: distribution, uptake and effect of testosterone. *American Journal of Veterinary Research* 40 (1): 103.
1310. Hidioglou, M., Williams, C. J., and M. Ivan. Pharmacokinetics and amounts of 25-hydroxycholecalciferol in sheep affected by osteodystrophy. *Journal of Dairy Science* 62 (4): 5671.
1311. Hidioglou, M., Williams, C. J., Khan, S. U., and I. R. Siddiqui. Amino acid and glycosaminoglycan composition of epiphyseal cartilage of neonate and osteoporotic lambs. *International Journal of Vitamin and Nutrition Research* 49 (4): 359.
1312. Hidioglou, M., Williams, C. J., and J. K. G. Kramer. Fate of labeled choline administered intraruminally to pregnant ewes given manganese-deficient or supplemented rations. *American Journal of Veterinary Research* 40 (9): 1273.
1313. Hidioglou, M., Williams, C. J., Siddiqui, I. R., and S. U. Khan. Effects of Mn-deficient feeding to ewes on certain amino acids and sugars in cartilage of their newborn lambs. *American Journal of Veterinary Research* 40 (10): 1375.
1314. Hiepe, T. Results and prospects of parasitological research in the service of parasite control under conditions of high-intensity livestock production (German Democratic Republic). *Monatshefte für Veterinärmedizin* 34 (19/20): 751.
1315. Hikosaka, K., Sasaki, Y., and T. Tsuda. Effects of glucose, insulin and FFA in food intake in the sheep. *Annales de Recherches Veterinaires* 10 (2-3): 237.
1316. Hilali, M., and E. Scholtyssek. Ultrastructural study of globidial parasites infecting the abomasum of sheep in Germany. *Acta Veterinaria Scandinavica* 20 (3): 321.
1317. Hinkelman, L. A., Bradford, G. E., Pollack, E. J., Anderson, G. B., and P. T. Cupps. An embryo transfer study of birth weight in Finnish Landrace and Targee sheep. *Journal of Animal Science* 48 (2): 298.
1318. Hinrichsen, J. K. Influence of domestication on mating behaviour in fat-tailed sheep. *Kuratorium für Technik und Bauwesen in der Landwirtschaft*: 91.
1319. Hinton, B. T., Snoswell, A. M., and B. P. Setchell. The concentration of carnitine in the luminal fluid of the testis and epididymis of the rat and some other animals. *Journal of Reproduction and Fertility* 56 (1): 105.
1320. Hirsh, D. C., Biberstein, E. L., and S. S. Jang. Obligate anaerobes in clinical veterinary practice. *Journal of Clinical Microbiology* 10 (2): 18.
1321. Hitchcock, D. K., and G. D. Hutson. Effect of variation in light intensity on sheep movement through narrow and wide races. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (97): 170.
1322. Hitchcock, D. K., and G. D. Hutson. Movement of sheep on inclines. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (97): 176.
1323. Hobe, G., Danhardt, S., and W. Busch. Transformation by rumen microorganisms of 19-norgestagens to oestrogens. *Archiv für Experimentelle Veterinärmedizin* 33 (4): 495.

1324. Hochereau de Reviere, M., Blanc, M. R., Cahoreau C., Courrot, M., Dacheux, J. L., and C. Pisselet. Histological testicular parameters in bilateral cryptorchid adult rams. *Annales de Biologie Animale, Biochimie, Biophysique* 19 (A4): 1141.
1325. Hockman, C. H., Bieger, D., and A. Weerasuriya. Supranuclear pathways of swallowing. *Progress in Neurobiology* 12 (1): 15.
1326. Hoeller, H., Breves, G., and R. Schmitt. Disappearance from blood and urinary excretion of sulfur-35 labeled thiamine in sheep. A kinetic study. *International Journal of Vitamin and Nutrition Research* 49 (4): 391.
1327. Hoeller, H., Buchhop, K., and G. Breves. Studies on the passage of thiamine vitamin B-1 through the rumen wall of sheep in vivo. *Zentralblatt für Veterinärmedizin. Reihe B* 26 (10): 841.
1328. Hoffmann, H. U., and M. Hoffmann. Interval feeding in lamb raising and lamb fattening. *Archiv für Tierzucht* 22 (5): 369.
1329. Hoffmann, H. U., and M. Hoffmann. Investigations of the nitrogen retention of early weaned lambs. *Archiv für Tierernährung* 29 (12): 787.
1330. Hoffmann, M. State and prospects of feeding methods for sheep in the German Democratic Republic. *Archiv für Tierernährung* 29 (7/8): 507.
1331. Hofmeyr, C. F. B. Cholecysto-duodenostomy in a ram with obstruction of the ductus choledochus communis. *Flemish Veterinary Journal (Vlaams diergeneeskundig tijdschrift)* 48 (2): 158.
1332. Hogue, D. E., Reed, J. T., Heffron, C. L., Gutenmann, W. H., and D. J. Lisk. Soft coal fly ash as a source of selenium in unpelleted sheep rations. *Cornell Veterinarian* 70 (1): 67.
1333. Hokegard, K. H., Karlsson, K., Kjellmer, I., and K. G. Rosen. Electrocardiographic changes in the fetal lamb during asphyxia in relation to beta adrenoceptor stimulation and blockade. *Acta Physiologica Scandinavica* 105 (2): 195.
1334. Holcroft, J. W., Trunkey, D. D., and M. A. Carpenter. Extravasation of albumin in tissues of normal and septic baboons and sheep. *Journal of Surgical Research* 26 (4): 341.
1335. Holler, H., Breves, G., and R. Schmitt. Disappearance from blood and urinary excretion of ³⁵S-thiamin in sheep—kinetic study. *International Journal for Vitamin and Nutrition Research* 49 (4): 391.
1336. Holler, H., Buchhop, K., and G. Breves. Studies on the passage of thiamin (Vit B₁) through the rumen wall of sheep in vivo. *Zentralblatt für Veterinärmedizin Reihe A* 26 (10): 841.
1337. Holovska, K., Lenartova, V., and I. Havassy. Distribution of glutamate dehydrogenase and glutamine synthetase activity in the sheep and chicken digestive tract. *Physiologia Bohemoslovaca* 27 (2): 145.
1338. Holovska, K., Lenartova, V., and J. Varady. The effect of feeding ruman contents on glutamate dehydrogenase activity in some organs of broilers. *Veterinarni Medicina* 24 (7): 443.
1339. Holt, G., and A. Froeslie. Occurrence and importance of environmental poisons in domestic and wild animals in Norway. *Norsk Veterinaertidsskrift* 91 (10): 575.
1340. Holzman, I. R., Lemons, J. A., Meschia, G., and F. C. Battaglia. Uterine uptake of amino acids and placental glutamine-glutamate balance in the pregnant ewe. *Journal of Developmental Physiology* 1 (2): 137.
1341. Honmode, J. Some observations on fertility of frozen ram semen. *Indian Veterinary Journal* 56 (3): 173.
1342. Honmode, J. Observations on some factors influencing vitality of ram semen during its freezing and thawing. *Indian Veterinary Journal* 56 (8): 663.
1343. Hood, R. L., and R. F. Thornton. The cellularity of ovine adipose tissue. *Australian Journal of Agricultural Research* 30 (1): 153.
1344. Hoogstraal, H., Meegan, J. M., Khalil, G. M., and F. K. Adham. The Rift Valley fever epizootic in Egypt in 1977-1978. 2. Ecological and entomological studies. *Transactions of Royal Society of Tropical Medicine and Hygiene* 73 (6): 618.
1345. Hook, P. J. Fast food: silage for sheep. *New Zealand Journal of Agriculture* 139 (5): 25.
1346. Hooley, R. D. The failure of prolactin to initiate lactogenesis in the ewe. *Australian Journal of Biological Sciences* 32 (3): 359.
1347. Hooley, R. D., Findlay, J. K., and R. G. A. Stephenson. Effect of heat stress on plasma concentrations of prolactin and luteinizing hormone in ewes. *Australian Journal of Biological Sciences* 32 (2): 231.
1348. Hooper, R. H., and I. A. Macdonald. Hepatocellular extraction and retention of fructose in conscious sheep. *Journal of Physiology* 293: 31P.
1349. Hoover, D. M., and H. L. Hoover. Ovine pulmonary cytomegalovirus. *Veterinary Pathology* 16 (4): 413.
1350. Hopkins, P. G. Nematode parasites of the intestine of sheep in laboratory rabbits: dose dependent features of the establishment and use of such populations in the

- study of resistance to anthelmintics. Index to Theses Accepted for Higher Degrees 27 (1): 83.
1351. Hopkins, T. Safety of a new anthelmintic, febantel, in sheep. *Veterinary Medical Review*, No. 1: 5.
1352. Hopkinson, W. I., Lloyd, J., and B. M. Micke. *Brucella ovis* in Merino rams in Western Australia. *Australian Veterinary Journal* 55 (4): 200.
1353. Hoppen, H. O., Schramm, W., and J. K. Findlay. Steroid secretion by the ovarian transplant of sheep and gonadotrophins during prostaglandin induced luteolysis. *Acta Endocrinologica* 91 (225): 104.
1354. Horak, F., and J. Novak. Ethological manifestations of ewes and lambs after delivery. *Zivocisna vyroba (Animal Husbandry)* 24 (3): 213.
1355. Horak, I. G. Parasites of domestic and wild animals in South Africa. XII. Artificial transmission of nematodes from blesbok and impala to sheep, goats and cattle. *The Onderstepoort Journal of Veterinary Research* 46 (1): 27.
1356. Horton, G. M. J., and P. H. G. Stockdale. Monensin and amprolium for early weaned feedlot lambs with naturally occurring coccidiosis. *Journal of Animal Science* 49 (suppl. 1): 378.
1357. Horton, G. M. J., and P. H. G. Stockdale. Effects of amprolium and monensin on oocyst discharge, feed utilization, and ruminal metabolism of lambs with coccidiosis. *American Journal of Veterinary Research* 40 (7): 955.
1358. Houssin, Y., and M. J. Davicco. Influence of birthweight on the digestibility of a milk-replacer in newborn lambs. *Annales de Recherches Veterinaires* 10 (2-3): 419.
1359. Howards, S., Lechene, C., and R. Vigersky. The fluid environment of the maturing spermatozoon. In: Fawcett, D. W., and J. M. Bedord. *The spermatozoon: maturation, motility, surface properties and comparative aspects*. Urban and Schwarzenberg, Baltimore, MD.
1360. Hristoforov, L., Peshkov, J., and L. Ivancheva. Diagnostic titres in *Chlamydia* infections in sheep, cattle and swine. *Veterinarnomeditsinski Nauki* 16 (3): 3.
1361. Hrudka, F., and A. F. Eljack. The effect of ethylenedibromide on differentiation of the acrosome nucleus and transient nuclear appendages in ram spermatids. *Journal of Ultrastructural Research* 67 (2): 135.
1362. Huber, T. L., Peed, M. C., Wilson, R. C., and D. D. Goetsch. Endotoxin absorption in hay-fed and lactic acidotic sheep. *American Journal of Veterinary Research* 40 (6): 792.
1363. Hubert, J., Kerboeuf, D., and L. Grumer. Study of gastro-intestinal strongylosis in a sheep flock on permanent pasture. I. Sheep parasitism in 1977. *Annales de Recherches Veterinaires* 10 (4): 503.
- 1363-a. Huck, R. A., and P. H. Lamont. Virus disease. In: Laing, J. A. *Fertility and Infertility in Domestic Animals*. 3rd Edition. Bailliere Tindall, London.
1364. Hughes, A. D., and L. Burdon. Hand-feeding of sheep and cattle: energy and protein requirements. *Technical Information Circular. Livestock Branch, Department of Agriculture and Fisheries, South Australia No. 44: 257 pp.*
1365. Hughes, P. B., and G. J. Shannahan. The role of chemicals in flystrike control. *Agricultural Gazette of New South Wales* 90 (3): 9.
1366. Hughes, P. B., and G. J. Shannahan. Understanding sheep blowflies and insecticides. *Agricultural Gazette of New South Wales* 90 (5): 24.
1367. Hulet, C. V. Improving reproductive efficiency in sheep. In: Hawk, H. W., *Beltsville Symposia in Agricultural Research*, Vol. 3, Allanheld, Osmun and Co., Montclair, New Jersey.
1368. Hulet, C. V., Dahrman, J. J., Shipe, W. L., and E. Duren. How to graft lambs. *Idaho Agricultural Experiment Station Current Information Series no. 469: 1-4.*
1369. Hulsemeyer, F., Graser, S., and L. Sagemeister. Trends in the development of GFR sheepmeat production under common market conditions. *Schriftenreihe des Bundesministeriums für Ernährung, Landwirtschaft und Forsten. Reihe A, Landwirtschaft-Angewandte Wissenschaft; Informationsdienstkartei (AGL-BO)*. Bonn No. D-80-02249, No. 226: 114 pp.
1370. Hummel, P. H. Antibiotic resistance among salmonellae isolated from animals in Tanzania. *Bulletin of Animal Health and Production in Africa* 27 (2): 113.
1371. Hunsaker, W. G., and M. S. Wolynetz. Vaginal temperature and eating, drinking, standing and walking activity rhythms of four anestrous Finnish-Landrace ewes. *Canadian Journal of Animal Science* 59 (1): 11.
1372. Hunt, E. R. Coopworth sheep in Australia. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England, 404 pp.*
1373. Hunt, R. W. T., and R. G. Aitken. Store cattle and sheep in the crofting counties of Scotland. A study of production and

- marketing with special reference to the problems of part and spare time holdings. Research and Development Publication. The west of Scotland Agricultural College, No. 9, 97 pp.
1374. Huntington, G. G., and R. A. Britton. Effect of dietary lactic acid on rumen lactate metabolism and blood acid-base status of lambs switched from low to high concentrate diets. *Journal of Animal Science* 49 (6): 1569.
1375. Huntington, G., Britton, R., and R. Prior. Effect of dietary concentrate level on N balance, urine Ca excretion and blood composition of sheep. *Journal of Animal Science* 49 (suppl. 1): 122.
1376. Huntington, G. B., Prior, R. L., and R. A. Britton. Dietary concentrate level affects absorption rates and metabolism of lactate and glucose in sheep. *Federation Proceedings* 39 (3:1): 769.
1377. Husaker, W. G., and M. S. Wolynetz. A study of free running rhythms in sheep. *International Journal of Chronobiology* 6 (4): 219.
1378. Husband, A. J., Beh, K. J., and Lascelles, A. K. Immunoglobulin A containing cells in the ruminant intestine following intraperitoneal and local immunization. *Immunology* 37 (3): 597.
1379. Huslig, R. L., Fogwell, R. L., and W. L. Smith. The prostaglandin forming cyclo oxygenase of ovine uterus relationship to luteal function. *Biology of Reproduction* 21 (3): 589.
1380. Hyde, J. L. A veterinarian's glimpse at animal health in the People's Republic of China. *Proceedings of United States Animal Health Association* 83: 1.
- I
1381. Iannelli, D. Immunogenetics of the A-2 serum antigen of sheep. *Immunogenetics* 8 (1): 77.
1382. Ichijo, S., et al. Clinical observation on chronic copper poisoning in sheep. *Journal of the Japan Veterinary Medical Association* 32 (1): 11.
1383. Ikede, B. O. Genital lesions in experimental chronic *Trypanosoma brucei* infection in rams. *Research in Veterinary Science* 26 (2): 145.
1384. Ikegami, M., Jobe, A., and P. W. Nathanielsz. Secretion and biological half-life of the surfactant di saturated phosphatidyl choline in lambs and adult sheep. *American Review of Respiratory Diseases* 119 (4, part 2): 318.
1385. Ilg, H., Thompson, W., and K. Bolsen. Effect of four corn silage and corn grain ratios and nitrogen source on digestibility and nitrogen retention in lambs. *Journal of Animal Science* 49 (suppl. 1): 119.
1386. Ilg, H., Thompson, W., and K. Bolsen. Corn silage nitrogen source and zeranol implants for finishing lambs. *Journal of Animal Science* 49 (suppl. 1): 119.
1387. Ilieva, I., and Kh. Paliev. Possibilities of substituting urea for sunflower oilmeal in mixed feeds for fattening lambs. *Zhivotnov'dni Nauki* 16 (5): 24.
1388. Illes, S. Data on taste preference in sheep on the basis of behavioural studies. *Al-lattenyesztes* 28 (4): 351.
1389. Illius, A. W. Endocrine function and the behaviour of male sheep. *Index to Theses Accepted for Higher Degrees* 27 (1): 82.
1390. Imai, S., Katsuno, M., and K. Ogimoto. Type of the pattern of the rumen ciliate composition of the domestic ruminants and the predator prey interaction of the ciliates. *Japanese Journal of Zootechnical Science* 50 (2): 79.
1391. Imam, I. Z. E., El-Karamany, R., and M. A. Darwish. An epidemic of Rift Valley Fever in Egypt. 2. Isolation of the virus from animals. *Bulletin of World Health Organization* 57 (3): 441.
1392. Imperial Chemical Industries, Pharmaceuticals Division. *Nematodirus* disease in lambs: *Nematododirus*—an unusual parasite. *Spectrum (ICI)* 1 (1): 4 pp.
1393. Inaba, Y. Akabane disease: an epizootic congenital arthrogryposis-hydranencephaly syndrome in cattle, sheep and goats caused by Akabane virus. *Japan Agricultural Research Quarterly* 13 (2): 123.
1394. Inskeep, E. K., Stevens, L. P., and C. R. Rudy. Fertility in ewes receiving low doses of estradiol during synchronized estrus. *Journal of Animal Science* 48 (1): 52.
1395. International Livestock Centre for Africa. *Small ruminant production in the humid tropics*. Addis Ababa, Ethiopia, P.O. Box 5689, iv + 122 pp.
1396. Ionescu, F., Scheul, V., and M. Barbu. Possibility of organizing lambing out of the normal season. *Revista de Cresterea Animalelor* 29 (6): 20.
1397. Ionica, C. Paratuberculosis of sheep. *Revista de Cresterea Animalelor* 29 (11): 34.
1398. Jordanov, I., Kunev, Zh., and M. Khristova. Resistance of Aujeszky's disease virus to gamma irradiation. *Veterinar-nomeditsinski Nauki* 16 (6): 52.
1399. Ireland, C. M., Gull, K., Gutteridge, W. E., and C. I. Pogson. The interaction of benzimidazolecarbarnates with mammalian microtubule protein. *Biochemical Pharmacology* 29 (17): 2680.

1400. Ireland, C. M., Gull, K., Gutteridge, W. E., and C. I. Pogson. The inhibition of mammalian brain microtubule assembly in vitro by benzimidazole carbamates. *Parasitology* 79 (3): xix.
1401. Irish Republic Ministry of Agriculture. Chapter 6: Sheep and wool. Annual Report of the Minister for Agriculture, 1973. Dublin, Irish Republic, 125 pp.
1402. Irwin, L. N., Mitchell, G. E., Jr., Tucker, R. E., and G. T. Schelling. Occurrence and disappearance of ruminal histamine and tryamine. *Journal of Animal Science* 48 (6): 1470.
1403. Isailovski, V. Use of propionylpromazine, xylazine and azaperone before surgery in the field. *Veterinarski Glasnik* 33 (6): 485.
1404. Isayants, B. L., and M. A. Akhmedov. The relationship of fibre length with precipitation characters. *Ovtsevodstvo* 8: 39.
1405. Isenzhulov, A. I., Bukenov, K. B., and O. A. Prokazin. Kazakh Arkhar-Merinos. Alma-Ata, USSR; Kainar.: Referativnyi Zhurnal (1979) 11.58.5; 104 pp.
1406. Islam, A. B. M. M. Genetic selection for reproductive traits in sheep. A review. *Livestock Advisor* 4 (11): 9.
1407. Islam, A. W. M. S. Hydatid disease in sheep in Mymensingh District, Bangladesh. *Journal of Parasitology* 65 (1): 37.
1408. Ismailov, A. S. The development of some sheep breeds in Azerbaijan. Baku, USSR, Elm: Referativnyi Zhurnal (1980) 3.58.332: 1979. 171 pp.
1409. Ivan, K., and B. Erzebet. Isolation of *Mucella ovis* from aborted sheep fetuses and serological methods to detect infection of ewes and rams. *Hungarian Veterinary Journal* 34 (8): 542.
1410. Italy, Associazione Italiana Lattiero-Casaria. 1979. Report of the President, Italian Milk and Cheese Association, 1978. Milan, Italy, 67 pp.
1411. Ivan, M. Metabolism of radio manganese and radio zinc in sheep. Effects of intraruminal dosing with nitrilo triacetic acid. *Canadian Journal of Animal Science* 59 (2): 283.
1412. Ivan, M., Ihnat, M., and M. Hidirglou. Effects of nitrilotriacetic acid on apparent absorption and duodenal flow of manganese, iron, zinc and copper in sheep. *Canadian Journal of Animal Science* 59 (2): 273.
1413. Ivan, M., and D. W. Johnston. A method for re-entrant cannulation in sheep. *Annales de Recherches Veterinaires* 10 (2/3): 288.
1414. Ivan, M., Jui, P., and M. Hidirglou. The effects of nitrilotriacetic acid on solubilities of zinc, copper, manganese and iron in the stomach of sheep. *Canadian Journal of Physiology and Pharmacology* 57 (4): 369.
1415. Ivanov, I., Dzhurov, A., Nikov, S., Petkov, S., and V. Jordanova. Biochemical and pathological studies on experimental rumen acidosis in sheep. *Veterinarnomeditsinski Nauki* 16 (6): 82.
1416. Ivanov, I., and N. Massalski. Listeriosis in Bulgaria. In: Ivanov, I. Problems of Listeriosis. Sofia, Bulgaria, National Agroindustrial Union Center for Scientific Information.
1417. Ivanov, K. P. Main principles of regulation of temperature homeostasis. *Fiziol. Zh. SSSR Im I. M. Sechenova* 65 (11): 1553.
1418. Ivanov, V., and E. Doicheva. Reduction in plasma free amino acids during infection with gram-negative bacteria (*Salmonella abortusovis*) in sheep. *Veterinarnomeditsinski Nauki* 16 (7): 34.
1419. Ivars Herrera, M. E. Effects of early shearing of young and adult Romney Marsh ewes in southern Chile. *Archivos de Medicina Veterinaria* 11 (2): 121.
1420. Ivens, G. W. Effects of pasture species and sheep grazing on establishment of sown *Ulex europaeus*. Proceedings of 7th Asian-Pacific Weed Science Society Conference, Sydney, Australia, p. 355.
1421. Iwamoto, H., and A. M. Rudolph. Circulatory effects of blockade of angiotensin II in fetal lambs. *Pediatric Research* 13 (4, part 2): 359.
1422. Iwanoto, H. S., Rudolph, A. M., Keil, L. C., and M. A. Heymann. Hemodynamic responses of the sheep fetus to vasopressin infusion. *Circulation Research* 44 (3): 430.

J

1423. Jackiewicz, K., and J. Ramza. The prevalence of some parasitoses among farm animals in the Zielona Gora Province in 1977. *Zycie Weterynaryjne* 54 (4): 107.
1424. Jackson, F., and M. G. Christie. Observations on the egg output resulting from continuous low level infections with *Ostertagia circumcincta* in lambs. *Research in Veterinary Science* 27 (2): 244.
1425. Jackson, G. L., and S. L. Davis. Comparison of luteinizing hormone and prolactin levels in cycling and anestrus ewes. *Neuroendocrinology* 28 (4): 256.
1426. Jackson, M. V., and T. E. Williams. Response of grass swards to fertilizer nitrogen under cutting or grazing. *Journal of Agricultural Science* 92 (3): 549.
1427. Jackson, N., and A. M. Downes. The fibre diameter profile of wool staples in individual sheep. *Australian Journal of Agricultural Research* 30 (1): 163.

1428. Jagusch, K. T., and B. A. Bell. The performance of lambs fed cereal grains and lucerne hay and a feasibility study on grain finishing lambs from pastoral sheep farms. *New Zealand Agricultural Science* 13 (1): 57.
1429. Jakubec, V., and M. Cerna. Analysis of realized genetic gain of useful traits in sheep. *Zivocisna vyroba (Animal Husbandry)* 24 (8): 637.
1430. Jakubec, V., Sykorova, H., Machacek, P., and J. Pevny. Evaluation of sires according to progenies in a sheep flock. *Zivocisna Vyroba* 24 (7): 539.
1431. James, J. W. Selection theory with overlapping generations. *Livestock Production Science* 6 (3): 215.
1432. James, J. W. and E. M. Roberts. Measurement in sheep and goat improvement. *Proceedings of the Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England, Armidale, N.S.W., Australia*, p. 359.
1433. James, P. J., and G. H. Warren. Effect of disruption of the sebaceous layer of the sheep's skin on the incidence of fleecrot. *Australian Veterinary Journal* 55 (7): 335.
1434. James, R. E. Testing panacur (fenbendazole) in Australia. *Blauen Hefte für den Tierarzt*, No. 59: 465.
1435. James, R. E. Some results of trials with Panacur in Australia. *Blue Book for the Veterinary Profession* 29: 395.
1436. Jamieson, W. S., and J. Hodgson. The effects of variation in sward characteristics upon the ingestive behaviour and herbage intake of calves and lambs under a continuous stocking management. *Grass and Forage Science* 34 (4): 273.
1437. Jansen, C. A., Krane, E. J., Thomas, A. L., Beck, N. F. G., Lowe, K. C., Joyce, P., Parr, M., and P. W. Nathanielsz. Continuous variability of fetal blood oxygen tension in the chronically catheterized fetal sheep. *American Journal of Obstetrics and Gynecology* 134 (7): 776.
1438. Jansen, C. A. M., Lowe, K. C., and P. W. Nathanielsz. The Comparison of continuous transcutaneous and intermittent intravascular PO₂ measurement in fetal sheep. *Journal of Physiology* 295: 72P.
1439. Jatkar, P. R., Ghosal, A. K., and S. K. Purohit. A note on sweat glands of Nali sheep in relation to canary colouration of Indian wool. *Indian Journal of Animal Sciences* 49 (2): 149.
1440. Jatkar, P. R., Ghosal, A. K., and S. K. Purohit. A note on the bacteriological investigations of Indian yellow wool. *Indian Journal of Animal Science* 49 (5): 404.
1441. Jatsch, O., and R. Sagi. Machine milkability as related to dairy yield and its fractions in dairy ewes. *Annales de Zootechnie* 28 (3): 251.
1442. Jayaramakrishna, V., Schalles, R. R., Menzies, C. S., and J. D. Wheat. Comparative performance of breed crosses in sheep. 2. Lamb production traits. *Indian Veterinary Journal* 56 (4): 312.
1443. Jayaraman, M. S., Masillamony, P. R., Nachimuthu, K., and V. D. Padmanaban. The usefulness of measles hemagglutination inhibition test in detecting Rinderpest antibodies in cattle and sheep after inoculation of tissue culture Rinderpest vaccine. *Indian Veterinary Journal* 56 (1): 816.
1444. Jayasuriya, M. C. N. Sodium hydroxide treatment of rice straw to improve its nutritive value for ruminants. *Tropical Agriculture* 56 (1): 75.
1445. Jayasuriya, M. C. N. Aikali treatment of paddy straw: effect of energy and non-protein nitrogen supplementation on digestibility and intake by sheep. *Journal of National Science Council, Sri Lanka* 7 (1): 11.
1446. Jegou, B., Dacheux, J. L., Garnier, D. H., Terqui, M., Colas, G., and M. Courot. Biochemical and physiological studies of androgen binding protein in the reproductive tract of the ram. *Journal of Reproduction and Fertility* 57 (2): 311.
1447. Jegou, B., Dacheux, J. L., Terqui, M., Garnier, D. H., and M. Courot. Androgen binding protein in the reproductive tract of the ram. *Research on Steroids* 8: 291.
1448. Jenkinson, D. M., and D. H. Lloyd. The topography of the skin surface of cattle and sheep. *British Veterinary Journal* 135 (4): 376.
1449. Jenkinson, D. M., Lloyd, D. H., and R. M. Mabon. The antigenic composition and source of soluble proteins on the surface of the skin of sheep. *Journal of Comparative Pathology* 89 (1): 43.
1450. Jenkinson, D. M., Montgomery, I., and H. Y. Elder. The ultrastructure of the sweat glands of the ox, sheep and goat during sweating and recovery. *Journal of Anatomy* 129 (1): 117.
1451. Jensen, C. J., and Urness, P. J. Winter cold damage to bitterbrush related to spring sheep grazing. *Journal of Range Management* 32 (3): 214.
1452. Jensen, D. O., and J. M. Asplund. Effect of leucine infusion on various nitrogen parameters in sheep. *Nutrition Reports International* 20 (1): 115.
1453. Jensen, N. E. Preliminary report on per-

- formance testing in 1979. *Tidsskrift for Faareavl* 44 (9): 10.
1454. Jobe, A., Ikegami, M., and P. W. Nathanielsz. Secretion and biological half-life of surfactant phosphatidyl choline in lambs. *Clinical Research* 27 (1): 126A.
1455. Joblin, K. N., and R. G. Keogh. The element composition of herbage at urine patch sites in a rye grass pasture. *Journal of Agricultural Science* 92 (3): 571.
1456. John, A., and M. J. Ulyatt. Phosphatidylcholine as a marker of duodenal flow of rumen protozoa in sheep. *Proceedings of the Nutrition Society* 39 (3): A144.
1457. John, M. E. Sheep hemoglobin E, a 3rd beta chain allele. *Hemoglobin* 3 (1): 93.
1458. Johns, D. R., and S. J. Dickeson. Efficacy of albendazole against *Fasciola hepatica* in sheep. *Australian Veterinary Journal* 55 (9): 431.
1459. Johnson, G. N., Palahniuk, R. J., Tweed, W. A., Jones, M. V., and J. G. Wade. Regional cerebral blood flow changes during severe fetal asphyxia produced by slow partial umbilical cord compression. *American Journal of Obstetrics and Gynecology* 135 (1): 48.
1460. Johnstone, A. C., Manktelow, B. W., Jolly, R. D., and D. J. Belton. Persistent lymphocytosis and virus-like particles in lymphocytes of sheep inoculated with cell-free extracts derived from ovine malignant lymphomas. *Journal of Pathology* 128 (4): 183.
1461. Johnstone, A. C., Moriarty, K. M., and B. W. Manktelow. Lymphocyte sensitization in sheep inoculated with extracts of spontaneously occurring malignant lymphomas. *Australian Journal of Experimental Biology and Medical Science* 57 (1): 87.
1462. Johnstone, I. L., Coote, G. R., and K. E. Smart. Effect of parasite control in the peri-parturient period on lamb birth weight and liveweight gain. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (59): 414.
1463. Johnstone, I. L., Darvill, F. M., Bowen, F. L., Butler, R. W., Smart, K. E., and I. G. Pearson. The effect of four schemes of parasite control on production in Merino wether weaners in two environments. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (98): 303.
1464. Johnstone, P. D., Pringle, G. C., and R. R. Webb. A technique for estimating the effect of errors that occur when culling subjectively by weight assessment. *New Zealand Journal of Experimental Agriculture* 7 (2): 115.
1465. Joiner, C. H., and P. K. Lauf. Temperature dependence of active K transport in cation dimorphic sheep erythrocytes. *Biochimica et Biophysica Acta* 552 (3): 540.
1466. Jones, C. T. Normal fluctuations in the concentration of corticosteroid and adrenocorticotrophin in the plasma of foetal and pregnant sheep. *Hormone and Metabolic Research* 11 (3): 237.
1467. Jones, D. A. The importance of surface area to volume ratio to the rate of oxygen uptake by red cells. *Journal of General Physiology* 74 (5): 643.
1468. Jones, G. E., Buxton, D., and D. B. Harker. Respiratory infections in housed sheep, with particular reference to mycoplasmas. *Veterinary Microbiology* 4 (1): 47.
1469. Jones, G. E., and A. E. Rae. Ureaplasmas in sheep. *Veterinary Record* 104 (20): 466.
1470. Jones, L. P. The effect of correction factors on fecundity in breeding programs with sheep. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England*. 464 pp.
1471. Jones, L. P., and K. M. Napier. Economic comparison of open and closed nucleus breeding schemes for wool production. *Agricultural Systems* 5 (1): 71.
1472. Jones, P., and B. H. Nicholson. Translational activity of ribonucleic acid from ruminant abomasum. *Biochemical Society Transactions* 7 (6): 1253.
1473. Jordan, R. M., and H. E. Hanke. Effect of ralgro implants on growth of lambs and foals. *Journal of Animal Science* 49 (suppl. 1): 192.
1474. Jordan, R. M., and H. E. Hanke. Effect of sale weight on lamb performance and profit. *Journal of Animal Science* 49 (suppl. 1): 88.
1475. Jordan, W. A., Thompson, B. K., Ivan, M., and M. Hidioglou. Lambs fail to improve with cement kiln dust supplements. *Feedstuffs* 51 (32): 33.
- 1475-a. Jouany, J. P., and J. Senaud. Defaunation of the sheep rumen. *Annales de Biologie Animale, Biochimie Biophysique* 19 (A3): 619.
1476. Jouany, J. P., and J. Senaud. Role of rumen protozoa in the digestion of food cellulosic materials. *Annales de Recherches Veterinaires* 10 (2/3): 502.
1477. Joyner, A. E., Jr., Brown, L. J., Fogg, T. J., and R. T. Rossi. Effect of Monensin on growth, feed efficiency and energy metabolism of lambs. *Journal of Animal Science* 48 (5): 106.
1478. Juhasz, B., Jecsei, J., and B. Szegedi. The effect of denutrition on some parameters of the rumen juice and the blood of sheep. *Archiv für Tierernährung* 28 (11-12): 685.
1479. Juhasz, B., Szegedi, B., and S. Mahmoud.

- Electrolyte metabolism in different water supply by sheep. *Acta Physiologica Academiae Scientiarum Hungaricae* 53 (2): 178.
1480. Julien, R., Rathelot, J., Canioni, P., and L. Sarda. Comparative study of the effect of pancreatic colipase on the lipase activity of mammals and fungi. *Annals of Animal Biology, Biochemistry and Biophysics* 19 (3B): 819.
1481. Jun, M. H., and R. H. Johnson. Clinico-immunological studies on ovine squamous cell carcinoma. *Australian Advances in Veterinary Science*, edited by M. G. Cooper, p. 55.
1482. Jun, M. H., and R. H. Johnson. Effect of cyclophosphamide on tumour growth and cell-mediated immunity in sheep with ovine squamous cell carcinoma. *Research in Veterinary Science* 27 (2): 155.
1483. Jun, M. H., and R. H. Johnson. Effect of removal of ovine squamous cell carcinoma on peripheral lymphocyte stimulation by tumour extracts and phytohaemagglutinin. *Research in Veterinary Science* 27 (2): 149.
1484. Jun, M. H., and R. H. Johnson. Suppression of blastogenic response of peripheral lymphocytes by serum from ovine squamous cell carcinoma bearing sheep. *Research in Veterinary Science* 27 (2): 161.
1485. Jun, M. H., Johnson, R. H., and J. M. Mills. In vitro response of lymphocytes of normal and ovine squamous cell carcinoma-bearing sheep to phytomitogens and tumour extracts. *Research in Veterinary Science* 27 (2): 144.
1486. Jury, K. E., Johnson, D. L., and J. N. Clarke. Adjustment factors for lamb weaning weight. I. Estimates from commercial flocks. *Oklahoma Current Farm Economics* 52 (2): 385.
1487. Jury, K. E., Johnson, D. L., and J. N. Clarke. Adjustment factors for lamb weaning weight. I. Estimates from commercial flocks. *New Zealand Journal of Agricultural Research* 22 (3): 385.
1488. Jusko-Grundboeck, J., Honory, K., Honory, D., and B. Zorawska. The influence of feeding hay from area with heavy pollution of atmosphere with nitrogen compounds on some biochemical parameters of blood and rumen contents in sheep. *Bulletin of the Veterinary Institute in Pulawy* 22 (3-4): 73.
- K
1489. Kadar, I., and E. Banfalvi. Isolation of *Brucella ovis* from aborted sheep fetus and serological methods to detect infection in ewes and rams. *Magyar Allatorvosok Lapja* 34 (8): 542.
1490. Kadymov, R. A., and R. M. Aliev. Simultaneous immunization of sheep against anthrax, pasteurellosis and clostridial infections. *Veterinariya* No. 5: 38.
1491. Kadymov, R. A., and T. A. Shirvanyan. Anaerobe (Clostridial) infections in sheep: influence of increased environmental temperature and relative humidity on immunogenesis. *Doklady Vsesoyuznoi Akademii Sel'Skokhozyaistvennykh Nauk*, No. 5: 29.
1492. Kadymov, R. A., and T. A. Shirvanyan. Influence of elevated temperature and humidity on immunogenesis in anaerobic infections. *Soviet Agricultural Sciences* 5: 44.
1493. Kahle, E. B., and R. L. Reid. Diet-plasma amino acid relationships in ewes fed nitrogen fertilized orchardgrass. *Journal of Animal Science* 49 (suppl. 1): 139.
1494. Kaizu, T., Lyons, S. A., Cross, C. E., Jennings, M. D., and J. A. Last. Composition of glycoproteins secreted by tracheal explants from various animal species. *Comparative Biochemistry and Physiology* 62B (3): 195.
1495. Kalanidhi, A. P., Saxena, K. K., Shukla, V. P., and S. K. Ranjhan. Body composition studies in native and cross-bred sheep. *The Indian Journal of Animal Sciences* 49 (8): 646.
1496. Kalinowska, C. Effect of milk yield of lowland ewes on growth of their lambs. *Przeglad Hodowlany* 14: 13.
1497. Kamenov, I. Total serum protein and protein pattern in sheep and lambs following experimental percutaneous invasion with *Bunostomum trigonocephalum*. *Veterinarnomeditsinski Nauki* 16 (9): 3.
1498. Kandasamy, N. Haemoglobin and blood potassium polymorphism in Nilagiri sheep. *Indian Journal of Heredity* 11 (1): 17.
1499. Kane, D. W. The prevalence of salmonella infection at slaughter. *New Zealand Veterinary Journal* 27 (6): 110.
1500. Kang, M. S. A preliminary study of a breeding programme for Tan-Yang sheep. *Hereditas (China)* 1 (3): 16.
1501. Kannaiyan, V. R., Shanmugasundaram, S., Thiagarajan, M., and R. D. Michael. Fibre characteristics of Mandya, Madras Red and Cross bred sheep. *Cheiron* 8 (4): 247.
1502. Kao, J., Bridges, J. W., and J. K. Faulkner. Metabolism of carbon-14 phenol by sheep, pig and rat. *Xenobiotica* 9 (3): 141.
1503. Karamanlidis, A. N., Saigal, R. P., Giolli, R. A., Mangana, O., and H. Michaloudi. Visual thalamocortical connections in sheep studied by means of the retrograde transport of horseradish peroxi-

- dase. *Journal of Comparative Neurology* 187 (2): 245.
1504. Karim, M. A. A survey of coenurosis in sheep in northern Iraq. *Tropical Animal Health and Production* 11 (3): 157.
1505. Karim, M. A., Penjouian, E. K., and F. I. Dessouky. The prevalence of brucellosis among sheep and goats in northern Iraq. *Tropical Animal Health and Production* 11 (3): 186.
1506. Karoly, B. Proteinase inhibitor of lamb meconium and faeces. *World Animal Review*, No. 30: 545.
1507. Karpova, O. S., Gal'tsev, Y. I., and V. V. Mishanin. Backcrossing in commercial sheep breeding. *Vestnik Sel'Skokozyaistvennoi Nauki*, No. 4: 76.
1508. Karsch, F. J., Foster, D. L., Legan, S. J., Ryan, K. D., and G. K. Peter. Control of the preovulatory endocrine events in the ewe. interrelationship of estradiol, progesterone and LH. *Endocrinology* 105 (2): 421.
1509. Kassai, T., and F. Hollo. Investigations on the immunogenic effect of experimental *Trichostrongylus colubriformis* infection in young lambs. *Helminthologia* 16 (2): 121.
1510. Kasting, N. W., Veale, W. L., and K. E. Cooper. Development of fever in the newborn lamb. *American Journal of Physiology* 236 (6): R184.
1511. Kasting, N. W., Veale, W. L., and K. E. Cooper. Endogenous pyrogen release by fetal sheep and pregnant sheep blood leukocytes. *Canadian Journal of Physiology and Pharmacology* 57 (12): 1453.
1512. Kasting, N. W., Veale, W. L., Cooper, K. E., and K. Lederis. An endogenous antipyretic produced in late pregnancy. In: Cox, B., et al. *Thermoregulatory Mechanisms and Their Therapeutic Implications*. S. Karger, Basel, Switzerland.
1513. Kategile, J. A., and J. H. Frederiksen. Effect of level of sodium hydroxide treatment and volume of solution on the nutritive value of maize cobs. *Animal Feed Science Technology* 4 (1): 1.
1514. Katic, R. V., Domi, D., Katrinka, M., and S. Jacimovic. Prophylactic and therapeutic value of hyperimmune serum against *Fusobacterium necrophorum* infection in sheep. *Veterinarski Glasnik* 33 (3): 191.
1515. Katitch, R. V. Etiology and immunoprophylaxy problems in sheep foot-rot. *Comparative Immunology, Microbiology and Infectious Diseases* 2 (1): 55.
1516. Kato, S., Sasaki, Y., and T. Tsuda. Food intake and rumen osmolality in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 229.
1517. Katrinka, M. Evaluation of foot rot vaccines for sheep. *Veterinarski Glasnik* 33 (3): 197.
1518. Katsigianis, T. S., and T. L. Merritt. Lambing traits and lamb and wool production of Finnsheep cross and Suffolk cross yearling ewes. *Journal of Animal Science* 49 (suppl. 1): 129.
1519. Katsitadze, B. V., and A. G. Kozmanishvili. Urea: an important component of pelleted feeds. *Ovtsevodstvo*, No. 11: 22.
1520. Kauzal, G. P. Internal parasites controlled by self medication in sheep. *Australian Veterinary Journal* 55 (8): 400.
1521. Kay, R. N. B. Seasonal changes of appetite in deer and sheep. *ARC Research Review* 5 (1): 13.
1522. Kazakov, N. A., and M. N. Sokolov. Prevalence of *Anaplasma ovis* and respiratory disease among the sheep of a large specialized farm. *Byulleten Vsesoyuznogo Instituta Eksperimental'noi Veterinarii*, 1979 37: 16.
1523. Kazaliev, M. B. Inheritance of the principal production characters in crossbred sheep. *Ovtsevodstvo* 9: 20.
1524. Kazbiev, A. B., and I. Ya. Chistyakov. The relationship of reproductive function in sheep to external environmental factors. *Byulleten Vsesoyuznogo Instituta Eksperimental'noi Veterinarii* 37: 29 (See Referativnyi Zhurnal (1980) 6 (58): 417.)
1525. Kazikhanov, R. K., and E. P. Miroedova. Carcass composition of Edilbaev lambs. *Ovtsevodstvo*, No. 5: 35.
1526. Keeler, R. F., Balls, L. D., Shupe, J. L., and M. W. Crowe. Teratogenicity and toxicity of coniine in cows, ewes, and mares. *The Cornell Veterinarian* 70 (1): 19.
1527. Keenan, E. J., Kemp, E. D., Ramsey, E. E., and F. Stormshak. Effect of 17-beta estradiol on estrogen and progesterone receptors in the sheep mammary gland. *Proceedings of Western Pharmacology Society* 22: 87.
1528. Keitui, E. A., Colenbrander, V. F., Lechtenberg, V. L., and L. F. Bauman. Abstract. Feed intake, rate of passage and digestibility of brown midrib corn silage fed to growing lambs. *Journal of Dairy Science* 62 (suppl. 1): 84.
1529. Kelleher, C. A., and J. Mason. Effect of tetrathiomolybdate upon sheep caeruloplasmin amine oxidase activity in vitro: influence of substrate on apparent sensitivity to inhibition. *Research in Veterinary Science* 26 (1): 124.
1530. Kellermann, O., Brevet, A., Tonetti, H., and J. P. Waller. Macromolecular complexes of aminoacyl transfer RNA syn-

- thetases (EC 6.1.1.) from eukaryotes. 1. Extensive purification and characterization of the high molecular weight complexes of 7 aminoacyl transfer RNA synthetases from sheep liver. *European Journal of Biochemistry* 99 (3): 541.
1531. Kellner, R. J., and M. Kirchgessner. Estimation of nutrient digestibilities of straw as a single forage and as a ration constituent. *Landwirtschaftliche Forschung* 32 (3): 335.
1532. Kellner, R. J., Kirchgessner, M., and J. Pallauf. Digestibility of the cell wall constituents of lucerne hay under the influence of physical structure, cutting date and feeding level. *Wirtschaftseigene Futter* 25 (4): 209.
1533. Kelly, J. D., and N. J. Campbell. Effect of route of infection on acquired resistance to *Fasciola hepatica* in the rat and sheep. *Research in Veterinary Science* 27 (2): 205.
1534. Kelly, J. D., and C. A. Hall. Anthelmintic resistance in nematodes. I. History. Present status in Australia, genetic background and methods for field diagnosis. *New South Wales Veterinary Proceedings* 15: 19.
1535. Kelly, P. Hypomagnesaemia in sheep: a review. *Agricultural Development and Advisory Service Quarterly Review* 34: 151.
1536. Kelly, R. W. Reproductive performance of ewes grazing Pawera red clover at mating. *Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries. Annual Report of Research Division 1977-78*. Hamilton, New Zealand, 252 pp.
1537. Kelly, R. W., Hay, R. J. M., and G. H. Shackell. Formononetin content of grasslands pawera red clover and its oestrogenic activity to sheep. *Journal of Experimental Agriculture* 7 (2): 131.
1538. Kelly, W. R., Dooge, D. J., McSweeney, H., and J. D. Collins. Antibiotic-resistant *Escherichia coli* in the meat chain: prevalence of contamination of carcasses of sheep and cattle grazed on previously contaminated pasture. *Irish Journal of Food Science and Technology* 3 (1): 70.
1539. Kempton, T. J., and R. A. Leng. Protein nutrition of growing lambs. 1. Responses in growth and rumen function to supplementation of a low-protein-cellulosic diet with either urea, casein or formaldehyde-treated casein. *British Journal of Nutrition* 42 (2): 289.
1540. Kempton, T. J., Nolan, J. V., and R. A. Leng. Protein nutrition of growing lambs. 2. Effect on nitrogen digestion of supplementing a low protein-cellulosic diet with either urea, casein or formaldehyde-treated casein. *British Journal of Nutrition* 42 (2): 303.
1541. Kennedy, R. L., Erenberg, A., Robillard, J. E., Merkow, A., and T. Turner. Effects of changes in maternal fetal pH on the transplacental equilibrium of bupivacaine. *Anesthesiology* 52 (1): 50.
1542. Kerboeuf, D. Strongylosis in the ruminants: latest findings. *Recueil Medecine Veterinaire de l'Ecole d'Alfort* 155 (12): 923.
1543. Kerboeuf, D. Pepsinogen in blood of ruminants as a diagnostic aid in stomach worm infestation. *Revue de Medecine Veterinaire* 130 (10): 1359.
1544. Kerry, J. B., and G. R. Craig. Field studies in sheep with multicomponent clostridial vaccines. *Veterinary Record* 105 (24): 551.
1545. Keys, J. E., and L. W. Smith. Grinding and age of corn stover effect on digestion, intake and growth of sheep. *Journal of Dairy Science* 62 (suppl. 1): 155.
1546. Kezar, W. W. A physiological study of acidosis in ruminants. *Dissertation Abstracts International* 1979 39B (12) 1: 5672.
1547. Kezar, W. W., and D. C. Church. Ruminant changes during the onset and recovery of induced lactic acidosis in sheep. *Journal of Animal Science* 49 (5): 1161.
1548. Kezar, W. W., and D. C. Church. Effect of thiopeptin and sodium bicarbonate on the prevention of lactic acidosis induced in sheep. *Journal of Animal Science* 49 (5): 1396.
1549. Khairy, A. E. M. Goats and sheep as possible reservoirs of *Entamoeba histolytica*. *Bulletin of the High Institute of Public Health, Alexandria* 8 (1): 237.
1550. Khalacheva, M. Study of the infectivity and immunogenicity of *Babesia ovis* in sheep. *Veterinarno-Meditsinski Nauki* 16 (4): 78.
1551. Khalaf, A. M., Doxey, D. L., Baxter, J. T., Black, W. J. M., Fitzsimons, J., and J. A. Ferguson. Late pregnancy ewe feeding and lamb performance in early life. 1. Pregnancy feeding levels and perinatal lamb mortality. *Animal Production* 29 (3): 393.
1552. Khalaf, A. M., Doxey, D. L., Baxter, J. T., Black, W. J. M., Fitzsimons, J., and J. A. Ferguson. Late pregnancy ewe feeding and lamb performance in early life. 2. Factors associated with perinatal lamb mortality. *Animal Production* 29 (3): 401.
1553. Khalaf, A. M., Doxey, D. L., Baxter, J. T., Black, W. J. M., and J. Fitzsimons. A note concerning the effects of ewe nutrition and colostrum deprivation on

- young lambs. *Animal Production* 29 (3): 411.
1554. Khalikov, M. Kh. Prevention of colibacteriosis in lambs in Dagestan. *Byulleten Vsesoyuznogo Instituta Eksperimental'noi Veterinarii* 5: 33.
1555. Khan, S. U., Foster, T. S., and M. H. Akhtar. In vitro metabolism of a mixture of atrazine and simazine by the soluble fraction from goose, pig and sheep liver homogenates. *Pesticide Science* 10 (6): 460.
1556. Khanazarov, Ch. Number of male lambs at birth and their feed utilization. *Zhivotnovodstvo* 12: 45.
1557. Kharole, M. U., Kalra, D. S., Dutta, B. M., and J. Singh. A note on besnoitiosis in animals and chickens. *Indian Veterinary Journal* 56 (11): 969.
1558. Khayam-Bashi, H. Protein fractionation, nucleic acids and enzymatic activity of cytoplasmic extracts from the intestinal mucosa of sheep. *Biochemical Medicine* 21 (1): 40.
1559. Khristoforov, L. Comparison of ways of detecting blocking antibodies in sheep with *Brucella melitensis*. *Veterinarnomeditsinski Nauki* 16 (6): 9.
1560. Kilgour, R. The importance of the ram on flock fertility. *Wool Technology and Sheep Breeding* 27 (2): 41.
1561. Kilgour, R. The humane handling of stock for slaughter with particular reference to procedures in New Zealand. *Animal Regulation Studies* 1 (3): 235.
1562. Kilmer, L. H., Wangsness, P. J., Kesler, E. M., Muller, L. D., Griel, L. C., Jr., and L. F. Krabill. Voluntary intake and digestibility of legume and grass diets fed to lactating cows and growing wethers. *Journal of Dairy Science* 62 (8): 1272.
1563. Kim, B. H., Rhee, J. C., and D. S. Kim. The in vitro drug resistance of *Escherichia coli* isolated from piglets, calves, lambs and goats with diarrhea. *Korean Journal of Veterinary Research* 19 (2): 121.
1564. Kim, K. J., Critz, A. M., and E. D. Crandall. Transport of water and solutes across sheep visceral pleura. *American Review of Respiratory Diseases* 120 (4): 883.
1565. Kimberlin, R. H. An assessment of genetical methods in the control of scrapie. *Livestock Production Science* 6 (3): 233.
1566. King, J. M. Game domestication for animal production in Kenya: field studies of the body-water turnover of game and livestock. *Journal of Agricultural Science* 93 (1): 71.
1567. King, T. P., and I. Bremner. Autophagy and apoptosis in liver during the prehaemolytic phase of chronic copper poisoning in sheep. *Journal of Comparative Pathology* 89 (4): 515.
1568. Kirk, J. A., Williams, G. L., and M. P. Herve. Progeny testing of performance tested Welsh UK mountain rams. *Animal Production* 28 (3): 428.
1569. Kirk, J. H., and M. S. Bulgin. Effects of feeding cull domestic onions (*Allium cepa*) to sheep. *American Journal of Veterinary Research* 40 (3): 397.
1570. Kirkbride, C. A. Lamb trauma caused by porcupine grass (*Stipa spartea*) seeds. *Veterinary Medicine and Small Animal Clinician* 74 (10): 1511.
1571. Kirkwood, A. C. Dipping for the control of sheep scale using HCH. Weybridge, Surrey, UK, Central Veterinary Laboratory, 8 pp.
1572. Kirton, A. H., Campbell, A. G., Payne, E., and E. G. Woods. Facial eczema and the palatability of meat from lambs. *Oklahoma Current Farm Economics* 52 (2): 399.
1573. Kiryukhina, V. I., and A. F. Chirchenko. Improving wool quality of fine-wooled sheep. *Vestnik Sel'Skokhozyaistvennoi Nauki* 6: 53.
1574. Kisker, C. T., and J. E. Robillard. The development of blood coagulation in the fetus. *Pediatric Research* 13 (4, part 2): 434.
1575. Kisloff, J. L., Tsuchiya, A. M., and J. M. Roberts. Identification of beta adrenergic binding sites in fetal sheep myocardium. *Clinical Research* 27 (1): 7A.
1576. Kistner, A., Theinon, J., Kornelius, J. H., and A. Hugo. Effect of pH on specific growth rates of rumen bacteria. *Annales de Recherches Veterinaires* 10 (2-3): 268.
1577. Kistner, T. P., and D. Wyse. Transplacental transmission of *Protostrongylus* sp. in California bighorn sheep (*Ovis canadensis californica*) in Oregon. *Journal of Wildlife Diseases* 15 (4): 561.
1578. Kistner, T. P., Wyse, D., Schlitz, R. A., Averkin, E., and A. Cary. A dose titration study with oxfendazole against naturally acquired helminths in sheep. *Veterinary Parasitology* 5 (2-3): 195.
1579. Kitterman, J. A., Ballard, P. L., Clements, J. A., Mescher, E. J., and W. H. Tooley. Tracheal fluid in fetal lambs. Spontaneous decrease prior to birth. *Journal of Applied Physiology, Respiratory and Environmental Exercise Physiology* 47 (5): 985.
1580. Kitterman, J. A., Liggins, G. C., Ballard, P. L., Clements, J. A., and W. H. Tooley. Stimulation of fetal breathing movements in lambs by inhibitors of prostaglandin synthesis. *Clinical Research* 27 (1): 131A.
1581. Kitterman, J., Liggins, G., Campos, G.,

- Forster, C., and R. Creasy. Hormonal factors in lung maturation in fetal lambs. *Pediatric Research* 13 (4, part 2): 979.
1582. Kitts, D. D., Krishnamurti, C. R., and W. D. Kitts. Post-surgical changes in blood parameters of the ovine fetus in utero. *Canadian Journal of Animal Science* 59 (2): 265.
1583. Klein, A. H., Castagna, P., Bass, F., Nathanielsz, P. W., and D. A. Fisher. Thyroid gland sensitivity to thyrotropin in fetal and new born lambs. *Clinical Research* 27 (1): 99A.
1584. Klein, A. H., Eliot, R. J., Glatz, T. H., Nathanielsz, P. W., and D. A. Fisher. The effect of acute hypoxia on the pituitary thyroid axis in lambs. *Pediatric Research* 13 (4, part 2): 360.
1585. Klein, A. H., Eliot, R. J., Glatz, T. H., Nathanielsz, P. W. and D. A. Fisher. The effect of acute hypoxia on serum thyroid hormone concentrations in lambs. *Clinical Research* 27 (1): 99A.
1586. Klewiec, J., and M. J. Radomska. Methods of independent culling levels and of selection index in the estimation of Polish merino breeding value. Paper, 30th annual meeting, European Association for Animal Production, No. GS 3.7.
1587. Klimek, M., and J. Burczyk. Effect of a single dose of exogenous progesterone on its level in the peripheral blood in ewes. *Roczniki Naukowe Zootechniki* 6 (1): 37.
1588. Klindt, J., Davis, S. L., and D. L. Ohlson. Estimation of half-life and metabolic clearance rate of thyrotropin-releasing hormone in sheep using a double antibody radioimmunoassay. *Journal of Animal Science* 48 (5): 1165.
1589. Klinowska, M. Seasonal changes in the sheep pineal—preparation and testing of tissue fractions. *Pineal Gland of Vertebrates including Man. Progress in Brain Research* 52: 323.
1590. K'nchev, L., Doichev, S., and V. Antonova. Oestrus synchronisation in sheep using ICI 80996. *Veterinarnomeditsinski Nauki* 16 (4): 12.
1591. Knesel, J. A., Duffy, R. E., and C. W. Alliston. A telemetry system for interactive maintenance of hyperthermia in ewes within psychometric chambers. *Journal of Animal Science* 49 (suppl. 1): 112.
1592. Knight, T. W. Effects of diet and live weight on ovulation in Romney ewes. *Annual Report 1978-79, Hamilton, New Zealand, Ministry of Agriculture and Fisheries*. 34 pp.
1593. Knight, T. W. Sources of ram pheromones that stimulate ovulation in ewes. *Annual Report 1978-79, Hamilton, New Zealand, Ministry of Agriculture and Fisheries*, 34 pp.
1594. Knight, T. W. Effects of ram to ewe ratios and joining date on lambing performance in Romney ewes. *Annual Report 1978-79, Hamilton, New Zealand, Ministry of Agriculture and Fisheries*, 34 pp.
1595. Knight, T. W., Dalton, D. C., and G. K. Hight. Identification of barren ewes by vasectomised rams. *Journal of Experimental Agriculture* 7 (2): 125.
1596. Knight, T. W., and S. H. Rowe. Relationship between plasma progesterone in late gestation and the incidence of dystocia in Romney ewes. *Theriogenology* 11 (5): 345.
1597. Knight, T. W., Tervit, R., and R. Fairclough. Regression of the corpus luteum following stimulation by the ram. *Annual Report 1978-79, Hamilton, New Zealand, Ministry of Agriculture and Fisheries*, 34 pp.
1598. Knights, G. I., O'Rourke, P. K., and P. S. Hopkins. Effects of iodine supplementation of pregnant and lactating ewes on the growth and maturation of their offspring. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (96): 19.
1599. Knoppler, H. O., Graunke, W., Mucke, W., Schulze, H., and W. Gedek. Lead, cadmium and mercury contents in meat and organ samples from sheep and lambs. *Die Fleischwirtschaft* 59 (2): 241.
1600. Knowles, R. L., and F. Tahau. A repellent to protect radiata pine seedlings from browsing sheep. *New Zealand Journal of Forestry Science* 9 (1): 3.
1601. Kobulej, T. Epizootiological observations on trichostrongylidoses of sheep in relation to grassland management. XXI World Veterinary Congress, 1-7 July 1979, Moscow. Summaries, Vol. 2, Section III: Parasitology, Moscow, USSR, 63 pp.
1602. Koch, V. Mixed feeds. Indispensable in animal production. *Deutsche Tierärztliche Wochenschrift* 86 (1): 378.
1603. Kochman, H., Garnier, J., and K. Kochman. Receptor binding and conformational properties of bovine and ovine prolactins after chemical modification of the two tryptophan residues. *Biochimica et Biophysica Acta* 578 (1): 125.
1604. Koenig, K. H. Genetic aspects of reproductive performance in the female sheep. *Wissenschaftliche Zeitschrift Karl-Marx Universität, Leipzig, Math-Naturwiss Reihe* 28 (3): 278.
1605. Kohlloeffel, L. U. E. The inner ear of mammals, sound in spirals. *Naturwissenschaften* 66 (2): 114.
1606. Kolb, A. Light-microscopical researches

- on the olfactory mucosa of the sheep. *Anatomischer Anzeiger* 146 (5): 444.
1607. Kolb, E. Biochemical and pathobiochemical aspects relating to genesis and prevention of ketosis in sheep. *Monatshefte für Veterinärmedizin* 34 (11): 431.
1608. Kolb, E., and S. A. Kouider. Latest findings regarding carbohydrate metabolism of sheep and its regulation. *Monatshefte für Veterinärmedizin* 34 (5): 188.
1609. Kollarova, E., and V. Smirnov. Evaluating some lamb carcass cuts for the content of protein. *Pol'Nohospodarstvo* 25 (6): 524.
1610. Komarek, R. J. Cannulation of the rumen and abomasum of sheep with specially designed cannulae and cannula insertion instrument. *Journal of Animal Science* 49 (suppl.): 382.
1611. Komarek, R. J. Duodenal and ileal cannulation of cattle and sheep with a "T" shaped cannula designed to replace the re-entrant cannula. *Journal of Animal Science* 49 (suppl. 1): 383.
1612. Komarov, A. Veins of the forelimb of sheep. *Trudy Latviiskoi Sel'Skokhozyaistvennoi Akademii* 169: 61.
1613. Kondil, A. A., Abū-Ellatif, M., and F. H. Abdou. Studies on ingestive behaviour of Ossimi sheep under summer conditions in Egypt. *Indian Journal of Animal Sciences* 49 (12): 1063.
1614. Kondratenko, V. I., Mizeretskii, N. N., and V. N. Pismenskaya. Improvement of manufacture of rennet. *Myasnaya Industriya SSSR* 4: 18.
1615. König, I., and J. Bergfeld. Testing and introduction of synthetic gonadotropin releasing hormones for control of reproduction in farm animals. *Monatshefte für Veterinärmedizin* 34 (16): 601.
1616. Kopczewski, A., Twardowski, H., Wardzinski, S., and G. Chylinski. Observations on the course of pulmonary adenomatosis in sheep. *Medycyna Weterynaryjna* 35 (6): 347.
1617. Korman, K., Musial, A., and M. Osikowski. Fattening to 35 kg of lambs weaned at 2 days of age. *Roczniki Naukowe Zoo-techniki* 6 (2): 295.
1618. Korman, K., and M. Osikowski. Preliminary investigation of the use of silage in summer diet of ewes. *Rocznik i Naukowe Zootechniki* 6 (2): 181.
1619. Koshy, T. J., Achuthan, H. N., Rajavelu, G., and C. M. Lalitha. A survey of the tick fauna of Tamil Nadu. *Cheiron, Tamil Nadu Journal of Veterinary Science and Animal Husbandry* 8 (3): 199.
1620. Kostikov, I. M., Fattening performance of crossbred rams. *Ovtsevodstvo* 7: 36.
1621. Kostyukov, M. A., Gordeeva, Z. E., and A. U. Kuyuma. Proof of the possibility of trans-stadial transmission of Wad-Medani virus in *H. a. anatolicum* ticks infected on experimentally infected agricultural animals. *Meditsinskaya Parazitologiya i Parazitarnye Bolezni* 48 (3): 39.
1622. Kotai, I., and G. Majoros. Structure of the sheep abomasal epithelial cells. *Hungarian Veterinary Journal (Magyar Allatoruosok Lapja)* 34 (1.): 813.
1623. Kotze, F. de K. Wool production in semi-arid areas with special reference to African conditions. In: *The Management and Diseases of Sheep*. Edited by British Council, Commonwealth Agricultural Bureau, Slough, U.K.
1624. Kouider, S., Kalb, E., Lippmann, R., and I. Muller. Studies into the effects of infusion of sorbite electrolyte solution (Urzolyt-153S) and of sorbite solution on levels of sorbite, fructose, glucose, insulin, and free fatty acids in blood plasma of sheep. *Monatshefte für Veterinärmedizin* 34 (14): 528.
1625. Kouider, S., Kalb, E., Lippmann, R., and I. Muller. Effects of intravenous infusion of mannite solution on various factors of metabolism in cattle and sheep. *Monatshefte für Veterinärmedizin* 34 (14): 532.
1626. Koval'chuk, L. S., Shikov, A. T., Andriyan, E. A., Avanesov, R. A., Kudeleva, G. V., Chapenko, S. V., Nagaena, L. I., and R. A. Kukain. Specificity of the cytotoxic test in sheep experimentally infected with bovine leukosis virus. In: *Kukain, R. A. Etiologiya i immunodiagnostika Leikoza Krupnogo Rogatogo Skota. Zinatne, Riga, Latvian SSR, USSR*.
1627. Kovalenko, Y. R., and Y. N. Fedorov. Quantitative determination of immunoglobulins in sheep. *Doklady Vsesoyuznoi Akademii Sel'Skokhozyaistvennykh Nauk*, No. 5: 24.
1628. Kovalev, Yu. P. Haylage for suckled lambs. *Ovtsevodstvo*, No. 5: 27.
- 1628-A. Kovar, I., Selstam, U., Catterton, W. Z., Stahlman, M. T., and H. W. Sundell. Laryngeal chemoreflex in newborn lambs. Respiratory and swallowing response to salts, acids and sugars. *Pediatric Research* 13 (10): 1144.
1629. Kovincic, I., Zakula, S., Perkucin, R., and M. Galic. Spread of listeriosis in domestic animals in Vojvodina, Yugoslavia, 1965-1977. *Veterinarski Glasnik* 33 (2): 113.
1630. Kozak, S., and C. W. Forsberg. Transformation of mercuric chloride and methyl mercury by the rumen microflora. *Applied Environmental Microbiology* 38 (4): 626.
1631. Kozhebekov, Z. K. Activity of blood oxi-

- ductive enzymes and catalases. Peroxidases and carbohydrases in sheep in relation to age and breed. *Izvestiya Akademii Nauk Kazakhskoi SSR. Seriya Biologicheskaya* No. 6: 35.
1632. Kozyr, A. A. Increase in protein richness of sheep rations. *Vyestsi Akad Nauk BSSR Syer Syel'Skhaspad Nauk O* (1): 118.
1633. Kozyr, A. A., and A. F. Talpeka. Fattening and meat quality of young sheep in relation to amount of pelleted feed in the diet. *Vesti Akademii Nauk BSSR, Sel'Skhaspadarchykh Nauk*, No. 2: 105 and 144.
1634. Kriesten, K. Lipoproteins in domestic animals. *Praktische Tierarzt* 60 (12): 1082.
1635. Krikun, V. A., Salimov, Kh. S., Petrovskii, G. S., Men'shikova, Z. N., Kumkov, V. I., Shishkov, V. P., and B. Z. Itkin. Immune response of calves and lambs experimentally infected with bovine oncovirus. In: Kukain, R. A. *Etiologiya i Immunodiagnostika Leikoza Krupnogo Rogatogo Skota*. Riga, Latvia, "Zinatne."
1636. Krikun, V. A., Salimov, Kh. S., Petrovskii, G. S., Shishkov, V. P., and B. Z. Itkin. Immunological, clinical and haematological investigations on sheep and calves experimentally infected with bovine leukosis virus. *Sbornik Nauchnykh Trudov Moskovskaya Veterinarnaya Akademiya* 107: 24.
1637. Krishna, L., and P. B. Mathur. A note on ovine and caprine perinatal chlamydiosis. *Indian Journal of Animal Sciences* 49 (10): 860.
1638. Krishna, L., Paliwal, O. P., and S. B. Kulshrestha. Incidence of perinatal mortality in lambs and kids. *Indian Veterinary Medical Journal* 3 (1): 15.
1639. Krishnamurti, C. R., Kitts, D. D., and J. G. Tompkins. Uterine myoelectrical activity in the periparturient ewe. *Annales de Recherches Veterinaires* 10 (2-3): 183.
1640. Krizek, J., Jakubec, V., Slana, O., and A. Pindak. Live weight at birth and at an age of 120 days in the lambs of the Tsigai breed and its 2-breed and 3-breed crossbreeds with prolific and mutton breeds. *Zivocisna Vyroba* 24 (7): 551.
1641. Kruger, G. Prevalence of tumours in domestic animals. III and IV. *Tierarztlische Umschau* 34 (11): 771.
1642. Krysin, M. P. Synthetic protein sources and wool yield of early-weaned lambs. *Ovtsevodstvo* 12: 31.
1643. Krysin, M. I. Different sources of protein in rations for lambs weaned early. *Zhivotnovodstvo*, No. 2: 48.
1644. Kuanyshbekova, G. A., and L. S. Kobegova. Influence of oxytocin and acetylcholine on the secretion of the principal components of ewe's milk. *Izvestiya Akademii Nauk Kazakhskoi SSR. Biologicheskaya; Veterinary Bulletin* 49, No. 1: 75.
1645. Kubiszyn, J., Nagorna-Stasiak, B., and M. Tyburczyk. Effect of industrial mixture B on the digestive processes in the rumen of sheep. *Polskie Archiwum Weterynaryjne* 21 (1): 157.
1646. Kudgyavtseva, T. P., and L. G. Burba. Comparative study of tumour pathomorphology in farm animals. In: Shabad, L. M., and V. P. Shishkov. *Problems of Experimental Oncology and Leukoses of Man and Animals*. "Kolos," Moscow, USSR.
1647. Kudryavtsev, A. P. Prevention of selenium deficiency in mammals and birds. Moscow, USSR, *Rossel'Khozizdat*, 88 pp.
1648. Kulme, K. J., Jenkins, W. L., and J. M. Kruger. Electrical stunning of Karakul lambs. *Journal of the South African Veterinary Association* 50 (1): 15.
1649. Kumaratilake, L. M., Thompson, R. C. A., and J. D. Dunsmore. Intraspecific variation in *Echinococcus*: a biochemical approach, isoelectric focusing of proteins. *Zeitschrift für Parasitenkunde* 60 (3): 291.
1650. Kunchev, L., Doichev, S., and V. Antonova. Oestrus synchronization in sheep by ICI 80,996 (cloprostenol). *Veterinar-nomeditsinski Nauki* 16 (4): 12.
1651. Kung, M., Abraham, W. M., Oliver, W. R., Jr., Hughes, J. R., and A. Wanner. Modification of hypoxic pulmonary vasoconstriction by antigen challenge in sensitive sheep. *American Review of Respiratory Diseases* 119 (r, part 2): 377.
1652. Kunizhev, M. M. Effectiveness of hormonal stimulation of oestrus in sheep on different levels of nutrition. See *Referativnyi Zhurnal* (1980) 5 (58): 402.
1653. Kurgan, V., and L. Kurgan. Capital endowment and rentability in sheep farming. *Ekonomika Sovetskoi Ukrainy* 5: 44.
1654. Kusumamihardja, S. Sex ratio of *Haemonchus contortus* infecting sheep. *Media Veteriner* 1 (1): 13.
1655. Kutchin, A. S., Kuchin, A. S., and R. A. Buzmakova. Subclinical intestinal nematode infections in sheep on improved pastures. XXI World Veterinary Congress, 1-7 Jul. 1979, Moscow. Summaries. Vol. 2, Section III: Parasitology, Moscow, USSR, 63 pp.
1656. Kuzdzal-Savoie, S. Comparative study of milk fat. *La Place du Lait et des Produits laitiers en alimentation humaine. Cahiers de Nutrition et de Dietetique* 14 (3): 181.
1657. Kvietok, J. Influence of different intensi-

- ties of nitrogen on output of dry matter and nitrogenous substances on pastures grazed by ewes. Ved Pr Vysk Ustavu Luk Pasienkov Banskej Bystrici O (13): 185.
1658. Kvietok, J. Intensity of grazing management as related to pasture efficiency. Ved Pr Vysk Ustavu Luk Pasienkov Banskej Bystrici O (14): 81.
1659. Kvietok, J. The influence of different organizations of pasturing ewes on intensively cultivated permanent grass stands on the growth of grass mass and productivity of ewes. Ved Pr Vysk Ustavu Luk Pasienkov Banskej Bystrici O (13): 171.
1660. Kvitko, Yu. D. Pellets for fattening young sheep. Ovtz-vodstvo No. 5: 24.
1661. Kyurtov, N. A study of soluble *Babesia ovis* antigen. Veterinaro-Meditsinski Nauki 16 (3): 5.
1662. Kyurtov, N. Preparation of *Babesia ovis* extracts and testing them for antigenic properties. Veterinaromeditsinski Nauki 16 (4): 84.
1663. Labie, C. International hygienic and sanitary norms for abattoirs for sheep and cattle. Prospects for their adaptation to meet current quality and trade requirements. Revue de Medecine Veterinaire 130 (5): 635.
1664. Labussiere, J., Ruiz, M. C., and J. F. Combaud. Rise in the intramammary pressure of the ewe after injection of water into the inqual artery. Annales de Biologie Animale, Biochimie, Biophysique 19 (6): 1843.
1665. Lachenmaier, F., and M. C. Schlichting. Current work on animal husbandry appropriate to each species during 1978. Report of a meeting of the German Veterinary Association specialist group on behavior. 6100 Darmstadt-Kranichstein, German Federal Republic: Kuratorium für Technik und Bauwesen in der Landwirtschaft E. V. 198 pp.
1666. Lehmann, G., and W. Seffner. Metabolic acidosis of ruminants. Monatshefte für Veterinärmedizin 34 (2): 44.
1667. Lacroix, M. C., and J. Martal. Evidence and evolution of chorionic gonatotropin in ewes. Comptes Rendus Series D 288 (8): 771.
1668. Laidlaw, A. S. Effects of grazing by lambs in autumn on a red clover-perennial rye grass sward. Grass and Forage Science 34 (3): 191.
1669. Laing, J. A. Normal fertility and incidence of infertility. In: Laing, J. A., Fertility and Infertility in Domestic Animals. 3rd Edition, Bailliere and Tindall, London, England.
1670. Lamand, M. Influence of silage contamination by soil upon trace elements availability in sheep. Annales de Recherches Veterinaires 10 (4): 571.
1671. Lamb, C. S., and Eadie, J. The effect of barley supplements on the voluntary intake and digestion of low quality roughages by sheep. Journal of Agricultural Science 92 (1): 235.
1672. Lamont, M. H. *Erysipelothrix rhusiopathiae*: epidemiology and infection in sheep. Veterinary Bulletin 49 (7): 479.
- 1672-A. Lamont, M. H. Vaccination of sheep against *Erysipelothrix rhusiopathiae*. Veterinary Bulletin 49 (10): 735.
1673. Lamont, M. H. Cases of suspected mycotoxicosis as reported by veterinary investigation centres. Proceedings of a 3rd Meeting on mycotoxins in animal disease, Pinner, UK, Ministry of Agriculture, Fisheries and Food, VIII + 82 pp.
1674. Land, R. B. Genetic and physiological variation in reproductive performance. In: The Management and Diseases of Sheep. Edited by British Council, Commonwealth Agricultural Bureau, Slough, UK.
1675. Land, R. B., Carr, W. R., and R. Thompson. Genetic and environmental variation in the lutropin response of ovariectomized sheep to luliberin. Journal of Reproduction and Fertility 56 (1): 243.
1676. Land, R. B., Drury, D. J., and M. Jordyce. Season of birth and the response to hemicastration in lambs. Animal Production 29 (3): 379.
1677. Land, R. B., and R. J. Scaramuzzi. A note on the ovulation rate of sheep following treatment with clomiphene citrate. Animal Production 28 (1): 131.
1678. Landolt, C. C., Matthay, M., Flick, M. R., and N. C. Staub. Failure of antihistamine to prevent increased lung vascular permeability after microemboli in sheep. Microvascular Research 17 (3, part 2): S90.
1679. Landsverk, T., and E. Bratberg. Polyarteritis nodosa associated with sarcocystosis in a lamb. Acta Veterinaria Scandinavica 20 (2): 306.
1680. Lane, J. A., and J. R. Ling. The in vitro metabolism of 2,6-diaminopimelic acid by rumen microorganisms. Proceedings of Nutrition Society 38 (2): 80A.
1681. Lange, D. J. de, and C. M. Potgieter. Genetic aspects concerning the composition of whey proteins and their biological value. South African Journal of Dairy Technology 11 (4): 147.
1682. Lange, R. E., Sandoval, A. V., and W. P. Meleney. Psoroptic scabies in bighorn sheep (*Ovis canadensis mexicana*) in New Mexico. Journal of Wildlife Disease 16 (1): 19.
1683. Langford, G. A., Marcus, G. J., Hackett,

- A. J., Ainsworth, L., Wolynetz, M. S., and H. F. Peters. A comparison of fresh and frozen semen in the insemination of confined sheep. *Canadian Journal of Animal Science* 59 (4): 685.
1684. Langlands, J. P., Bowles, J. E., and G. E. Donald. The nutrition of ruminants grazing native and improved pastures. IV. Long-term effects of the quantity of superphosphate applied on the nutritive value of the diet selected by sheep grazing a pasture originally sown to *Phalaris adquatica* and *Trifolium repens*. *Australian Journal of Agricultural Research* 30 (3): 565.
1685. Langman, V. A., Maloiy, G. M. O., Schmidt-Nielsen, K., and R. C. Schroter. Nasal heat exchange in the giraffe and other large animals. *Respiratory Physiology* 37 (3): 325.
1686. Lanigan, G. W., Payne, A. L., and P. A. Cockrum. Production of tremorgenic toxins by *Penicillium janthinellum*, a possible etiological factor in rye grass staggers. *Australian Journal of Experimental Biological and Medical Sciences* 57 (1): 31.
1687. Lanigan, G. W., and J. E. Peterson. Bromosulphophthalein clearance rates in sheep with pyrrolizidine liver damage. *Australian Veterinary Journal* 55 (5): 220.
1688. Lankhorst, A., Counotte, G. H. M., Koopman, J. P., and R. A. Prins. Rapid characterization of mixed microbial populations in ruminal contents, cecal contents and in faeces by a semi-quantitative assay of some hydrolytic enzymes (API zyme). *Zeitschrift für Tierphysiologie, Tierernährung und Futtermittelkunde* 41 (30): 162.
1689. Lankin, V. S., Stakan, G. A., and E. V. Naumenko. Domestic behavior of sheep. 1. The relation of the functional state of the hypothalamic pituitary adrenal system to behavior and age in thin fleeced sheep. *Genetika* 15 (5): 891.
1690. Lankin, V. S., Stakan, G. A., and E. V. Haumenko. Domestic behavior of sheep. 2. A study and analysis of differences in behavior in thin fleeced sheep. *Genetika* 15 (5): 901.
1691. Lanyon, L. E., Magee, P. T., and D. G. Baggott. The relationship of functional stress and strain to the process of bone remodeling. An experimental study on the sheep radius. *Journal of Biomechanics* 12 (8): 593.
1692. Lanza, A., Lanza, E., Scerra, V., and P. Pennisi. Effects of the Merinolandschaf × Comisana crossing on lamb production. 1. The production of suckling lambs fed natural milk. *Zootecnica E. Nutrizione Animale* 5 (6): 585.
1693. Large, R. V. The integrated use of land for agricultural and amenity purposes. *Ark* 6 (7): 210.
1694. Larsen, H. J. Whole blood method for measuring mitogen-induced transformation of sheep lymphocytes. *Research in Veterinary Science* 27 (3): 334.
1695. Larson, B. L., and H. M. Hegarty. Orotic acid in milks of various species and commercial dairy products. *Journal of Dairy Science* 62 (1): 1641.
1696. Lasierra, J., and J. Altarriba. Transferines and weight gain in the "Rosa Aragonesa" sheep breed. *Zootecnica* 28 (1-3): 71.
1697. Latif, M. G. A., and E. Owen. Comparison of Texel- and Suffolk-sired lambs out of Finnish Landrace × Dorset Horn ewes under grazing conditions. *Journal of Agricultural Science* 93 (1): 235.
1698. Laude, H., and J. Gelfi. Properties of Border disease virus as studied in a sheep cell line. *Archives of Virology* 62 (4): 341.
1699. Laughren, L. C., and A. W. Young. Duodenal nitrogen flow in response to increasing dietary crude protein in sheep. *Journal of Animal Science* 49 (1): 211.
1700. Lauvergne, J. J. Models of distribution for populations of domestic animals after migration in waves from a center of origin. *Annales de Genetique et de Selection Animale* 11 (1): 105.
1701. Lauvergne, J. J., and S. Bottema. Color variants in Dutch heath sheep. *Annales de Genetique et de Selection Animale* 11 (1): 1.
1702. Lauvergne, J. J., and R. Laurans. Inventory and conservation of farm animal genetic material in France and ecodevelopment. A descriptive bibliography for 1961-1979. *Annales de Genetique et de Selection Animale* 11 (2): 165-186.
1703. Lavania, J. P., and S. J. Angelo. Therapeutic management of exophthalmos in a lamb. *Indian Veterinary Journal* 56 (8): 707.
1704. Lawlor, M. J., and J. O'Shea. The effect of ammoniation on the intake and nutritive value of straw. *Animal Feed Science and Technology* 4 (3): 169.
1705. Lax, J., Chapman, A. B., Pope, A. L., Baker, R. L., and B. P. Bradley. Comparison of single trait and index selection in sheep. *Journal of Animal Science* 49 (4): 776.
1706. Lax, J., French, L. R., Chapman, A. B., Pope, A. L., and L. E. Casida. Length of breeding season for 8 breed groups of sheep in Wisconsin. *Journal of Animal Science* 49 (4): 939.
1707. Lazar, P., and G. Martyan. Information on animal health and diseases in the Hungarian National Research Information

- Center. U.S. Department of Agriculture Miscellaneous Publication 0 (1381): 225.
1708. Lazzaro, D. A. Leptospirosis ovina. *Gaceta Veterinaria* 41: 346 and 767.
1709. Leach, T. M., Restall, D. J., Warriss, P. D., and L. J. Wilkins. Physiological effects of stunning in relation to meat quality. Meat Research Institute Biennial Report 1977-79, Langford. Bristol, UK: 48.
1710. Leaning, W. H. D., Roncalli, R. A., Hotson, I. K., and I. H. Sutherland. Evaluation of avermectin B1 against nematodes of sheep and cattle. Summaries, 21st World Veterinary Congress, Vol. 2, Section III: 14.
1711. Le Bars, H., and A. de L. Banting. A comparative study of the patho-physiological repercussions of an experimental infection by *Fasciola hepatica* in rabbit, sheep and cattle. *Revista Portuguesa de Ciencias Veterinarias* 74 (449): 5.
1712. Led, J. E., Yannarella, F. G., Manazza, J. A., and G. M. Denegri. Effect of albendazole on *Moniezia expansa* and *Thysanosoma actinoides* in sheep. *Gaceta Veterinaria* 41 (341): 363.
1713. Lee, C. O. Intracellular sodium ion activity of sheep purkinje fibers. *Bulletin of New York Academy of Medicine* 55 (4): 419.
1714. Lee, C. O., and H. A. Fozzard. Membrane permeability during low potassium depolarization in sheep cardiac purkinje fibers. *American Journal of Physiology* 237 (3): C156.
1715. Lee, C. O., Kang, D. H., Sokol, J. H., and K. S. Lee. Relation between intracellular sodium ion activity and positive inotropic action of sheep cardiac purkinje fibers. *Biophysical Journal* 25 (2, part 2): 198A.
1716. Lee, J. C., and S. E. Downing. Coronary dynamics and myocardial metabolism in the diabetic new born lamb. *American Journal of Physiology* 237 (2): H118.
1717. Leeflang, P. Prevalence and significance of tick-borne diseases of domestic animals in northern Nigeria. In: *Wilde, J. K. H., Tick-borne diseases and their vectors.* University of Edinburgh Centre for Tropical Veterinary Medicine, Edinburgh, Scotland, p. 144.
1718. Lees, J. L. Factors affecting puberty and mating behaviour in sheep. In: *The Management and Diseases of Sheep.* Edited by British Council, Commonwealth Agricultural Bureau, Slough, UK.
1719. Lefevre, E., Laidet, M., and J. Rougeot. Dermatophilosis in sheep in France. *Recueil de medecine veterinaire Publie Avec le Concours du Corps Enseignant de l'ecole d'Alfort* 154 (11): 913.
1720. Legen, S. J., and F. J. Karsch. Neuroendocrine regulation of the estrous cycle and seasonal breeding in the ewe. *Biology of Reproduction* 20 (1): 74.
1721. Leguia, G., and I. V. Herbert. Prevalence of *Sarcocystis* spp. in dogs, foxes and sheep and *Toxoplasma gondii* in sheep and the use of the indirect haemagglutination reaction in serodiagnosis. *Research in Veterinary Science* 27 (3): 390.
1722. Lehmkuhl, H. D., and R. C. Cutlip. Experimentally induced respiratory syncytial viral infection in lambs. *American Journal of Veterinary Research* 40 (4): 512.
1723. Lehmkuhl, H. D., and R. C. Cutlip. Experimental respiratory syncytial virus infection in feeder age lambs. *American Journal of Veterinary Research* 40 (12): 1729.
1724. Lehr, C. Scrapie of sheep. A literature review. Inaugural Dissertation, Tierärztliche Hochschule, Hannover, 124 pp.
1725. Lehrer, A. R., Schindler, H., Brown, M. B., and H. Fischler. The effect of mating, artificial insemination and fright on uterine motility of the estrous ewe. *Animal Reproduction Science* 1 (4): 297.
1726. Leibholz, J., and R. C. Kelaway. Amino acid requirements for microbial protein synthesis. *Annales de Recherches Veterinaires* 10 (2-3): 274.
1727. Leigh, J. H., Wilson, A. D., and W. E. Mulham. A study of sheep grazing a belah (*Casuarina cristata*)-rosewood (*Heterodendrum oleifolium*) shrub woodland in western New South Wales. *Australian Journal of Agricultural Research* 30 (6): 1223.
1728. Leino, A., and E. Soppi. Effect of thymosin on PHA and Con A responses by fetal lamb lymphocytes. *Clinical Immunology and Immunopathology* 13 (2): 136.
1729. Leish, Z., and B. A. Panaretto. Effect of intravenously infused dexamethasone on collagen metabolism in skin of Merino sheep. *Australian Journal of Biological Sciences* 32 (6): 561.
1730. Le Jambre, L. F. Effectiveness of anthelmintic treatments against levamisole-resistant *Ostertagia*. *Australian Veterinary Journal* 55 (2): 65.
1731. Le Jambre, L. F., and I. A. Barger. Efficiency of rafoxanide and naphthalophos against inhibited *Haemonchus contortus*. *Australian Veterinary Journal* 55 (7): 346.
1732. Le Jambre, L. F., and P. J. Martin. Effectiveness of morantel tartrate and naphthalophos against levamisole resistant *Ostertagia* in sheep. *Veterinary Science Communications* 3 (2): 153.
1733. Le Jambre, L. F., Martin, P. J., and R. F. Webb. Thiabendazole resistance in field

- populations of *Haemonchus contortus*. Australian Veterinary Journal 55 (4): 163.
1734. Le Jambre, L. F., Royal, W. M., and P. J. Martin. The inheritance of thiabendazole resistance in *Haemonchus contortus*. Parasitology 78 (2): 107.
1735. Lemieux, P. G., and L. L. Wilson. Nutritive evaluation of a waste pulp in diets for finishing lambs. Journal of Animal Science 49 (2): 342.
1736. Lenartova, V., Holovska, K., Havassy, T., and K. Boda. Glutamate dehydrogenase in the digestive tract of sheep. Annales de Recherches Veterinaires 10 (2-3): 488.
1737. Lenarz, M. S. Social structure and reproductive strategy in desert bighorn sheep (*Ovis canadensis mexicana*). Journal of Mammalogy 60 (4): 671.
1738. Le Neindre, P., Poindron, P., and C. Delouis. Hormonal induction of maternal behaviour in non-pregnant ewes. Physiology and Behavior 22 (4): 731.
1739. Leontowicz, H., Barej, W., Kulasek, G., and M. Chomyszyn. Diminishing rumen butyrogenesis in bulls and sheep fed sugar beets. Annales de Recherches Veterinaires 10 (2-3): 454.
1740. Leslie, D. J. Jr., and C. L. Douglas. Desert Bighorn sheep of the River Mountains, Nevada. Wildlife Monographs 66: 6.
1741. L'Estrange, J. L. The performance and carcass fat characteristics of lambs fattened on concentrate diets. 4. Effects of barley fed whole, ground or pelleted and of a high level of supplementation. Irish Journal of Agricultural Research 18 (2): 173.
1742. Levacher. Sheep population in the world and in France and its evolution. Comptes Rendus des Seances de l'Academie d'Agriculture de France 65 (9): 712.
1743. Leveille, M., Jouany, J. P., and J. P. Brun. Automatic analysis of feeding and ruminating behavior in sheep. Annales de Biologie Animale Biochimie Biophysique 19 (B3): 889.
1744. Leveille, M., Pincet, C., and C. Dardillat. Characteristics of an electromagnetic flow meter specially built to measure intestinal flow in sheep. Annales de Recherches Veterinaires 10 (2-3): 497.
1745. Levin, D., Perkin, R., Parkey, M., Mayhew, E., and R. Hartwig. Experimental aortic stenosis in fetal lambs. Pediatric Research 13 (4, part 2): 347.
1746. Levrat, C., and P. Louisot. Monnosylation of lipidic and protein acceptor of sheep lung microsomes. Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences Series D., 289 (6): 533.
1747. Levy, D. Comparative aspects of cholestasis in domestic animals. Dissertation Abstracts International 40B: 6: 2555.
1748. Lewis, A. B., Donovan, M., and A. C. G. Platzker. Cardiovascular responses to hypoxemia following autonomic blockade in fetal lambs. Clinical Research 27 (1): 95A.
1749. Lewis, G. S., Bazer, F. W., and M. E. Wilson. Proteins of ovine blastocyst origin. Biology of Reproduction 20 (suppl. 1): 101A.
1750. Lewis, R. J., and K. A. Lisle. Benefits accruing from anthelmintic treatment. Australian Veterinary Journal 55 (8): 399.
1751. Lichtenwalner, R. E., Rooney, L. W., Glueck, J. A., and L. Reyes. Nutritive value of "weathered" sorghum grain for ruminants. Journal of Animal Science 49 (1): 183.
1752. Liebisch, A. Ecology and distribution of Q-fever Rickettsiae in Europe with special reference to Germany. Recent Advances in Acarology, Volumes I and II, Academic Press, Inc., New York, N.Y. USA.
1753. Liebisch, A., Meermann, A., Flasshoff, F. G., and C. Runge. Treatment of psoroptic mange in cattle and sheep with the phosphoric acid ester phoxim. Deutsche Tierärztliche Wochenschrift 86 (12): 496.
1754. Liebisch, A., and M. Zukari. Biological and ecological studies on ticks of the genera *Boophilus*, *Rhipicephalus* and *Hyalomma* in Syria. In: Wilde, J. K. H., Tick-borne diseases and their vectors. University of Edinburgh Centre for Tropical Veterinary Medicine, Edinburgh, Scotland, p. 150.
1755. Liely, H. Shepherds and reindeer nomads in the Soviet Union. Soviet Studies 31 (3): 401.
1756. Liggins, G. C. Parturition in the sheep and goat: fetal maturation related to parturition. In: Developments in Animal and Veterinary Sciences, 5. Elsevier, Amsterdam, Netherlands.
1757. Liggins, G. C., Ballard, P. L., Clements, J. A., and W. H. Tooley. Inhibitors of prostaglandin synthetase stimulate breathing movements in fetal lambs. Pediatric Research 13 (4, part 2): 979.
1758. Liggins, G. C., Kitterman, J. A., and C. S. Forster. Fetal maturation related to parturition. Animal Reproduction Science 2 (1/3): 193.
1759. Light, M. W., Schipper, I. A., Molitor, T. W., Tilton, J. E., and W. D. Slinger. Progressive pneumonia in sheep: incidence of natural infection and establishment of clean flocks. Journal of Animal Science 49 (5): 1157.
1760. Lightfoot, R. J., and N. R. Adams.

- Changes in cervical histology in ewes following prolonged grazing on oestrogenic subterranean clover. *Journal of Comparative Pathology* 89 (3): 367.
1761. Lincoln, G. A. Light-induced rhythms of prolactin secretion in the ram and the effect of cranial sympathectomy. *Acta Endocrinologica* 91 (3): 421.
1762. Lincoln, G. A. Photoperiodic control of seasonal breeding in the ram, participation of the cranial sympathetic nervous system. *Journal of Endocrinology* 82 (1): 135.
1763. Lincoln, G. A., and H. M. Fraser. Blockade of episodic secretion of luteinizing hormone in the ram by the administration of antibodies to luteinizing hormone releasing hormone. *Biology of Reproduction* 21 (5): 1239.
1764. Linde-Sipman, J. S., Van der Ingh, T. S., and G. A. M. Van Den. Tricuspid atresia in a foal and a lamb *Zentralblatt für Veterinärmedizin* 26A (3): 239.
1765. Linhart, S. B., Sterner, R. T., Carrigan, T. C., and D. R. Henne. Komondor guard dogs reduce sheep losses to coyotes: a preliminary evaluation. *Journal of Range Management* 32 (3): 238.
1766. Linklater, K. A., and K. W. Angus. Spontaneous renal disease resembling hyperoxaluria in young lambs. *Veterinary Record* 104 (19): 429.
1767. Linklater, K. A., and D. A. Dyson. Field studies on enzootic abortion of ewes in south east Scotland. *Veterinary Record* 105 (17): 387.
1768. Lipskii, M. D. Fattening performance of lambs in relation to age at first mating of their dams. *Sbornik Trudov. Belorusskii Nauchno-Issledovatel'skii Institut Zivotnovodstva* 20 (10): 2.
1769. Lissitzky, S. Thyroglobulin structure and pathophysiology. *Acta Endocrinologica Suppl.* 0 (225): 445.
1770. Lister, D., Leach, T. M., Audsley, A. R. S., Spencer, S. G. S., Warris, P. D., Wilkins, L. J., Brown, S. N., Buckley, K. G., and P. E. Whittington. Study of stress and its control in meat animals. *Meat Research Institute Biennial Report 1977-79*, Langford, Bristol, UK: 51.
1771. Lister, D., Perry, B. N., Audsley, A. R. S., Gregory, N. G., Lovell, R. D., Toong, A., Wells, G., Brown, S. N., Church, T. C., and P. E. Whittington. Relation between nervous and hormonal mechanisms in live animals and variations in meat quality. *Meat Research Institute Biennial Report 1977-79*, Langford, Bristol, UK: 47.
1772. Llanos, A. J., Ramachandran, J., Creasy, R. K., Rudolph, A. M., and M. Seron-Ferre. Alpha melanocyte stimulating hormone and adrenocorticotropin in the regulation of glucocorticoid secretion during the perinatal period in sheep. *Endocrinology* 105 (3): 613.
1773. Lloyd, D. H., Amakiri, S. F., and D. M. Jenkinson. Structure of the sheep epidermis. *Research in Veterinary Science* 26 (2): 180.
1774. Lloyd, D. H., Jenkinson, D. M., and R. M. Mabon. Location of immunoglobulins in the skin of cattle and sheep. *Research in Veterinary Science* 26 (1): 47.
1775. Lloyd, J., and B. M. Micke. *Brucella ovis* in Merino rams in Western Australia. *Australian Veterinary Journal* 55 (4): 200.
1776. Lloyd, M., Jones, D. W., Morgan, I., Pratt, J. H., and A. J. Kempster. An investigation into the use of anabolic steroids for hoggets finished on roots. *Animal Production* 28 (3): 418.
1777. Lobato, J. F. P., and R. G. Beilarz. Relation of social dominance and body size to intake of supplements in grazing sheep. *Applied Animal Ethology* 5 (3): 233.
1778. Loboda, K. I. Fattening performance and meat production of the progeny of Romanov ewes mated at different ages. *Sbornik Trudov. Belorusskii Nauchno-Issledovatel'skii Institute Zivotnovodstva* 20 (10): 5.
1779. Lock, J. E., Coceani, F., and P. M. Olley. Pulmonary vascular responses to prostaglandins in the conscious newborn lamb. In: Samuelsson, B., Ramwell, P., and R. Paoletti. *Advances in Prostaglandin and Thromboxane Research*, Vol. 7, p. 751, Raven Press, New York.
1780. Lock, J. E., Coceani, F., and P. M. Olley. Direct and indirect pulmonary vascular effects of tolazoline in the newborn lamb. *Journal of Pediatrics* 95 (4): 600.
1781. Lock, J. E., Olley, P. M., Coceani, F., Hamilton, F., and G. Doubilet. Pulmonary and systemic vascular responses to 6 keto prostaglandin E₁ in the conscious lamb. *Prostaglandins* 18 (2): 303.
1782. Loeken, T., Ulvund, M. J., and T. Vag. A case of gangrenous ergotism in grazing sheep. *Acta Veterinaria Scandinavica* 20 (4): 601.
1783. Logan, E. F. Cow colostrum. Survival kit for lambs. *Agriculture in Northern Ireland* 53 (1): 278.
1784. Lohan, I. S., Singal, S. P., and S. Yashwant. Response of the testes and accessory sex organs to exogenous gonadotrophin in prepuberal rams. *Indian Journal of Experimental Biology* 17 (2): 128.
1785. Loir, M., and J. L. Courtens. Nuclear reorganization in ram spermatids. *Journal of Ultrastructural Research* 67 (3): 309.
1786. Loken, T., Ulvund, M. J., and T. Vag. A

- case of gangrenous ergotism in grazing sheep. *Acta Veterinaria Scandinavica* 20 (4): 601.
1787. Lomax, M. A., Donaldson, I. A., and C. I. Pogson. Palmitate metabolism by isolated hepatocytes from fed and fasted sheep. *Proceedings of the Nutrition Society* 38 (2): A89.
1788. Long, C. R., Shelton, J. M., and E. A. Swoope. Sheep and goat, wool and mohair. Texas Agricultural Experiment Station Progress Report, No. 3562, pp. 1-110.
1789. Long, P. E., Olcott, B., Selwyn, M., and R. H. Teske. Comparative plasma kinetics of sulfamethazine administered orally to normal and anemic sheep. *Journal of Animal Science* 49 (suppl. 1): 386.
1790. Longhurst, W. M., Connolly, G. E., Browning, B. M., and E. O. Garton. Food interrelationships of deer and sheep in parts of Mendocino and Lake Counties, California. *Hilgardia* 47 (6): 191.
1791. Lopez, T. A. Fescue foot and its relationship with other fungal diseases: a review. *Revista de Medicina Veterinaria* 60 (2): 87.
1792. Lorenz, K. Ergot on cereal grains. *Critical Reviews in Food Science and Nutrition* 11 (4): 311.
1793. Lorton, S. P., Gatley, S. J., Lieberman, L. M., and N. L. First. Use of technetium-99m labeled spermatozoa for monitoring sperm transport in the female reproductive tract. *American Journal of Roentgenology* 132 (3): 494.
1794. Louvier, J. A., Colvin, H. W. Jr., Ishizaki, G., Iwamoto, G. A., and H. R. Parker. Effect of rumen insufflation on ruminal contraction rate in sheep. *Journal of Animal Science* 49 (4): 934.
1795. Lowe, K. C., Beck, N. F. G., McNaughton, D. C., Gluckman, P. D., Kaplan, S. L., Grumbach, M. M., and P. W. Nathanielsz. Effect of long-term bromocriptine infusion on plasma prolactin and ovine chronic somatomammotropic in the pregnant ewe and fetal sheep. *American Journal of Obstetrics and Gynecology* 135 (6): 773.
1796. Lowe, K. C., Beck, N. F. G., McNaughton, D. C., Jansen, C. A. M., Thomas, A. L., Nathanielsz, P. W., Mallon, K., and D. H. Steven. Ultrastructural changes in the placenta of the ewe after longterm intravascular infusion of 2-bromo-alpha-ergocryptine (CB154) into mother or fetus. *Quarterly Journal of Experimental Physiology and Cognate Medical Sciences* 64 (4): 253.
1797. Luchsinger, D. W., and R. K. Anderson. Longitudinal studies of naturally acquired *Brucella abortus* infection in sheep. *American Journal of Veterinary Research* 40 (9): 1307.
1798. Luciani, J. M., Bezard, J., Devictor-Vuillet, M., and P. Mauleon. ³H-Thymidine labelling pattern of preleptotene chromosome condensation stages in the foetal sheep ovary. *Annales de Biologie Animale, Biochimie, Biophysique* 19 (4B): 1241.
1799. Luckins, A. G., and A. R. Gray. Trypanosomes in the lymph nodes of cattle and sheep infected with *Trypanosoma congolense*. *Research in Veterinary Science* 27 (1): 129.
1800. Luft, W., and I. Luft. Therapeutic measures in pregnancy toxemia in sheep. *Tierärztliche Umschau* 34 (3): 202.
1801. Lun, S., Espiner, E. A., and D. S. Hart. Effect of ACTH on the aldosterone response to potassium in sheep with adrenal transplants. *American Journal of Physiology* 237 (6): E500.
1802. Lunaas, T. Prostaglandin for oestrus synchronization in sheep. *Norsk Veterinær Tidsskrift* 91 (11): 676.
1803. Lushchenko, A. E. Results of crossing Krasnoyarsk ewes with Australian Merino rams. *Nauchno-Tekhnicheskii Byulleten'*. Sibirskii Nauchno-Isseledovatel'skii Institut Zhivotnovodstva. *Referativnyi Zhurnal* (1980) 2 (58): 314; 1979, 32: 3.
1804. Luther, H. G. Jr. The pharmacokinetics of sulfadiazine in cattle, sheep and swine. *Dissertation Abstracts, International* 39B: 12, I: 5789.
1805. Luthman, J., and S. O. Jacobsson. Serum sulfonamide concentrations (in cattle and sheep) after oral and parenteral administration. *Svensk Veterinartidning* 31 (24): 783.
1806. Lynch, G. P. Biological effects of mycotoxins on ruminants. In: *Interactions of Mycotoxins in Animal Production*, National Academy of Sciences, Washington, D. C.
1807. Lynch, G. P., and C. Jackson Jr. Blood metabolites of gestating ewes as indicators of nutritional status. *Journal of Animal Science* 49 (suppl. 1): 134.
1808. Lynch, J. J., and D. A. Hedges. The influence of shape of paddock, type of fence and stocking rate on grazing behaviour and social facilitation in Merino sheep. *Applied Animal Ethology* 5 (4): 321.

M

1809. Macarie, I., and T. Lungu. Pathology of the abomasum in *Besnoitia (Globidium) gilruthi* infection in sheep. *Lucrari Stiintifice Institutul Agronomic "N. Băcescu" Seria C: 1977/1978, published 1979, 2/21: 41.*

1810. Macarie, I., Lungu, T., Fromunda, V., Oproiu, V., and H. Olaru. Pathology of cysticercosis in sheep. *Lucrari Stiintifice Institutul Agronomic "N. Balcescu" Seria C: 1977/1978, published 1979. 2/21: 49.*
1811. MacArthur, R. A., Johnston, R. H., and V. Geist. Factors influencing heart rate in free-ranging bighorn sheep: a physiological approach to the study of wild-life harassment. *Canadian Journal of Zoology 57 (10): 2010.*
1812. Macgibbon, A. K. H., Motion, R. L., Crow, K. E., Buckley, P. D., and L. F. Blackwell. Purification and properties of sheep liver aldehyde dehydrogenases (EC 1.2.1.3). *European Journal of Biochemistry 96 (3): 585.*
1813. Macgregor, R. C., and D. G. Armstrong. Effect of increasing potassium intake on absorption of magnesium by sheep. *Proceedings of the Nutrition Society 38 (2): AC6.*
1814. Mackenzie, P. K. I. Trypanosomiasis in sheep due to *Trypanosoma (Nannomonas) congolense*. Index to Theses Accepted for Higher Degrees 27 (1): 83.
1815. MacKenzie, P. K. I., Boyt, W. P., and V. W. Nesham. Serum immunoglobulin levels in sheep during the course of naturally acquired and experimentally induced trypanosomiasis. *British Veterinary Journal 135 (2): 178.*
1816. Mackie, R. I., and F. M. C. Gilchrist. Changes in lactate-producing and lactate-utilizing bacteria in relation to pH in the rumen of sheep during stepwise adaptation to a high-concentrate diet. *Applied and Environmental Microbiology 38 (3): 422.*
1817. Mackie, R. I., and S. Heath. Enumeration and isolation of lactate-utilizing bacteria from the rumen of sheep. *Applied and Environmental Microbiology 38 (3): 416.*
1818. MacNish, G. C. Role of sheep in the spread of blackleg of rapeseed. *Australasian Plant Pathology 8 (2): 22.*
1819. Macrae, J. C. Protein metabolism. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
1820. Macrae, J. C., Milne, J. A., Wilson, S., and A. M. Spence. Nitrogen digestion in sheep given poor-quality indigenous hill herbage. *British Journal of Nutrition 42 (3): 525.*
1821. Macrae, J. C., Sharman, G. A. M., Smith, J. S., Easton, J. F., and R. L. Coop. Preliminary observations on the effects of *Trichostrongylus colubriformis* infestation on the energy and nitrogen metabolism of lambs. *Animal Production 28 (3): 456.*
1822. MacWilliams, P. S. Red cell metabolism in phosphorus-deficient sheep. *Dissertation Abstracts International 39B 11: 5267.*
1823. Madel, A. J. Short communications: sheep. *British Veterinary Journal 135 (4): 381.*
1824. Madzirov, Z., Tokovski, T., and K. Petkov. Fertility of Ovce Polje ewes graded to merino with regard to embryo mortality. *Veterinarski Glasnik 33 (6): 429.*
1825. Magda, I. I., Itkin, B. Z., and I. I. Voronin. Operative surgery with the principles of topographical anatomy of domestic animals. Moscow, USSR, "Kolor," 3rd Edition.
1826. Maglad, M. A. Control of insulin secretion in ruminants. *Dissertation Abstracts International 40B (5): 2070.*
1827. Magyar, D. M., Buster, J. E., Elsner, C. W., Nathanielsz, P. W., Oliveros, R., and G. E. Abraham. Validation of a specific radioimmunoassay to measure plasma cortisol in the fetal sheep. *Steroids 33 (1): 45.*
1828. Magyar, D. M., Elsner, C. W., Nathanielsz, P. W., Lowe, K. C., and J. E. Buster. Comparison of 2 rapid cortisol radioimmunoassays for use in the fetal sheep. *Steroids 34 (1): 111.*
1829. Mahmoud, O. M., Adam, S. E. I., and G. Tartour. The effects of *Calotropis procera* on small ruminants. I. Effects of feeding sheep with the plant. *Journal of Comparative Pathology 89 (2): 241.*
1830. Mahmoud, O. M., Adam, S. E. I., and G. Tartour. The effects of *Calotropis procera* on small ruminants. II. Effects of administration of the latex to sheep and goats. *Journal of Comparative Pathology 89 (2): 251.*
1831. Major, R. M., Clarke, J. K., and M. R. Alley. An in vitro study of the replication of *Mycoplasma ovipneumoniae*. *New Zealand Veterinary Journal 27 (4): 58.*
1832. Makaveev, T. Hereditary variation of reduced glutathione in blood of sheep from various breeds. *Genetica I Seleksiya 12 (4): 275.*
1833. Malik, A. B., Van der Zee, H., and B. C. Lee. Pulmonary transvascular fluid dynamics in sheep during hemorrhage. *Lymphology 12 (3): 149.*
1834. Malik, M. A., Shah, M. A., and M. N. Asghar. Method for the estimation of aflatoxin B-1 and aflatoxin G-1 in animal tissue. *Pakistan Journal of Scientific Research 31 (1-2): 58.*
1835. Mallet, B., Gulian, J. M., Scizky, M., Laurent, G., and M. Charrel. Multiple molecular forms of erythrocyte carbonic anhydrase of sheep. *Biochimica et Biophysica Acta 576 (2): 290.*

1836. Maltseva, N. V., and B. I. Knodaurov. Effect of thymus extract on immune response in animals. *Sel'Skokochoyaistvennaya Biologiya* 14 (6): 745.
1837. Malviya, H. C., Patnaik, B., Tiwari, H. C., and B. K. Sharma. Measurement of the blood loss caused by *Haemonchus contortus* infection in sheep. *Indian Veterinary Journal* 56 (8): 709.
1838. Mamaev, N. Kh., and D. M. Davudev. Tetramisole granules and mebenvet against strongylata infections in sheep. *Veterinariya*, No. 12: 41.
1839. Manders, W. T., Pagani, M., and S. F. Vatner. Depressed responsiveness to vaso constrictor and vaso dilator agents and baro reflex sensitivity in conscious new born lambs. *Circulation* 60 (4): 945.
1840. Manfredini, M., and C. Cavani. Distillery effluents as animal feed-use of condensed beet molasses slop (CBMS) in lambs feeding. *Zootecnica E Nutrizione Animale* 5 (1): 147.
1841. Manfredini, M., and C. Cavani. Distillery effluents as animal feed-use of condensed (Treated) beet molasses slop (CBMS) in lambs feeding. *Zootecnica E Nutrizione Animale* 5 (1): 155.
1842. Manga Gonzalez, M. Y., Morrondo Pelyao, M. P., Reguera Feo, A., and L. Castanon Ordonez. Data on natural infection of certain *Cernuella* and *Helicella* spp. by larvae of ovine protostrongyles. Second National Congress on Parasitology, October 1979, Leon, Spain.
1843. Manickavel, K., Shanmugasundaram, S., and M. Thiagarajan. Reproductive performance of Mandya breed of sheep in Tamil-Nadu. *Cheiron* 8 (2): 118.
1844. Manktelow, B., and J. Hellstrom. The history of Johne's Disease. *New Zealand Veterinary Journal* 27 (3): 48.
1845. Manolescu, N., Ciocnitu, V., Avram, N., and C. Dimitriu. Scanning electron microscopy in study of some leukemic cells in domestic mammals and fowl. *Rev. Roum Biol* 24 (1): 27.
1846. Manterola, B. H. Nutrition and production in sheep. *Publicacion Docente. Departamento de Ganaderia y Produccion Prateense. Universidad de Chile* 4: 110.
1847. Manuelidis, E. E., and L. Manuelidis. Clinical and morphological aspects of transmissible Creutzfeldt Jakob disease. In: Zimmerman, H. M., *Progress in Neuropathology* Vol. 4, Raven Press New York.
1848. Manunta, G., Cancedda, M., and P. Cappai. Clearance in the milk of tritium-labeled fluorogestone in lactating ewe treated for synchronisation of oestrus. *Archivio Veterinario Italiano* 30 (1-2): 7.
1849. Manunta, G., Marchi, S., and P. Nuvole. Hormonal induction of lactation in sheep-effect of a brief treatment. *Boll Soc Ital Biol Spc* 54 (18): 1751.
1850. Manunta, G., Pira, M., and P. Nuvole. Further research on the induction of lactation in sheep with brief hormone treatment. *Boll Soc Ital Biol Sper* 54 (18): 1756.
1851. Manz, J. Serological tests on extracts from the musculature of bovines, sheep, goats and deer. *Die Fleischwirtschaft* 59 (3): 408.
1852. Maracek, I., Arendarcik, J., Praslicka, M., Tokos, M., Balun, J., and A. Stanikova. The functional and morphological changes in the adenohipophysis of ewes after exposure to X-rays. *Veterinari Medicina* 25 (3): 153.
1853. Marchand, G. A sheep carcass classification scheme and its commercial use. *Patre* No. 267: 21.
1854. Marcus, G. J., Ainsworth, L., and R. Lucis. Cholesterol biosynthesis and progesterone production by chorionic cells of the early sheep conceptus in vitro. *Steroids* 34 (3): 295.
1855. Marcus, G. J., Lucis, R., and L. Ainsworth. Metabolism of progesterone by chorionic cells of the early sheep conceptus in vitro. *Steroids* 34 (7): 807.
1856. Maribel, J. Y., Tennant, B. C., and B. Baldwin. Effects of intravenous administration of D-penicillamine on liver copper stores of housed sheep. *Kenya Veterinarian* 3 (1): 7.
1857. Marinova, R., and C. Manev. A study of *Listeria monocytogenes* strains isolated from men and animals. *Problems of Listeriosis, Proceedings of 7th international symposium, Varna*, edited by I. Ivanov, Sofia, Bulgaria.
1858. Marit, G. B., Scheffrahn, N. S., Troxel, T. R., and D. J. Kesler. Sex behaviour and hormone responses in ewes administered testosterone propionate. *Theriogenology* 12 (6): 375.
1859. Markiewicz, K., Depta, A., Grabarski, J., and Z. Luczak. Investigations on the dicrocoeliosis pathogenesis in ewes. XXI World Veterinary Congress, 1-7 July, 1979, Moscow. *Summaries, Vol. 2, Section III: Parasitology, Moscow, USSR*, 63 pp.
1860. Markovic, B. S., Bilic, V., Brglez, I., Janc, M., Popovic, M., and M. Rani-savljevic. Problems of prevention and control of *Escherichia coli* infection (cattle, sheep, swine). *Veterinarski Glasnik* 33 (2): 117.
1861. Markovic, R. Spread of Echinococcosis

- and its consequences in the Valjevo area. *Veterinarski Glasnik* 33 (3): 219.
1862. Marriner, S., and J. A. Bogan. Correspondence: ruminal bypass with benzimidazole anthelmintics. *Veterinary Record* 105 (11): 261.
1863. Marrs, D. C., Campbell, D. R., Featherstone, H. E., and P. R. Noland. Ensiled swine waste as food for gestating sows and fattening lambs. *Arkansas Farm Research* 28 (6): 7.
1864. Marsh, R. The effects of wilting on fermentation in the silo and on the nutritive value of silage. *Grass Forage Science* 34 (1): 1.
1865. Martal, J., Lacroix, M. C., Loudes, C., Saunier, M., and S. Winterberger-Torres. Trophoblastin, an antiluteolytic protein present in early pregnancy in sheep. *Journal of Reproductive Fertility* 56 (1): 63.
1866. Martens, H. Studies on the absorption in vivo of magnesium from the rumen of sheep. *Berliner und Münchener Tierärztliche Wochenschrift* 92 (8): 152.
1867. Marensz, N. D., and R. J. Scaramuzzi. Plasma concentrations of luteinizing hormone follicle stimulating hormone and progesterone during the breeding season in ewes immunized against androstenedione or testosterone. *Journal of Endocrinology* 81 (3): 249.
1868. Marienfeld, C. J. Detecting teratogenic substances by watching animal populations. In: Klingberg, M. A., and J. A. C. Weatherall. *Contributions to epidemiology and biostatistics Vol. 1. Epidemiologic methods for detection of teratogens*. Karger, Basel, Switzerland.
1869. Marnett, L. J., Johnson, J. T., and M. J. Bienkowski. Arachidonic acid dependent metabolism of 7,8-dihydroxy-7,8-dihydrobenzoapyrene by ram seminal vesicles. *Federated European Biochemical Societies* 106 (1): 13.
1870. Marriner, S., and J. A. Bogan. The influence of the rumen on the absorption of drugs: studies using meclofenamic acid administered by various routes to sheep and cattle. *Journal of Veterinary Pharmacology and Therapeutics* 2 (2): 109.
1871. Marshall, A. W., Mihaly, G. W., Morgan, D. J., Stephens, D. A., Smallwood, R. A., and K. J. Hardy. Propranolol disposition and biliary excretion in the pregnant sheep and fetus. *Gastroenterology* 77 (5): 425.
1872. Marshall, J. W., and V. R. Squires. Accuracy of quantitative methods used for the botanical analysis of esophageal fistula samples. *Tropical Grasslands* 13 (3): 140.
1873. Marshall, R. B., Broughton, E. S., and S. C. Hathaway. Protection of sheep by vaccination against artificial challenge with *Leptospira interrogans serovar hardjo*. *New Zealand Veterinary Journal* 27 (9): 195.
1874. Marten, G. C., and R. M. Jordan. Substitution value of birdsfoot trefoil for alfalfa-grass in pasture systems. *Agronomy Journal* 71 (1): 55.
1875. Martensz, N. D., Scaramuzzi, R. J., and P. F. A. Van Look. Plasma concentrations of luteinizing hormone and follicle stimulating hormone during anestrus in ewes actively immunized against estradiol 17 beta estrone or testosterone. *Journal of Endocrinology* 81 (3): 261.
1876. Marti-Henneberg, C., Gluckman, P. D., Thomsett, M. J., Kaplan, S. L., Rudolph, A. M., and M. M. Grumbach. The ontogeny of serotonergic regulation of growth hormone and prolactin in the ovine fetus and neonate. *Clinical Research* 27 (1): 127A.
1877. Martin, B. Non-parasitic respiratory infections of sheep in Britain. In *Practice* 1 (5): 23.
1878. Martin, G. B. Ram-induced ovulation in seasonally anovular Merino ewes-effect of oestradiol on the frequency of ovulation, oestrus and short cycles. *Theriogenology* 12 (5): 283.
1879. Marrs, D. C., Campbell, D. R., Featherstone, H. E., and P. R. Noland. Ensiled swine waste as feed for gestating sows and fattening lambs. *Arkansas Farm Research* 28 (6): 7.
1880. Martin, G. B., Scaramuzzi, R. J., Cox, R. I., and P. B. Gherardi. Effects of active immunization against androstenedione or oestrone on oestrus, ovulation and lambing in Merino ewes. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (101): 673.
1881. Martin, J. The effect of the immune response of sheep on *Nematodirus battus*. Index to Theses Accepted for Higher Degrees 27 (1): 83.
1882. Martin, P. J., and L. F. LeJambre. Larval paralysis as an in vitro assay of levamisole and morantel tartrate resistance in *Ostertagia*. *Veterinary Science Communications* 3 (2): 159.
1883. Martin, W. B. Non-parasitic respiratory disease of sheep. III: The Management and Diseases of Sheep. Edited by British Council. Commonwealth Agricultural Bureaux, Slough, UK.
1884. Martin, W. B., Angus, K. W., Robinson, G. W., and F. M. M. Scott. The herpesvirus of sheep pulmonary adenomatosis. *Comparative Immunology, Microbiology and Infectious Diseases* 2 (2-3): 313.
1885. Martinez, F., and S. Hernandez. Sheep helminthoses in extensive farming. XXI World Veterinary Congress, 1-7 July

- 1979, Moscow, Summaries, Vol. 2, Section III: Parasitology Moscow, USSR, 63 pp.
1886. Martinez Fonseca, P. R., Ruiz Diaz, R., and H. Castillo Rojas. Oestrus synchronisation in Tabasco or Pelibuey ewes. *Tecnica Pecuaria en Mexico* No. 36: 28.
1887. Marzin, J., and A. Brelurut. Comparative performance of limousin and Romanov crossbred ewes managed relatively intensively. *Bulletin Technique, Centre de Recherches Zootechniques et Veterinaires de Theix*, No. 37: 15.
1888. Mascarello, F., and A. Veggetti. A comparative histochemical study of intrinsic laryngeal muscles of ungulates and carnivores. *Basic and Applied Histochemistry* 23 (2): 103.
1889. Mason, I. L. Inventory of special herds and flocks of breeds of farm animals including conservation herds of rare breeds, feral populations, domestic animals in zoos and experimental and selection strains. FAO, Rome, Italy, 114 pp.
1890. Mason, V. C. Quantitative importance of bacterial residues in the non-dietary faecal nitrogen of sheep. 1. Methodology studies. *Zeitschrift für Tierphysiologie Tierernährung und Futtermittelkunde* 41 (3): 131.
1891. Mason, V. C. Quantitative importance of bacterial residues in the non-dietary faecal nitrogen of sheep. 2. Estimates of bacterial nitrogen in faecal material from 47 digestibility trials. *Zeitschrift für Tierphysiologie Tierernährung und Futtermittelkunde* 41 (3): 131.
1892. Mason, V. C., and J. H. Frederiksen. Partition of the nitrogen in sheep faeces with detergent solutions, and its application to the estimation of the true digestibility of dietary nitrogen and the excretion of non-dietary faecal nitrogen. *Zeitschrift für Tierphysiologie Tierernährung und Futtermittelkunde* 41 (3): 121.
1893. Matassino, D., Dell'Aquila, S., Colatruoglio, P., and E. Cosentino. Qualitative characteristics of Gentile di Puglia lambs born from synchronized ewes: I. Myoheology. *Zootechnica E Nutrizione Animale* 5 (6): 601.
1894. Mathur, K. N. Incidence of "Q" fever among sheep and goats around Jaipur (Rajasthan). *Indian Journal of Animal Health* 18 (1): 49.
1895. Mathur, K. N., Bhargava, S. C., and V. K. Khanna. Sero prevalence of animal brucellosis in and around Bassi Jaipur Rajasthan, India. *Indian Journal of Microbiology* 19 (3): 107.
1896. Matsuzawa, T., and Y. Ikarashi. Hemolysis of various mammalian erythrocytes in sodium chloride glucose and phosphate buffer solutions. *Laboratory Animal* 31 (4): 329.
1897. Matthews, D., Brunson, R. V., and A. Vlassoff. Effect of dexamethasone on the ability of sheep to resist reinfection with nematodes. *Veterinary Parasitology* 5 (1): 65.
1898. Matthews, D. Vaccination of sheep against *Nematodirus* spp. *Veterinary Parasitology* 5: 243.
1899. Mattioli, J., Chien, S., Vassenon, T., Christ, R., and R. Lynn. Effect of angiotensin II A-2 blockade on the response of the fetal lamb to acute hypoxia and hypovolemia. *Pediatric Research* 13 (4, part 2): 360.
1900. Mauer, D. R., Sielczak, M., and A. Wanner. A new video technique for the in vitro measurement of ciliary motility. *Journal of Cell Biology* 83 (2, part 2): 178A.
1901. Mavrogenis, A. P., and Louca, A. A note on some factors influencing post-weaning performance of purebred and crossbred lambs. *Animal Production* 29 (3): 415.
1902. Maxwell, J. A. L. Cost benefit analysis of the use of anthelmintics in sheep. *Australian Veterinary Journal* 55 (3): 152.
1903. Maxwell, J. A. L. Temporary infertility in Merino ewes grazing improved pastures in Western Australia. *Australian Veterinary Journal* 55 (8): 381.
1904. Maxwell, T. J. Economic techniques for the assessment of sheep systems. In: *The Management and Diseases of Sheep*. Edited by British Council, Commonwealth Agricultural Bureaux, Slough, UK.
1905. Maxwell, T. J., Doney, J. M., Milne, J. A., Peart, J. N., Russel, A. J. F., Sibbald, A. R., and D. Macdonald. The effect of rearing type and prepartum nutrition on the intake and performance of lactating Greyface ewes at pasture. *Journal of Agricultural Science* 92 (1): 165.
1906. Mayr, A. Development of new immunization and paramunization methods in veterinary medicine. *Blauen Hefte für den Tierarzt* 60: 494.
1907. Mazharov, M. K. Immunity and aging. *Terapevticheskii Arkhiv* 51 (6): 101.
1908. McBeath, D. G., Preston, N. K., and F. Thompson. Studies in sheep on the efficacy of fendendazole administered via a feed-block carrier. *British Veterinary Journal* 135 (3): 271.
1909. McCaughey, W. J. et al. *Ureaplasma* spp. isolated from ewes in Northern Ireland. *The Veterinary Record* 104 (17): 397.
1910. McCaughey, W. J. and others. Ureaplas-

- mas in sheep. *Veterinary Record* 105 (25-26): 576.
1911. McClellan, M. C., Abel, J. H. Jr., Sawyer, H. R., and G. D. Niswender. Ultrastructural autoradiographic analysis of progesterone secretion in the corpus luteum of sheep. *Anatomical Record* 193 (3): 618.
1912. McColl, R. H. S., and A. R. Gibson. Downslope movement of nutrients in hill pasture, Taita, New Zealand. 2. Effects of season, sheep grazing and fertilizer. *New Zealand Journal of Agricultural Research* 22 (1): 151.
1913. McConnell, J. D., and R. J. Green. The control of hydatid disease in Tasmania. *Australian Veterinary Journal* 55 (3): 140.
1914. McCracken, J. A. Hormone receptor control of prostaglandin F-2 alpha secretion by the ovine uterus. In: Samuelsson, B., Ramwell, P. W., and R. Oaoletti. *Advances in Prostaglandin and Thromboxane Research*, Vol. 8, p. 1329, Raven Press, New York.
1915. McCulloch, B., and C. J. Whitehead. Monitoring of bacteriological contamination and assessment of carcase surface growth by using direct and indirect contact examination techniques and various colony counting procedures. *Journal of the South African Veterinary Association* 50 (2): 123.
1916. McDonald, C. A., Thompson, J. M., Rhoades, J. D., and C. V. Ross. Effect of graded levels of zeranol implants on growing-finishing lambs fed diets containing orchardgrass hay versus cottonseed hulls as their source of roughage. *Journal of Animal Science* 49 (suppl. 1): 195.
1917. McDonald, G. A. Pasture utilization by sheep and cattle. *Proceedings of the New Zealand Grassland Association* 40: 25.
1918. McDonald, I., Robinson, J. J., Fraser, C., and R. I. Smart. Studies on reproduction in prolific ewes. 5. The accretion of nutrients in the foetuses and adnexa. *Journal of Agricultural Science* 92 (3): 591.
1919. McDougald, L. R. Attempted cross transmission of coccidia between sheep and goats and description of *Eimeria ovinoidalis* sp. n. *Journal of Protozoology* 26 (1): 109.
1920. Mcgaughey, S. J. Wether lamb fattening in the hills. *Agriculture in Northern Ireland* 54 (6): 156.
1921. McGrath, P. E. J., and M. P. Boland. Effect of using oestrous teaser ewes on semen output in rams. *Faculty of General Agriculture, Research Report 1976-77*. Dublin, Irish Republic.
1922. McGrath, P. E., Boland, M. P., and I. Gordon. Effect of sexual preparation procedures on semen characteristics in the ram. *Journal of Agricultural Science* 93 (3): 761.
1923. McGuirk, B. J., Ponsoni, R. W., and K. D. Atkins. Should we be breeding sheep that are easier to shear. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics*. University of New England, 404 pp.
1924. McGuirk, B. J., and M. Rose. The value of fleece measurement in Merino breeding programs. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics*. University of New England, 404 pp.
1925. McIntosh, G. H., Baghurst, K. I., Potter, B. J., and B. X. Hetzel. Foetal thyroidectomy and brain development in the sheep. *Neuropathology and Applied Neurobiology* 5 (5): 363.
1926. McIntyre, K. H. Elliottdale sheep and the carpet industry. *Journal of Agriculture, Tasmania* 50 (3): 57.
1927. McKay, E. J., and L. M. McLeay. Gastric intrinsic factor in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 195.
1928. McKinley, A. H. A study of genetic and environmental factors causing variation in the fibre diameter and other traits in the wool of Merino sheep. *Dissertation Abstracts International B*, 39: (12), Pt. 1: 5673.
1929. McKinley, M. J., Denton, D. A., Hatzikostas, S., and R. S. Weisinger. Effect of angiotensin II on parotid saliva secretion in conscious sheep. *American Journal of Physiology* 237 (1): E54.
1930. McLaughlin, C. L., Baile, C. A., and P. E. Bender. Cannabinoids and feeding in sheep. *Psychopharmacology* 64 (3): 321.
1931. McLeod, C. N., Harding, R., Johnson, P., McClelland, M. E., and P. L. Whyte. Control of respiration and behaviour during development in ewe reared lambs. *Biotelemetry Patient Monitoring* 6 (4): 171.
1932. McManus, D. P., and J. D. Smyth. Isoelectric focusing of some enzymes from *Echinococcus granulosus* (horse and sheep strains) and *E. multilocularis*. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 73 (3): 259.
1933. McManus, T. J. Native fauna and liver fluke marsupials. *Journal of Agriculture, Tasmania* 50 (2): 43.
1934. McMartin, D. A., Hunter, A. R., and J. W. Harris. Experimental pneumonia in red deer produced by an ovine *Chla-*

- mydia*. Veterinary Record 105 (25/26): 574.
1935. McMillan, D. D., Boyd, G. N., and R. D. Bland. Dietary modification of increased pulmonary microvascular permeability in lambs exposed to oxygen. Clinical Research 27 (1): 132A.
1936. McMillen, I. C., Cookson, I., Thorburn, G. D., and J. S. Robinson. Lack of effect of morphine and naloxone on plasma concentrations of prolactin and growth hormone in fetal and adult sheep. Acta Endocrinologica 91 (225): 78.
1937. McNamee, J. E., and N. C. Staub. Pore models of sheep lung microvascular barrier using new data on protein tracers. Microvascular Research 18 (2): 229.
1938. McNeilly, A. S., and R. B. Land. Effect of suppression of plasma prolactin on ovulation, plasma gonadotrophins and corpus luteum function in LH-RH-treated anoestrous ewes. Journal of Reproduction and Fertility 56 (2): 601.
1939. McRae, S. D. Resource allocation alternative in an Andean herding system: a simulation approach. Dissertation Abstracts International A: 40: 6: 3429.
1940. McSporrn, K. D., and E. D. Fielden. Studies on dystocia in sheep: 2. Peivic measurements of ewes and histories of dystocia and eutocia. New Zealand Veterinary Journal 27 (4): 75.
1941. McSporrn, K. D., and R. S. Wyburn. Studies on dystocia in sheep. 1. A technique for radiographic pelvimetry in the ewe. New Zealand Veterinary Journal 27 (4): 64.
1942. Meads, W. J. et al. The effect of single doses of selenium salts on whole blood levels of selenium in ewes on a selenium-deficient diet. New Zealand Veterinary Journal 28 (1-2): 20.
1943. Mears, G. J., Van Petten, G. R., Harris, W. H., Bell, J. U., and F. L. Lorscheider. Induction of estrus and fertility in the anestrus ewe with hormones and controlled lighting and temperature. Journal of Reproduction and Fertility 57 (2): 461.
1944. Meegan, J. M., Hoogstraal, H., and M. I. Mousa. An epizootic of Rift Valley Fever in Egypt in 1977. Veterinary Record 105 (6): 124.
1945. Meek, A. H., and R. S. Morris. The effect of prior infection with *Fasciola hepatica* on the resistance of sheep to the same parasite. Australian Veterinary Journal 55 (2): 61.
1946. Meek, A. H., and R. S. Morris. An epidemiological investigation of ovine fascioliasis (*Fasciola hepatica*) on both irrigated and non-irrigated pastures in Northern Victoria. Australian Veterinary Journal 55 (8): 365.
1947. Mehlitz, D. Trypanosome infections in domestic animals in Liberia. Tropenmedizin und Parasitologie 30 (2): 212.
1948. Mehta, B. S., Kandasamy, N., and C. L. Arora. Adult body weight of indigenous and crossbred ewes under semi-arid conditions in India. Tropical Animal Health and Production 11 (4): 227.
1949. Meinecke-Tillmann, S., Meinecke, B., and R. Wassmuth. Regulative capacity of sheep embryos in vivo and in vitro. Zuchthygiene 14 (4): 165.
1950. Meissner, H. H., Pienaar, J. P., Liebenberg, L. H. P., and C. Z. Roux. Rumen flow dynamics and voluntary intake in ruminants. Annales de Recherches Veterinaires 10 (2-3): 219.
1951. Meissner, H. H., and C. Z. Roux. Voluntary feed intake, growth, body composition and efficiency in the sheep: quantification of between-animal variation. Agroanimalia 11 (1): 9.
1952. Meissonnier, E., and M. Dobbels. Nervous symptoms in ewes in a flock fed fescue silage. Point Veterinaire 9 (42): 49.
1953. Meloney, W. P., and I. H. Roberts. Trials with 8 acaricides against *Psoroptes ovis*, the sheep scabies mite. Recent Advances in Acarology 2: 95.
1954. Mellor, D. J. The physiology of pregnancy. In: The Management and Diseases of Sheep. Edited by British Council, Commonwealth Agricultural Bureaux, Slough, UK.
1955. Mellor, D. J., and I. C. Matheson. Daily changes in the curved crown-rump length of individual sheep fetuses during the last 60 days of pregnancy and effects of different levels of maternal nutrition. Quarterly Journal of Experimental Physiology and Cognate Medical Sciences 64 (2): 119.
1956. Mellor, P. S., and G. Pitzolts. Observations on breeding sites and light-trap collections of *Culicoides* during an outbreak of bluetongue in Cyprus. Bulletin of Entomological Research 69 (2): 229.
1957. Mel'nikova, K. V., and A. T. Dobrodromov. Control of foot rot on large sheep farms. Byulleten Vsesoyuznogo Instituta Eksperimental'noi Veterinarii 37: 27.
1958. Melrose, D. R. The need for, and possible methods of application of hormone assay techniques for improving reproductive efficiency. British Veterinary Journal 135 (5): 453.
1959. Mendenhall, V. T., and S. K. Ercanbrack. Influence of carcass weight, sex, and breed on consumer acceptance of lamb. Journal of Food Science 44 (4): 1063.

1960. Menger, H., and G. Michel. The course of spermatogenesis in the ram. *Archiv für Experimentelle Veterinärmedizin* 33 (1): 53.
1961. Menke, K. H., Raab, L., Salweski, A., Steingass, H., Fritz, D., and W. Schneider. The estimation of the digestibility and metabolizable energy content of ruminant feeding stuffs from the gas production when they are incubated with rumen liquor in vitro. *Journal of Agriculture Science* 93 (1): 217.
1962. Mercer, J. B., Andrews, J. F., and M. Szekely. Thermoregulatory responses in new-born lambs during the first thirty-six hours of life. *Journal of Thermal Biology* 4 (3): 239.
1963. Merrick, L., Lewicki, C., Krzymowska, H., Brzostkowski, H., Florek, S., Czarniawska, S., and M. Koziorowski. Uniform feeding of sheep in large scale production. *Zeszyty Naukowe Akademii Rolniczo-Technicznej W : Olsztynie* 199: 177.
1964. Mereminskii, A. I., and I. Y. Gluzman. Prognosis and prophylaxis of fascioliasis and paramphitomiasis. *Veterinariya No. 7*: 43.
1965. Meresta, L. Tuberculin provocation of leucery in sheep. *Bulletin of the Veterinary Institute in Pulawy* 23 (1/2): 5.
1966. Merkel, R. A., Mostafavi, M. S., Bergen, W. G., Spooner, M. E., and H. A. Henneman. Effect of growth potential, sex and age on ovine adipose tissue cellularity and lipogenic activity. *Journal of Animal Science* 49 (suppl. 1): 228.
1967. Merry, R. J., Smith, R. H., and A. B. McAllan. Lactosyl urea in ruminant nutrition. *Annales de Recherches Veterinaires* 10 (2-3): 314.
1968. Meshkov, S. New data on the life cycle of ovine sarcosporidia. *Veterinarna Sbirka* 77 (4): 20.
1969. Metzler, A., Ehrensperger, F., and K. Danner. Borna virus infection in sheep: follow-up after spontaneous infection, with special emphasis on antibody-kinetics in serum and cerebrospinal fluid. *Australian Journal of Zoology* 27 (1): 37.
1970. Meulen, U. Ter, Struck, S., Schulke, E., and E. A. El-Harith. A review on the nutritive value and toxic aspects of *Leucaena leucocephala*. *Tropical Animal Production* 4 (2): 113.
1971. Meyer, E. P. Use of selenium pellets in sheep in Australia. *Australian Advances in Veterinary Science*, edited by M. G. Cooper, p. 49.
1972. Mia, A. S. Comparative studies on serum protein determination in various species of domestic animals. *Veterinary Clinical Pathology* 7 (2): 17.
1973. Mian, I. A. Relationship of staple length, fineness, moisture content and vegetable matter of wool with age of sheep. *Pakistan Journal of Scientific Research* 31 (1-2): 29.
1974. Michael, S. A. et al. Efficacy of oxfendazole against natural infestations of nematodes and cestodes in sheep in Egypt. *Veterinary Record* 104 (15): 338.
1975. Michalet-Doreau, B., and A. Xande. Influence of the season on the feeding behaviour of sheep receiving green forage in a set tropical zone. *Annales Zootechnica* 28 (4): 381.
1976. Michalk, D. L. Sheep production in the United States. *Wool Technology and Sheep Breeding* 27 (1): 21.
1977. Michalk, D. L., and D. G. Saville. Supplementary feeding of range sheep. *Journal of Range Management* 32 (6): 422.
1978. Michalowski, T. Effect of feeding frequency on the diurnal changes in microbial protein, volatile fatty acids and ammonia contents of the rumen of sheep. *Journal of Agricultural Science* 93 (1): 67.
1979. Michell, A. R. Robust and inexpensive metabolism cages for sheep. *British Veterinary Journal* 135 (3): 294.
1980. Michell, A. R. Water and electrolyte excretion during the estrous cycle in sheep. *Quarterly Journal of Experimental Physiology and Cognitive Medical Sciences* 64 (2): 79.
1981. Michnova, E., Boda, K., Tomas, J., and I. Havassy. Urease EC-3.5.1.5 activity in the contents and tissues of the sheep, pig, and chicken gastrointestinal apparatus. *Physiologia Bohemoslovaca* 28 (6): 545.
1982. Mihajlovic, B., Kuzmanovic, M., Vukobrat, D., and Z. Stefanovic. Comparative investigation of some methods for the detection of *Chlamydia ovis*. *Acta Veterinaria* 28 (3): 119.
1983. Mikus, M., and J. Malik. Sheep farming in mountainous regions. *Nas Chov* 39 (6): 251.
1984. Mikush, M., and M. Mikus. Technical parameters of milking machines for ewes. *Milchwissenschaft* 34 (5): 267.
1985. Millar, K. R., and P. P. Lorentz. Urinary methylmalonic acid as an indicator of the vitamin B12 status of grazing sheep. *New Zealand Veterinary Journal* 27 (5): 90.
1986. Millard, R. W., Baig, H., and Vatner, S. F. Prostaglandin control of the renal circulation in response to hypoxemia in the fetal lamb in utero. *Circulation Research* 45 (2): 172.
1987. Miller, B. G., Wild, J., and G. M. Stone. Effects of progesterone on the oestrogen-stimulated uterus: a comparative

- study of the mouse, guinea pig, rabbit and sheep. *Australian Journal of Biological Sciences* 32 (6): 549.
1988. Miller, B. L., Fahey, G. C. Jr., Rindsig, R. B., Berger, L. L., and W. G. Bottje. In vitro and in vivo evaluations of soybean residues ensiled with various additives. *Journal of Animal Science* 49 (6): 1545.
1989. Miller, E. L. Prediction of the protein requirements of farm ruminants and implications of these predictions for diet formulation. *Veterinary Record* 105 (21): 485.
1990. Miller, E. L., and I. L. Johnson. Alkali treated straw and urea for pregnant ewes. *Animal Production* 28 (3): 430.
1991. Miller, G. J., Riley, M. L., and R. A. Field. A convenient microfiltration procedure for purification of bovine and ovine subcutaneous tissue lipid extracts. *Journal of Agricultural and Food Chemistry* 27 (1): 206.
1992. Miller, J. K. Current mycotoxin studies at the Edinburgh Veterinary investigation Centre. Proceedings of a 3rd Meeting on Mycotoxins in Animal Disease, Pinner, UK, Ministry of Agriculture, Fisheries and Food, VIII + 82 pp.
1993. Miller, K. F., Critser, J. K., Rowe, R. F., and O. J. Ginther. Ovarian effects of bovine follicular fluid in sheep and cattle. *Biology of Reproduction* 21 (3): 537.
1994. Miller, M. P., Harvey, R. W., Barrick, E. R., and A. C. Linnerud. Effect of readily available carbohydrate and roughage source on performance of lambs and steers fed a liquid supplement. *Journal of Animal Science* 49 (6): 1552.
1995. Miller, S. J. Problems of the extensive sheep industry in Queensland. *Australian Advances in Veterinary Science* edited by M. G. Cooper, p. 52.
1996. Milliken, K. Sheep meat and the E. E. C. *Agriculture in Northern Ireland* 54 (2): 53.
1997. Millot, P. Genetic control of lymphocyte antigens in sheep. The OLA complex and two minor loci. *Immunogenetics* 9 (6): 509.
1998. Mills, C. F., and I. Bremner. Mechanisms and quantitative aspects of the antagonistic effect of molybdenum on copper metabolism in animals. *Journal of Food Science and Agriculture* 30 (7): 745.
1999. Mills, J., Robertson, R., Mawwhinney, H., and P. Hopkins. Use of turbulent air flow to apply an insecticide mist to sheep. *Wool Technology and Sheep Breeding* 27 (1): 5.
2000. Mills, S. C., Searle, T. W., and R. Evans. Long-term effects of feeding protected sunflower seed supplement on the composition of body fat in growing sheep. *Australian Journal of Biological Sciences* 32 (4-5): 457.
2001. Milne, J. A., Bagley, L., and S. A. Grant. Effect of season and level of grazing on the utilization of heather by sheep. 2. Diet selection and intake. *Grass and Forage Science* 34 (1): 45.
2002. Milne, J. A., Christie, A., and A. J. F. Russel. The effects of nitrogen and energy supplementation on the voluntary intake and digestion of heather by sheep. *Journal of Agricultural Science* 92 (3): 635.
2003. Milne, J. A., Maxwell, T. J., and W. Souther. Effect of level of concentrate feeding and amount of herbage on the intake and performance of ewes with twin lambs at pasture in early lactation. *Animal Production* 28 (3): 452.
2004. Ministry of Agriculture, British Columbia 1979. *Agriculture Statistics Yearbook, 1978*. Victoria, B.C., Canada, Parliament Bldgs. 93 pp.
2005. Misra, R. K., and V. K. Singh. Pre-weaning and post-weaning survivability in Corriedale, Coimbatore and their crossbred sheep. *Indian Veterinary Journal* 56 (1): 859.
2006. Misra, R. K., and N. Swain. Clinical evaluation of benzyl benzoate as an acaricide against sheep scab. *Livestock Adviser, Bangalore, India* 4 (7): 31.
2007. Mitat, J. A., and P. Cruz. Genetic polymorphism of hemoglobin and transferrin in F-1 sheep (Corriedale x Criollo). *Revista Cubana Reprod. Animal* 5 (1): 5.
2008. Mitchell, A. D., Chappell, A., and K. L. Knox. Metabolism of betaine in the ruminant. *Journal of Animal Science* 49 (3): 764.
2009. Mitchell, A. R. Water and electrolyte excretion during the oestrous cycle in sheep. *Quarterly Journal of Experimental Physiology and Cognate Medical Sciences* 64 (2): 79.
2010. Mitchell, B. A study of the growth and carcass characteristics of large lambs. *Dissertation Abstracts International B* 39: (12), Pt. 1: 5674.
2011. Mitchell, B., and J. T. Williams. Respiratory function changes in sheep associated with lying in lateral recumbency and with sedation by xylazine. *Proceedings of the Association of Veterinary Anaesthetists of Great Britain and Ireland* 6: 30.
2012. Mitchell, B., and J. T. Williams. Blood gas changes in sheep associated with feeding. *Proceedings of the Association of Veterinary Anaesthetists of Great Britain and Ireland* 6: 37.
2013. Mitchell, M. D., Anderson, A. B. M.,

- Brunt, J. D., Clover, L., Ellwood, D. A., Robinson, J. S., and A. C. Turnbull. Concentrations of 6-oxo-prostaglandin F-1 alpha in the maternal and foetal plasma of sheep during spontaneous and induced parturition. *Journal of Endocrinology* 83 (2): 141.
2014. Mitchell, P. J. Studies on ovine white liver disease in East Gippsland. Cobalt deficiency treated with cyanocobalamin. *Victorian Veterinary Proceedings* 37: 30.
2015. Mitrovic, M. Fasciolocidal activity of a halogenated benzenesulfonanilide. *Experientia* 35 (3): 325.
2016. Mittal, J. P., and P. K. Ghosh. A note on the effect of shearing on certain physiological responses of Corriedale rams under arid conditions during summer. *Indian Journal of Animal Sciences* 49 (2): 152.
2017. Mittal, J. P., and P. K. Ghosh. Comparative semen characteristics of Corriedale, Marwari and Jaisalmeri rams maintained under hot arid conditions. *Journal of Agricultural Science* 92 (1): 1.
2018. Mittal, J. P., and P. K. Ghosh. Comparative performance of indigenous and exotic sheep in the Indian arid zone. *Journal of Agricultural Science* 92 (2): 273.
2019. Mittal, J. P., and P. K. Ghosh. Body temperature, respiration and pulse rate in Corriedale, Marwari and Magra sheep in the Rajasthan desert. *Journal of Agricultural Science* 93 (3): 587.
2020. Mogha, I. V., and A. K. Bhargava. Ruminal fistula technique and utility. *Indian Veterinary Journal* 56 (10): 885.
2021. Molitor, T. W., Light, M. R., and I. A. Schipper. Elevated concentrations in serum immunoglobulins due to infection by ovine progressive pneumonia virus. *American Journal of Veterinary Research* 40 (1): 69.
2022. Molitor, T. W., Light, M. R., and I. A. Schipper. Incidence of ovine progressive pneumonia in the North Dakota State University sheep flocks, determined by agar-gel immunodiffusion. *North Dakota Farm Research* 37 (2): 24.
2023. Molitor, T. W., Schipper, I. A., Berryhill, D. L., and M. R. Light. Evaluation of the agar-gel immunodiffusion test for the detection of precipitating antibodies against progressive pneumonia virus of sheep. *Canadian Journal of Comparative Medicine* 43 (3): 280.
2024. Mollgard, K., Lauritzen, B., and N. R. Saunders. Double replica technique applied to choroid plexus from early fetal sheep. Compactness and complexity of tight junctions. *Journal of Neurocytology* 3 (2): 139.
2025. Monet-Kuntz, C., Terqui, M., and A. Locatelli. Characterization of a cytoplasmic androgen receptor in the ram testis. *Molecular and Cellular Endocrinology* 16 (2): 57.
2026. Monge, E., Vallejo, M., and I. Sierra. Genetical structure of foreign sheep breeds. *Zootecnia* 28 (1/3): 63.
2027. Monge, E. Presence and evolution of Hb-C in lambs. *Archivos de Zootecnia* 28 (112): 317.
2028. Montgomery, R. H., and P. Hemmingsen. Abortion in sheep. *New Zealand Journal of Agriculture* 138 (5): 63.
2029. Monzu, N. Flystrike in sheep. Secondary and tertiary flies striking sheep in western Australia. *Journal of Agriculture, Western Australia* 20 (2): 48.
2030. Moon, H. W., Isaacson, R. E., and J. Pohlenz. Mechanisms of association of enteropathogenic *Escherichia coli* with intestinal epithelium. *American Journal of Clinical Nutrition* 32 (1): 119.
2031. Moore, C. K., Amos, H. E., Lowrey, R. S., Evans, J. J., and D. Burdick. Influence of abomasal infusions of glucose and methionine on nitrogen balance in wethers. *Journal of Animal Science* 49 (suppl. 1): 45.
2032. Moore, E., DeLeon, L. B., Akrami, C., Simpson, E. H., McMann, B. J., and L. S. Weiss. Phospholipid metabolism during renal compensatory growth in fetal lambs. *Pediatric Research* 13 (4, part 2): 361.
2033. Moore, E. S., DeLeon, L. B., Weiss, L. S., McMann, B. J., and M. Ocampo. Compensatory renal hypertrophy in fetal lambs. *Pediatric Research* 13 (1): 1125.
2034. Moore, E. S., Ocampo, M., Galvez, M. B., McMann, B. J., and E. H. Simpson. Ontogeny of intrarenal solute gradients in fetal and postnatal life. *Pediatric Research* 13 (4, part 2): 516.
2035. Moore, J. H., and W. W. Christie. Lipid metabolism in the mammary gland of ruminant animals. *Progress in Lipid Research* 17 (4): 347.
2036. Moore, R. W. Influence of hogget growth on subsequent ewe fertility. *Annual Report 1978-79*, Hamilton, New Zealand, Ministry of Agriculture and Fisheries, 34 pp.
2037. Moran, M., Guada, J. A., and F. J. Ovejero. Effect of energy concentration and protein content of the diet on milk production in Churra coarse wool bearing sheep. *An Inst Nac Invest Agrar Ser Prod Anim* 0 (10): 77.
2038. More, T., and K. L. Sahni. Some haematological changes during 3 months after birth of Chokla lambs under semi-arid conditions. *Indian Veterinary Journal* 56 (8): 646.

2039. More, T., and K. L. Sahni. Effect of long-term intermittent watering on some blood and urine attributes of pregnant sheep under semi-arid conditions. *Indian Journal of Animal Sciences* 49 (7): 549.
2040. More, T., and K. L. Sahni. Effect of water deprivation on wool production of breeding ewes under semi-arid conditions. *Indian Veterinary Journal* 56 (11): 931.
2041. Morgan, W. J. B., and D. J. Mackinnon. Brucellosis. In: Laing, J. A. *Fertility and Infertility in Domestic Animals*. 3rd Edition. Bailliere Tindall London.
2042. Morishima, H. O., Finster, M., Pedersen, H., Fukunaga, A., Ronfeld, R. A., Vasallo, H. G., and B. G. Covino. Pharmacokinetics of lidocaine in fetal and neonatal lambs and adult sheep. *Anesthesiology* 50 (5): 431.
2043. Morishima, H. O., Gutsche, B. G., Stark, R. I., Milliez, J. M., James, L. S., Barkus, J. C., and B. G. Covino. Relationship of fetal bradycardia to maternal administration of lidocaine in sheep. *American Journal of Obstetrics and Gynecology* 134 (3): 289.
2044. Morishima, H. O., Sakuma, K., Pedersen, H., Dyrenfurth, I., and M. Finster. Relief of stress with meperidine in pregnant baboons and sheep. *Anesthesiology* 51 (suppl. 3): 292S.
2045. Morishima, H. O., Sakuma, K., Pedersen, H., Finster, M., Daniel, S. S., and L. S. James. Is alleviation of maternal stress beneficial to the fetus. *Pediatric Research* 13 (4, part 2): 371.
2046. Morley, F. H. W. Applications of research to flock health. *Australian Advances in Veterinary Science*, edited by M. G. Cooper, p. 51.
2047. Morriss, F. H., Jr., Adcock, E. W. III, Paxson, C. L. Jr., and W. J. Greeley, Jr. Uterine uptake of amino acids throughout gestation in the unstressed ewe. *American Journal of Obstetrics and Gynecology* 135 (5): 601.
2048. Morrono Pelayo, P., Manga Gonzalez, Y., Reguera Feo, A., and N. Diez Banos. Experimental infection of various Helicidae with ovine protostrongyles. Second National Congress on Parasitology, October 1979, Leon, Spain.
2049. Morsy, T. A., El Dasougi, S. T., and S. A. Michhal. Toxoplasma antibodies among slaughter sheep in Jordan. *Journal of the Egyptian Society of Parasitology* 9 (1): 137.
2050. Morton, D. B., Curry, V. A., and G. D. Harkiss. The effect on fertility of vaccinating female sheep with biochemically defined fractions of ram spermatozoa. *Fertility and Sterility* 31 (6): 683.
2051. Morton, D. B., and P. A. McAnulty. The effect on fertility of immunizing female sheep with ram sperm acrosin and hyaluronidase. *Journal of Reproductive Immunology* 1 (1): 61.
2052. Morton, H., Clunie, G. J. A., and F. D. Shaw. Test for early pregnancy in sheep. *Research in Veterinary Science* 26 (2): 261.
2053. Morton, H., Nancarrow, C. D., Scaramuzzi, R. J., Evison, B. M., and G. J. A. Clunie. Detection of early pregnancy in sheep by the rosette inhibition test. *Journal of Reproduction and Fertility* 56 (1): 75.
2054. Moseley, G., and J. R. Jones. Technique for sampling total rumen contents in sheep. *Research in Veterinary Science* 27 (1): 97.
2055. Moseley, G., and J. R. Jones. Some factors associated with the difference in nutritive value of artificially dried red clover and perennial ryegrass for sheep. *British Journal of Nutrition* 42 (1): 139.
2056. Moskalenko, A. N. The origin of fat-rumped sheep. *Ovtsevodstvo* No. 5: 37.
2057. Moss, G. E. Effect of estradiol 17-beta on gonadotropin releasing hormone mediated release of LH during the estrous and anestrus season. *Biology of Reproduction* 20 (suppl. 1): 109A.
2058. Moss, I. R., and E. M. Scarpelli. Generation and regulation of breathing in utero. Fetal carbon dioxide response test. *Journal of Applied Physiology, Respiration, Environmental Exercise Physiology* 47 (3): 527.
2059. Moss, I. R., and E. M. Scarpelli. Respiratory regulation in pregnant ewes and in fetal lambs in utero. *Pediatric Research* 13 (4, part 2): 361.
2060. Moss, J. A., Melrose, D. R., Reed, H. C. B., and M. Vandeplassche. Spermatozoa semen and artificial insemination. In: Laing, J. A. *Fertility and Infertility in Domestic Animals*, Bailliere and Tindall, London, England.
2061. Mostafavi, M. S. The effect of growth rate, sex and age on skeletal muscle and adipose tissue growth and development. *Dissertation Abstracts International B* 40 (2): 508.
2062. Mostaghni, K. Exocrine pancreatic secretion in conscious sheep. *Zentralblatt für Veterinärmedizin* 26 (6): 458.
2063. Mostaghni, K., and A. Ahmadnezhad. Some observations on alopecia in sheep. *Veterinary Medical Review*, No. 1: 26.
2064. Mostaghni, K., and B. R. Howard. Neural and chemical control of abomasal secretion in sheep. *Cornell Veterinarian* 69 (3): 286.

2065. Motcane, M., Middleton, D. M., and L. R. Polley. A survey of disease conditions in adult and feeder sheep. *Canadian Veterinary Journal* 20 (1): 2.
2066. Mottelib, A. A., El-Galil, G. A., and I. S. Abdallah. Some haematological and biochemical studies on caseous lymphadenitis in sheep. *Journal of the Egyptian Veterinary Medical Association* 36 (2): 58.
2067. Motyl, T., Dutkiewicz, M., Krasicka, B., and J. Krzeminski. Frequency of rumen contractions in ruminants fed completely on silage. *Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego Akademii Rolniczej W. Warszawie Weterynaria* 9: 57.
2068. Motyl, T., Kania, B. F., and G. Kulasek. Inhibition of rumen motility by ammonium ion in sheep. *Acta Physiological Polonica* 30 (1): 142.
2069. Mount, L. E. Adaptation to thermal environment: man and his productive animals. In: *Contemporary Biology: adaptation to thermal environment, man and his productive animals*. University Park Press, Baltimore, Maryland, USA.
2070. Movsum-Zade, K. K. Relationships between internal diseases and metabolic disorders in farm animals. Particularly cobalt deficiency in sheep. *Veterinariya* No. 8: 59.
- 2071-A. Mrden, M., Radic, L., and B. S. Markovic. Bacteria isolated from the organs of emergency-slaughtered cattle, sheep and swine. *Veterinarski Glasnik* 33 (6): 467.
- 2071-B. Muhammed, S. I., and E. C. Eliasson. The prevalence of antibodies to *Mycobacterium johnei* in colostrum deprived lambs. *Veterinary Record* 105 (1): 11.
- 2072-A. Mueller, P. L., Gluckman, P. D., Kaplan, S. L., Rudolph, A. M., and M. M. Grumbach. Hormone onogeny in the ovine fetus. 5. Circulating prolactin in mid gestation and late gestation and in the new born. *Endocrinology* 105 (1): 129.
- 2072-B. Mukhamedgaliev, F. M. Reserves of crossbred sheep production. *Vestnik Sel'Skokhozyaistvennoi Nauki*, No. 4: 57.
2073. Mukhamedov, N. D. The effect of induced parturition on the subsequent fertility of karakul ewes. See *Referativnyi Zhurnal* (1980) 5 (58): 358.
2074. Mukherjee, T. K. Genetic resources of farm animals for improvement in Malaysia. *Malaysian Applied Biology* 8 (1): 87.
2075. Mulholland, J. G., and J. B. Coombe. A comparison of the forage value for sheep of buckwheat and sorghum stubbles grown on the Southern Tablelands of New South Wales. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (98): 297.
2076. Mulholland, J. G., and J. B. Coombe. Supplementation of sheep grazing wheat stubble with urea, molasses and minerals-quality of diet, intake of supplements and animal response. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (96): 23.
2077. Muller, M. J. A method of feeding the biting midge *Culicoides brevitarsis* on mammalian hosts. *Journal of Medical Entomology* 16 (4): 335.
2078. Muller, W. Problem of adequate ventilation rates during transport of animals by air. *Schlachten und Vermarkten* 79 (11): 352.
2079. Mulvihill, D. M., and P. F. Fox. Proteolytic specificity of chymosins and pepsins on beta caseins. *Milchwissenschaft* 34 (11): 680.
2080. Muncy, R., Kormendy, B., and M. Mocsy. Comparison of agar gel precipitation and complement fixation test for the detection of *Brucella ovis* infection. *Acta Microbiologica Academiae Scientiarum Hungaricae* 26 (1): 11.
2081. Munday, B. L. Cats and sarcocystis of sheep. *New Zealand Veterinary Journal* 27 (1-2): 19.
2082. Munday, B. L. The effect of *Sarcocystis ovis* on growth rate and haematocrit in lambs. *Veterinary Parasitology* 5 (2-3): 129.
2083. Munday, B. L., and A. Corbould. Serological responses of sheep and cattle exposed to natural toxoplasma infection. *Australian Journal of Experimental Biology and Medical Science* 57 (2): 141.
2084. Murai, E., and L. Sugar. Taeniid species in Hungary. I. Cysticercosis, coenurosis and hydatidosis of wild ungulates. *Parasitologia Hungarica* 12: 41.
2085. Murata, Y., Miyake, K., and E. J. Quilligan. Pre-ejection period of cardiac cycles in fetal lamb. *American Journal of Obstetrics and Gynecology* 133 (5): 509.
2086. Murdoch, W. J., and R. A. Dailey. Prostaglandin E-2 and prostaglandin F-2-alpha in ovine follicles before and during estrus. *Biology of Reproduction* 20 (suppl. 1): 51A.
2087. Murray, D. M., and O. Slezacek. Growth rate effects on the chemical composition of the carcass and muscle tissue of sheep. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (97): 161.
2088. Murzamadiyev, A. M., and R. Zhapbasov. Cytogenetics of sheep. Alma-Ata, USSR; Nauka: *Referativnyi Zhurnal* 11.58.371., 127 pp.

2089. Musinov, Y. Response of lambs to intensive husbandry. *Veterinariya* No. 9: 33.
2090. Musinov, Y. Resistance of lambs to disease under conditions of intensive husbandry. *Trudy Vsesoyuznogo Instituta Eksperimental'noi Veterinariii* 49: 86.
2091. Mutanda, L. N. Rotavirus antibodies in animals in Kenya. *Bulletin of Animal Health and Production in Africa* 27 (1): 87.
2092. Muzichin, S. I., and B. E. H. Ali. A study of sheep pox in the Sudan. *Bulletin of Animal Health and Production in Africa* 27 (2): 105.
2093. Myagkaya, G., and W. T. Daems. Fusion of erythro lysosomes in epithelial cells of sheep placenta. *Cell Tissue Research* 203 (2): 209.
2094. Myagkaya, G., Schellens, J. P. M., and H. Vreeling-Sindelarova. Lysosomal breakdown of erythrocytes in the sheep placenta. An ultrastructural study. *Cell and Tissue Research* 197 (1): 79.
2095. Myers, D. M., and V. M. Varela-Diaz. Serodiagnosis of ram epididymitis by counterimmunoelectrophoresis, using *Brucella ovis* surface R antigens. *Journal of Clinical Microbiology* 10 (4): 451.
2096. Myhrvold, V. Cryopreservation of sheep red blood cells. 1. Experiments with polyvinylpyrrolidone and other protective agents. 2. Purified polyvinylpyrrolidone and hydrolyzed starch as protective agents. 3. Complement titrations with frozen sensitized cells. *Acta Veterinaria Scandinavica* 20 (4): 525, 531 and 537.
2097. Myhrvold, V. Cryopreservation of sheep red blood cells. 3. Complement titrations with frozen sensitized cells. *Acta Veterinaria Scandinavica* 20 (4): 537.
- N
2098. Nadkarni, U. G., and K. C. Raut. Optimum flock size for ovines under migratory and stationary conditions. *Indian Journal of Animal Sciences* 49 (5): 356.
2099. Nain, S. P. S., and R. C. Pathak. The effect of chick interferon on growth of ovine parainfluenza-3 virus in lamb kidney cell culture. *Haryana Veterinarian* 18 (2): 140.
2100. Najdenov, T., Bozhinova, O., Dimitrova, R., and T. Zhelyazkov. Biological evaluation of ensilaging and dehydrating maize. 8. *Zhivotnov'd Nauki* 16 (5): 98.
2101. Najpande, P. G., Jamdar, M. N., Shrivastava, A. M., and I. C. Datta. Inflammatory response in the placental attachment of sheep following experimental infections with *Brucella melitensis*. *Indian Journal of Experimental Biology* 17 (8): 830.
2102. Nakahara, K., Ohkuda, K., and N. C. Staub. Effect of infusing histamine into pulmonary or bronchial artery on sheep pulmonary fluid balance. *American Review of Respiratory Disease* 120 (4): 875.
2103. Nakamura, Y., Tada, Y., Shibuya, H., Yoshida, J., and R. Nakamura. Influence of concentrates on the nitrate metabolism of microorganisms in rumen of sheep. *Japanese Journal of Zootechnical Science* 50 (11): 782.
2104. Nancarrow, C. D., Evison, B. M., Scaramuzzi, R. J., and K. E. Turnbull. Detection of induced death of embryos in sheep by the rosette inhibition test. *Journal of Reproductive Fertility* 57 (2): 385.
2105. Napier, K. M., and L. P. Jones. The efficiency of visual classing of Merino sheep for wool production. Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England, 404 pp.
2106. Naryana, K. Preliminary studies on cholinergic control of pituitary gonadotrophin secretion in the ewe. *Research in Veterinary Science* 27 (2): 141.
2107. Narayana, K., and H. Dobson. Alpha-adrenergic control of gonadotrophin secretion in the ewe. *Journal of Veterinary Pharmacology and Therapeutics* 2 (1): 47.
2108. Narayana, K., and H. Dobson. Effect of administration of antibody against GNRH on preovulatory LH and FSH surges in the ewe. *Journal of Reproduction and Fertility* 57 (1): 65.
2109. Narayanaswamy, M. Note on reproductive efficiency of Bannur ewes. *Indian Journal of Animal Research* 13 (2): 107.
2110. Narinder, S. General performance of sheep flock of Rajasthan desert under arid conditions. *Indian Journal of Animal Sciences* 49 (4): 273.
2111. Narita, M., Inui, S., and Y. Hashiguchi. The pathogenesis of congenital encephalopathies in sheep experimentally induced by Akabane virus. *Journal of Comparative Pathology* 89 (2): 229.
2112. Nascimento, S. J. do. Influence of diet and intestinal parasites on hemogram of lambs. *Arquivos da Escola de Veterinaria de Universidade Federale de Minas Gerais* 31 (3): 477.
2113. Nascimento, E. F. do, Reis, R., Carvalho, A. U. de, Leite, R. C., and A. A. Simplicio. Endemic ethmoid tumors in sheep. *Arquivos Escuela Veterinaria Universidad Federal Minas Gerais* 31 (3): 337.
2114. Natarajan, N., Ganesakale, D., and V. Rathnasabapathy. Standardization of

- breeding records. Correction factors to estimate body weight at 300 days of age of Madras Red and Mandya Breeds of sheep. *Cheiron* 8 (1): 49.
2115. Nath, K., Vijjan, V. K., Krishna, G., and S. K. Ranjhan. Relative value of single-cell proteins (SCP) and groundnut-cake as a protein supplement in the ration of lambs. *Indian Journal of Animal Sciences* 49 (3): 199.
2116. Nathanielsz, P. W., and D. A. Fisher. Thyroid function in the perinatal period. *Animal Reproduction Science* 2 (1/3): 57.
2117. Nathanson, N., Petursson, G., Georgsson, G., Palsson, P. A., Martin, J. R., and A. Miller. Pathogenesis of Visna. IV. Spinal fluid studies. *Journal of Neuropathology and Experimental Neurology* 38 (3): 197.
2118. Naumann, J., and G. Neumann. Oxytocinase activity in pregnant domestic animals. *Monatshefte für Veterinärmedizin* 34 (15): 563.
2119. Naurzaliev, M., Sisengaliev, K., Satbergenov, B., and U. Mukashev. Effect of early mating of rams on subsequent reproductive value. *Vestnik Sel'Skokozyaistvennoi Nauki Kazakhstana* 22: 7: 52.
2120. Nawaz, M., and F. H. Khan. Pharmacokinetics and urinary excretion of sulphadimidine in sheep and goats. *Journal of Veterinary Pharmacology and Therapeutics* 2 (2): 129.
2121. Neal, C. A. L., Glasgow, E. F., Atkins, R. C., and N. M. Thomson. Glomerular cultures from normal and diseased animal and human kidneys. *Journal of Anatomy* 128 (3): 658.
2122. Neal, W. A., Lewis, J. P., Welch, E. T., Litcher, C. L., Moores, R. R., and C. S. Wright. Inhibition of erythropoiesis by plasma components from sheep, goats and rabbits. *American Journal of Veterinary Research* 40 (4): 493.
2123. Nedkvitne, J. J. Effect of nutrition and shearing before the mating season on the breeding activity in female lambs. Paper, 30th annual meeting, European Association for Animal Production. No. Ms 4.6.
2124. Neill, A. R., Grime, D. W., Snoswell, A. M., Northrop, A. J., Lindsay, D. B., and R. M. C. Dawson. The low availability of dietary choline for the nutrition of the sheep. *Biochemical Journal* 180 (3): 559.
2125. Nejmark, L. Bile excretion in sheep. *Zeszyty Naukowe Akademii Rolniczej We Wrocławiu, Weterynaria* 36: 120-133.
2126. Nekipelovak, R. A., Papikhina, K. M., Gordeev, Y. S., and S. Aryngazin. The efficacy of cambendazole against intestinal nematodes. *Veterinariya* No. 9: 45.
2127. Nemeth, P., Horvath, Z., and G. Kelenyi. T-cell lymphoblastoma in sheep. *Acta Veterinaria* 27 (3): 303.
2128. Nepesov, B. Efficiency of sheep rearing in the central Karakum desert. Ashkhabad, USSR, Ylym, 1979. 156 pp.
2129. Nestic, L., and M. Kadic. Contribution to the knowledge of histophysiological characteristics of the pineal gland of ewes during pregnancy. *Pineal Gland of Vertebrates Including Man. Progress in Brain Research* 52: 437.
2130. Nestic, L., and L. Babic. Histophysiological characteristics of the subcommissural organ of ewes over the annual cycle. *Veterinariya* 28 (1): 53.
2131. Netherlands, Gezondheidsdienst voor dieren in Friesland. *Sheep health care. 59E Jaarverslag, Leeuwarden 1979*, 93-97.
2132. Netherlands, Gezondheidsdienst voor Dieren in Friesland. *Sheep health in Friesland province during 1979. 60E Jaarverslag, Leeuwarden, Netherlands*, p. 89.
2133. Netherlands, Stichting Gezondheidsdienst voor Dieren in Drenthe. *Animal Health Service for animals in Drenthe Province, Netherlands, Report for 1978. Assen (1979)*, 71 pp.
- 2133-A. Netherlands, Stichting Gezondheidsdienst voor Dieren in de Provincie Groningen. *Coccidiosis in sheep. 32E Jaarverslag, Groningen, Netherlands*, p. 88.
2134. New Zealand Animal Health Division. *Laboratory Reports, Autumn 1979. Surveillance, Wellington, New Zealand* 6 (3): 9.
2135. New Zealand Animal Health Division. *Horse, cattle, sheep, goat in New Zealand, 1974-1978. Dermatophilosis. Surveillance, Wellington, New Zealand* 1979, 6 (3): 4.
2136. New Zealand Department of Scientific and Industrial Research. *Report for the year ended 31 March 1979. Wellington, New Zealand: P. D. Hasselberg, Government Printer*, 64 pp.
2137. New Zealand Meat and Wool Boards' Economic Service. *Supplement to the sheep and beef farm survey 1976-77. Some further analysis of production and financial data from the sheep and beef farm survey. Publications, New Zealand Meat and Wool Boards' Economic Service, No. 1796*.
2138. New Zealand Meat and Wool Boards' Economic Service. *Annual review of the sheep and beef industry 1978/79. Publication, New Zealand Meat and Wool*

- Boards' Economic Service, No. 1813, 40 pp.
2139. New Zealand Meat and Wool Boards' Economic Service. Sheep and beef farm survey 1977/78. Production and financial analysis from a sample of sheep and beef farms for the season July 1st to June 30th. Publications, New Zealand Meat and Wool Boards' Economic Survey, No. 1816, 55 pp.
2140. New Zealand, Ministry of Agriculture and Fisheries. The Animal Health Division in 1978. Surveillance 6 (2): 20 pp.
2141. New Zealand, Ministry of Agriculture and Fisheries. Annual Report of Agricultural Research Division 1977-1978. Wellington, New Zealand, Government Printer, 1979. 252 pp.
2142. New Zealand, Ministry of Agriculture and Fisheries. Effect of PMSG treatment on ovulation rate of ewes fed a high level of coumestrol. Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries, Annual Report of Research Division 1977-78, Hamilton, New Zealand, 252 pp.
2143. New Zealand Hydatids Council. 19th Annual report for the year ended 31 March 1979. Wellington, New Zealand, Ministry of Agriculture and Fisheries, 28 pp.
2144. Newhook, J. C., and P. T. Smith. The role of the muscle cricopharyngeus in the suckling lamb. Journal of Anatomy 128 (3): 662.
2145. Newton, J. E. Intensive systems on lowland grass. In: The Management and Diseases of Sheep. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
2146. Newton, J. E., and J. S. Fenlon. The performance of Masham ewes. Animal Production 29 (1): 69.
2147. Nicander, L. Fine structure of principal cells in the initial segment of the epididymal duct in the ram. Zentralblatt für Veterinärmedizin 8 (4): 318.
2148. Nicander, L., and K. N. Kvisgaard. Modified endoplasmic reticulum in the epididymal epithelium of ruminants. Journal of Ultrastructure Research 69 (1): 147.
2149. Nicholson, J. W. G., and R. E. McQueen. Feeding value of ensiled mixtures containing arumen residue. Journal of Animal Science 49 (suppl. 1): 138.
2150. Nicholson, T. Some effects of insulin on eating and rumination. Annales de Recherches Veterinaires 10 (2-3): 231.
2151. Nicholson, W. E., Barton, R. N., Puett, D., Orth, D. N., and G. W. Liddle. Evidence for renotropic activity in ovine pituitaries. Endocrinology 105 (1): 16.
2152. Nicolas, J. A., Pestre-Alexandre, M., Chauchef, Ms. S., Mounier, M., and M. L. Ferial. Importance of *Erysipelothrix insidiosa* in the infectious arthritis of sheep. Bulletin de L'Académie Veterinaire de France 52 (1): 33.
2153. Nicoias, J. A., Pestrealexandre, M., Chauchef, S., Mounier, M., and M. L. Ferial. Attempt of vaccination against sheep salmonellosis. 1. Revue de Médecine Veterinaire 130 (4): 569.
2154. Nicolas, J. A., Pestrealexandre, M., Delahaye, J., Chauchef, S., Mounier, M., and M. L. Ferial. Attempt of oral vaccination against sheep salmonellosis to *Salmonella abortus ovis*. 2. Revue de Médecine Veterinaire 130 (6): 891, and 895.
2155. Nicolet, J., Tontis, A., Giger, T., Schallibaum, M., Wuthrich-Parviainen, P., Krawinkler, M., Paroz, P., Bestetti, G., and P. H. Boss. *Mycoplasma ovipneumoniae* in an enzootic, proliferative, interstitial pneumonia of sheep. Schweizer Archiv für Tierheilkunde 121 (7): 341.
2156. Nicolle, C., Esnault, C., and M. Courot. A cytophotometric study of ram spermatozoon DNA and Nucleoproteins. Annales de Biologie, Animale, Biochimie, Biophysique 19 (6): 1817.
2157. Niebieszczanski, H. Prolapse of the vaginal portion of the cervix uteri in sheep. Zycie Weterynaryjne 54 (2): 47.
2158. Niedermuller, H., and I. Haider. Plasma levels of various enzymes and metabolites of cattle and sheep in Syria. Wiener Tierärztliche Monatsschrift 66 (3): 88.
2159. Nikitchanka, I. N. Improvement of methods of selection. Genetic research in animal husbandry. Vyestsi Akad Navuk BSSR Syer Syel'skhaspad Navuk 0 (2): 87.
2160. Nikitin, V. Y., and P. E. Kazachek. The reproductive function in sheep of the caucasian breed. Veterinariya (1): 62.
2161. Nikolic, D., and D. Trajic. Main characteristics of the R1 Generation crosses of the Sjenica sheep and ameliorators used. Arhiv 32 (120): 133.
2162. Nikolov, N. V., and P. Zurliiski. Pathological changes in experimental nematodiaris in lambs. Veterinarnomeditsinski Nauki 16 (8): 29.
2163. Nikov, S., and G. Mikhailov. Clinical and experimental study of chronic poisoning with herbazin-50 in sheep. Veterinarnomeditsinski Nauki 16 (2): 19.
2164. Ninova, I. Effect of complete mixed feeds with different protein content on fattening lambs. Zhivotnov'dni Nauki 16 (5): 29.

2165. Nishino, S., Kondo, S., and K. Ogino. Effects of dietary potassium level on mineral metabolism in sheep. *Journal of the College of Dairying (Japan)* 8 (1): 43.
2166. Nishino, S., Kondo, S., and K. Ogino. Determination of acid-insoluble ASH as index substance of digestion trials with sheep and lactating cows. *Journal of the College of Dairying (Japan)* 8 (1): 23.
2167. Niswender, G. D., and M. A. Diekmann. LH receptors in the ovine corpus luteum during the estrous cycle and early pregnancy. In: *Ovarian Follicular and Corpus Luteum Function*. Plenum Press, New York.
2168. Nitter, G., and W. Schlote. Role of maternal effects for selection with examples from sheep breeding. *Züchtungskunde* 51 (5): 380.
2169. Nitter, G., and W. Schlote. Maternal effects and ram evaluation. Paper, 30th annual meeting, European Association for Animal Production, No. G 2.4.
2170. Noakes, D. E. The normal breeding animal. In: *Laing, J. A., Fertility and Infertility in Domestic Animals*, Bailliere and Tindall, London, England.
- 2170-A. Nobis, V. G. Contribution to taxonomy of the wild sheep of Cyprus (*Ovis ammon ophion* Blyth, 1841). *Zietschrift für Säugetierkunde* 44 (1): 55.
2171. Noble, R. C., Shand, J. H., and A. W. Bell. Fetal to maternal transfer of palmitic acid and linoleic acid across the sheep placenta. *Biology of Neonate* 36 (3/4): 113.
2172. Nolan, J. V., and S. Stachiw. Fermentation and nitrogen dynamics in Merino sheep given a low-quality-roughage diet. *British Journal of Nutrition* 42 (1): 63.
2173. Norman, L. M., and W. Hohenboken. Genetic and environmental effects on internal parasites, foot soundness and attrition in crossbred ewes. *Journal of Animal Science* 48 (6): 1329.
2174. Norris, J. J., and M. P. Boland. Induction of parturition in sheep with corticosteroids. *Faculty of General Agriculture, Research Report 1976-77*. Dublin, Irish Republic.
2175. Norris, J. J., and M. P. Boland. Pregnancy diagnosis in sheep using ultrasonics. *Faculty of General Agriculture, Research Report 1976-77*.
2176. Nott, D. B. Hydatid disease in man—past, present and future. *Australian Veterinary Journal* 55 (3): 136.
2177. Nour, A. M., Abou Akkada, A. R., el-Shazley, K., Naga, M. A., Borhami, B. E., and M. S. Abaza. Effect of increased levels of urea in the diet on ruminal protozoal counts in four ruminant species. *Journal of Animal Science* 49 (5): 1300.
2178. Nouws, J. F. M., and G. Ziv. Serum chloramphenicol levels and the intramuscular bioavailability of several parenteral formulations of chloramphenicol in ruminants. *Veterinary Quarterly* 1 (1): 47.
2179. Nuwanyakpa, M., Ilg, H., Bolsen, K., and G. Posler. Summer annual hays and silages for growing lambs. *Journal of Animal Science* 49 (suppl. 1): 108.
2180. Nwosu, U. C., Anday, E. K., Kaplan, M. M., Utiger, R. D., and M. Delivoria-Papadopoulos. Lack of association of parturition with antepartum surge of triiodothyronine in the fetal lamb. *Pediatric Research* 13 (4, part 2): 383.
2181. Nwosu, U. C., Anday, E. K., Kaplan, M. M., Utiger, R. D., and M. Delivoria-Papadopoulos. Elevation of 3,3',5' triiodothyronine as a possible marker for intrauterine distress in the fetal lamb. *Pediatric Research* 13 (4, part 2): 361.
2182. Nwosu, U. C., Kaplan, M. M., Utiger, R. D., and M. Delivoria-Papadopoulos. Plasma triiodothyronines in fetal sheep. Effects of illness and thyroidectomy. *Hormone Metabolism Research* 11 (9): 509.
2183. Nyerges, A. E. The ecology of domesticated animals under traditional management in Iran: preliminary results from the Turan Biosphere Reserve. *Pastoral Network Paper*. Agricultural Administration Unit, Overseas Development Institute, No. 9d, 44 pp.

O

2184. Obara, Y., and K. Shimbayashi. Intra-ruminal injection of urea and changes in secretion of parotid saliva in sheep. *British Journal of Nutrition* 42 (3): 497.
2185. O'Connell, E., and M. F. Wilkins. Serological response of sheep to *Sarcocystis* spp. *New Zealand Journal of Zoology* 6 (4): 649.
2186. O'Donnell, I. J. Allergens, immunoglobulin E and the Australian livestock industry. *Victorian Veterinary Proceedings* 37: 9.
2187. O'Donoghue, P. J. The ovine sarcosporidia reviewed. Abstracts of papers presented at the 23rd Conference of Australian Society for Parasitology, Leura, NSW, Australia VI + 57 pp.
2188. Oerskov, E. R. Utilization of cereals for sheep and implications of processing. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
2189. Oerskov, E. R., and D. A. Grubb. Growth of store lambs on cereal-based diets with protein or urea. *Animal Production* 29 (3): 371.
2190. Oerskov, E. R., Grubb, D. A., Smith, J. S., Webster, A. J. F., and W. Corrigan.

- Efficiency of utilization of volatile fatty acids for maintenance and energy retention by sheep. *British Journal of Nutrition* 41 (3): 541.
2191. Oerskov, E. R., Grubb, D. A., and R. Stinton. The effect of dry-matter concentration and preservation method of whole barley on feed utilization by early-weaned lambs. *Animal Production* 28 (3): 431.
2192. Oerskov, E. R., Grubb, D. A., Wenham, G., and W. Corrigan. The sustenance of growing and fattening ruminant by intra-gastric infusion of volatile fatty acid and protein. *British Journal of Nutrition* 41 (3): 553.
2193. Oerskov, E. R., MacDevmid, A., Barnes, B. J., Grubb, D. A., and B. A. Lukins. Effect of sodium hydroxide treatment on digestibility of oat., barley, wheat and maize and on utilization of sodium hydroxide oats and barley by lambs and steers. *Animal Production* 28 (3): 432.
2194. Ogata, M. Mycoplasma infection. *Japanese Journal of Bacteriology* 34 (1): 66.
2195. Ogedigbe, E. M. Investigations on the biology of *Hyalomma impressum* under laboratory conditions. Thesis, Munich University, German Federal Republic, 40 pp.
2196. Ogletree, M. L., and K. L. Brigham. Indomethacin augments endotoxin induced increased lung vascular permeability in sheep. *American Review of Respiratory Diseases* 119 (4, part 2): 383.
2197. Ogunrinade, A. A preliminary observation on the pathogenicity of *Fasciola gigantica* in pregnant West African Dwarf ewes. *Revue d'Elevage et de Medecine Veterinaire des Pays tropicaux* 32 (3): 247.
2198. Ogunsusi, R. A. Anthelmintic efficacy of oxfendazole and haloxon against arrested *Haemonchus contortus* larvae in sheep. *Research in Veterinary Science* 27 (1): 129.
2199. Ogunsusi, R. A. Termination of arrested development of the trichostrongyles of sheep in northern Nigeria. *Research in Veterinary Science* 26 (2): 189.
2200. Ogunsusi, R. A. Pasture infectivity with trichostrongylid larvae in the northern Guinea savanna of Nigeria. *Research in Veterinary Science* 26 (3): 320.
2201. Ogunsusi, R. A., and M. Eysker. Inhibited development of trichostrongylids of sheep in northern Nigeria. *Research in Veterinary Science* 26 (1): 103.
2202. Ohwada, S., and H. Tamate. DNA microphotometry on ruminal epithelial cells in the sheep. *Tohoku Journal of Agricultural Research* 30 (1): 16.
2203. Okamoto, M. Effects of chopped and ground hay feeding on the ruminating behaviour of sheep. *Bulletin of the Hokkaido Prefectural Shintoku Animal Husbandry Experiment Station*, No. 10: 37.
2204. Okamoto, M. Relationship between hay intake and ruminating behaviour of sheep. *Bulletin of Hokkaido Prefectural Shintoku Animal Husbandry Experiment Station*, No. 10: 41.
2205. Okamoto, M. Studies on ruminating behaviour and the digestive physiological significance of rumination. Report of Hokkaido Prefectural Agricultural Experiment Stations No. 30: 72 pp.
2206. Okoh, A. E. J. Abortion in sheep near Kano, Nigeria. *Tropical Animal Health and Production* 12 (1): 11.
2207. Oldham, C. M., and G. B. Martin. Stimulation of seasonally anovular Merino ewes by rams. II. Premature regression of ram-induced corpora lutea. *Animal Reproduction Science* 1 (4): 291.
2208. Oldham, C. M., Martin, G. B., and T. W. Knight. Stimulation of seasonally anovular Merino ewes by rams. I. Time from introduction of the rams to the pre-ovulatory LH surge and ovulation. *Animal Reproduction Science* 1 (4): 283.
2209. Olek, P. C., and D. J. Lisk. Toxicologic studies with sheep fed colored magazines and newsprint. *Cornell Veterinarian* 69 (4): 356.
2210. Oliveira, G. P. Occurrence of *Railletia auris* in *Ovis aries* in Brazil. *Cientifica* 7 (1): 149.
2211. Oliveira, G. P., Novaes, A. P., Costa, A. J., and O. Andrade. Photosensitization in sheep by *Pithomyces chartarum* in *Bronchia decumbens* pastures in the Sao Carlo region, Sao Paulo State, Brazil. *Cientifica* 6 (7): 17.
2212. Oliver, R. E. Studies on ovine progressive pneumonia. *Dissertation Abstracts International* 40B: 4: 1573.
2213. Olsen, J. D. Method for repeated or prolonged rumen infusion without establishing an open fistula. *American Journal of Veterinary Research* 40 (5): 730.
2214. Olson, T. A., and P. W. Loggings. Performance of sheep of AA, BB and AB hemoglobin types. *Journal of Animal Science* 49 (suppl. 1): 167.
2215. Olujic, M., Mihajlovic, B., Ilic, M., Asanin, R., Popovic, C., and G. Karanflovski. Etiology of ovine enzootic abortion. *Veterinarski Glasnik* 33 (6): 423.
2216. Olusanya, S. K., and F. O. Adepoju. Osmotic fragility of erythrocytes of some Nigerian species of domestic ruminants. *Bulletin of Animal Health and Production in Africa* 27 (4): 237.
2217. Oluyemi, J. A., Longe, B., and R. Esubi. Replacing corn with sun-dried manure of

- laying pullet, mature pig, sheep and cow. *Poultry Science* 38 (4): 852.
2218. Omel'chenko, E. B., Sayatov, M. K., Shuratov, I. K., and T. P. Kolod'ko. Thermolabile inhibitors of influenza virus in sera of cold blooded and warm blooded animals, birds and humans. *Izvestiya Akademii Nauk Kazakhskoi SSR Seriya Biologicheskaya* 17 (1): 52.
2219. Orcasberro, R., and G. S. Smith. Intake and digestibility of fibrous hay by sheep fed sewage solids in supplemental feed. *Journal of Animal Science* 49 (suppl. 1): 176.
2220. Orourke, P. K., and P. S. Hopkins. Effects of iodine supplementation of pregnant and lactating ewes on the growth and maturation of their offspring. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (96): 19.
2221. Orpin, C. G., and A. J. Letcher. Effect of absence of rumen ciliate protozoa on the rumen fluid volume in sheep. *Society for General Microbiology Quarterly* 7 (1): 35.
2222. Orr, M. B. et al. A syndrome of dental abnormalities of sheep. II. The pathology and radiology. *New Zealand Veterinary Journal* 27 (12): 276.
2223. Orr, R. J., and J. E. Newton. The effect of litter size on the intake and performance of ewes offered concentrates and grass silage in late pregnancy. *Animal Production* 28 (3): 451.
2224. Orr, R. J., Newton, J. E., and N. E. Young. A note on a comparison of different weaning policies for ewes suckling triplets at pasture. *Animal Production* 28 (2): 275.
- There is No. #2225.
2226. Orskov, F. R. Recent information on processing of grain for ruminants. *Livestock Production Science* 6 (4): 335.
2227. Orskov, E. R., and D. A. Grubb. Growth of store lambs on cereal-based diets with protein or urea. *Animal Production* 29 (3): 371.
2228. Orskov, E. R., and D. A. Grubb. Minimal nitrogen metabolism of lambs. *Proceedings of the Nutrition Society* 38 (2): A24.
2229. Orskov, E. R., Grubb, D. A., Smith, J. S., Webster, J. F., and W. Corrigan. Efficiency of utilization of volatile fatty acids for maintenance and energy retention by sheep. *British Journal of Nutrition* 41 (3): 541.
2230. Orshov, E. R., Grubb, D. A., and R. Stirton. The effect of dry matter concentration and preservation method of whole barley on feed utilization of early weaned lambs. *Animal Production* 28 (3): 431.
2231. Orskov, E. R., Macdearmid, A., Barnes, B. J., Grubb, D. A., and B. A. Lukins. Effect of sodium hydroxide treatment on digestibility of oats, barley, wheat and maize and on utilization of sodium hydroxide oats and barley by lambs and steers. *Animal Production* 28 (3): 432.
2232. Orskov, E. R., and I. McDonald. The estimation of protein degradability in the rumen from incubation measurements weighted according to rate of passage. *Journal of Agricultural Science* 92 (2): 499.
2233. Orsi, A. M., Melo, V. R., and M. C. Oliveira. Occurrence of intraepithelial lymphocytes in the bull and ram epididymis. *Resumos do IV Encontro de Pesquisas Veterinarias 8-9 Novembro, 1979. Jabotioabal, Brazil; Faculdade Ciencias Agrarias E Vet. Universidad de Nacional Estado Sao Paulo*, 43 pp.
2234. Osburn, B. I., Stott, J. L., Barber, T. L., and M. Sawyer. Development of an inactivated bluetongue virus vaccine. *Federation Proceedings* 38 (3), II: 1159.
2235. O'Shea, J. D., Cran, D. G., and M. F. Hay. The small luteal cells of the sheep. *Journal of Anatomy* 128 (3): 642.
2236. Oshiro, S., Sasaki, Y., Hamasaki, M., and T. Tsuda. Effects of reserpine on physiological responses of cold exposed sheep. *Japanese Journal of Zootechnical Science* 50 (9): 609.
2237. Osikowski, M., Borys, B., and R. Dulwicz. Production and quality of wool of fattened lambs of different commercial crossbred types from Polish merino ewes and mutton-type rams. *Roczniki Naukowe Zootechniki* 6 (1): 313.
2238. Osman, A. M. Bilateral vasectomy in immature lambs—long term effects. *Zucht-hygiene* 14 (2): 78.
2239. Osman, D. I., and L. Ploen. Fine structure of the modified sertoli cells in the terminal segment of the seminiferous tubules of the bull, ram and goat. *Animal Reproduction Science* 2 (4): 343.
2240. Ostaszewski, P. Influence of phenolamine on blood glucose concentration after feeding in sheep with alloxan diabetes. *Acta Physiologica Polonica* 30 (1): 149.
2241. Ostrovskii, N. S., and V. I. Il'chenko. Prevention of wounds during sheep shearing. *Veterinariya*, No. 9: 61.
2242. Osuagwuh, A. I., and J. U. Akpokodje. Infectious keratoconjunctivitis in goats and sheep in Nigeria. *Veterinary Record* 105 (6): 125.
2243. Osuji, P. O., and C. Devers. Nitrogen utilization of growing-finishing Barbados Blackbelly lambs. *Journal of Agricultural Science* 92 (1): 113.
2244. Ouhelli, H., and A. Dakkak. Sheep monieziosis epidemiological peculiarities in Morocco. *Revue de Medecine Veterinaire* 130 (12): 1653.

- No 2245.
2246. Oui, U. I., and D. N. Mowat. Nutritive value of thermo ammoniated and steam treated maize stover. 1. Intake digestibility and nitrogen retention. *Animal Feed Science and Technology* 4 (3): 177.
2247. Oui, U. I., Mowat, D. N., and J. G. Buchanan-Smith. Nutritive value of thermoammoniated and stem-treated maize stover. 2. Rumens metabolites and rate of passage. *Animal Feed Science and Technology* 4 (3): 187.
2248. Overas, J., Ulvund, M. I., Bakkevig, S., and R. Eiken. Poisoning in sheep induced by the mushroom *Continarius speciosissimus*. *Acta Veterinaria Scandinavica* 20 (1): 148.
2249. Owczarewicz, A., and J. Karpinski. Evaluation of the histological and histochemical changes in the liver of sheep in experimental occlusion of the jejunum. *Medycyna Weterynaryjna* 35 (8): 482.
2250. Ozer, Z. The influence of passage through sheep on the seeds of meadow plants. *Weed Research* 19 (4): 247.
2251. Ozkoc, U. Studies in the serological diagnosis of *Babesia ovis* infection in sheep by fluorescent antibody technique. *Pendik Veteriner Mikrobiyoloji Enstitüsü Dergisi* 11 (2): 70.
2252. Ozmen, M., and M. Pir. Bacteriological and serological studies on the causes of abortion of sheep and goat fetuses sent to the Bornova Veterinary Research Institute 1971-1977. *Pendik Veteriner Mikrobiyoloji Enstitüsü Dergisi* 11 (2): 5.
- P
2253. Pachauri, V. C., and S. S. Negi. A note on the utilization by yearling Gaddi ewes of mixed *Zea mays* and *Sorghum vulgare* green supplemented with three levels of linseedcake. *Indian Journal of Animal Sciences* 49 (4): 322.
- 2254-A. Padove, S. J., Bryant, D. M., Brigham, K. L., and C. R. McKeen. Diphenhydramine reduces endotoxin induced increased lung vascular permeability in unanesthetized sheep. *American Review of Respiratory Diseases* 119 (4, part 2): 384.
- 2254-B. Pagani, M., Mirsky, I., Baig, H., Manders, W. T., Kerkhof, P., and S. F. Vatner. Effects of age on aortic pressure-diameter and elastic stiffness-stress relationships in unanaesthetized sheep. *Circulation Research* 44 (3): 420.
2255. Pak, V. B., and V. N. Sharganov. Verifying the objectivity of quality criteria of urea concentrate based on its effective use in fattening lambs. *Doklady Vsesoyuznoi Ordenu Lenina Akademii Sel'Skokhozyaistvennykh Nauk*, No. 7: 26.
2256. Pak, V. B., and V. N. Sharganov. Testing the objectivity of quality criteria for carbamide concentrate from the effectiveness of feeding it to nursing lambs. *Soviet Agricultural Science* 0 (7): 41.
2257. Pakhunova, L. V., and Z. V. Morozova. Availability of nutrients to animals on pastures. *Zhivotnovodstvo*, No. 7: 41.
2258. Palermo, D. Residues of Morantel in meat and internal organs of sheep. *Archivio Veterinario Italiano* 30 (3-4): 110.
2259. Palermo, D., and G. Q. Maccotta. Changes in the values of blood minerals in sheep with gastrointestinal trichostrongylid infections. *Rivista di Zootecnia e Veterinaria*, No. 2: 61.
2260. Palfi, V., and S. Belak. Protective effect of vaccination against experimental adenoviral pneumoenteritis in fattening lambs. *Veterinary Microbiology* 3 (3): 191.
2261. Palfi, V., and S. Belak. Specific control against pneumoenteritis of lambs caused by adeno viruses. 2. Protective effect of monovalent and bivalent vaccines in fattening lambs. *Magyar Allatorvosok Lapja (Hungarian Veterinary Journal)*: 34 (1): 59.
2262. Palfi, V., and S. Belak. Recall phenomenon induced with ovine adenoviruses. Brief report. *Archives of Virology* 61 (1/2): 169.
2263. Palfii, F. Yu., Katrechko, L. I., and M. I. Teslyuk. Certain metabolic indices in the rumen and blood of sheep fed granulated and pelleted feed mixtures with different urea levels. *Soviet Agricultural Science* 0 (11): 60.
2264. Palfii, F. Yu., Katrechko, L. I., and M. I. Teslyuk. Feed mixtures with different amounts of urea. *Ovtsevodstvo*, No. 10: 25.
2265. Palfii, F. Yu., Katrechko, L. I., and M. I. Teslyuk. Metabolism in rumen and blood of sheep fed on loose or pelleted feed mixtures with different amounts of urea. *Doklady Vsesoyuznoi Ordenu Lenina Akademii Sel'Skokhozyaistvennykh Nauk*, No. 11: 38.
2266. Paling, R. W., Jesseet, D. W., and B. R. Heath. The occurrence of infectious diseases in mixed farming of domesticated wild herbivores and domestic herbivores including camels in Kenya. Part 1. Viral diseases: a serologic survey with special reference to foot-and-mouth disease. *Journal of Wildlife Diseases* 15 (2): 351.
2267. Paliwal, O. P., and M. R. Baxi. Pulmonary myxoma in sheep. *Indian Veterinary Journal* 56 (10): 892.
2268. Paliwal, O. P., Krishna, L., and S. B. Kulshrestha. Studies on the mortality in lambs and kids. II. Pathological and mi-

- crobiological observations. *Indian Veterinary Medical Journal* 3 (3): 163.
2269. Pallauf, J., Kirchgessner, M., and R. J. Kellner. Influence of physical structure, cutting date and feeding level on nutrient digestibility on lucerne hay. *Wirtschaftseigene Futter* 25 (4): 198.
2270. Palmer, W. L., and R. L. Cowan. Comparison of deer and sheep digestive capacities. *Journal of Wildlife Management* 43 (3): 798.
2271. Palmieri, A. III. Micro encapsulation and dissolution parameters of undeceno vanillylamide, a potential coyote deterrent. *Journal of Pharmacological Science* 68 (12): 1561.
2272. Pamp, D. E., Goodrich, R. D., Dowdy, R. H., and J. C. Meiske. Performance of lactating goats and lambs fed corn silage grown on sludge-amended soils. *Journal of Animal Science* 49 (suppl. 1): 462 pp.
2273. Panaretto, B. A. Comparisons of the plasma steroid concentration profiles and wool growth responses after administration of two forms of dexamethasone to sheep. *Australian Journal of Biological Sciences* 32 (3): 343.
2274. Panaretto, B. A., and A. L. C. Wallace. Synergistic effects of thiocyanate with flumethasone in inhibiting wool growth in Meriono wethers. *Australian Journal of Biological Sciences* 32 (1): 77.
2275. Pandey, V. S., Mahin, L., and R. Vanbreuseghem. Prevalence and distribution of ringworm by *Trichophyton verrucosum* in sheep in the high altas of Morocco. *Annales de la Society belge de Medecine tropicale* 59 (4): 385.
2276. Panisup, A. S., Gaba, S. C., and V. K. Bhatnagar. Incidence of coenurosis in sheep in Hissar. *Haryana Veterinarian* 18 (1): 53.
2277. Panisup, A. S., Kalra, D. S., and H. V. S. Chauhan. Transposition of arterial trunk in a lamb. *Haryana Veterinarian* 18 (1): 47.
2278. Panisup, A. S., Kalra, D. S., and H. V. S. Chauhan. Relative prevalence of *Eimeria* species in lambs at Hissar (Haryana). *Haryana Veterinarian* 18 (2): 124.
- 2278-A. Panisup, A. S., Kalra, D. S., and H. V. S. Chauhan. Investigation of an outbreak of foot and mouth disease in sheep. *Haryana Agricultural University Journal of Research* 9 (1): 111.
2279. Panitkov, M. A., and G. F. Tsiridin. Organization of veterinary work on a sheep farming complex of 50,000 sheep. *Veterinarnye Problemy Zhivotnovodstva Nechernozemnoi Zony RSFSR*, Edited by V. P. Shishkov, Moscow, USSR, "Kolos," pp. 104-111.
2280. Pant, K. P., Kandasamy, N., and A. L. Arora. Studies on the duration of pregnancy in relation to size of lamb at birth in indigenous and crossbred sheep. *Indian Veterinary Journal* 56 (10): 855.
2281. Pappano, A. J., and E. E. Carmeliet. Epinephrine and the pacemaking mechanism at plateau potentials in sheep cardiac Purkinje fibers. *Pfluegers Archives. Eur. J. Physiology* 383 (1): 17.
2282. Paquay, R., Doize, F., and J. C. Bouchat. Long-term control of voluntary food intake in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 223.
2283. Pardon, P., Marly, J., Girard, J. C., and R. Imbert. Duration and intensity of vaginal excretion of *Salmonella abortusovis* by ewes after abortion. *Bulletin Mensuel de la Societe Veterinaire Pratique de France* 63 (4): 277.
2284. Pardon, P., Sanchis, R., and J. L. Martel. Abortion due to *Salmonella* in ruminants, a review. *Bulletin des Groupements Techniques Veterinaires No. 6-B-165*: 15.
2285. Pareek, P. K., and P. K. Dwaraknath. Possible effects of macro-climatic components on sheep plasma vitamin-A levels. *Indian Veterinary Journal* 56 (12): 997.
2286. Parish, S. M. A method for nonsurgical correction of rectal prolapse in lambs. *Veterinary Medicine and Small Animal Clinician* 74 (6): 871.
2287. Parmeter, S. N. Surface changes and secretory processes in oncospheres of *Taenia ovis* undergoing activation. *New Zealand Journal of Zoology* 6 (4): 649.
2288. Parrott, R. F., and R. V. Davies. Serum gonadotrophin levels in prepubertally castrated male sheep treated for long periods with propionated testosterone, dihydrotestosterone, 19-hydroxytestosterone or oestradiol. *Journal of Reproduction and Fertility* 56 (2): 543.
2289. Parrott, R. F., and F. Hills. Serum prolactin levels in castrated rams at various times of the year and during treatment with androgens or estrogen. *Journal of Endocrinology* 83 (1): 27.
2290. Parry, D. M., McMillen, I. C., Robinson, J. S., and G. D. Thorburn. Immunocytochemical localisation of prolactin and growth hormone in the perinatal sheep pituitary. A morphological and quantitative study. *Cell and Tissue Research* 197 (3): 501.
2291. Parry, H. B. Elimination of natural scrapie in sheep by sire genotype selection. *Nature* 277 (5692): 12.
2292. Parry, I., and J. C. Bell. Response of hill lambs to vitamin B-12. *Animal Production* 28 (3): 456.
2293. Parsonson, I. M., O'Halloran, M. L., Zee, Y. C., and W. A. Snow. The effects of bovine viral diarrhoea-mucosal dis-

- ease (BVD) virus on the ovine foetus. *Veterinary Microbiology* 4 (4): 279.
2294. Partodihardjo, S., Noordin, M., Sugijanto, S. M. D., and S. Djojosoedarmo. Serological survey of brucellosis and leptospirosis in central and east Java and Bali. *Midia Veteriner* 1 (1): 30.
2295. Pash, M. P., Pickering, B. G., Tweed, W. A., and R. J. Ralahniuk. Pressure passive cerebral blood flow in the nonasphyxiated fetus. *Anesthesiology* 51 (suppl. 3): S293.
2296. Pass, M. A., Seawright, A. A., Lambertson, J. A., and T. J. Heath. Lantadene, A toxicity in sheep. A model for cholestasis. *Pathology* 11 (1): 89.
2297. Pastea, E., Popa, V. V., Cinganu, S., and N. Cornila. Morphology and physiology of the oesophageal (reticular) groove and the reticulo-omasal orifice of sheep. *Lucrari Stiintifice Institutul Agronomic N. Balcescu. Seria C: 1977/1978.*, Published 1979. 2/21: 25.
2298. Pastoor, P. W., and A. M. Weitenberg. The use of a modified form of Dalton's curette in the treatment of vaginal prolapse in sheep. *Netherlands Journal of Veterinary Science (Tijdschrift voor Diergeneeskunde)* 104 (11): 479.
2299. Paterson, A. J., and M. T. W. Hearn. Fused rocket immunoelectrophoretic analysis of human and sheep thyroglobulins purified by gas chromatography. *Australian Journal of Experimental Biology and Medical Science* 57 (6): 641.
2300. Patnayak, B. C., Mohan, M., Bhatia, D. R., and A. Hajra. A note on the nutritional value of cowpea, moth (dewgram) and clusterbean fodders fed as hay to sheep. *Indian Journal of Animal Sciences* 49 (9): 746.
- 2300-A. Patterson, J., and D. A. Titchen. Sympathetic and beta adrenergic stimulation of parotid salivary secretion in sheep. *Quarterly Journal of Experimental Physiology Cogn Med Sci* 64 (3): 175.
2301. Patureau-Mirand, P., Grizard, J., and R. Pion. Factors affecting concentration of free amino acids in blood and their effect on the calculation of amino acid requirements in preruminant calves and lambs. *Annales de la Nutrition et de l'Alimentation* 33 (2): 283.
2302. Pautrat, G., and P. Filippi. Evidence for production of the fusion factor during the in vitro infection of sheep choroplexus cells by Visna virus. *Comptes Rendus des Seances de la Societe de Biologie et de ses Filiales* 173 (4): 811.
- 2302-A. Pavlovic, O., and J. Vitic. Proteins and lipoproteins of sheep blood serum. *Acta Veterinaria (Belgrade)* 29 (3/4): 147.
2303. Pavri, R. S., Baxi, A. J., and S. N. Nair. Red cell ATP 2,3-diphosphoglycerate and hemoglobin types in Deccani sheep from Maharashtra India. *Bulletin of Haffkine Institute* 7 (1): 38.
2304. Payneau, A. Part played by ectoparasites in the syndrome of the sheep "on its back." *Annales de Recherches Veterinaires* 10 (4): 567.
2305. Paynter, D. I. Glutathione peroxidase and selenium in sheep. I. Effect of intraruminal selenium pellets on tissue glutathione peroxidase activities. *Australian Journal of Agricultural Research* 30 (4): 695.
2306. Paynter, D. I., Anderson, J. W., and J. W. McDonald. Glutathione peroxidase and selenium in sheep. II. The relationship between glutathione and selenium-responsive unthriftness in Meriono lambs. *Australian Journal of Agricultural Research* 30 (4): 703.
2307. Pearson, L. D., Demartini, J. C., and S. A. Fiscus. Cellular responses in efferent lymph during parapox virus infection in sheep. *Federation Proceedings* 38 (3): 11: 1158.
2308. Pearson, N. J., and J. J. England. Isolation of a chlamydia agent from Rocky Mountain Bighorn sheep. *Journal of Wildlife Diseases* 15 (4): 499.
2309. Peart, J. N., Doney, J. M., and W. F. Smith. Lactation pattern in Scottish Blackface and East Friesland x Scottish Blackface cross-bred ewes. *Journal of Agricultural Science* 92 (1): 133.
2310. Peek, J. M., Riggs, Robert A., and J. L. Lauer. Evaluation of fall burning on bighorn sheep winter range. *Journal of Range Management* 32 (6): 430.
2311. Peeters, L. L. H., Sheldon, R. E., Jones, M. D., Jr., Makowski, E. L., and G. Meschia. Blood flow to fetal organs as a function of arterial oxygen content. *American Journal of Obstetrics and Gynecology* 135 (5): 637.
2312. Pegram, R. G., Roeder, P. L., and J. M. Scott. Two new serotypes of *Pasteurella haemolytica* from sheep in Ethiopia. *Tropical Animal Production* 11 (1): 29.
2313. Pekrov, A., and E. I. Evv. Rumen digestion parameters in lambs fed with pelleted diet. *Annales de Recherches Veterinaires* 10 (2-3): 440.
2314. Pelaez, R., and D. M. Walker. Milk replacers for preruminant lambs: limiting amino acids in two soybean protein isolates determined with a change-over design. *Australian Journal of Agricultural Research* 30 (1): 125.
2315. Pell, J. M., Jeacock, M. K., and D. A. L. Shepherd. Interconversion of glutamate and glutamine in the placenta during development of foetal lambs. *Proceedings of the Nutrition Society* 38 (1): A19.
2316. Penelski, I. Possibilities of using some

- packaging materials for ewes' milk. Kachkaval cheese in retail packs. Nauchni Trudove. Institut po Mlechna Promishlenost 9: 135.
2317. Penning, P. D., and M. J. Gibb. The effect of milk intake on the intake of cut and grazed herbage by lambs. *Animal Production* 29 (1): 53.
2318. Penny, R. H. C., O'Sullivan, B. M., Mantle, P. G., and B. I. Shaw. Clinical studies on tremorgenic mycotoxicoses in sheep. *The Veterinary Record* 105 (17): 392.
2319. Pensuet, P. Establishment of a selection scheme in Texel sheep. *Patre* 269: 37.
2320. Perdigon, G., Gentile, T., and A. Margni. Activation of complement by precipitating and coprecipitating antibodies of various animal species. *Revista Argentina de Microbiologia* 11 (1): 1.
2321. Perez-Trejo, F., Dwyer, D. D., and K. H. Asay. Forage yield phenological development and forage quality of an *Agropyron repens* × *Agropyron spicatum* hybrid. *Journal of Range Management* 32 (5): 387.
2322. Perrett, E. A., Gray, M. E., and M. T. Stahlman. Histochemical identification of chloride secreting cells in the fetal lamb respiratory tract. *Pediatric Research* 13 (4, part 2): 362.
2323. Perkins, J. L., and J. Harp. Influence of zeranol implants on lamb growth. *Arkansas Farm Research* 28 (5): 16.
2324. Perry, B. D. et al. Serological study of ovine toxoplasmosis in Colombia: epidemiological study of a field outbreak. *The Veterinary Record* 104 (11): 231.
2325. Perry, D. A. Effective flystrike control at minimum cost. *Agricultural Gazette of New South Wales* 90 (3): 7.
2326. Perry, R. A., and P. M. Robinson. Cytology of the pars intermedia of the adult sheep. *Journal of Anatomy* 128 (3): 654.
2327. Pessoa, J. F. S., and A. J. Silva. Blood transaminases values in Herbivores. *Revista Portuguesa de Ciencias Veterinarias* 74 (450): 101.
2328. Petery, F., Lorinczi, M., Monostori, E., Zsolnay, L. R., Miklos, K., Ormai, I., Nemeth, M., and K. V. Rajczy. Studies on preimmunization and postimmunization antibodies of sheep. *Annales Immunologica Hungarica* 19 (0): 163.
2329. Peters, G. J., and J. H. Veerkamp. Concentration, synthesis and utilization of phosphoribosylpyrophosphate in lymphocytes of five mammalian species. *International Journal of Biochemistry* 10 (11): 885.
2330. Petersen, G. V., and D. R. Wright. Observations of subcutaneous haemorrhagic speckling in lambs. *New Zealand Veterinary Journal* 27 (8): 166.
2331. Peterson, B. T., Harris, T. R., and K. I. Brigham. Comparison of urea and sodium as indicators of capillary permeability in the lungs of anesthetized sheep. *Microvascular Research* 17 (3): 11.
2332. Petkov, P. Pathological studies of experimental "thiazole-80" poisoning of sheep. *Veterinarnomeditsinski Nauki* 16 (7): 6.
2333. Petkov, A., Dilov, P., and L. Bairakova. A new preparation against fasciolosis. *Veterinarna Sbirka* 77 (6): 44.
2334. Petkov, A., and E. I. Enev. Rumen digestion parameters in lambs fed pelleted diets. *Annales de Recherches Veterinaires* 10 (2-3): 440.
2335. Petkov, K., Madzirov, Z., and R. Ilkovski. Heavy metals (lead and cadmium) as contaminants of the environment. *Veterinarski Glasnik* 33 (7): 511.
2336. Petrov, M. P. Land-use of semi-deserts in central Asia. In: *Management of semi-arid ecosystems*. Amsterdam, Netherlands, Elsevier Scientific Publishing Co., 398 pp.
2337. Petrovic, Z. Ixodidae-vectors of piroplasmoses in the eastern zone of Yugoslavia. XXI World Veterinary Congress, 1-7 July 1979, Moscow, Summaries, Vol. 2, Section III: Parasitology, Moscow, USSR, 62 p.
2338. Petterson, D. S., Howlett, R. M., Robertson, T. A., and J. M. Papadimitriou. Alteration in cell division morphology and motility induced by the toxic principle of lupinosis. *Australian Journal of Experimental Biology and Medical Science* 57 (2): 211.
2339. Pfeffer, A. T., and D. L. Dungworth. Small lesions in the anterior lobes of lungs from lambs. *New Zealand Veterinary Journal* 27 (4): 67.
2340. Pfeiffer, E., Becker, K., Prigge, H., and H. Soller. Studies of energy retention in growing lambs fed diets containing different proportions of NaOH treated straw. *Zeitschrift für Tierphysiologie Tierernährung und Futtermittelkunde* 42 (4): 206.
2341. Pfister, K. An epidemiological investigation on gastrointestinal parasitoses in sheep: 1. Coprological analyses. *Schweizer Archiv für Tierheilkunde* 121 (3): 127.
2342. Pfister, K., and W. Kropf. Epidemiological investigations concerning endoparasites of sheep. 2. Statistical analyses. *Schweizer Archiv für Tierheilkunde* 121 (10): 533.
2343. Pfister, U., Rahn, B. A., Perren, S. M., and S. Weller. Blood supply and bone remodeling following medullary nailing of long bones. *Experimental study in the sheep tibia. Aktuel Traumatol* 9 (4): 191.
2344. Phadke, S. P., Bjugwat, S. V., Kapshikar,

- R. N., and S. D. Ghevari. Listeriosis in sheep and goats in Maharashtra. *Indian Veterinary Journal* 56 (8): 634.
2345. Phernetton, T. M., and J. H. C. Rankin. Effect of prostaglandin 12 on uterine maternal and fetal adrenal blood flow. *Proceedings of Society for Experimental Biology and Medicine* 162 (2): 324.
2346. Philipps, A. F., Dubin, J. W., and J. R. Raye. Maturation of early phase insulin release in the neonatal lamb. *Pediatric Research* 13 (4, part 2): 362.
2347. Philipps, A. F., Dubin, J. W., and J. R. Raye. Alanine stimulated insulin secretion in the fetal lamb. *Pediatric Research* 13 (4, part 2): 979.
2348. Philipps, A. F., Dubin, J. W., and J. R. Raye. Response of the fetal and newborn lamb to glucose and tolbutamide infusions. *Pediatric Research* 13 (12): 1375.
2349. Phillips, D. D., and D. M. Walker. Sequence of limiting amino acids in groundnut protein isolate for the pre-ruminant lamb. *Australian Journal of Agricultural Research* 30 (2): 321.
2350. Phillips, W. A., Webb, K. E., Jr., and J. P. Fontenot. Characteristics of threonine, valine and methionine absorption in the jejunum and ileum of sheep. *Journal of Animal Science* 48 (4): 926.
- No 2351.
2352. Pickering, B. G., Pash, M. J., and R. J. Palahniuk. Effects of ketamine on regional cerebral blood flow in the asphyxiated fetus. *Anesthesiology* 51 (suppl. 3): S294.
2353. Pinar, J. G. Oestrus induction in ewes of breed lacha out of season (field work). *Zootecnia* 28 (10-12): 439.
2354. Piercy, D. W. T., Reynolds, J., and P. R. M. Brown. Reproductive safety studies of oxfendazole in sheep and cattle. *British Veterinary Journal* 135 (5): 405.
2355. Pierzynowski, S. Methods of pancreatic juice collection in sheep in chronic experiments. *Svys Physiological Polonica* 30 (1): 157.
2356. Pion, R., Combe, E., Patureau-Mirand, P., and E. M. Pereira. Digestive utilization of dietary amino acids: effect of endogenous nitrogen and intestinal microflora. *Annales de la Nutrition et de l'Alimentation* 33 (2): 274.
2357. Pirie, H. M. Respiratory diseases of sheep. *Respiratory Diseases of Animals. Notes for a Postgraduate Course*, Glasgow, UK, Veterinary School, 124 pp.
2358. Pirija, O., Hadziosmanovic, A., Kajtaz, J., and M. Duranovic. Possible use of grape waste in mixed feeds for lambs. *Krmiva* 21 (4): 78.
2359. Piterova, L., Aleksandrov, S., Lazarov, I., Stayanov, A., and S. Sandev. Urea in diets for lactating ewes. 3. Effect of starea-44 on blood serum lipids. *Zhivotnov'dni Nauki* 16 (4): 106.
2360. Pitt, M. D., and H. F. Heady. The effects of grazing intensity on annual vegetation. *Journal of Range Management* 32 (2): 109.
2361. Plant, J. W. Techniques suitable for sheep infertility investigations by field veterinarians. *New South Wales Veterinary Proceedings* 15: 57.
2362. Plant, J. W., and M. W. Lollback. Investigating low lamb-marking percentages in the western division of New South Wales. *Agricultural Gazette of New South Wales* 90 (4): 22.
2363. Plant, J. W., Seaman, J. T., and D. Jakovljevic. Non-surgical sterilization of rams using a sclerosing agent. *Australian Veterinary Journal* 55 (6): 263.
2364. Platikanov, N., Stoyanov, A., and I. Penkov. Waste roughage in diets for fattening early weaned lambs. *Zhivotnov'dni Nauki* 16 (1): 18.
2365. Platt, N. E. An evaluation of amitraz, a new acaricidal sheep dip against the castor bean tick *Ixodes ricinus* in Scotland and Lancashire, UK. In: Wilde, J. D. H., Tick-borne Diseases and their vectors, University of Edinburgh Centre for Tropical Veterinary Medicine, Edinburgh, Scotland, 206 pp.
2366. Plopper, C. G., Mariassy, A. T., and L. Hill. The ultrastructure of the nonciliated bronchiolar epithelial clara cell. A comparison of 10 mammalian species. *Anatomical Record* 193 (3): 655.
2367. Poindrion, P., Martin, G. B., and R. D. Hooley. Effects of lambing induction on the sensitive period for the establishment of maternal behavior in sheep. *Physiological Behaviour* 23 (6): 1081.
2368. Pollott, G. E., and F. A. Ahmed. An investigation into the sex difference in growth rate of Watish lambs (Sudan Desert type) and the related food conversion efficiency. *Um Banein Livestock Research Bulletin*, Sudan. No. 10: 8 pp.
2369. Pollott, G. E., and F. A. Ahmed. The pre-weaning growth of Watish lambs and the influence of sex, time of birth and management on weight-for-age. *Um Banein Livestock Research Bulletin*, Sudan, No. 11, 12 pp.
2370. Polydorou, K. Brucellosis in sheep and goats in Cyprus. *Comparative Immunology, Microbiology and Infectious Diseases* 2 (1): 99.
2371. Ponting, L. M., and I. H. Pitman. A rapid in vitro method for evaluating pouron dose forms of levamisole for sheep. *Australian Journal of Pharmaceutical Science* 8 (1): 15.

2372. Ponzoni, R. W. Objectives and selection criteria for Australian Merino sheep. Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England, Armidale, N.S.W., Australia, p. 320.
2373. Ponzoni, R. W., Azzarini, M., and S. K. Walker. Production in mature Corriedale ewes first mated at 7 to 11 or 18 months of age. *Animal Production* 29 (3): 385.
2374. Poos, M. I., Hanson, T. L., and T. J. Klopfenstein. Mönensin effects on diet digestibility, ruminal protein bypass and microbial protein synthesis. *Journal of Animal Science* 48 (6): 1516.
2375. Pope, A. L., Moir, R. J., Sellers, M., Underwood, E. J., and C. L. White. The effect of sulphur on ⁷⁵Se absorption and retention in sheep. *Journal of Nutrition* 109 (8): 1448.
2376. Pope, F., Jr. Livestock data systems in the centrally planned countries. Proceedings of International Symposium on Animal Health and Disease Data Banks. Washington, D.C. 1978, U.S. Department of Agriculture Miscellaneous Publications 0 (1381): 277-282.
2377. Pope, W. F., Hirota, N. A., and F. Stormshak. Influence of ovarian steroids on the response of ovine uterine arterial smooth muscle to norepinephrine. *Journal of Animal Science* 49 (1): 151.
2378. Pope, W. F., and F. Stormshak. Effect of the ovine conceptus on in vitro responses of uterine arteries to prostaglandin E-2 and norepinephrine. *Biology of Reproduction* 29 (4): 847.
2379. Popescu, V., Puia, I., Bogdan, A. T., Tarau, V., Popescu, H., Csakany, I., and I. Siliste. Phytoestrogens and their importance in the breeding and fattening of sheep. *Revista de Cresterea Animalelor* 29 (2): 52.
2380. Popof, M. Biochemical tests of urine and blood in diseases of sheep. I. Methods. *Point Veterinaire* 9 (42): 41.
2381. Popof, M. Uses of biochemical tests on urine and blood in diseases of sheep. II. Analytical study in ketosis, hypocalcaemia, enterotoxaemia and urolithiasis. *Point Veterinaire* 9 (43): 65.
2382. Popof, M. Biochemical tests of urine and blood in diseases of sheep. III. Appraisal of results. *Point Veterinaire* 9 (44): 59.
2383. Popoff, M. Enterotoxaemia due to *Clostridium perfringens* and glycosuria in sheep. *Bulletin Mensuel de la Societe Veterinaire Pratique de France* 63 (6): 431.
2384. Popoff, M., and M. Savey. Scrapie in sheep, recent findings. *Bulletin Mensuel de la Societe Veterinaire Pratique de France* 63 (4): 259.
2385. Poppi, D. P., and J. H. Ternouth. Secretion and absorption of phosphorus in the gastrointestinal tract of sheep fed on four diets. *Australian Journal of Agricultural Research* 30 (3): 503.
2386. Porter, R. J., and J. M. Bassett. Early insulin release following suckling in neonatal lambs and rabbits. *Diabetologia* 16 (3): 261.
2387. Pospieszny, N. Distribution of the vagus nerve of the stomach and certain lymph nodes of the sheep in the prenatal period. *Anatomischer Anzeiger* 146 (1): 47.
2388. Pospieszny, N. Morphology and topography in sheep of the thoracic part of the vagus nerve in the prenatal period. *Zoologica Poloniae* 27 (2): 195.
2389. Postoian, S. P., Postoyan, S. R., and G. G. Ovnyanyan. New Vector of anaplasmosis of sheep in Armenia. XXI World Veterinary Congress, Summaries, Vol. 2, Section III, Parasitology, 68 p.
2390. Potier, M., Guay, P., Lamothe, P., Bousquet, D., Dallaire, L., and S. B. Melancon. Origin and developmental patterns of lactase and other glycosidases in sheep amniotic and allantoic fluid. *Journal of Reproduction and Fertility* 57 (1): 49.
2391. Potkanski, A., Gawrecki, K., Urbaniak, M., and L. Blaszczak-Michalak. Large amounts of fresh and ensiled sugar beet leaves for feeding sheep. *Roczniki Akademii Rolniczej w Poznaniu* No. 111.
2392. Potokina, L. I., and N. D. Tsyrendondokov. Qualitative evaluation of the skins of Volgograd fine-wooled sheep. *Sbornik Nauchnykh Trudov. Moskovskaya Veterinarnaya Akademiya* 104: 41.
2393. Powell, H. C., and P. W. Lampert. Hexachlorophene toxicity. In: Vinken, P. J., and G. W. Bruyn. *Handbook of Clinical Neurology*, Vol 37. Intoxications of the Nervous system, Part 2. Elsevier, Amsterdam.
2394. Powell, J., Zawi, H. T., Crockett, J. J., Croy, L. I., and R. D. Morrison. Central Oklahoma rangeland response to fire, fertilization and grazing by sheep. *Oklahoma Agricultural Experiment Station Bulletin*, No. 744, pp. 3-25.
2395. Prabhakar, K. S., and L. S. Hiregoudar. Haematological observations in splenectomized *Theileria* carrier sheep. *Gujarat Agricultural University Research Journal* 4 (2): 57.
2396. Pratt, B. R., Butcher, R. L., and E. K. Inskeep. Effect of continuous intrauterine administration of prostaglandin E2 on lifespan of corpora lutea of nonpregnant ewes. *Journal of Animal Science* 48 (6): 1441.

2397. Pratt, B. R., and E. K. Inskip. Antiluteolytic activity of prostaglandin-containing fractions from ovine uteri. *Biology of Reproduction* 20 (suppl. 1): 66A.
2398. Precausta, P., and J. Oudar. Infectious diseases in sheep and goat. 5th International Symposium of International Association of Veterinarians specializing in infectious diseases. Tunis, December 20-22, 1978. *Revue de Medecine Veterinaire* 130 (3): 447.
2399. Precausta, P., Kato, F., and G. Vellut. A new freeze-dried living virus vaccine against sheep pox. *Comparative Immunology, Microbiology and Infectious Diseases* 1 (4): 305.
2400. Pregram, R. G., Roeder, P. L., and J. M. Scott. Two new serotypes of *Pasteurella haemolytica* from sheep in Ethiopia. *Tropical Animal Health and Production* 11 (1): 29.
2401. Premvati, G., and A. K. Chopra. *Haemonchus contortus*, *Oesophagostomum columbianum* and *Trichuris ovis*. In vitro variation of glycogen content in three sheep nematodes. *Parasitology* 78 (3): 355.
2402. Prescott, J. H. D. Growth and development of lambs. In: *The Management and Diseases of Sheep*. Edited by British Council, Commonwealth Agricultural Bureaux, Slough, UK.
2403. Preston, J. M., and E. W. Allonby. Influence of breed on the susceptibility of sheep to *Haemonchus contortus* infection in Kenya. *Research in Veterinary Science* 26 (2): 134.
2404. Preston, J. M., and E. W. Allonby. Influence of haemoglobin phenotype on the susceptibility of sheep to *Haemonchus contortus* infection in Kenya. *Research in Veterinary Science* 26 (2): 140.
2405. Preston, J. M., Karstad, L., Woodford, M. H., and E. W. Allonby. Experimental transmission of gastro-intestinal nematodes between sheep (*Ovis aries*) and Thomson's gazelles (*Gazella thomsonii*). *Journal of Wildlife Diseases* 15 (3): 399.
2406. Preston, R. L. Typical composition of feeds for cattle and sheep. *Feedstuffs* 51 (35): 3A.
2407. Price, E. O., and K. A. Tomlinson. Species affinities in domestic sheep and goats. *California Agriculture* 33 (2): 4.
2408. Prichard, R. K., and D. R. Hennessy. Effects of the oesophageal groove reflex on oxfendazole pharmacokinetics and efficacy against benzimidazole resistant nematodes. *Parasitology* 79 (3): XII.
2409. Prins, R. A., Vanhalvangestel, J. C., and G. H. M. Counotte. Degradation of amino acids and peptides by mixed rumen micro-organism. *Zeitschrift für Tierphysiologie, Tierernährung und Futtermittelkunde* 42 (6): 333.
2410. Prior, R. L., and Hruska, R. L. Gluconeogenesis from lactate by the ovine fetus in vivo. *Journal of Animal Science* 49 (suppl. 1): 399.
2411. Prior, R. L., Scott, R. A., and R. A. Britton. Influence of supplemental nitrogen source and time on feed on tissue serine concentrations and enzymes of serine synthesis and degradation in sheep. *Journal of Animal Science* 49 (6): 1528.
2412. Pritchard, D. H., Rahaley, R. S., and D. V. Naphine. Tracheitis in sheep after oral administration of a mineral supplement. *Australian Veterinary Journal* 55 (7): 342.
2413. Prozesky, L., and J. P. J. Joubert. Overdosing with parabendazole as a cause of paralyzed lambs. *Journal of the South African Veterinary Association* 50 (3): 226.
2414. Pru-d'homme, M. J. Effect of an inhibitor of prostaglandin synthesis on uterine motility of the castrated ewe treated with estrogens. *Journal of Physiology (Paris)* 75 (5): 31A.
2415. Prusova, L. S., Musina, A. A., and E. B. Vsevolodov. Rate of division of germi-native cells in the hair bulb of lambs, in relation to rate of growth of wool fibres. *Isvestiya Akademii Nauk Kazakhskoi SSR. Seriya Biologicheskaya* No. 5: 72.
2416. Pryadko, E. E., Isabaev, M. I., and B. B. Bisenov. Dictyocauliasis in sheep in Kazakhstan. *Vestnik Sel'Skokhozyaistvennoi Nauki, Kazakhstana (Kazakhstan Auyi Sharuashylyk Gylymynyn Habarshysy)*, No. 18: 68.
2417. Pullan, N. B., and A. C. Rowland. Bovine malignant catarrhal fever in Nigeria. *Tropical Animal Health Production* 11 (2): 117.
2418. Purchas, R. W., O'Brien, L. E., and C. M. Pendleton. Some effects of nutrition and castration on meat production from male Suffolk cross (Border Leicester-Romney Cross) lambs. 2. Meat quality. *Oklahoma Current Farm Economics* 52 (2): 375.
2419. Purvis, G. M. et al. Lamb mortality in a commercial lowland sheep flock with reference to the influence of climate and economics. *The Veterinary Record* 104 (11): 241.
2420. P'yanov, V. D., Skorobogatykh, N. N., and I. Kh. Rakhimov. Feeding behaviour of sheep given pelleted feeds. *Vestnik Sel'Skokhozyaistvennoi Nauki, Moscow*. No. 7: 73.
2421. Pyorala, E., Lahteenmaki, P., Tiuhonen, H., and S. Osterterg. The secretion of luteinizing hormone in ewes of Finnish

- Landrace during estrus. *Acta Veterinaria Scandinavica* 20 (2): 216.
2422. Quirke, J. F., and G. V. Wallace. Intraperitoneal vaccination of rams. *New Zealand Veterinary Journal* 27 (5): 105.
2423. Quirke, J. F. Oestrus, ovulation, fertilization and early embryo mortality in progestagen-PMSG treated Galway ewe lambs. *Irish Journal of Agricultural Research* 18 (1): 1.
2424. Quirke, J. F. Comparison of the reproductive performance of Galway and Suffolk-cross ewe lambs. *Animal Production, Report from Dunsinea, Moorepark and Western Research Centres, Research Report 1977, Dublin, 190 pp.*
2425. Quirke, J. F. Comparison of the reproductive performance of Galway and Suffolk-cross ewe lambs. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Report for 1978, Dublin, Irish Republic, 212 pp.*
2426. Quirke, J. F. Control of reproduction in adult ewes and ewe lambs, and estimation of reproductive wastage in ewe lambs following treatment with progestagen impregnated sponges and PMSG. *Livestock Production Science* 6 (3): 295.
2427. Quirke, J. F. Effect of body weight on the attainment of puberty and reproductive performance of Galway and Fingalway female lambs. *Animal Production* 28 (3): 297.
2428. Quirke, J. F. Regulation of puberty and reproduction in female lambs. Paper, 30th annual meeting, European Association for Animal Production, No. Ms 4.3.
2429. Quirke, J. F., and J. P. Gosling. Pre-pubertal plasma luteinizing hormone concentrations and progesterone concentrations during the oestrous cycle and early pregnancy in Galway and Fingalway female lambs. *Animal Production* 28 (1):
2430. Quirke, J. F., and J. P. Gosling. Accuracy of pregnancy diagnoses on the basis of plasma progesterone levels in ewe lambs and mature ewes. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Dublin, 212 pp.*
2431. Quirke, J. F., and J. P. Hanrahan. Survival of fertilized sheep ova in lactating and dry ewes. *Animal Production, Report from Dunsinea, Moorepark and Western Research Centres, Research Report, Dublin, 190 pp.*
2432. Quirke, J. F., and J. P. Hanrahan. Comparison of the survival of fertilized eggs in mature ewes and ewe lambs. *Animal Production, Report from Dunsinea, Moorepark and Western Research Centres, Research Report, 1977. Dublin, 190 pp.*
2433. Quirke, J. F., Hanrahan, J. P., and J. Gosling. Effect of lactation on aspects of reproduction in sheep. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Dublin, 212 pp.*
2434. Quirke, J. F., Jennings, J., Hanrahan, J. P., and J. P. Gosling. Effects of GNRH analogues on aspects of reproduction in sheep. *Animal Production, Report from Dunsinea, Moorepark, and Western Research Centres, Research Report 1977, Dublin, 190 pp.*
2435. Quirke, J. F., Jennings, J. J., Hanrahan, J. P., and J. P. Gosling. Oestrus, time of ovulation, ovulation rate and conception rate in progestagen-treated ewes given GN-RH, GN-RH analogues and gonadotrophins. *Journal of Reproduction and Fertility* 56 (2): 479.
2436. Quirke, J. F., and W. Sheehan. Assessment of growth promoters in the fattening of lowland lambs on concentrates. *Animal Production Report from Dunsinea, Moorepark and Western Research Centres, Research Report 1978, Dublin, Irish Republic, 212 pp.*

R

2437. Raab, L., Salewski, A., Steingass, H., Schneider, W., and K. H. Menke. Gas formation in rumen juices in vitro as a measurement of digestibility and of convertible energy content in feeds for ruminants. *Zeitschrift für Tierphysiologie, Tierernährung und Futtermittelkunde* 42 (1): 36.
2438. Rabinowitz, L., Gunter, R. A., and R. L. Sarason. Renal sodium and potassium excretion in sheep given amiloride. *American Journal of Veterinary Research* 40 (5): 688.
2439. Rac, R., Pain, R. W., Van Zyl, A., Van der Walt, B. J., Pammenter, M., Albrecht, C. F., Van Jaarsveld, P. P., Van Dijk, J. E., de Vijlder, J. J. M., Van Voorthuizen, W. F., Belshaw, B. E., and W. H. H. Tegelaers. Congenital goiter. In: Andrews, E. J., Ward, B. C., and D. N. H. Atman. *Spontaneous Animal Models of Human Disease, Volume 1, Academic Press, N.Y.*
2440. Radek, J. The arterial vascularization of the reproductive organs of the ewe. *Zool Pol* 27 (2): 227.
2441. Radev, G., Marinov, P., Velkov, V., and G. Popov. Deep freezing of ram semen. *Zhivotnov'dni Nauki* 16 (7): 77.
2442. Radford, H. M. The effect of hypothalamic lesions on oestradiol-induced changes in LH release in the ewe. *Neuroendocrinology* 28 (5): 307.

2443. Rae, A. L. Plant and animal breeding in 2000 A. D. *New Zealand Agricultural Science* 13 (4): 145.
2444. Rahman, M. M., and M. A. Huq. A comparative study of gestation period, prolificacy and lambing interval of native and upgraded Lohi sheep. *Bangladesh Veterinary Journal* 10 (1/4): 31.
2445. Rahman, T., and P. K. R. Iyer. Studies on pathology of ovine pneumonias. *Indian Veterinary Journal* 56 (6): 455.
2446. Rai, A. K., Mehta, B. S., Gour, D., and M. Singh. Sweating in sheep and goats. *Indian Journal of Animal Sciences* 49 (7): 546.
2447. Rai, A. K., Mehta, B. S., and M. Singh. Thermal sweating in different body regions of sheep. *Journal of Agricultural Science* 92 (2): 511.
2448. Rai, A. K., Singh, M., and T. More. Cutaneous water loss and respiration rates of various breeds of sheep at high ambient temperatures. *Tropical Animal Health and Production* 11 (1): 51.
2449. Rai, A. K., Singh, N. P., and B. C. Patnayak. Influence of feeding formaldehyde-treated protein in sheep. I. Changes in rumen fermentation characteristics. *Indian Veterinary Journal* 56 (11): 949.
2450. Rakhmanin, P. P., Alekhin, R. M., Darda, P. N., Kruglikov, B. A., Antonyuk, V. P., and G. V. Raushenbakh. Formation of immunity in sheep inoculated with various doses of the foot and mouth disease virus. *Veterinariya* 0 (1): 32.
2451. Rako, A., Mikulec, K., and I. Karadjole. Economic need for formation by breeding of a high-quality production type of domestic sheep. *Stocarstvo* 33 (1/2): 1.
2452. Raman, K. S., Mani, V., and M. P. Arumugam. Studies on birth weight of Stavropol merinos in South India. *Cheiron* 8 (3): 177.
2453. Ramiriz, R., and C. Pijoan. Annual frequency of pneumonic lesions among goats and lambs slaughtered in Mexico. *Revista Latinoamericana de Microbiologia* 21 (2): 65.
2454. Ramiisse, J., Brement, A. M., Poirier, J. C., Rabreaud, C., and P. Simonnet. Bacterial flora of neo-natal lethal diarrhoea on calf, lamb and piglet. *Revue de Medecine Veterinaire* 130 (1): 111.
2455. Ramisz, A., Urban, E., and A. Balicka. Value of fenbendazole (Panacur) for controlling nematodes of the family Protostrongylidae in sheep. *Medycyna Weterynaryjna* 35 (12): 709.
2456. Ramsay, M. A., and R. M. F. S. Sadleir. Detection of pregnancy in living bighorn sheep by progestin determination. *Journal of Wildlife Management* 43 (4): 970.
2457. Ramsey, N., Miller, J. K., and M. C. Bell. Effects of dietary imbalance of magnesium, calcium and potassium on plasma insulin in sheep and cattle. *Journal of Animal Science* 49 (suppl. 1): 13.
2458. Ranaweera, A., Ford, E. J. H., and A. R. Samad. Effect of triamcinolone acetate on plasma glucose and ketone concentration and on the total entry rate of glucose in twin pregnant hypoglycaemic ketotic sheep. *Research in Veterinary Science* 26 (1): 12.
2459. Rankin, J. H. G., and M. K. McLaughlin. The regulation of the placental blood flows. *Journal of Developmental Physiology* 1 (1): 3.
2460. Rankin, J. H., Phernetton, T. M., Anderson, D. F., and A. D. Berssenbrugge. Effect of prostaglandin 12 on ovine placental vasculature. *Journal of Developmental Physiology* 1 (2): 151.
2461. Rao, M. R. K. M., and C. Choudary. Pulmonary adenomatosis (Jaagsiekte) in sheep. *Indian Journal of Veterinary Pathology* 3: 44.
2462. Rao, V. M. Interhemispheric connections between primary visual areas in adult sheep and newborn lambs. *Journal of Physiology* 296: 65P.
- 2463-A. Rapic, D., Dzakula, N., and J. Stipanic. Efficacy and economic advantage in the use of oxylozanide with tetramisole in the anthelmintic treatment of lambs. *Praxis Veterinaria* 27 (1/2): 37.
- 2463-B. Rasotgi, R. K., Youssef, F. G., Keens-Dumas, M. J., and D. Davis. Note on early growth rates of lambs of some tropical breeds. *Tropical Agriculture* 56 (3): 259.
- 2463-C. Ratan, R., Bhatia, D. R., and M. Singh. A note on chemical composition and nutritive value of wheat bhusa for sheep. *Indian Journal of Animal Sciences* 49 (8): 676.
2464. Ratan, R., Patnayak, B. C., and D. R. Bhatia. A note on the utilization of seaweed-meal (*Sargassum*) in concentrate mixture of cross-bred hoggets. *Indian Journal of Animal Sciences* 49 (2): 140.
2465. Rattenbury, J. M., Jeacock, M. K., and D. A. L. Shepherd. Urea synthesis in the liver and kidney of developing sheep. *Biochimica et Biophysica Acta* 630 (2): 210.
2466. Ratter, S., Rees, L. H., Landon, J. R., Hillier, K., Jansen, C. A. M., Beck, N. F. G., Lowe, K. C., Thomas, A. L., and P. W. Nathanielsz. The effect of prostaglandin E-2 infusion in the fetal lamb on fetal plasma ACTH, prolactin and cortisol concentrations. *Prostaglandins* 18 (1): 101.
2467. Rattray, P. V., and K. T. Jagusch. Influence of stocking rate on production from sheep of different genotypes. *Agricultural Research in the New Zealand Min-*

- istry of Agriculture and Fisheries. Annual Report of Research Division 1977-78, Hamilton, New Zealand, 252 pp.
2468. Rattray, P. V., and K. T. Jagusch. Effect of pasture allowance during autumn on ewe performance. Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries, Annual Report of Research Division 1977-78, Hamilton, New Zealand, 252 pp.
2469. Rattray, P. V., Jagusch, K. T., and K. S. Maclean. The effect of pasture allowance on the performance of different breeds of sheep. Proceedings of New Zealand Grassland Association 40: 89.
2470. Ray, A. C., Tamulinas, S. H., and J. C. Reagor. High pressure liquid chromatographic determination of cantharidin, using a derivatization method in specimens from animals acutely poisoned by ingestion of blister beetles (*Epicauta lemniscata*). American Journal of Veterinary Research 40 (4): 498.
2471. Rawlings, N. C., Kennedy, S. W., and D. M. Henricks. Active immunization of the cyclic ewe against an estrone protein conjugate. Theriogenology 12 (3): 139.
2472. Rawlings, N. C., Kennedy, S. W., and D. M. Henricks. Effect of short term passive immunization of the cyclic ewe against estradiol-17-beta. Theriogenology 12 (6): 313.
2473. Raynaud, J. P. Epidemiology of nematode infections in farm animals. Factors governing their occurrence. Point Veterinaire 8: 401.
2474. Raynaud, J. P. Epidemiology of nematode infections of farm animals. Factors governing their occurrence. II. Point Veterinaire 9 (41): 23.
2475. Rcheulishvili, M. D., and M. I. Dogonadze. Transferrin polymorphism in various breeds of sheep and its relationship with productivity. Sakartvelos SSR Metsnierabata Akademiis Moambe. Soobshch. An Gruzssr. Referativnyi Zhurnal (1980) 1.58.421. 1979. 94 (3): 685.
2476. Rcheulishvili, M. D., Dogonadze, M. I., and M. K. Antadze. Haemoglobin polymorphism of sheep in relation to productivity. Sakartvelos SSR Metsnierabata Akademiis Moambe. Soobshch. An Gruzssr. Referativnyi Zhurnal (1979) 12.58.274. 1979. 94 (1): 165.
2477. Reddy, K. K., Mehta, B. S., and C. L. Arora. Effect of ewes weight at service on lamb production in Soviet Merino. Indian Veterinary Journal 56 (6): 487.
2478. Reddy, T. K., and M. R. Reddy. Studies on the utilization of urea-molasses enriched paddy straw and tapioca residue in lamb rations. Indian Veterinary Journal 56 (5): 400.
2479. Reed, K. F. M. A note on the feeding value of grass and grass/clover silages for store lambs. Animal Production 28 (2): 271.
2480. Reguera, A., Hidalgo, R., Morrondo, P., and M. Diez Banos. Rhythms of elimination of protostrongyle larvae from sheep under natural conditions. Second National Congress on Parasitology, October 1979, Leon, Spain.
2481. Rees, H. G. Positioning of the stomach tube in lambs. The Veterinary Record 104 (12): 270.
2482. Rees, M. C., and D. J. Minson. The validity of in vitro techniques using rumen fluid or cellulase for predicting changes in the dry matter digestibility of grasses caused by fertilizer calcium sulfur phosphorus and nitrogen. Grass Forage Science 34 (1): 19.
2483. Reid, C. S. W., John, A., Ulyatt, M. J., Waghorn, C. G., and L. P. Milligan. Chewing and the physical breakdown of feed in sheep. Annales de Recherches Veterinaires 10 (2-3): 205.
2484. Reid, H. W. The epidemiology of louping ill. In: Wilde, J. K. H., Tick-borne Diseases and Their Vectors. University of Edinburgh Centre for Tropical Veterinary Medicine, Edinburgh, Scotland, p. 501.
2485. Reid, R. I., Jung, G. A., Wolfe, C. H., and R. E. Kocher. Effects of magnesium fertilization on mineral utilization and nutritional quality of alfalfa for lambs. Journal of Animal Science 48 (5): 1191.
2486. Reid, R. L., Baker, B. S., and G. A. Jung. Quality of timothy phleum pratense hay as affected by magnesium fertilization or dietary magnesium supplementation. Journal of Animal Science 49 (suppl. 1): 139.
2487. Reilly, P. E. B., and L. C. Chandrasena. Indices of stress in housed experimental sheep. Research in Veterinary Science 27 (2): 250.
2488. Reinecke, R. K., Snyman, H. M., and H. Seaman. Studies on *Haemonchus contortus* 2. The effect of abomasal nematodes on subsequent challenge with *Haemonchus contortus*. Onderstepoort Journal of Veterinary Research 46 (4): 199.
2489. Reis, P. J., and Panaretto, B. A. Chemical defleecing as a method of harvesting wool from sheep. World Animal Review No. 30: 36.
2490. Remesy, C., and C. Demigne. Effects of undernutrition during late pregnancy on gluconeogenesis and ketogenesis in twin-pregnant ewes. Annales de Biologie Animale, Biochimie, Biophysique 19 (1B): 241.
2491. Renshaw, H. W., Graff, V. P., and N. L.

- Gates. Visceral caseous lymphadenitis in thin ewe syndrome: isolation of *Corynebacterium*, *Staphylococcus*, and *Moraxella* spp. from internal abscesses in emaciated ewes. *American Journal of Veterinary Research* 40 (8): 1110.
2492. Repaldiza, E., Rodriquez Poblete, M. J., Babin M. del M., Camara, R. de la, and J. L. Valls. Chemical contribution to the study of lung and liver hydatid cyst of sheep. *Anales del Instituto Nacional de Investigaciones Agrarias, Higiene y Sanidad Animal* 1978/1979, No. 4: 83.
2493. Respaldiza, E., Gomez, R. A., Rodriquez, M. J., Valls, J. L., Castrao, J. M., and I. Abellanet. The incidence of subclinical coccidiosis in sheep. *Second National Congress on Parasitology*, October 1979, Leon, Spain.
2494. Reuss, U. Investigations using the anthelmintic synanthic (Oxfendazole) for the treatment of gastrointestinal nematode and tapeworm infestations in sheep under natural conditions. *Tierärztliche Umschau* 34 (12): 836.
2495. Revilla Delgado, R., and E. Sáez Olivito. Economic aspects of sheep feeding. *Anales de la Facultad de Veterinaria, Universidad de Zaragoza*, 1977-78, published 1979, 12/13: 11/12: 507.
2496. Rexroad, C. E., Jr. Dihydroergocryptine and dihydroalprenolol binding in the myometrium of ewes during the estrous cycle. *Biology of Reproduction* 20 (suppl. 1): 92A.
2497. Rexroad, C. E., Jr., and H. D. Guthrie. Prostaglandin F-2 alpha and progesterone release in vitro by ovine luteal tissue during induced luteolysis. In: *Ovarian Follicular and Corpus Luteum Function*. Plenum Press, N.Y.
2498. Reynolds, G. W., Anderson, N., Stiffe, G., Hansky, J., and D. A. Titchen. Ovine tissue and serum gastrin in osteragiiasis. *Annales de Recherches Veterinaires* 10 (2-3): 341.
2499. Reynolds, M. L., Evans, C. A. N., Reynolds, E. O. R., Saunders, N. R., Durbin, G. M., and J. S. Wigglesworth. Intra cranial hemorrhage in the preterm sheep fetus. *Early Human Development* 3 (2): 163.
2500. Reynolds, P. J. Interrelationships of zinc and molybdenum on the copper status of sheep. *Journal of Animal Science* 49 (suppl. 1): 400.
2501. Ribbeck, R., Splisteser, H., Rauch, H., and T. Hiepe. Problems in the control of ectoparasites in the Mongolian People's Republic. *Angewandte Parasitologie* 20 (4): 221.
2502. Ribbeck, R., and G. Witzel. Fascioliasis of cattle and sheep—economic losses. *Monatshefte für Veterinärmedizin* 34 (2): 56.
2503. Ribeiro, J. M. C. R. Digestion and metabolism of forage diets by sheep. Thesis. Aberdeen University, UK.
2504. Ribeiro, J. M. C. R., Webster, A. J. F., and J. C. Macrae. An attempt to explain the differences in net energy values of 1st and 3rd cut dried grass. *Animal Production* 28 (3): 429.
2505. Rice, D. W., O'Leary, J., and L. S. Bull. Abstract. Influence of moisture content and addition of lactobacillus culture on fermentation of alfalfa and digestion by sheep. *Journal of Dairy Science* 62 (suppl. 1): 198.
- 2506 & 2507. Rich, M. M. New Zealand beef and sheep supply relationships. *Australian Journal of Agricultural Economics* 23 (2): 102.
2508. Richard, C., and N. Yalcin. Epidemiology of sheep listeriosis in France. In: *Ivanov, I. Problems of Listeriosis*. National Agroindustrial Union Center for Scientific Information, Sofia, Bulgaria.
2509. Richard, Y., Fontaine, M., Oudar, J., and M. P. Fontaine. Contribution to an epidemiological study and the pathogenesis of caseous lymphadenitis of sheep. *Comparative Immunology, Microbiology and Infectious Diseases* 2 (1): 125.
2510. Richards, I. S., Petterson, D. S., and D. A. Purcell. Treatment of ovine annual ryegrass toxicity with chlordiazepoxide. *Australian Veterinary Journal* 55 (6): 782.
2511. Richardson, B. C., and J. E. Mercier. The primary structure of ovine beta caseins. *European Journal of Biochemistry* 99 (2): 285.
2512. Richardson, C., Richards, M., Terlecki, S., and W. M. Miller. Jaws of adult culled ewes. *Journal of Agricultural Science* 93 (3): 521.
2513. Richardson, C., Terlecki, S., and G. Lewis. Ovine nephropathy associated with the feeding of a semi-purified diet of low copper content. *Journal of Comparative Pathology* 89 (1): 73.
2514. Richardson, R. I., and A. F. Livesey. Gluconeogenesis in isolated sheep hepatocytes. *Proceedings of the Nutrition Society* 38 (1): A2.
2515. Richardson, T. C., Jeacock, M. K., and D. A. L. Shepherd. Alanine and propionate metabolism in lamb liver. *Annales de Recherches Veterinaires* 10 (2-3): 365.
2516. Richter, W., Werner, E., and H. Bahr. Normal values for animal health and husbandry. Jena. German Democratic Republic, VEB Gustav Fischer Verlag, 246 pp.
2517. Ricordeau, G., Pelletier, J., Courot, M., and J. Thimonier. Phenotypic and genetic relationships between endocrine criteria and testicular measurements of

- young Romanov rams and the ovulation rates at 8 months of their half sisters. *Annales de Genetique et de Selection Animale* 11 (2): 145.
2518. Riddick, D. H., Luciano, A. A., and J. R. Raye. Thyroxine uptake and metabolism by fetal sheep after intraamniotic thyroxine injection. *American Journal of Obstetrics and Gynecology* 133 (6): 618.
2519. Riedel, A. The fauna of some prehistoric settlements of the Verona area, Italy. *Atti Mus Civ Stor Nat Trieste* 31 (1/4): naire 10 (2/3): 189.
2520. Rifaat, M. A., Morsy, T. A., Sadek, M. S. M., Azab, M. E., Khaled, M. L. M., and E. H. Safar. Incidence of toxoplasmosis among farm animals in North Coastal zone of Egypt. *Journal of the Egyptian Society of Parasitology* 9 (1): 193.
2521. Riffkin, G. G., and C. Dobson. Predicting resistance of sheep to *Haemonchus contortus* infections. *Veterinary Parasitology* 5: 365.
2522. Righter, H. F., Showalter, D. H., and R. H. Teske. Comparative plasma kinetics of orally administered sulfamethazine in clinically parasitized and parasitism treated lambs. *Journal of Veterinary Pharmacology and Therapeutics* 2 (3): 203.
2523. Rios Reyes, R., and J. C. Flores Rodriguez. The application of citarin-L-spot on levamisole in tropical sheep breeds. *Veterinary Medical Review*, No. 1: 81.
2524. Ris, D. R. Intraperitoneal administration of *Brucella ovis* saline-in-oil vaccines. *New Zealand Veterinary Journal* 27 (8): 165.
2525. Riveros, V., and L. Corvalan. Effects of carotene and vitamin A on fertility of rams on semi-arid pasture. *Advances en Produccion Animal* 4 (1): 55.
2526. Rizvanov, K., Kuzmanova, Y., Nikov, S., Mikhailov, G., and A. Dzhurov. Effect on mice and sheep of large doses of toxin from some strains of *Bacillus thuringiensis*. *Veterinarnomeditsinski Nauki* 19 (9): 6.
2527. Robb, T. W., Ely, D. G., Rieck, C. E., Thomas, R. J., and B. P. Glenn. Mefluidide treatment of fescue. Effect on mineral utilization. *Journal of Animal Science* 49 (suppl. 1): 33.
2528. Robbins, C. T., and B. L. Robbins. Fetal and neonatal growth patterns and maternal reproductive effort in ungulates and subungulates. *American Naturalist* 114 (1): 101.
2529. Roberts, D. H. Maedi/visna testing service for imported sheep. *The Veterinary Record* 105 (14): 335.
2530. Roberts, E. M. Ram buyers value measurement information—results of recent survey. *Wool Technology and Sheep Breeding* 27 (4): 31.
2531. Roberts, G. B., Kenney, P. A., and J. L. Reeve. Effect of lupin grain and recently cut lucerne on intake and digestibility of mature weathered herbage by border Leicester × Merino ewes. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (97): 156.
2532. Robertson, J. S. The sheep fetus at parturition. *Animal Production Science* 2 (1/3): 167.
2533. Robertson, V. European lamb "cocktail." *New Zealand Journal of Agriculture* 138 (2): 54.
2534. Robillard, J. E., Matson, J. R., Sessions, C., and B. Consamus. Renal response of the lamb fetus to hypoxemia and following recovery. *Pediatric Research* 13 (4, part 2): 518.
2535. Robillard, J. E., Matson, J. R., Sessions, C., and F. G. Smith, Jr. Developmental aspects of renal tubular reabsorption of water in the lamb fetus. *Pediatric Research* 13 (10): 1172.
2536. Robillard, J. E., Matson, J. R., Vanorden, D., Weismann, D. M., and F. G. Smith, Jr. Role of aldosterone on renal sodium and potassium excretion during fetal life and new born period. *Pediatric Research* 13 (4, part 2): 362.
2537. Robillard, J., and R. E. Weitzman. Effect of fetal hypoxemia on vasopressin and renal water excretion. *Pediatric Research* 13 (4, part 2): 518.
2538. Robillard, J. E., Weitzman, R. E., Fisher, D. A., and F. G. Smith, Jr. The dynamics of vasopressin release and blood volume regulation during fetal hemorrhage in the lamb fetus. *Pediatric Research* 12 (5, part 1): 606.
2539. Robinsin, S. L., Fisher, D. J., Rudolph, A. M., and J. I. E. Hoffman. Age related changes in coronary blood flow and resistance in chronically instrumented sheep. *Pediatric Research* 13 (4, part 2): 350.
2540. Robinson, G. W., and J. E. Anderson. Isolation of *Chlamydia psittaci ovis* in sheep thyroid cell culture. *Veterinary Record* 104 (2): 55.
2541. Robinson, J. The sheep head fly (*Hydrotaea irritans*). Biology of immature stages in the soil. *Bulletin of Entomological Research* 69 (4): 589.
2542. Robinson, J. J., and I. McDonald. Ovine prenatal growth, its mathematical description and the effects of maternal nutrition. *Annales de Biologie Animale. Biochimie. Biophysique* 19 (B1): 225.
2543. Robinson, J. J., McHattie, I., Calderon Cortes, J. F., and J. L. Thompson. Further studies on the response of lactating

- ewes to dietary protein. *Animal Production* 29 (2): 257.
2544. Robinson, J. S. The sheep fetus at parturition. *Animal Reproduction Science* 2 (1/3): 167.
2545. Robinson, J. S. Parturition in the sheep and goat: the sheep fetus at parturition. In: *Developments in Animal and Veterinary Sciences*, 5. Elsevier, Amsterdam, Netherlands.
2546. Robinson, J. S., Kingston, E. J., Jones, C. T., and G. D. Thorburn. Studies on experimental growth retardation in sheep. The effect of removal of endometrial caruncles on fetal size and metabolism. *Journal of Development Physiology* 1 (5): 379.
2547. Robinson, P. M., Rowe, E. J., and E. M. Wintour. The histogenesis of the adrenal cortex in the fetal sheep. *Acta Endocrinologica* 91 (1): 134.
2548. Robinson, S. M., Cadwallader, J. A., and P. M. Hill. Regional alveolar gas composition and lung function in sheep. *Respiration Physiology* 37 (3): 239.
2549. Robinson, S., Gregory, G. A., Fischer, D., Hoffman, J. I. E., and A. M. Rudolph. Age related changes in coronary blood flow and resistance in chronically instrumented sheep. *Anesthesiology* 51 (suppl. 3): S323.
2550. Rodolakis, A., and A. Souriau. Clinical evaluation of a commercial vaccine against chlamydial abortion of ewes. *Annales de Recherches Veterinaires* 10 (1): 41.
2551. Rodriguez Osorio, M., and V. Gomez Garcia. The sero-epidemiology of toxoplasmosis in sheep and goats of the province of Granada. Second National Congress on Parasitology, October 1979, Leon, Spain.
2552. Rohlinger, P., Grunow, C., Reichmann, A., and M. Zimmerhackel. Preliminary tests to assess the usefulness of the infrared measurement technique in veterinary medicine. *Monatshäfte für Veterinärmedizin* 34 (8): 287.
2553. Rojo Vazquez, P. A., Cordero del Campillo, M., Diez Banos, P., and M. Diez Banos. The relationship between fecal egg counts and parasitic load in natural infections of *Dicrocoelium dendriticum* and *D. lanceolatum* in sheep.
2554. Rolbin, S. H., Levison, G., Shnider, S. M., Biehl, D. R., and R. G. Wright. Dopamine treatment of spinal hypotension decreases uterine blood flow in the pregnant ewe. *Anesthesiology* 51 (1): 36.
2555. Romaniuk, K. Control of tapeworms, *Moniezia* sp., and gastrointestinal and pulmonary nematodes in sheep using fenbendazole. *Wiadomosci Parazytologiczne* 25 (4): 461.
2556. Romingher, M. Fertility of ewes at Deleni Farm inseminated with fresh, diluted or frozen semen from Merino rams. *Revista de Cresterea Animalelor* 29 (1): 43.
2557. Romvary, J., Meszarosk, J., and J. Rozsa. Screening of cattle and sheep herds for the presence of *Coxiella burneti* infection. *Magyar Allatorvosok Lapja* (Hungarian Veterinary Journal) 34 (7): 441.
2558. Rommel, W., Rummer, H. J., and A. Basig. Use of prostaglandins to synchronise oestrus in sheep. *Monatshäfte für Veterinärmedizin* 34 (21): 813.
2559. Roodman, G. D., and E. D. Zanjani. Endogenous erythroid colony-forming cells in fetal and newborn sheep. *Journal of Laboratory and Clinical Medicine* 94 (5): 699.
2560. Rosa, I. V., Ammerman, C. G., Henry, P. R., Littell, R. C., and P. E. Loggins. Al, Fe and P interrelationships in lambs. *Journal of Animal Science* 49 (suppl. 1): 401.
2561. Rosenfeld, C. R., Andujo, O., Johnston, J. M., and M. M. Jimenez. Phosphatidate, phosphohydrolase and phospholipids in tracheal and amniotic fluid during ovine gestation. *Pediatric Research* 13 (4, part 2): 363.
2562. Ross, A. D., and W. A. Day. Intestinal polyps in a lamb. *New Zealand Veterinary Journal* 27 (8): 172.
2563. Ross, J. G., Duncan, J. L., and W. G. Halliday. Investigation of *Haemonchus contortus* infections in sheep. Comparison of irradiated larvae and transfer factor treatment. *Research in Veterinary Science* 27 (2): 258.
2564. Ross, J. G., and W. G. Halliday. Investigations of transfer factor activity in the transfer of immunity to *Trichostrongylus axei* infections in sheep. *Research in Veterinary Science* 26 (1): 41.
2565. Ross, J. G., and W. G. Halliday. Investigations of transfer factor activity in immunity to *Ostertagia circumcincta* and *Trichostrongylus colubriformis* infections in sheep. *International Journal for Parasitology* 9 (4): 281.
2566. Ross, R., Care, A. D., Pickard, D. W., Peacock, M., and J. S. Robinson. The relationship between fetal and maternal plasma 25 hydroxy vitamin D in the sheep. *Calcified Tissues International* 27 (suppl.): A40.
2567. Ross, R., Care, A. D., Taylor, C. M., Pelc, B., and B. A. Sommerville. The transplacental movement of metabolites of vitamin D in the sheep. In: Norman, A. W. et al. *Basic Research and Its Clinical Application: Proceedings of the 4th Workshop on Vitamin D*. W. de Gruyter, New York.

2568. Roth, I. J. Low lambing percentages on the Cuttaburra. *Agricultural Gazette of New South Wales* 90 (4): 24.
2569. Rougeot, J., and R. G. Thebault. Chemical defleecing of wool: critical study of the method. *Proceedings 5th International Wool Textile Research Conference, Vol. IV, World Textile Abstracts* 11: 2488.
2570. Rousseau, J. P., and M. Falempin. Activity of gut receptors in the conscious sheep. *Annales de Recherches Veterinaires* 10 (2-3): 189.
2571. Rousseaux, C. G. Pink bones in sheep carcasses. *Australian Veterinary Journal* 55 (5): 253.
2572. Roux, D. J. Y. le. Electroencephalogram of sheep: results of numerical analysis. Thesis, Ecole Nationale Veterinaire, Alfort, France, 66 pp.
2573. Roux, J. Epidemiology and prevention of brucellosis. *Bulletin of World Health Organization* 57 (2): 179.
2574. Rowe, J. B., Loughman, M. L., Nolan, J. V., and R. A. Leng. Secondary fermentation in the rumen of a sheep given a diet based on molasses. *British Journal of Nutrition* 41 (2): 393.
2575. Rowlands, D. ap T., and R. B. Clampitt. Plasma enzyme levels in ruminants infected with *Fasciola hepatica*. *Veterinary Parasitology* 5: 155.
2576. Rozier, J., Ferrando, R., Carlier, V., and C. Fourlon. Nature of the yellow fat in sheep. *Bulletin de l'Academie Veterinaire de France* 52 (4): 545.
2577. Rowsell, E. V., Carnie, J. A., Wahbi, S. D., Al-Tai, A. H., and K. V. Rowsell. L-Serine Dehydratase (EC 1.2.1.13) and L-serine pyruvate amino transferase (EC 2.6.1.51) activity in different animal species. *Comparative Biochemistry and Physiology* 63 (4): 543.
2578. Ruckebusch, Y. Clermont-Ferrand, France, 3-7 September 1979, Vth International symposium on ruminant physiology, digestive physiology and metabolism. Series of short communications. Conference proceedings to be published in 1980. *Annales de Recherches Veterinaires* 10 (2/3): 157.
2579. Rudolph, R., and W. Schnabl. Histochemical, enzyme histochemical and electron microscopic studies of blood leukocytes from clinically healthy and leukaemic sheep. *Veterinary Medical Review* No. 2: 140.
2580. Ruesse, I., and H. G. Leibich. Maturation of secretory granules in the endosalpinx 1 to 4 days post coitum in sheep. *Cell Tissue Research* 201 (1): 145.
2581. Rukavina, A. Foot rot in sheep in the Lici region of Yugoslavia. *Fraxis Veterinaria* 27 (5/6): 255.
2582. Rumsey, T. S. Apple pomace in gestating ewe diets. *Journal of Animal Science* 49 (suppl. 1): 139.
2583. Rumsey, T. S., Bitman, J., Wrenn, T. R., Thompson, M. J., and W. E. Robbins. N,N-Dimethyldodecanamine fed to growing lambs. *Journal of Animal Science* 49 (suppl. 1): 141.
2584. Rurak, D. W. Plasma vasopressin levels during haemorrhage in mature and immature fetal sheep. *Journal of Developmental Physiology* 1 (1): 91.
2585. Rushton, B., Sharp, J. M., Gilmour, N. J. L., and D. A. Thompson. Pathology of an experimental infection of specific pathogenfree lambs with parainfluenza virus Type 3 and *Pasteurella haemolytica*. *Journal of Comparative Pathology* 89 (3): 321.
2586. Russe, I., and H. G. Leibich. Maturation of secretory granules in the endosalpinx one to four days post coitum in the sheep. *Cell and Tissue Research* 201 (1): 145. (See also #2580).
2587. Russel, A. J. F. The nutrition of the pregnant ewe. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
2588. Russo, P., Vitu, C., Lambert, M., and A. Grauffret. Comparative study of various Chlamydia strains. Preliminary study. *Comparative Immunology, Microbiology and Infectious Diseases* 2 (1): 75.
2589. Russo, V., Chiofalo, L., and P. Micari. Polymorphism of milk proteins in Comiso ewes. *Rivista di Zootecnia E Veterinaria* No. 4: 239.
2590. Ryan, J. J., Pilon, J. E., McLeod, H. A., Crober, D. C., and A. E. Sefton. The transfer of the coccidiostat clopidol to lambs by feeding chicken waste. *Journal of Environmental Quality* 8 (3): 439.
2591. Ryder, M. L. Preserving rare breeds of sheep and goats. *Span* 22 (1): 11.
2592. Ryder, M. L., and G. C. Priestley. Changes in epidermal and wool pigmentation in autografts of sheep skin. *Journal of the Textile Institute; World Textile Abstracts* 11. 1979/4696: 70 (5): 210.
2593. Rzepczyk, C. Sarcocystis infections in sheep in Queensland. Abstracts of papers presented at 23rd Conference of Australian Society for Parasitology, Leura, NSW, Australia, 57 pp.
2594. Ryzhikh, A., Reschetnikov, I., and B. Itkin. Regularity of thymus, lymphoid organs and lymph morphogenesis in cattle, sheep and reindeer. *Zentralblatt für Veterinärmedizin* 8 (4): 373.
2595. Rzhantsyna, I., and Y. Malofeev. Morphological features of some body systems of marals, sheep and goats in adaptation to industrial-type management in

the Altai Mountains. Zentralblatt für Veterinärmedizin 8 (4): 373.

S

2596. Sabata, V., and C. Schlegel. The effect of glucose infusion upon hypoxic human and sheep fetuses. *Physiologia Bohemoslovaca* 28 (3): 275.
2597. Sachdev, G. P., Zodrow, J. M., and R. Carubelli. Hydrophobic interaction of fluorescent probes with fetuin, ovine submaxillary mucin, and canine tracheal mucins. *Biochimica and Biophysica Acta* 580 (1): 85.
2598. Sachs, H., and R. Will. Febantel—a new broad-spectrum anthelmintic. Summaries, 21st World Veterinary Congress, Vol. 2, Section III: 11.
2599. Sackner M. A., Dougherty, R. D., Chapman, G. A., Zarzecki, S., Zarzemski, L., and R. Schreck. Effects of sodium nitrate aerosol on cardio pulmonary function of dogs, sheep and man. *Environmental Research* 18 (2): 421.
2600. Sacks, L. M., Klein, M., Wallace, I., Mela, L., and M. Deliveria-Papadopoulos. Effect of decreased cerebral blood flow on brain tissue oxygenation of new born lambs. *Pediatric Research* 13 (4, part 2): 363.
2601. Sadana, J. R., Purohit, V. D., and D. S. Kalra. Incidence and pathology of verminous pneumonia in sheep and goats. *Haryana Veterinarian* 18 (2): 111.
2602. Safarov, Y. B., and Z. M. Guseinov. Bacterial carrier state in ovine mastitis. *Doklady Vsesoyuznoi Akademii Sci' Skokhozyaistvennykh Nauk*, No. 9: 31.
2603. Sahagun, E. O. Growth and development of Manchega sheep. *An Inst. NAC Invest. Agrar. Ser. Prod. Anim.* 0 (1): 45.
2604. Sahai, B. N., and A. K. Sinha. A note on the identity of *Haemonchus bispinosus* and *H. contortus* based on genetical development. *Indian Journal of Animal Sciences* 49 (2): 161.
2605. Sainsbury, D., and P. Sainsbury. *Livestock Health and Housing*. Bailliere and Tindall, Pub., London, UK.
2606. Saint George, T. D., and C. J. McCaughan. The transmission of the CSIRO-19 strain of Bluetongue Virus Type 20 to sheep and cattle. *Australian Veterinary Journal* 55 (4): 198.
2607. Sairam, M. R. Further characterization of the ovine lutropin alpha subunit and beta subunit prepared by the salt precipitation method. *International Journal of Peptide Protein Research* 14 (2): 153.
2608. Sairam, M. R. Immunological relationships among ovine glycoprotein hormones. *Journal of Endocrinology* 83 (2): 149.
2609. Saito, H., and O. D. Ratnoff. Comparative studies of Hageman Factor (Factor 12) in mammalian plasmas by immunological techniques. *Proceedings of the Society for Experimental Biology and Medicine* 161 (3): 412.
2610. Sakai, Y., Yamamoto, N., and K. Yasuda. Immunohistochemical demonstration of hyaluronidase (EC 3.2.1.35) in the sheep testis. *Acta Histochemistry and Cytochemistry* 12 (2): 141.
2611. Sakai, Y., Yamamoto, N., and K. Yasuda. Localization of acrosomal proteinase in sheep testis. *Acta Histochemica et Cytochemica* 12 (2): 151.
2612. Same as #2610.
2613. Sakko Sheku, B. A. Effect of polycarbacin (fungicide) on sheep and rabbits, and on properties of their meat. *Sbornik Nauchnykh Trudov Moskovskaya Veterinarnaya Akademiya* 105: 138.
2614. Saks, F. F., and Baitinger, V. F. Functional morphology of the cricopharyngeus muscle in some mammals. *Arkh Anat Gistol Embriol* 77 (11): 108.
2615. Salamon, S., Maxwell, W. M. C., and J. H. Firth. Fertility of ram semen after storage at 5 degrees C. *Animal Production Science* 2 (4): 373.
2616. Salimov, Kh. S. I. Aetiology of leukoses—experiments with bovine leukosis carried out in Uzbekistan. II. Blood morphology in lambs and calves experimentally infected with bovine leukosis virus. In: Kukain, R. A. *Etiologiya I immunodiagnostika Leikoza Krupnogo Rogatogo Skota.*, Zinatne, Riga, Latvian SSR, USSR.
2617. Sambu, G. The gene pool of Mongolian sheep. *Ovtsevodstvo*, No. 1: 39.
2618. Samizadeh-Yazd, A., Rhodes, C. N., Jr., Pope, A. L., and A. C. Todd. Ovine coccidiosis. Comparison of the effects of monensin and aureomycin on lambs infected with coccidia. *American Journal of Veterinary Research* 40 (8): 1107.
2619. Sampson, P. M., Jimenez, S. A., and R. I. Bashey. Isolation and partial characterization of proteoglycans from sheep lung parenchyma. *Biochimica et Biophysica Acta* 588 (1): 129.
2620. Sanchez Acedo, C., Castillo Hernandez, J. A., and J. Gutierrez Galindo. The efficacy of febantel against various kinds of gastrointestinal parasites of ewes. Second National Congress on Parasitology, October 1979, Leon, Spain.
2621. Sanchez Belda, A., and M. C. Sanchez Trujilliano. Spanish breeds of sheep. Madrid, Spain; *Publicaciones de Extension Agraria*, 501 pp.
2622. Sanchezhermosillo, M., and R. N. B. Kay. Retention time and digestibility of milled hay in sheep and red deer (*Cervus elaphus*).

- phus). Proceedings of the Nutrition Society 38 (3): A123.
2623. Sanchis, R. The *E. coli* in neonatal diseases of lambs (study of 234 strains). Recueil Medecine Veterinaire de l'Ecole d'Alfort 155 (10): 775.
2624. Sandholm, M., and T. Monkanen-Buzalski. Colostral trypsin inhibitor capacity in different animal species. Acta Veterinaria Scandinavica 20 (4): 469.
2625. Sanford, L. M., and G. D. Phillips. Pituitary and testicular function in rams following inhibition of prolactin secretion during the ovine nonbreeding season. Biology of Reproduction 20 (suppl. 1): 27A.
2626. Sangster, N. C., and M. Gunawan. The use of guinea pigs to assay anthelmintic resistance in ovine isolates of *Trichostrongylus colubriformis*. Abstracts of papers at 23rd Conference of Australian Society for Parasitology, Leura, NSW, Australia, 57 pp.
2627. Sangster, N. C., Whitlock, H. V., Russ, I. G., Gunawan, M., Griffin, D. L., and J. D. Kelly. *Trichostrongylus colubriformis* and *Ostertagia circumcincta* resistant to levamisole, morantel tartrate and thiabendazole: occurrence of field strains. Research in Veterinary Science 27 (1): 106.
2628. Sangwan, D. C., and V. M. Mandokhot. Effect of various levels of poultry excreta in supplementary concentrate mixture for stall-fed Nali lambs: growth response and feed intake. Indian Journal of Animal Sciences 49 (10): 798.
2629. Sanna, A., Mesina, G., Casu, S., and G. Piva. Diets based on dried sugar-beet pulps with molasses in fattening lambs. Zootechnica e Nutrizione Animale 5 (1): 143.
2630. Sano, H., Takahashi, K., Fujita, M., Ambo, K., and T. Tsuda. Effect of environmental heat exposure on physiological responses, blood constituents and parameters of blood glucose metabolism in sheep. Tohoku Journal of Agricultural Research 30 (2): 76.
2631. Sanson, B. F., Symonds, H. W., and P. J. Taylor. The transfer of copper from ewes with Border disease to their lambs. Journal of Comparative Pathology 89 (3): 361.
2632. Santiago, M. A. M., Costa, U. C. da, and S. Benevenga. *Haemonchus contortus* and *Ostertagia circumcincta* resistant levamisole. Revista do Centro de Ciencias Rurais 9 (1): 101.
2633. Santisteban, M. E., and M. M. A. Morales. Carcass composition and anatomical characters in karakul lambs. Agricultura Tecnica 39 (1): 22.
2634. Sarma, B. J. R., Murthy, K. G., Reddy, T. C., and B. S. Murti. Rinderpest in cattle and sheep. Indian Journal of Animal Health 18 (1): 19.
2635. Sasaki, Y., Takahashi, H., and K. Hikosaka. Reduced insulin response in sheep exposed to cold. Annales de Recherches Veterinaires 10 (2-3): 388.
2636. Sauerlander, R. *Cepaea nemoralis* (Helicidae, Stylommatophora) as experimental intermediate host of *Muellerius capillaris* (Protostrongylidae, Nematoda). Zeitschrift für Parasitendunde 59 (1): 59.
2637. Sauter, E. A., Jacobs, J. A., Parkinson, J. F., and S. K. Ercanbrach. Effect of carcass weight and fat thickness of lamb carcasses on surface bacteria counts. Journal of Food Science 44 (5): 1430.
2638. Savan, P. M. J., Jeacock, M. K., and D. A. L. Shepherd. Fate of amino acids in isolated perfused livers of developing sheep. British Journal of Nutrition 42 (3): 467.
2639. Savarie, P. J., and R. T. Sterner. Evaluation of toxic collars for selective control of coyotes that attack sheep. Journal of Wildlife Management 43 (3): 780.
2640. Savey, M., and J. Espinasse. Scrapie in the sheep and laboratory animals: suitability of the sheep model for the study of slow virus diseases. Veterinary Science Communications 3 (2): 87.
2641. Savin, Z., Petrovic, A., Bordjoski, A., Vujic, B., and S. Katic. Fasciolosis on the mountainous pasture lands. XXI World Veterinary Congress, 1-7 July 1979, Moscow. Summaries, Vol. 2, Section III: Parasitology, Moscow, USSR, 63 pp.
2642. Savoie, S., Forest, M. G., Bourel, B., Saez, J. M., Bertrand, J., and J. R. Ducharme. Perinatal activity of the hypothalamic pituitary gonadal axis in the lamb. I. Circulating levels of luteinizing hormone follicle stimulating hormone, prolactin and testosterone, and in vivo response to human chorionic gonadotropins in the 1st 2 months of life. Biology of Reproduction 21 (5): 1051.
2643. Sawyer, G. J. The influence of radiant heat load on reproduction in the Merino ewe. I. The effect of timing and duration of heating. Australian Journal of Agricultural Research 30 (6): 1133.
2644. Sawyer, G. J. The influence of radiant heat load on reproduction in the Merino ewe. II. The relative effects of heating before and after insemination. Australian Journal of Agricultural Research 30 (6): 1133.
2645. Sawyer, G. J., Lindsay, D. R., and G. B. Martin. The incidence of radiant heat load on reproduction in the Merino ewe. III. Duration of oestrus, cyclical oestrous activity, plasma progesterone, LH levels and fertility of ewes exposed to

- high temperatures before mating. Australian Journal of Agricultural Research 30 (6): 1151.
2646. Sawyer, H. R. Ultracytochemical localization of 3-beta hydroxy steroid dehydrogenase activity in dissociated luteal cells. Biology of Reproduction 20 (suppl.): 68A.
2647. Sayin, F., Dincer, S., and U. Milli. Experimental demonstration of the species independence of *Eimeria arloingi* and *Eimeria ovina*. Veteriner Fakultesi Dergisi Ankara Universitesi 26 (1/2): 1.
2648. Saylor, W. W. Hepatic copper metabolism in sheep: effects of age and dietary levels of copper and zinc. Dissertation Abstracts International 40B: 1.
2649. Saylor, W. W., Morrow, F. D., and R. J. Leach, Jr. Copper- and zinc-binding proteins in sheep liver: effects of dietary levels of the metals. Federation Proceedings 38 (3): 614.
2650. Scales, G. H., and R. A. Moss. Reproductive performance of ewes flushed on lucerne. Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries. Annual Report of Research Division 1977-78. Hamilton, New Zealand, 252 pp.
2651. Scaramuzzi, R. J. Antibodies to androgens and ovulation of the ewe. Journal of Steroid Biochemistry 11 (1, part C): 957.
2652. Schahidi, R., and D. Smidt. Morphological studies on the ovaries of Iranian Kustistan sheep for assessing seasonal influences on reproduction. Deutsche Tierärztliche Wochenschrift 87 (2): 60.
2653. Schalkwyk, P. C. Van, Geyser, T. L., Recio, M., and F. B. G. Erasmus. The anthelmintic efficacy of albendazole against gastrointestinal roundworms, tapeworms, lungworms and liverflukes in sheep. Journal of the South African Veterinary Association 50 (1): 31.
2654. Schanbacher, B. D. The regulation of FSH secretion in rams. Journal of Reproduction and Fertility (suppl.) 26: 15.
2655. Schanbacher, B. D. Increased lamb production with rams exposed to short day-lengths during the nonbreeding season. Journal of Animal Science 49 (4): 927.
2656. Schanbacher, B. D., and J. J. Ford. Photoperiodic regulation of ovine spermatogenesis: relationship to serum hormones. Biology of Reproduction 20 (4): 719.
2657. Scharrer, E., and B. Amann. Active intestinal transport of uracil in sheep. Annales de Recherches Veterinaires 10 (2/3): 467.
2658. Scharrer, E., Licbich, H. G., Raab, W., and N. Promberger. Influence of age and rumen development on intestinal absorption of galactose in lambs. Functional and morphological study. Zentralblatt für Veterinärmedizin 26 (2): 95.
2659. Scharrer, E., Peter, W., and W. Raab. Reciprocal relationship between rumen development and intestinal sugar transport capacity in sheep. Zentralblatt für Veterinärmedizin 26 (7): 513.
2660. Schiavo, A., Giovanni, F. de, Ferlicca, A., Martini, M., Stagni, M., and A. Mantovani. Survey of the health of sheep and goats in Italy. Rivista di Zootechnia E Veterinaria 5: 351.
2661. Schiemann, R., Jentsch, W., Hoffmann, L., and H. Wittenburg. Studies on full grown sheep to evaluate the feed energy of green forage silages. Archiv für Tierernährung 29 (1): 51.
2662. Schillhorn van Veen, T. W. Ovine fascioliasis (*Fasciola gigantica*) on the Ahmadu Bello University Farm. Tropical Animal Health and Production 11 (3): 151.
2663. Schmidt, R. L. Hibler, C. P., Spraker, T. R., and W. H. Rutherford. An evaluation of drug treatment for lungworm in bighorn sheep. Journal of Wildlife Management 43 (2): 461.
2664. Schneeberger, E. E., Walters, D. V., and R. E. Olver. Structure of pulmonary epithelial tight junctions during lung liquid absorption in newborn lambs. Journal of Cell Biology 83 (2, part 2): 87A.
2665. Schneider, D. J., Marasas, W. F. O., Dal-ekuys, J. C., Kried, N. P. J., and G. C. Vanschalkwyk. Field outbreak of suspected stachybotryotoxicosis in sheep. Journal of South African Veterinary Association 50 (2): 73.
2666. Schoeman, S. J. A comparison of different types of ewes in a grading-up program with white karakul rams. Agroanimalia 11 (4): 51.
2667. Schoeman, S. J. Analysis of the breed structure of the karakul stud industry in southwest Africa. Agroanimalia 11 (4): 55.
2668. Schoeman, S. J., and P. J. LeRoux. Influence of age on the reproductive pattern and related statistics at the Neudamm Karakul stud. Agroanimalia 11 (3): 41.
2669. Schrecke, W., Zahner, H., and Z. Z. Mbemba. On epidemiology of nematode gastroenteritis of cattle in Ituri, Zaire. XXI World Veterinary Congress, 1-7 July 1979, Moscow. Summaries, Vol. 2, Section III: Parasitology, Moscow, USSR, 63 pp.
2670. Schreiner, R. L., Bonderman, P. W., Morehead, H., Nolen, P., Escobedo, M. B., Gresham, E. L., and J. A. Lemons. Fetal and maternal hormonal response to starvation in the ewe. Pediatric Research 13 (4): II: 363.
2671. Schreiner, R. L., Lemons, J. A., and E.

- L. Gresham. Effect of maternal malnutrition of singleton and twin pregnancies in the sheep. *Nutrition Reports International* 21 (4): 525.
2672. Schumacher, G. H., Fanghaenel, J., and C. Christmann. Animal model in the study of craniofacial growth. *Zentralblatt für Allgemein Pathologie und Anatomie* 123 (1-2): 108.
2673. Schumacher, G. H., Ivankievicz, D., and J. Fanghanel. The role of function in the formation of the skull. *Acta Morphologica Academiae Scientiarum Hungaricae* 27 (1/2): 53.
2674. Schvarc, F., Gamcik, P., and P. Mesaros. Effect of oxytocin on the passage of sperm through the genital organs of sheep synchronized with Agelin. *Biologizace a Chemizace* 15 (5): 543.
2675. Schwabe, C. W. Epidemiological aspects of the planning and evaluation of hydatid disease control. *Australian Veterinary Journal* 55 (3): 109.
2676. Scoggins, B. A., Allen, K. J. F., Coghlan, J. P., Denton, D. A., Graham, W. F., Humphrey, T. J., and J. A. Whitworth. Hemodynamics of ACTH induced hypertension in sheep. *Clinical Science* 57 (suppl. 5): 333S.
2677. Scott, J. V., Stowring, L., Haase, A. T., Narayan, O., and R. Vigne. Antigenic variation in visna virus. *Cell* 18 (2): 321.
2678. Searle, T. W., Graham, N. M., and E. Smith. Studies of weaned lambs before, during and after a period of weight loss. II. Body composition. *Australian Journal of Agricultural Research* 30 (3): 525.
2679. Seidel, G. E., Jr. Applications of embryo preservation and transfer. In: Hawk, H. W., Beltsville Symposia in Agricultural Research, Vol. 3, Animal Reproduction, Allanheld, Osmun and Co., Montclair, New Jersey.
2680. Seidel, S. M., and G. E. Seidel, Jr. Embryo transfer bibliography. *Theriogenology* 12 (6): 399.
2681. Selaive, A. B., and J. P. Kennedy. A surgical technique for the collection of cervical mucus in the ewe. *Australian Veterinary Journal* 55 (4): 170.
2682. Sellers, R. F., Gibbs, E. P. J., Herniman, K. A. J., Pedgley, D. E., and M. R. Tucker. Possible origin of the blue-tongue epidemic in Cyprus August 1977. *Journal of Hygiene* 83 (3): 547.
2683. Sertich, P. L., Kaltenbach, C. C., Dunn, T. G., and J. M. Klindt. Endocrine, enzyme and fetal weight parameters in the undernourished ewe. *Journal of Animal Science* 49 (suppl. 1): 336.
2684. Seshachalum, S. Abstract of thesis: on the incidence of nematodes of sheep and their larval stages on pastures in and around Bangalore. *Mysore Journal of Agricultural Sciences* 13 (1): 119.
2685. Severin, V. S. The effect of quality of rams on fecundity of ewes. *Zhivotnovodstvo*, No. 11: 63.
2686. Shaka, S., and P. Nansen. Epidemiology of Fascioliasis in Denmark. Studies on the seasonal availability of metacercariae and the parasite stages over wintering on pasture. *Veterinary Parasitology* 5 (2-3): 145.
2687. Shamsul Islam, A. W. M. Hydatid disease in sheep of Mymensingh District, Bangladesh. *Journal of Parasitology* 65 (1): 37.
- 2687-A. Shand, J. H., and R. C. Noble. Role of maternal triglycerides in the supply of lipids to the ovine fetus. *Research in Veterinary Science* 26 (1): 117.
2688. Shand, J. H., and R. C. Noble. Delta-9 desaturase and delta-6 desaturase activities of the ovine placenta and their role in the supply of fatty acids to the fetus. *Biology of Neonate* 36 (5/6): 298.
2689. Shani, J., Goldhaber, G., and G. Ziv. Biphasic prolactin release by haloperidol and perphenazine in lactating and pregnant cows and ewes. *Biochemical Pharmacology* 28 (7): 1213.
2690. Sharganov, V. N. Utilization of feed mixtures based on haylage. *Ovtsevodstvo*, No. 11: 23.
2691. Sharma, H. R., Forsberg, N. E., and W. Guenter. The nutritive value of pressure-steamed aspen (*Populus tremuloides*) for mature sheep. *Canadian Journal of Animal Science* 59 (2): 303.
2692. Sharma, K. N., Mehrotra, P. K., and V. K. Khanna. A note on characterization and antibiotics sensitivity of pasteurellae. *Indian Journal of Animal Sciences* 49 (2): 142.
2693. Sharma, R. L., and D. N. Dhar. Population kinetics of primary *Oesophagostomum columbianum* infections in lambs. *Indian Journal of Animal Sciences* 49 (3): 203.
2694. Sharma, R. L., and D. N. Dhar. Immunization of lambs against *Oesophagostomum columbianum* using irradiated third stage larvae. *Zeitschrift für Parasitenkunde* 61 (1): 53.
2695. Sharma, S. K. Foot and mouth disease viraemia in sheep. *Indian Veterinary Medical Journal* 3 (2): 93.
2696. Sharma, V. D., Sethi, M. S., Yadav, M. P., and D. C. Dube. Sero epidemiologic investigations on brucellosis in the states of Uttar Pradesh and Delhi, India. *International Journal of Zoonoses* 6 (2): 75.
2697. Sharrow, S. H., and W. C. Keueger. Performance of sheep under rotational and

- continuous grazing on hill pastures. *Journal of Animal Science* 49 (4): 893.
2698. Shcheglov, V. V., Vorob'ev, E. S., Fitsev, A. I., and E. E. Arzumanyan. Role of enzyme preparations during feeding of sheep on straw. *Zhivotnovodstvo*, No. 10: 36.
2699. Shchupak, B. I. Use of production functions for forecasting and planned calculation of main factors of economic activity. *Probl Osvo Pustyn* 0 (4): 65.
2700. Sheehan, W., Lawlor, M. J., and I. H. Bath. Silage intakes in relation to the energy requirements of ewes in late pregnancy. *Irish Journal of Agricultural Research* 18 (2): 97.
2701. Sheldon, G., Brazzy, J., Tuggle, B., Drenshaw, C., Jr., and G. Brumley. Fetal lamb lung lavage and its effect on lung phosphatidyl choline. *Pediatric Research* 12 (5, part 1): 599.
2702. Sheldon, R. E., Peeters, L. L. H., Jones, M. D., Jr., Makowski, E. L., and G. Meschia. Redistribution of cardiac output and oxygen delivery in the hypoxemic fetal lamb. *American Journal of Obstetrics and Gynecology* 135 (8): 1071.
2703. Shelton, M. Estimation of genetic change in a performance testing program for sheep. *Journal of Animal Science* 48 (1): 26.
2704. Shemesh, M., Ayalon, N., and T. Mazor. Early pregnancy diagnosis in the ewe based on milk progesterone levels. *Journal of Reproduction and Fertility* 56 (1): 301.
2705. Shepelev, D. S. Comparative prevalence of *Cysticercus tenuicollis* in farm animals and eradication of the helminthiasis in pigs. *Tematicheskii Sbornik. Mordovskii Universitet: Referativnyi Zhurnal. Zhivotnovodstvo Veterinariya* (1977). 10.58.732; 1979. Vyp 2: 125.
2706. Sheppy, A. J. Outcrossing as a breeding policy. Part II. *Ark* 6 (12): 380.
2707. Sherikar, A. T., Ajinkya, S. M., Khot, J. B., and A. M. Vaidya. Differentiation of meats by gel diffusion technique. *Indian Journal of Animal Science* 49 (5): 350.
2708. Sherriff, D. *Eperythrozoon ovis*—a cause of anaemia, reduced production and decreased exercise tolerance in sheep. *Australian Veterinary Journal* 55 (12): 602.
2709. Sheth, A. R., Joshi, L. R., Moodbidri, S. B., and S. S. Rao. Characterization of a gonadal factor involving the control of FSH secretion. *Journal of Reproduction and Fertility* 26: 71 (suppl.).
2710. Sheu, S. S., Korth, M., and D. A. Lathrop. Resting membrane and potassium equilibrium potentials in sheep purkinje fibers. *Biophysical Journal* 25 (2, part 2): 198A.
2711. Shevryakov, N. V., Babiichuk, A. M., and A. F. Yavonenko. Citrate synthesis by reduction carboxylation of alpha ketoglutarate in rumen tissue of cattle and sheep. *Ukrainskii Biokhimiicheskii Zhurnal* 51 (5): 497.
2712. Shields, D. R., and W. G. Martin. Effect of extended supplementation with magnesium on blood metabolites of sheep. *Journal of Animal Science* 49 (suppl. 1): 134.
2713. Shiga, A., Miyachi, T., Sato, M., Shinozaki, K. I., Saeki, T., and M. Hayashi. Experimental studies on hypomagnesemia of ruminants. IV. Effect of cold stress on the mineral metabolism of sheep fed on herbage. *Journal of Faculty of Agriculture, Iwate University* 14 (3): 173.
2714. Shiga, A., and K. Shinozaki. Experimental studies on hypomagnesemia of ruminants. 2. Magnesium and calcium metabolism in young and old ewes fed low-magnesium diets. *Japanese Journal of Veterinary Science* 41 (3): 307.
2715. Shiga, A., and K. Shinozaki. Experimental studies on hypomagnesemia of ruminants. 3. Metabolism of magnesium and calcium in sheep at the time of change from a low magnesium and calcium diet to a low magnesium diet with calcium carbonate. *Japanese Journal of Veterinary Science* 41 (5): 531.
2716. Shigidi, M. T. A. A comparison of five serological tests for the diagnosis of experimental *Corynebacterium ovis* infection in sheep. *British Veterinary Journal* 135 (2): 172.
2717. Shigidi, M. T. A. Isolation of *Listeria monocytogenes* from animals in the Sudan. *British Veterinary Journal* 135 (3): 297.
2718. Shillhorn van Veen, T. W. Ovine fascioliasis (*Fasciola gigantica*) on the Ahmadu Bello University Farm, Nigeria. *Tropical Animal Health Production* 11 (3): 151.
2719. Shinchi, S., and M. Kandatsu. Decomposition of rumen bacteria by ciliate protozoa in vitro. *Bulletin of Azabu Veterinary College* 4 (1): 199.
2720. Shnyder, S. M., Wright, R. G., Levinson, G., Roizen, M. F., Wallis, K. L., Rolbin, S. H., and J. B. Craft. Uterine blood flow and plasma norepinephrine changes during maternal stress in the pregnant ewe. *Anesthesiology* 50 (6): 524.
2721. Shreeve, B. J., Patterson, D. S. P., Roberts, B. A., Macdonald, S. M., and A. W. Hayes. Tremorgenic mycotoxins and

- anirral diseases. In: Pepin, G. A., Paterson, D. S. P., and B. J. Shreeve. Proceedings of a 3rd meeting on mycotoxins in animal disease, Ministry of Agriculture, Fisheries and Food. UK, 58 pp.
2722. Shubber, A. H., and D. L. Doxey. The effect of whey proportion on the accuracy of immunoglobulin estimations in colostrum. *Veterinary Science Communications* 3 (2): 147.
2723. Shubber, A. H., Doxey, D. L., Black, W. J. M., and J. Fitzsimons. Colostrum production by ewes and the amounts ingested by lambs. *Research in Veterinary Science* 27 (3): 280.
2724. Shubber, A. H., Doxey, D. L., Black, W. J. M., and J. Fitzsimons. Immunoglobulin levels in ewe colostrum and in lamb serum. *Research in Veterinary Science* 27 (3): 280.
- 2724-A. Shupe, J. L., Olson, A. E., and R. P. Sharma. Effects of fluorides in domestic and wild animals. In: Oehme, F. W. Hazardous and toxic substances. Vol. 2, Marcel Dekker, New York.
2725. Sibbald, A. R., Maxwell, T. J., and J. F. Adie. A conceptual approach to the modeling of herbage intake by Hill sheep. *Agricultural Systems* 4 (2): 119.
2726. Siddons, R. C., Beever, D. E., Nolan, J. V., McGallan, A. B., and J. C. Macrae. Estimation of microbial protein in duodenal digesta. *Annales de Recherches Veterinaires* 10 (2-3): 286.
2727. Siddons, R. C., Evans, R. T., and D. E. Beever. Effect of formaldehyde treatment before ensiling on the digestion of wilted grass silage by sheep. *British Journal of Nutrition* 42 (3): 535.
2728. Siegel, S. R. Potassium chloride stimulation of aldosterone in the newborn lamb. *Journal of Pediatrics* 95 (6): 1051.
2729. Siegel, S. R., and D. A. Fisher. The effects of angiotensin. II. Blockade and nephrectomy on the renin angiotensin aldosterone system in the new born lamb. *Pediatrics Research* 12 (5, part 1): 603.
2730. Siegel, S. R., Nathanielsz, P. W., and D. A. Fisher. Vascular insensitivity responsible for hyperreninemia and hyperaldosteronemia in the new born lamb. *Clinical Research* 27 (1): 133A.
2731. Siegel, S. R., Nathanielsz, P. W., and D. A. Fisher. The effects of angiotensin II on blood pressure, plasma renin activity and aldosterone in the fetal lamb. *Pediatric Research* 13 (4, part 2): 363.
2732. Siegel, S. R., Nathanielsz, P. M., and D. A. Fisher. Vascular insensitivity to angiotensin II in the newborn lamb. *Pediatric Research* 13 (4, part 2): 520.
2733. Siegel, S. R., and T. Parkhill. Effects of angiotensin II and saralasin on prorenin in the fetal lamb. *Kidney International* 16 (6): 796.
2734. Siimes, A. S., and R. K. Creasy. Cardiac and uterine hemodynamic responses to ritodrine hydrochloride administration in pregnant sheep. *American Journal of Obstetrics and Gynecology* 133 (1): 20.
2735. Silavin, S. L. The role of microfilaments in luteal steroidogenesis. *Biology of Reproduction* 20 (suppl. 1): 67A.
2736. Silva, R. M. Analysis of trace elements in serum, liver and pancreas of sheep infected with gastrointestinal helminths by absorption spectrophotometry. *Arquivos da Escola de Veterinaria da Universidade Federal de Minas Gerais* 31 (3): 488.
2737. Simakov, A. F., and L. P. Badlo. Effect of dietary structure on absorption of amino acids and polypeptidase activity of digesta of sheep. *Trudy, Komi Filial Akademii Nauk SSSR; Referativnyi Zhurnal* 58 (1979) 5.58.675; 1978, 38: 52.
2738. Simesen, M. G., Aalund, O., and L. Husager. Biochemical changes following bilateral nephrectomy in the ovine. *Acta Veterinaria Scandinavica* 20 (4): 595.
2739. Simesen, M. G., and C. Hyldgaard-Jensen. A case of parturient paresis with 2 relapses in 1 ewe—a case report. *Nordisk Veterinaer Medicin* 31 (9): 392.
2740. Simoens, P., Vos, N. R. de, and H. Lauwers. Illustrated anatomical nomenclature of the heart and the arteries of head and neck in the domestic animals. *Mededelingen van de Faculteit Diergeneeskunde Rijksuniversiteit Gent* 21 (1/2): 100.
2741. Simos, E., and A. Frangopoulos. The present state of listeriosis in Greece. In: I. Ivanov. Problems of Listeriosis. National Agroindustrial Union Center for Scientific Information, Sofia, Bulgaria.
2742. Simov, P., Semov, P., and A. Veselinova. Effect of feeding large amounts of concentrates on the health of lambs. *Veterinarnomeditsinski Nauki* 16 (2): 24.
2743. Simpson, C. F., and M. L. Bruss. Ectopic calcification in lambs from feeding the plant *Cestrum diurnum*. *Calcification Tissue International* 29 (3): 245.
2744. Simpson, H., and T. N. Edev. Changes in physical condition and ejaculate characteristics in paddock-mated rams. *Australian Veterinary Journal* 55 (5): 225.
2745. Simpson, V. R. Bluetongue antibody in the domestic and game animals of Botswana. *Tropical Animal Health Production* 11 (1): 43.
2746. Sinclair, A. J., Embury, D. H., and D. Pritchard. Globoid cell leucodystrophy (Krabbe's disease) in sheep. *Pathology* 11 (2): 334.

2747. Singh, A. P., Singh, G. R., Bhargava, A. I., and I. V. Mogha. Observations on everted intestinal anatomosis using continuous lock-stitch sutures in sheep. *Indian Journal of Animal Sciences* 49 (4): 286.
2748. Singh, H. P., Bhat, P. N., Raina, B. L., and R. Singh. Phylogenetic relationships between indigenous sheep breeds. *Indian Journal of Animal Sciences* 49 (1): 910.
2749. Singh, J., Sadana, J. R., Kulshreshtha, R. C., and D. S. Kalra. Isolation, serotyping and antibacterial sensitivity of *Escherichia coli* from cases of colibacillosis in lambs and kids. *Haryana Veterinarian* 18 (1): 11.
2750. Singh, J. P., Yadav, D. N., and O. P. S. Sengar. A note on urea as a partial substitute of protein in sheep nutrition. *Indian Journal of Animal Sciences* 49 (11): 965.
2751. Singh, L. B., Dwarakanath, P. K., Rakhimov, A., and S. P. Prasad. Blood electrolytes (K and Na) and Hb-variants in Karakul sheep. *Indian Veterinary Journal* 56 (7): 554.
2752. Singh, L. B., Singh, M., Dwarakanath, P. K., and A. Lal. Effect of some biochemical characters on production traits in sheep. II. Some wool traits. *Indian Journal of Animal Health* 18 (1): 27.
2753. Singh, M., More, T., and A. K. Rai. Heat tolerance of different genetic groups of sheep exposed to elevated temperature conditions. *Journal of Agricultural Science* 94 (1): 63.
2754. Singh, N. General performance of sheep flock of Rajasthan desert under arid conditions. *Indian Journal of Animal Sciences* 49 (4): 273.
2755. Singh, N., Kwatra, M. S., and R. S. Bajwa. Pathology of naturally occurring *Paramphistomum cervi* infection in sheep. *Indian Journal of Parasitology* 3 (2): 183.
2756. Singh, N., and G. C. Taneja. Effect of prolonged salt intake on the reproduction of ewes and weight of lambs born to Marwari sheep. *Indian Journal of Animal Research* 13 (2): 71.
2757. Singh, N. P., Monohar Singh, and B. C. Pagniyak. Effect of energy and protein levels on nutrient digestibility and wool production. *Indian Journal of Animal Sciences* 49 (4): 277.
2758. Singh, R. Hormonal and autocoid effects on ovarian activity and oestrus behaviour in sheep. *Thesis Abstracts. Haryana Agricultural University* 6 (1): 12.
2759. Singh, S., and J. C. Hawke. The in vitro lipolysis and biohydrogenation of monogalactosyldiglyceride by whole rumen contents and its fractions. *Journal of the Science of Food and Agriculture* 30 (6): 603.
2760. Singh, S. P., Sethi, M. S., and V. D. Sharma. Prevalence of salmonellae in sheep and goats: isolation and antibiogram. *Indian Journal of Animal Sciences* 49 (1): 53.
2761. Singh, V. P., and R. C. Pathak. An observation on the thermostability of parainfluenza-3 isolates. *Indian Veterinary Journal* 56 (6): 520.
2762. Singh, V. P., and R. C. Pathak. A note on the growth curve of ovine parainfluenza-3 virus. *Indian Journal of Animal Sciences* 49 (1): 237.
2763. Singh, V. P., and R. C. Pathak. A note on the prevalence of parainfluenza-3 antibodies in sheep and goats. *Indian Journal of Animal Sciences* 49 (10): 865.
2764. Singh, V. P., and R. C. Pathak. Experimental pneumonia in lambs inoculated with parainfluenza-3 virus. *Indian Journal of Experimental Biology* 17 (2): 221.
2765. Singh, V. P., and R. C. Pathak. Differentiation of ovine parainfluenza 3 isolates on the basis of hemagglutination. *Indian Journal of Animal Research* 12 (2): 115.
2766. Sinha, N. K., Joshi, J. D., and K. L. Sahni. Note on the occurrence of puberty and sexual maturity in native and cross bred sheep reared under confinement. *Indian Journal of Animal Sciences* 49 (12): 1096.
2767. Sinha, N. K., Wani, G. M., and K. L. Sahni. Observations on the reproductive behaviour and semen quality of rams reared under tropical conditions. *Indian Journal of Animal Sciences* 49 (11): 916.
2768. Sivkova, K., and V. Rusev. Digestive processes in the rumen of sheep given diets of different physical form. *Zhivotnov'dni Nauki* 16 (1): 100.
2769. Siwecka, B. Effect of feeding on blood flow in the mesenteric blood vessels of sheep. *Acta Physiologica Polonica* 30 (1): 179.
2770. Skalka, J., and L. Vrzgula. Dynamics of the acid-base indices of the blood of lambs from the 7th day of post-natal life to adult age. *Veterinarni Medicina* 24 (6): 351.
2771. Skalka, J., and L. Vrzgula. Values of haematological indices in intensive lamb fattening in modern breeding systems. *Zivocisna vyroba (Animal Husbandry)* 24 (3): 205.
2772. Skalka, J., and L. Vrzgula. 2-year dynamics of hematological indices in sheep under specialized large-capacity rearing conditions. *Zivocisna Vyroba (Animal Husbandry)* 24 (4): 313.
2773. Skand, J. H., and R. C. Noble. Delta-9 and

- delta-6-desaturase activities of the ovine placenta and their role in the supply of fatty acids to the fetus. *Biology of the Neonate* 36 (5/6): 298.
2774. Skjervold, H. Causes of variation in sex ration and sex combination in multiple births in sheep. *Livestock Production Science* 6 (4): 387.
2775. Skmmer, R. M. W., Peter, D. W., and P. G. Board. Effect of a duodenal infusion of methionine on erythrocyte reduced glutathione of sheep. *Journal of Agricultural Science* 93 (1): 241.
2776. Skrivan, M. Estimation of digestibility by the indicator method with ash insoluble in HCL. *Zivocisna Vyroba* 24 (3): 223.
2777. Skrivan, M., Marvan, F., and R. Loucka. Effect of pelletized feeds on the morphological changes of the epithelium of proventriculi in rams. *Zivocisna vyroba (Animal Husbandry)* 24 (10): 721.
2778. Slater, J. S., and D. J. Mellor. Concentrations of free amino acids in maternal and fetal plasma from conscious catheterized ewes during the last 5 weeks of pregnancy. *Research in Veterinary Science* 26 (3): 296.
2779. Slauson, D. O., and R. M. Lewis. Comparative pathology of glomerulonephritis in animals. *Veterinary Pathology* 16 (2): 135.
2780. Slee, J. Response of sheep to cold exposure in relation to selection for survival ability. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureau, Slough, UK.
2781. Slyter, L. Lambing on schedule. *South Dakota Farm and Home Research* 30 (1): 22.
2782. Smart, J. L., Roberts, T. A., Stringer, M. F., and N. Shah. The incidence and serotypes of *Clostridium perfringens* on beef, pork and lamb carcasses. *Journal of Applied Bacteriology* 46 (2): 377.
2783. Smeaton, D. C. Effect of pasture allowance over February-March on ewe live-weight change and reproductive performance. *Annual Report 1978-79*, Hamilton, New Zealand, Ministry of Agriculture and Fisheries, 34 pp.
2784. Smith, A., and A. G. Calder. Characterization of ethyl substituted fatty acids from lamb subcutaneous triacylglycerols by combined gas chromatography mass spectrometry. *Biomedical Mass Spectrometry* 6 (8): 347.
2785. Smith, A., Calder, A. G., Lough, A. K., and W. R. H. Duncan. Identification of methyl-branched fatty acids from the triacylglycerols of subcutaneous adipose tissue of lambs. *Lipids* 14 (12): 953.
2786. Smith, A. D., and L. J. Shandruk. Comparison of fecal, rumen and utilization methods for ascertaining pronghorn diets. *Journal of Range Management* 32 (4): 275.
2787. Smith, B. L., Reynolds, G. W., and P. P. Embling. Effect of method of oral administration of zinc sulphate on acute zinc toxicity in the sheep. *New Zealand Journal of Experimental Agriculture* 7 (2): 107.
2788. Smith, C., King, J. W. B., Nicholson, D., Wold, B. T., and Bampton, P. R. Performance of crossbred sheep from a synthetic dam line. *Animal Production* 29 (1): 1.
2789. Smith, C. M., Krishnamurti, C. R., and W. D. Kitts. Effect of lactic acid administration on rumen myoelectrical activity and pressure changes in the sheep. *Canadian Journal of Animal Science* 59 (2): 255.
2790. Smith, H. W., and M. B. Huggins. Experimental infection of calves and lambs with mixtures of invasive and enteropathogenic strains of *Escherichia coli*. *Journal of Medical Microbiology* 12 (4): 507.
2791. Smith, J. F., and K. T. Jagusch. Coumestans in lucerne and ovulation in ewes. *Oklahoma Current Farm Economics* 52 (2): 411.
2792. Smith, J. F., and K. T. Jagusch. Coumestans levels in lucerne and ovulation rate of ewes. *Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries, Annual Report of Research Division 1977-78*, Hamilton, New Zealand, 252 pp.
2793. Smith, M. A., Malechek, J. C., and K. O. Fulgham. Forage selection by mule deer on winter range grazed by sheep in Spring. *Journal of Range Management* 32 (1): 40.
2794. Smith, M. W., and P. S. James. Absorption of methionine by foetal and neonatal lamb colon. *Journal of Agricultural Science* 92 (1): 39.
2795. Smith, P. A., and M. P. Boland. Increasing the lambing percentage in Galway ewes by controlled breeding. *Faculty of General Agriculture, Research Report 1976-77*, Dublin, Irish Republic.
2796. Smith, P. A., and M. P. Boland. Semen quality in Suffolk, Texel and Dorset Horn rams during the sheep non-breeding season. *Faculty of General Agriculture, Research Report, 1976-77*. Dublin, Irish Republic.
2797. Smith, P. A., and M. P. Boland. Studies in the collection of semen from Suffolk, Texel and Dorset horn rams. *Faculty of General Agriculture, Research Report 1976-77*. Dublin, Irish Republic.
2798. Smith, P. A., Boland, M. P., and J. T. Hayes. Effect of season on sperm cell

- morphology in Texel rams. Faculty of General Agriculture, Research Report 1976-77. Dublin, Irish Republic.
2799. Smith, P. A., Boland, M. P., and I. Gordon. Effect of inseminating instrument and number of inseminations on outcome of set-time sheep AI. Faculty of General Agriculture Research Report 1976-77. Dublin, Irish Republic.
2800. Smith, R. H. Synthesis of microbial nitrogen compounds in the rumen and their subsequent digestion. *Journal of Animal Science* 49 (6): 1604.
2801. Smith, W. D., and M. G. Christie. *Haemonchus contortus*: some factors influencing the degree of resistance of sheep immunized with attenuated larvae. *Journal of Comparative Pathology* 89 (1): 141.
2802. Smith, W. L., Huslig, R. L., Rollins, T. E., and R. L. Fogwell. Uterine prostaglandin forming cyclo oxygenase relationship to luteolysis and subcellular localization. In: Samuelsson, B., Ramwell, P. W., and R. Paoletti. *Advances in Prostaglandin and Thromboxane Research*, Vol. 8, p. 1345, Raven Press, New York.
2803. Smollich, A., Schauer, D., Weber, G., and W. Busch. Morphokinetic action of PMSG and sexual steroids on links of the cerebrohypophysio-gonadal axis of anoestrous sheep. *Archiv für Experimentelle Veterinärmedizin* 33 (1): 141.
2804. Smyth, J. D. *Echinococcus granulosus* and *E. multilocularis* in vitro culture of the strobilar stages from protoscoleces. *Angewandte Parasitologie* 20 (3): 137.
2805. Snodgrass, D. R. Diarrhoea in neonatal lambs. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
2806. Snodgrass, D. R., Angus, K. W., Gray, E. W., Menzies, J. D., and G. Paul. Pathogenesis of diarrhea caused by astrovirus infections in lambs. *Archives of Virology* 60 (304): 217.
2807. Snodgrass, D. R., Ferguson, A., Allan, F., Angus, K. W., and B. Mitchell. Small intestinal morphology and epithelial cell kinetics in lamb rotavirus infections. *Gastroenterology* 76 (3): 477.
2808. Soeli, N. E. Chronic copper poisoning in sheep. Biochemical, kinetic, morphologic and comparative studies. Oslo, Norway, Veterinary College, 90 pp.
2809. Sojka, W. J., Morris, J. A. and C. Wray. Enteric colibacillosis in lambs with special reference to passive protection of lambs against experimental infection by colostral transfer of antibodies from ewes vaccinated with K99. *Fortschritte der Veterinärmedizin*, No. 29: 52.
2810. Sokol, J. H., Lee, C. O., and F. J. Lupo. Measurement of the free calcium ion concentration in sheep cardiac purkinje fibers with neutral carrier calcium ion selective microelectrodes. *Biophysical Journal* 25 (2, part 2): 143a.
2811. Sola, A., Schlueter, M., and R. Phibbs. Responses of new born lambs breathing room air and 4.5 percent carbon dioxide during massive hemorrhage. *Clinical Research* 27 (5): 821 A.
2812. Sola, A., Spitzer, A., Schlueter, M., Keil, L., and R. H. Phibbs. Responses of new born lambs to rapid massive hemorrhage. *Pediatric Research* 13 (Part 2, No. 4): 352.
2813. Soliman, H. S., Orskov, E. R., Atkinson, T., and R. I. Smart. Utilization of partially hydrolysed starch in milk replacers by newborn lambs. *Journal of Agricultural Science* 92 (2): 343.
2814. Soliman, H. S., Orskov, E. R., and I. Mackie. Utilization of fish protein hydrolysates in milk substitutes for lambs. *Journal of Agricultural Science* 93 (1): 37.
2815. Soliman, S. A., El-Sabae, A. E. H., Curely, A., and N. S. Ahmed. Subcellular distribution of neurotoxin esterase activity in lamb and mouse brain. *Journal of Environmental Science and Health* 15B (2): 207.
2816. Solomon, M. B., Kemp, J. D., Fly, D. G., Fox, J. D., and W. G. Moody. Carcass and meat characteristics of lambs of different breed crosses, weight and sex. *Journal of Animal Science* 49 (suppl. 1): 231.
2817. Solomonov, Kh., Stoyanov, A., and D. Ts. Dochevski. The influence of length of feeding milk substitutes on early weaned lamb growth. *Zhivotnov'd Nauki* 16 (4): 41.
2818. Soman, J. P., and I. P. Singh. A note on immunogenicity of cell-culture-attenuated sheep-pox virus. *Indian Journal of Animal Sciences* 49 (8): 674.
2819. Sunmez, R., Turkmüt, L., and C. Sarican. Studies on cross breeding of Awassi and Daglic sheep. *Zuchtungskunde* 51 (5): 401.
2820. Sood, S. M., Sidhu, K. S., and R. K. Dewan. Heat stability and the voluminosity and hydration of casein micelles from milks of different species. *New Zealand Journal of Dairy Science Technology* 14 (3): 217.
2821. Sorodoc, G., Surdan, C., Peiulescu, P., Osman, J., Stoian, N., and S. Anghelescu. Specific prophylaxis of enzootic chlamydial ovine abortion. Review of Roumanian Medical Virology 30 (2): 131.
2822. South Africa, Dept. of Agricultural Tech-

- tical Services, 1979. Annual report of the Secretary for Agricultural Technical Services for the period 1 July 1977 to 30 June 1978. Pretoria, South Africa VI, 241 pp.
2823. Southcott, W. H. Management control for nematode parasites. *New South Wales Veterinary Proceedings* 15: 17.
2824. Spain, Centro Nacional de Alimentacion y Nutricion. Food legislation. Classified by foods, 1976-79. Madrid, Spain, 248 pp.
2825. Speedy, A. W. Clean grazing for sheep. *Veterinary Record* 105 (9): 179.
2826. Spencer, G. S. Effects of electrical and captive bolt stunning on the incidence of blood-splash in lambs. *Journal of the Science of Food and Agriculture* 30 (11): 1108.
2827. Spitzer, J. C., and R. H. Carpenter. Synchronized breeding of cycling ewes to produce fetuses of known gestational age. *Laboratory Animal Science* 29 (6): 755.
2828. Sprague, M. A., Motto, M. L., and J. M. Lopez Diaz. Alternatives to a monoculture of Henequen in Yucatan Mexico. 3. Performance of forage drops and livestock. *Interciencia* 4 (3): 157.
2829. Spraker, T. R. The pathogenesis of pulmonary protostrongylosis in bighorn lambs. *Dissertation Abstracts International* 40B (4): 1640.
2830. Sreemarnarayana, O., and B. B. Mahapatro. Rate of passage of digesta in sheep and goats fed on nitrogen from different sources. *Indian Veterinary Journal* 56 (9): 772.
2831. Sriraman, P. K., Rao, P. R., Ahmed, M. N., Reddy, M. M., and G. A. Sastry. Case of unilateral pyelonephritis with an abscess in brain in a ram. *Indian Veterinary Journal* 56 (4): 336.
2832. Stadtmire, D. L., Reid, R. L., and G. A. Jung. Selenium status of beef cattle and sheep in Pennsylvania and West Virginia. *Journal of Animal Science* 49 (suppl. 1): 132.
2833. Stafford, J. E., and J. R. W. Walkley. Breeding objectives and selection criteria for Australian prime lamb production. *Proceedings of Inaugural Conference, Australian Association of Animal Breeding and Genetics, University of New England, Armidale, N.S.W., Australia*, p. 337.
2834. Stahl, W., Macario, A. J. L., and G. Turck. Chronic toxoplasmosis depressed humoral immune response to sheep erythrocytes. *Abstracts of Annual Meeting of American Society of Microbiologists*, 69 p.
2835. Stakan, G. A., Soskin, A. A., and E. K. Minina. An analysis of production characters and the possibilities of using biochemical blood markers. *Genetika* 15 (7): 1304.
2836. Stallings, C. C., McGuffey, R. K., Middleton, T. R., and J. W. Thomas. Responses of sheep and dairy cows to propionic acid treatment of alfalfa haylage fed with or without corn silage. *Journal of Dairy Science* 62 (8): 1264.
2837. Stamp, J. T. Scrapie disease of sheep. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
2838. Stangassinger, M., Beck, U., and B. Emmanuel. Is glucose ketogenic in rumen epithelium. *Annales de Recherches Veterinaires* 10 (2-3): 413.
2839. Stangassinger, M., and D. Giesecke. Quantitative measurement of gluconeogenesis from isobutyrate in sheep. *Archives International Physiology and Biochemistry* 87 (2): 265.
2840. Strangassinger, M., and D. Giesecke. Studies on gluconeogenesis from isobutyric acid. *Zeitschrift für Tierphysiologie, Tierernährung und Futtermittelkunde* 42 (1): 42.
2841. Stanikova, A., Maracek, I., Arendarcik, J., Balun, J., and M. Praslicka. The qualitative and quantitative histological changes in the oviducts and uteri of ewes after exposure to X-rays. *Veterinarni Medicina* 25 (3): 161.
2842. Stankiewicz, M., Jonas, W., and D. Eliott. Non-specific activation of complement by parasites: a simple method for detecting C-3 on the larvae of parasitic nematodes. *New Zealand Journal of Zoology* 6 (4): 645.
2843. Stanley, H. J. Ontario sheep apprenticeship program. Milton, Ontario, Canada: Ontario Ministry of Agriculture and Food, 4 pp.
2844. Stanton-Yonge Molkenbuhr, G. Effects of different castration methods on efficiency of production in housed Romney Marsh lambs. *Archivos de Medicina Veterinaria* 11 (2): 125.
2845. Stark, R. I., Daniel, S. S., Husain, K. M., James, L. S., and R. L. Vande Wiele. Arginine vasopressin during gestation and parturition in sheep fetus. *Biology of Neonate* 35 (5-6): 235.
2846. Staub, N. C., Binder, A., Flick, M. R., and A. Perel. Role of blood factors in lung microvascular injury after emboli in sheep. *Circulation supplement* 60 (2): 11.
2847. Staub, N. C., and K. Ohkuda. Reversible lung vascular permeability increase by air emboli effect of left atrial pressure. *American Review of Respiratory Disease* 119 (4, part 2): 389.
2848. Staub, N. C., Ohkuda, K., Nakahara, K.,

- Weidner, W. J., and A. Binder. The effect of uneven pulmonary artery obstruction in sheep on lung fluid balance. In: Saldeen, T. The Microembolism Syndrome. Almqvist and Wiskell International, Stockholm, p. 201.
2849. Steblay, R. W. Animal model of human disease; anti-glomerular-basement-membrane glomerulonephritis. Animal model: experimental autoimmune anti-glomerular-basement-membrane glomerulonephritis in the sheep. *American Journal of Pathology* 96 (3): 875.
2850. Steeds, W. G., Devlin, T. J., and K. M. Wittenberg. Whey or processed faba-bean starch as an energy source with urea in liquid supplements for finishing lambs. *Canadian Journal of Animal Science* 59 (1): 35.
2851. Steele, W. The performance of lambs reared by ewes given protected lipids during late pregnancy and early lactation. *Animal Production* 28 (3): 287.
2852. Stehbens, W. E. Chronic changes in the walls of experimentally produced aneurysms in sheep. *Surgery, Gynecology and Obstetrics* 149 (1): 43.
2853. Steine, T. Effect of early breeding on production performance of ewes. 30th annual meeting, European Association for Animal Production, No. MS 4.2.
2854. Stellflug, J. N. Diagnosis of pregnancy in sheep with ultrasonic devices. *Journal of Animal Science* 49 (suppl. 1): 339.
- 2854-A. Stephens, L. C., McCjesney, A. E., and C. F. Nockels. Improved recovery of vitamin E-treated lambs that have been experimentally infected with intratracheal *Chlamydia*. *British Veterinary Journal* 135 (3): 291.
2855. Stephenson, J. B., and A. B. Grant. Selenium residues in sheep meat. *New Zealand Veterinary Journal* 27 (11): 232.
2856. Stern, D., Adler, J. H., Tagari, H., and E. Eyal. Responses of dairy ewes before and after parturition to different nutritional regimes during pregnancy. III. The concentration of some metabolites in the blood during pregnancy. *Annales de Zootechnie* 28 (3): 239.
2857. Stern, M. D., and W. B. Hoover. Method for determining and factors affecting rumen microbial protein synthesis: a review. *Journal of Animal Science* 49 (6): 1590.
2858. Sterner, R. T. Effects of sodium cyanide and diphacinone in coyotes (*Canis latrans*), applications as predacides in livestock toxic collars. *Bulletin of Environmental and Contaminative Toxicology* 23 (1/2): 211.
2859. Stevens, E. J. The botanical analysis of sheep diet: a comparison of three methods of sheep diet determination and the field application of faecal cecal analysis. *Proceedings of New Zealand Grassland Association* 40: 190.
2860. Stevenson, P. *Echinococcus* in Great Britain. A brief review of the current position. *Journal of Small Animal Practice* 20 (4): 233.
2861. Stewart, D. J. Role of elastase in the differentiation of *Bacteroides nodosus* infections in sheep and cattle. *Research in Veterinary Science* 27 (1): 99.
2862. Stewart, T. A., and I. T. Forrester. Acetylcholine induced calcium movements in hypotonically washed ram spermatozoa. *Biology of Reproduction* 21 (1): 109.
2863. Stinson, D. A., Allen, A. C., and D. J. Lloyd. Contribution of left to right ductus arteriosus shunting duct shunt to pulmonary blood flow in premature lambs during the 1st hours of life. *Pediatric Research* 13 (4, part 2): 352.
2864. Stoerger, M. F., Hinds, F. C., and H. W. Norton. Feeder usage among groups of lambs self-fed varying diets in two slotted floor pen sizes. *Journal of Animal Science* 49 (suppl. 1): 150.
2865. Stoerger, M. F., Hinds, F. C., Norton, H. W., and J. M. Stookey. Observations of feeding behaviour among groups of lambs self-fed varying diets in two slotted floor pen sizes. *Journal of Animal Science* 49 (suppl. 1): 150.
2866. Stoerger, M. F., Hinds, F. C., and P. Torgerson. A method of studying feeding behaviour among groups of lambs by recording feeder usage. *Journal of Animal Science* 49 (suppl. 1): 89.
2867. Stoerger, M. F., Hinds, F. C., and M. H. Wallace. Feeder usage among groups of self-fed lambs in two locations and two pen types. *Journal of Animal Science* 49 (suppl. 1): 89.
2868. Stone, G. M., Wild, J., and B. G. Miller. The uterine endometrium and isthmic oviduct of the ewe. Does progesterone act as an antiestrogen. *Biology of Reproduction* 21 (2): 273.
2869. Storm, E., and E. R. Orskov. Utilization of rumen bacteria by ruminants. *Annales de Recherches Veterinaires* 10 (2/3): 294.
2870. Stormshak, F. Uterine estrogen and progesterone receptors. In: Hawk, H. W., Beltsville Symposia in Agricultural Research, Vol. 3, Animal Reproduction., Allanheld, Osmun and Co., Montclair, New Jersey.
2871. Stoyanov, A., and I. Penkov. Growth and productivity of different constitutional-productive types of sheep in relation to nutrition. *Zhivotnov'dni Nauki* 16 (2): 30.
2872. Streu, J., and F. H. Becker. Ways of attaining a good and stable reproductive

- performance in ewe flocks. *Tierzucht* 33 (7): 306.
2873. Stritzke, D. J., Whiteman, J. V., Thomas, D. L., and J. E. Fields. Observations on milk production of crossbred ewes during three different seasons. Miscellaneous Publication, Oklahoma Agricultural Experiment Station, NP-104: 192.
2874. Studzinski, T., and R. Bobowiec. Effect of intraduodenal infusion of hydrochloric acid and sodium bicarbonate on the volume of secretion, bicarbonate output and pH of pancreatic juice and bile in sheep. *Acta Physiologica Polonica* 30 (1): 186.
2875. Studzinski, T., and R. Bobowiec. Effect of secretin and chemical stimulation of the duodenum on neutralizing functions of pancreatic juice and bile in sheep. *Medycyna Weterynaryjna* 35 (7): 443.
2876. Suaudeau, J., Carvalho, A., Austen, W. G., and A. J. Erdmann III. The importance of platelets for the isolated lamb heart perfused at 13 Celsius. *Journal of Surgical Research* 26 (6): 618.
2877. Subba Rao, M. V., and B. S. Malik. Cross neutralization tests on sheep poxvirus, goat poxvirus and contagious pustular dermatitis virus. *Acta Virologica* 23 (2): 165.
2878. Subbotin, N. F., and S. T. Karelin. Epizootiology. Course of infection and treatment of ovine fascioliasis. *Veterinariya*, No. 8: 46.
2879. Suckling, G. Mineralization of the enamel of ovine permanent central incisor teeth using microhardness and histological techniques. *Calcified Tissue International* 28 (2): 121.
2880. Sudweeks, E. M., Ely, L. O., and L. R. Sisk. Effect of particle size of corn silage on digestibility and rumen fermentation. *Journal of Dairy Science* 62 (2): 292.
2881. Sukow, W. W., and C. S. Shern. Evidence for differences in the binding of triton X-100 to sheep and human serum albumins. *Physiological Chemistry and Physics* 11 (4): 359.
2882. Sumner, R. M. W. Efficiency of wool and body growth in pen-fed Romney, Coopworth, Perendale, and Corriedale sheep. *Journal of Agricultural Research* 22 (2): 251.
2883. Sumner, R. M. W., Peter, D. W., and P. G. Board. Effect of a duodenal infusion of methionine on erythrocyte reduced glutathione of sheep. *Journal of Agricultural Science* 93 (1): 241.
2884. Sumner, R. M. W., and S. K. Stephenson. Comparative productivity of super-fine Merino and Border Leicester breeding ewes grazing semi-improved native pasture on the New England tablelands, New South Wales. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (99): 402.
2885. Sundell, H., Catterton, W. Z., Kovar, I., Rojas, J., Green, R., Groggaard, J., Harris, T., and K. Brigham. Lung water and vascular permeability in newborn lambs. *Clinical Research* 27 (5): 823A.
2886. Sundell, H. W., Gray, M. E., Relier, J. P., Kovar, I. Z., Catterton, W. Z., Swift, L. L., and M. T. Stahlman. Effects of ACTH on lung maturation in fetal lambs. *American Journal of Pathology* 97 (2): 393.
2887. Surman, P. G. The isolation of *Chlamydia* agents from conjunctival scrapings of sheep with keratonconjunctivitis. *Australian Veterinary Journal* 55 (8): 401.
2888. Susa, J. B., Cowett, R. M., Oh, W., and R. Schwartz. Suppression of gluconeogenesis and endogenous glucose production by exogenous insulin administration in the new born lamb. *Pediatric Research* 12 (5, part 1): 594.
2889. Susa, J. B., Stonestreet, B., Schwartz, R., Oh, W., Cowett, R. M., and D. Warburton. Endogenous insulin secretion and metabolic clearance rates in the neonatal lamb. *Pediatric Research* 13 (4, part 2): 357.
2890. Suter, D. E., Fletcher, P. W., Sluss, P. M., and G. D. Niswender. Down regulation of receptors for luteinizing hormone in the ovine corpus luteum and its effect on progesterone secretion. *Biology of Reproduction* 20 (supp. 1): 69A.
2891. Suteu, E. Prevention and control of haemosporidial infections during the grazing season (cattle, sheep, goat, horse). *Revista de Cresterea Animalelor* 29 (5): 27.
2892. Sutherland, R. J. Clinical biochemistry in ovine white liver disease. *New Zealand Veterinary Journal* 27 (4): 67.
2893. Sutherland, R. J. et al. Ovine white liver disease—an hepatic dysfunction associated with vitamin B12 deficiency. *New Zealand Veterinary Journal* 27 (11): 227.
2894. Sutherland, R. M. Deer versus sheep. A comment. *Journal of Agriculture Economics* 30 (1): 67.
2895. Sutiak, V., Bialon, C., Sutiakova, I., and P. Holakovsky. Tests on the protective efficacy of acetic and propionic acids in urea poisoning of sheep. *Biologizace a Chemizace Zivocisne Vyrobyveterinaria* 15 (2): 142.
2896. Sutiak, V., Rosival, I., Hrivnak, J., Dadejikova, Z., and N. Janigova. Ammonia metabolism. Therapeutic efficacy of intravenous administration: of titrated L-glutamic acid in urea poisoning. *Biologizace a Chemizace Zivocisne Vyrobyveterinaria* 15 (2): 129.
2897. Sutic, M., Mitic, S., and N. Svilar. Affa-

- toxins in milk and milk products. *Mljekarstvo* 29 (4): 74.
2898. Suttle, N. F. Copper, iron, manganese and zinc concentrations in the carcasses of lambs and calves and the relationship to trace element requirements for growth. *British Journal of Nutrition* 42 (1): 89.
2899. Suttle, N. F. Changes in hepatic copper stores in pre-ruminant and ruminant lambs given ammonium tetrathiomolybdate in their diets. *Proceedings of the Nutrition Society* 38 (2): A58.
2900. Sutton, R. H. Effect of *Eperythrozoon ovis* infection on the reductive potential of sheep erythrocytes. *Veterinary Parasitology* 5 (1): 11.
2901. Sutton, R. H. The pathology of *Eperythrozoon ovis*. *New Zealand Veterinary Journal* 27 (1/2): 18.
- 2901-A. Sutton, R. J. Passive transfer of immunity to *Taenia ovis* in lambs via colostrum. *Research in Veterinary Science* 27 (2): 197.
2902. Sutton, R. N. P. Slow viruses and chronic disease of the central nervous system. *Postgraduate Medical Journal* 55 (640): 143.
2903. Svanbaeva, Z. S. Dynamics of secretion of oxytocin and catecholamines during inhibition of milk ejection. *Fiziologicheskii Zhurnal SSSR Imeni I. M. Sechenova* 65 (1): 117.
2904. Svarcbek, J. Liquid flow meter. German Federal Republic Patent Application, 1979. 2 824 910.
2905. Swainson, C. P., and D. Thomson. Studies on mesangio capillary glomerulo nephritis in Finnish Landrace sheep. *Kidney Investigations* 16 (1): 93.
2906. Swartz, H. A., Sebaugh, J., and J. F. Lasley. Lymphocyte cultures in the sheep. *Journal of Animal Science* 49 (suppl. 1): 79.
2907. Sweasey, D. et al. Border disease: a sequential study of surviving lambs and an assessment of its effect on profitability. *Veterinary Record* 104 (20): 447.
2908. Sweasey, D., and D. S. P. Patterson. Congenital hypo myelinogenesis border disease of lambs. Post natal neurochemical recovery in the central nervous system. *Journal of Neurochemistry* 33 (3): 705.
2909. Swedish National Food Administration. An acceptable death: a review of the hearing on pre-slaughter stunning held at Kavlinge, Sweden on 19th May 1979. *Meat Hygienist*, No. 23: 19.
2910. Swick, R. A., Cheeke, P. R., and D. R. Buhler. Effect of sheep rumen fermentation on the toxicity of tansy ragwort (*Senecio jacobaea*). *Journal of Animal Science* 49 (suppl. 1): 412.
2911. Syark, R. I., Daniel, S. S., Husain, K. M., James, L. S., and R. L. Vande Wiele. Arginine vasopressin during gestation and parturition in sheep fetus. *Biology of the Neonate* 35 (5/6): 235.
2912. Sykes, A. R. The role of science in estimating production potentials. *New Zealand Agricultural Science* 13 (3): 107.
2913. Sykes, A. R., and R. L. Coop. Effects of parasitism on host metabolism. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
2914. Sykes, A. R., Coop, R. L., and K. W. Angus. Chronic infection with *Trichostrongylus vitrinus* in sheep—some effects on food utilization, skeletal growth and certain serum constituents. *Research in Veterinary Science* 26 (3): 372.
2915. Sykes, A. R., and A. J. F. Russel. Seasonal variation in plasma protein and urea nitrogen concentrations in hill sheep. *Research in Veterinary Science* 27 (2): 223.
2916. Symons, L. E. A., Steel, J. R., and W. O. Jones. Pathophysiology and production of lambs infected concurrently with *Trichostrongylus colubriformis* and *Ostertagia circumcincta*. Abstracts of papers presented at 23rd conference of Australian Society for Parasitology, Leura, NSW, Australia.
2917. Synowiedzki, Z., Jankowska, K., Szczepanik, H., and B. Trzpil. Phosphavit B12 and its use for treatment of some deficiency diseases induced by metabolic disorders in animals. *Medycyna Weterynaryjna* 35 (3): 147.
2918. Szeto, H. H., Kaiko, R. F., Clapp, J. R., Larrow, R. W., Mann, L. I., and C. E. Inturrisi. Urinary excretion of meperidine by the fetal lamb. *Journal of Pharmacology and Experimental Therapeutics* 209 (2): 244.

T

2919. Tadjbakhche, H., and G. Touvay. Evolution of antibodies in immunized ewes against *Salmonella abortus ovis* by killed vaccines. *Revue de Medecine Veterinaire* 130 (12): 1635.
2920. Tager-Kagan, P. Dicrocoeliasis due to *Dicrocoelium hospes* in Niger. *Revue d'Elevage et de Medecine Veterinaire des Pays Tropicaux* 32 (1): 53.
2921. Tait, R. M. The effects of acid-preserved high-moisture barley and pelleting on the utilization of all-concentrate diets by early-weaned lambs. *Canadian Journal of Animal Science* 59 (1): 101.
2922. Tait, R. M., and P. L. Dubeski. Response of newborn lambs to iron-dextran injection. *Canadian Journal of Animal Science* 59 (4): 809.
2923. Takahasi, E., Inaba, Y., Sato, K., Kurogi,

- H., Akashi, H., Satoda, K., and T. Omori. Antibody to rotavirus in various animal species. *National Institute of Animal Health Quarterly* 19 (1/2): 72.
2924. Tamate, H., Shiomura, Y., and T. Sakata. Scanning electron microscopic observation of sheep ruminal mucosa at its epithelium-connective tissue interface. *Tohoku Journal of Agricultural Research* 30 (2): 57.
2925. Tammingø, S. Protein degradation in the forestomachs of ruminants. *Journal of Animal Science* 49 (6): 1615.
2926. Tanaka, H. Experimental studies on immunity of testis. *Nishinihon Journal of Urology* 41 (1): 19.
2927. Tang, B. Y., Adams, N. R., and G. J. Sawyer. Increase in plasma cortisol concentrations in ewes fed oestrogenic subterranean clover. *Research in Veterinary Science* 27 (3): 286.
2928. Tashevov, K. T., and R. S. Karybaev. Interrelationship between bile eliminating function of the liver and mammary gland activity in ruminants during the lactation period. *Izv Akad Nauk Kaz SSR Ser Biol* 17 (3): 54.
2929. Taschenov, K. T., Varady, J., Boda, K., and J. Fejes. Participation of bile and pancreas juice in the secretion of endogenous nitrogen into the digestive tract of sheep. *Archiv für Tierernährung* 29 (7/8): 477.
2930. Tatarintsev, N. T. Efficacy of anti-epizootic measures against clostridial infections in sheep. *Trudy Vsesoyuznogo Instituta Eksperimental'noi Veterinarii* 49: 81.
2931. Tato, L., Mase, R., Pinelli, L., Pizzo, P., and D. Gaburro. Monorchidism. In: Job, J. C. *Pediatric and Adolescent Endocrinology*, Vol. 6, Cryptorchidism: Diagnosis and Treatment, S. Karger, Basel.
2932. Taylor, M. G., James, E. R., Bickle, Q., Hussein, M. F., Andrews, B. J., Dobinson, A. R., and G. S. Nelson. Immunization of sheep against *Schistosoma bovis* using an irradiated schistosomular vaccine. *Journal of Helminthology* 53 (1): 1.
2933. Taylor, R. G., Workman, J. P., and J. E. Browns. The economics of sheep predation in South-western Utah. *Journal of Range Management* 32 (4): 317.
2934. Taylor, S. M., and G. R. Pearson. *Trichostrongylus vitrinus* in sheep. I. The location of nematodes during parasitic development and associated pathological changes in the small intestine. *Journal of Comparative Pathology* 89 (3): 397.
2935. Taylor, S. M., and G. R. Pearson. *Trichostrongylus vitrinus* in sheep. II. The location of nematodes and associated pathological changes in the small intestine during clinical infection. *Journal of Comparative Pathology* 89 (3): 405.
2936. Taylor, W. P., and A. Abegunde. Isolation of peste des petits ruminants virus from Nigerian sheep and goats. *Research in Veterinary Science* 26 (1): 94.
2937. Taylor-Robinson, D. Pathogenicity of ureaplasmas for animals and man. *Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene. Erste Abteilung Originals*: 245 A (1/2): 150.
2938. Tchobroutsky, C., Monset-Couchard, M., Dumez, Y., and P. Toubas. Fetal breathing during moderate asphyxia in sheep and in human related to outcome of pregnancy. In: Chef, R. *Contributions to Gynecology and Obstetrics*. Vol. 6: 80, Karger, Basel.
2939. Teehan, T. J., Boylan, W. J., Rempel, W. E., and H. F. Windels. Estimation and estimates of individual heterosis. Maternal heterosis and recombination loss from a crossbreeding experiment with sheep. 30th annual meeting, European Association for Animal Production, No. G 2.5.
2940. Terblanche, H. J. J. Trials with febantel to determine the effect on breeding ewes and their offspring. *Veterinary Medical Review* 2: 118.
2941. Terblanche, H. J. J. Trials of febantel. Efficacy against nine nematode species common in sheep. *Gaceta Veterinaria* 41 (342): 440.
2942. Terek, V. I. Protein content of blood serum of sheep during different seasons. *Vischarstvo. Kiev. UKRSSR: Referativnyi Zhurnal* 58 (1979) 7.58.154: 1979, No. 18, 54.
2943. Terek, V. I. Changes in total protein and its fractions in blood serum of sheep during development. *Bilkoci Aklad Sirovatkikrovi Ovets'U Rizni Sezoni Poku Vischarstvo. Kiev. UKRSSR* 1979, No. 18: 54.
2944. Terent'ev, V. V., Fakhrutdinov, R. G., Kuv'kov, P. I., Terent'eva, M. V., and K. G. Kudryakov. Wool traits of meat-wool sheep in western Kazakhstan. *Vestnik Sel'Skokhozyaistvennoi Nauki Kazakhstana* 22 (10): 91.
2945. Terpstra, C., Boer, G. F. de, Hendricks, J., and D. J. Houwers. Studies on the epizootiology of Visna-Maedi in sheep. *Tijdschrift voor Diergeneeskunde* 104 (23): 928.
2946. Terqui, M. Joint effects of the dam and fetus on fetal growth and preweaning growth. *Bulletin Technique, Departement de Genetique Animal, Institut National de la Recherche Agronomique* No. 29/30: 9.
2947. Terzolo, H. R., D'Empaire, M., Bender-

- sky, S., and L. M. Igarza. Prevalence of *Salmonella typhimurium* in a clinically healthy flock of sheep. *Revista de Medicina Veterinaria*. Argentina 60 (5): 277.
2948. Tesanovic, D. Climatic factors and reproduction of Awassi sheep at the Dujaila farm in Iraq. *Stocarstvo* 33 (3/4): 103.
2949. Teste, C. *Oestrus ovis* infestation in sheep in France. Epidemiological study in the South. Thesis. Ecole National Veterinaire, Alfort, France, 67 pp.
2950. Tetlow, R. M., and R. J. Wilkins. Some effects of the size and density of dried forage packages on animal intake and performance. Proceedings of second international green crop drying congress, University of Saskatchewan, pp. 271-276.
2951. Tharlandsen, J. A trial with albendazole against *Dicrocoelium dendriticum* sheep. Proceedings of 9th symposium of Scandinavian Society for Parasitology, Abo, Finland, June 1979. Institute of Parasitology, Abo Akademi, Finland, No. 15.
2952. Thellen, G. H., Pedersen, N. C., and J. Higgins. Role of regional and distant lymph nodes in rejection of feline sarcoma virus induced tumors in sheep. *Journal of the National Cancer Institute* 63 (2): 389.
2953. Thewis, A., Francois, E., Thielemans, M. F., Thill, N., and M. Andre. Rate of passage of digesta in sheep. *Annales de Recherches Veterinaires* 10 (2/3): 163.
2954. Thiery, J. C., Blanc, M., Ravault, J. P., and J. Pelletier. Effects of anterior and posterior hypothalamic deafferentiation on gonadotrophin and prolactin secretion in ovariectomized ewes under hormonally induced oestrous cycles. *Annales de Biologie Animale, Biochimie, Biophysique* 19 (A4): 1081.
2955. Thieulant, M. L., and J. Pelletier. Evidence for androgen and estrogen receptors in castrated ram pituitary cytosol. Influence of time after castration. *Journal of Steroid Biochemistry* 10 (6): 677.
2956. Thimonier, J. Hormonal control of oestrous cycle in the ewe (a review). *Livestock Production Science* 6 (1): 39.
2957. Thivend, P., Clark, C. F. S., Orskov, E. R., and R. N. B. Kay. Digestion of partially hydrolysed starch in milk replacers by the young lamb. *Annales de Recherches Veterinaires* 10 (2-3): 422.
2958. Thomaon, D. J., and S. B. Cammell. Utilization of chopped and pelleted lucerne (*Medicago-sativa*) by growing lambs. *British Journal of Nutrition* 41 (2): 297.
2959. Thomas, B. B., and J. A. Boling. Ca, P and Mg metabolism in lambs injected with cholecalciferol (CC), 25-OH-CC and D-1 alpha -OH-CC. *Journal of Animal Science* 49 (suppl. 1): 14.
2960. Thomas, C., Daley, S. R., Aston, K., and P. M. Hughes. The effect of date of cut on silage intake and milk yield by cows and on digestibility in vitro in cows and sheep. *Animal Production* 28 (3): 422.
2961. Thomas, D. L., and J. V. Whiteman. Effects of substituting Finnsheep and Dorset breeding for Rambouillet breeding. I. Productivity of young, spring-lambing ewes. *Journal of Animal Science* 48 (2): 256.
2962. Thomas, D. L., and J. V. Whiteman. Effects of substituting Finnsheep and Dorset breeding for Rambouillet breeding. II. Productivity of fall-lambing ewes. *Journal of Animal Science* 48 (2): 265.
2963. Thomas, H. Ovaccidal activity of febantel. *New Zealand Veterinary Journal* 27 (12): 273.
2964. Thomas, P. C., and J. C. Hodgson. The clearance rate of rumen liquid and rumen fermentation pattern in sheep receiving forage diets. *Journal of Agricultural Science* 92 (3): 683.
2965. Thomas, R. J., Ely, D. G., Boling, J. A., Robb, T. W., and B. P. Glenn. Short term response to cholecalciferol injection in ovine liver and serum phosphorus, calcium and magnesium. *Journal of Animal Science* 49 (suppl. 1): 14.
2966. Thomas, R. J., and P. J. Waller. Field observations on the epidemiology of abomasal parasites in young sheep during winter and spring. *Research in Veterinary Science* 26 (2): 209.
2967. Thomas, S., and R. C. Campling. The digestibility of diets containing processed dried lucerne by sheep and cows (Research note). *Grass and Forage Science* 34 (2): 149.
2968. Thompson, J. K., Reid, R. L., and G. Madala. Blood and salivary composition of lactating beef cows and mineral utilization by sheep on magnesium fertilized spring pasture. *Journal of Animal Science* 49 (suppl. 1): 133.
2969. Thompson, J. M., Atkins, K. D., and A. R. Gilmour. Carcass characteristics of heavyweight crossbred lambs. II. Carcass composition and partitioning of fat. *Australian Journal of Agricultural Research* 30 (6): 1207.
2970. Thompson, J. M., Atkins, K. D., and A. R. Gilmour. Carcass characteristics of heavyweight crossbred lambs. III. Distribution of subcutaneous fat, intermuscular fat, muscle and bone in the carcass. *Australian Journal of Agricultural Research* 30 (6): 1215.
2971. Thompson, J. M., Ross, C. V., and J. D. Rhoades. Comparisons of lamb produc-

- tion systems. *Journal of Animal Science* 49 (suppl. 1): 203.
2972. Thompson, K. G., Lake, D. E., and D. O. Cordes. Hepatic encephalopathy associated with chronic facial eczema. *New Zealand Veterinary Journal* 27 (1): 221.
2973. Thompson, R. C. A. Biology and speciation of *Echinococcus granulosus*. *Australian Veterinary Journal* 55 (3): 93.
2974. Thompson, W., Ilg, H., and K. Bolsen. Effect of four corn silage and corn grain ratios and nitrogen source on rumen parameters and plasma urea nitrogen. *Journal of Animal Science* 49 (suppl. 1): 120.
2975. Thomsett, M. J., Gluckman, P. D., Marti-Henneberg, C., Kaplan, S. L., Rudolph, A. M., and M. M. Grumbach. The development of the prolactin response to thyrotropin releasing factor in the ovine fetus and neonate. *Clinical Research* 27 (1): 129A.
2976. Thomson, D. J., and S. B. Cammell. The utilization by lambs of the energy and protein in dried pelleted grass treated with formaldehyde. *Animal Production* 29 (2): 245.
2977. Thomson, D. J., and S. B. Cammell. Recent nutritional studies with lucerne. *Grass* No. 23: 9.
2978. Thomson, D. J., and S. B. Cammell. The utilization of chopped and pelleted lucerne medicago-sativa by growing lambs. *British Journal of Nutrition* 41 (2): 297.
2979. Thomson, D. J., Fenlon, J. S., and S. B. Cammell. Estimates of maintenance requirement of growing lambs. *British Journal of Nutrition* 41 (1): 223.
2980. Thonney, S. C., Gaskins, C. T., and J. K. Hillers. Systems analysis of production alternative for lamb management. *Journal of Animal Science* 49 (5): 1176.
2981. Thorburn, G. D., and J. R. C. Challis. Endocrine control of parturition. *Physiological Reviews* 59 (4): 963.
2982. Thorlacius, S. O., Coxworth, E., and D. Thompson. Intake and digestibility of fababea crop residue by sheep. *Canadian Journal of Animal Science* 59 (2): 459.
2983. Thorel, M. F., and L. Valette. Study on goat *Mycobacterium paratuberculosis* and comparison with *M. paratuberculosis* in sheep and cattle. *Revue de Médecine Vétérinaire* 130 (12): 1623.
2984. Thormar, H., Wisniewski, H. M., and F. H. Lin. Sera and cerebrospinal fluids from normal uninfected sheep contain a Visna virus inhibiting factor. *Nature* 279 (5710): 245.
2985. Thornber, E. J., Dunlop, R. H., Gawthorne, J. M., and C. R. Huxtable. Polioencephalo-malacia (Cerebrocortical necrosis) induced by experimental thiamine deficiency in lambs. *Research in Veterinary Science* 26 (3): 378.
2986. Thornburg, K. L., Binder, N. D., and J. J. Faber. Diffusion permeability and ultrafiltration-reflection-coefficients of Na⁺ and Cl⁻ in the near-term placenta of the sheep. *Journal of Developmental Physiology* 1 (1): 47.
2987. Thornton, R. F., Hood, R. L., Jones, P. N., and V. M. Re. Compensatory growth in sheep. *Australian Journal of Agricultural Research* 30 (1): 135.
2988. Thornton, R. M., Blackmore, D. K., Holly, R. D., Harris, R. E., and N. A. Marsden. Petchial haemorrhages in carcass fat of slaughtered lambs. *New Zealand Veterinary Journal* 27 (9): 181.
2989. Thulke, H. G. Influence of the stud on the performance of Merino meat yearlings in joint rearing at stations. *Wiss Z Karl-Marx Univ Leipzig Nath-Naturwiss Reihe* 28 (2): 295.
2990. Tidsskrift for Faareavl. Sheep on Gotland. *Tidsskrift for Faareavl* 44 (12): 4.
2991. Tikhonova, N. A. Skin histology and some wool characters in interse crossbred meat-wool sheep with crossbred wool. *Nauchno-Tekhnicheskii Byulleten. Sibirskii Nauchno-Issledovatel'skii i Proektno-Tekhnologicheskii Institut Zhivotnovodstva Referativnyi Zhurnal* 1.58.59, No. 32: 23.
2992. Tillaev, A. A. Raising efficiency in karakul farming. *Ekonomika sel'skogo Khozyaistva* 8: 48.
2993. Tischner, M., Piestrak, T., Zachara, A., and M. Roborzynski. Artificial insemination of sheep using semen collected by electro-ejaculation. *Medycyna Weterynaryjna* 35 (5): 297.
2994. Tissier, M., and A. Brelurut. Grass silage of mediocre quality for ewes at the end of gestation and beginning of lactation. *Bulletin Technique. Centre de Recherches Zootechniques et Veterinaires de Theix*, No. 3, 5: 59.
2995. Tissier, M., and M. Theriez. Effects of ewe energy levels during pregnancy on lamb birth weight and growth rate. *Annales de Biologie Animale Biochimie Biophysique* 19 (B1): 235.
2996. Titchen, D. A. Diaphragmatic and esophageal activity in regurgitation in sheep. An electromyographic study. *Journal of Physiology* 292: 381.
2997. Tiwary, S. N., Singh, C. D. N., and G. J. Jha. Pathology of acute fluorine poisoning in sheep. *Indian Veterinary Journal* 56 (8): 638.
2998. Tiebaldin, E. K. Influence of the waiting period before slaughter on the quality of sheep meat. *Sbornik Nauchnykh Trudov Moskovskaya Veterinarnaya Akademiya* 105: 127.

2999. Todorovski, N., Ristevski, K., and K. Popovaki. Milk production and milk fat percentage of Awassi ewes from a privately owned flock in Macedonia. *Sto-carstvo* 33 (7/8): 267.
3000. Tokovski, T., Madzirov, Z., and K. Fetkov. The effect of conception rate and fertility of ewes of diluting semen of Ovce Poljemerino rams with seminal plasma. *Veterinarski Glasnik* 33 (6): 437.
3001. Tomar, S. S. Time of parturition in sheep. *Indian Journal of Animal Research* 13 (2): 68.
3002. Tomar, S. S. Genetic variability in body weight and measurements of Nali sheep. *Indian Veterinary Journal* 56 (12): 1023.
3003. Tomar, S. S., and J. M. Mahajan. Genetic variations in conception rates of sheep under sub-temperate conditions. *Indian Veterinary Journal* 56 (3): 178.
3004. Tomar, S. S., and J. M. Mahajan. Genetic and non-genetic variation in the mating behaviour of ewes under sub-temperate Himalayan conditions. *Indian Veterinary Journal* 56 (5): 393.
3005. Tomes, G. L., Robertson, D. E., and R. J. Lightfoot. *Sheep breeding*, revised by W. Haresign. Butterworths, London, Ed. 2, 580 pp.
3006. Tomori, O. Clinical, virological and serological response of the West African Dwarf sheep to experimental infection with different strains of Rift Valley Fever Virus. *Research in Veterinary Science* 26 (2): 152.
3007. Tomov, I. Progeny test evaluation of the meat yielding qualities of rams employed in the flock of the wheat and sunflower institute near General Toshevo Bulgaria in 1976. *Zhivotnov'd Nauki* 16 (4): 35.
3008. Tongeren, H. A. E. van. Rift Valley Fever. A veterinary and medical problem. *Tijdschrift voor Diergeneeskunde* 104 (17): 659.
3009. Tontis, A., Bestetti, G., Konig, H., and H. Luginbuhl. Enzootic occurrence of pulmonary adenomatosis in 13 sheep of the Berne area. *Schweizer Archiv für Tierheilkunde* 121 (5): 251.
3010. Torday, J. S., Brown, E. R., Nielsen, H. C., Fencel, M. D. M., and H. W. Taesch. Correlation of tracheal fluid cortisol and pulmonary surfactant production in chronically catheterized fetal sheep. *Pediatric Research* 13 (4, part 2): 365.
3011. Tore, I. R. Biochemical polymorphism in sheep. 1. Erythrocyte types, and 2. Haemoglobin types. *Istanbul Universitesi Veteriner Fakultesi Dergisi* 5 (1): 93.
3012. Torell, D. T., Duellke, B. D., and R. H. B. Durant. Sterilizing lambs by chemical sclerosing of epididymi. Formaldehyde and calcium chloride. *Journal of Animal Science* 49 (suppl. 1): 204.
3013. Torres-Hernandez, G., and W. Hohenboken. Relationships between ewe milk production and pre-weaning lamb weight gain. *Journal of Animal Science* 49 (suppl. 1): 204.
3014. Torres-Hernandez, G., and W. Hohenboken. Genetic and environmental effects on milk production, milk composition and mastitis incidence in crossbred ewes. *Journal of Animal Science* 49 (2): 410.
3015. Torres-Hernandez, G., and W. Hohenboken. An attempt to assess traits of emotionality in crossbred ewes. *Applied Animal Ethology* 5 (1): 71.
3016. Torrie, C. Response of sheep carotid arteries to noradrenaline and increased pressure. *Journal of Molecular and Cellular Cardiology* 11 (suppl. 2): 59.
3017. Tosch, U., and K. U. Benner. Comparative nephelometric aggregation studies with platelets from various species. *Microvascular Research* 17 (3): 11.
3018. Traber, D. L., Bohs, C. T., Carvajal, H. F., Linares, H. A., Miller, T. H., and D. L. Larson. Early cardiopulmonary and renal function in thermally injured sheep. *Surgery, Gynecology and Obstetrics* 148 (5): 753.
3019. Trail, J. C. M., Hoste, C. H., Wissoco, Y. J., Lhoste, Ph., and I. L. Mason. Trypanotolerant livestock in West and Central Africa. Volume 2, Country Studies. Addis Ababa, Ethiopia, International Livestock Centre for Africa, 147 pp.
3020. Trail, J. C. M., Hoste, C. H., Wissoco, Y. J., Lhoste, Ph., and I. L. Mason. Trypanotolerant livestock in West and Central Africa. Volume 1. General Study. Addis Ababa, Ethiopia: International Livestock Centre for Africa, 147 pp.
3021. Tran, C. T., Edey, T. N., and J. K. Findlay. Pituitary response of prepuberal lambs to oestradiol-17 B. *Australian Journal of Biological Sciences* 32 (4/5): 463.
3022. Trapp, M. J., and A. L. Slyter. Factors that affect fertility of ewe lambs. *Journal of Animal Science* 49 (suppl. 1): 88.
3023. Travnicek, M., Federic, F., Balascak, J., and M. Korim. Methods of prevention and preventative diagnosis of mastitis in sheep. *Veterinarstvi* 29 (10): 450.
3024. Treacher, T. T. The nutrition of the lactating ewe. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
3025. Trelford, J. D., and M. Trelford-Sauder. The amnion in surgery, past and pres-

- ent. *American Journal of Obstetrics and Gynecology* 134 (7): 833.
3026. Tressol, J. C., and M. Lamand. The emergence and treatment kinetic of cobalt deficiency in the sheep. *Annales de Recherches Veterinaires* 10 (1): 71.
3027. Trifonov, T. The clinical symptoms of mixed trematode infection in sheep. *Veterinarna Sbirka* 77 (5): 28.
3028. Tripp, M. J., Pond, F. R., Butler, J. A. Whanger, P. D., and A. S. H. Wu. Incorporation of Se-75 into ovine semen, plasma and red cells. *Federation Proceedings* 38 (3): 390.
3029. Truszczynski, M. Current methods for diagnosing and controlling slow virus infections of sheep. *Medycyna Weterynaryjna* 35 (5): 257.
3030. Tryphonas, L., Hidioglou, M., and B. Collins. Reversal by testosterone of atrophy of accessory genital glands of castrated male sheep. A histologic and morphometric study. *Veterinary Pathology* 16 (6): 710.
3031. Tsang, C. P. W., and A. J. Hackett. Metabolism of progesterone in the pregnant sheep near term. Identification of 3 Beta hydroxy 5-alpha pregnan-20-one 3 sulfate as a major metabolite. *Steroids* 33 (5): 577.
3032. Tsang, C. P. W., and A. J. Hackett. Metabolism of estrone sulfate in the pregnant sheep. *Theriogenology* 11 (6): 429.
3033. Tsiamitas, Ch. The contraction force of the reticulum surfaces in sheep. *Annales de Recherches Veterinaires* 10 (2-3): 171.
3034. Tsuchiya, T., and H. Tamate. Ultrastructural localization of adenyl cyclase activity in sheep parathyroid gland. *Acta Histochemica et Cytochemica* 12 (4): 356.
3035. Tsuda, T., Fujita, M., and K. Ambo. Metabolism of blood glucose in cold exposed sheep. *Annales de Recherches Veterinaires* 10 (2-3): 373.
3036. Tsyrendondokov, N. D. The creation of a new breed-Volgograd Mutton-Finewooled sheep. *Sbornik Nauchnykh Trudov. Moskovskaya Veterinarnaya Akademiya*, No. 104: 31.
3037. Tsyrendondokov, N. D., and I. T. Kotlyarov. A new breed of mutton/finewooled sheep. *Zhivotnovodstvo* No. 6: 41.
3038. Tsyrenzhapova, D. C., and N. D. Tsyrendondokov. Wool production of sheep of the volgograd breed group and the caucasian breed. *Sbornik Nauchnykh Trudov. Moskovskaya Veterinarnaya Akademiya*, No. 104: 44.
3039. Tsyrenzhapova, D. C., and N. D. Tsyrendondokov. Meat production of young rams of the Volgograd breed group and the Caucasian breed. *Sbornik Nauchnykh Trudov. Moskovskaya Veterinarnaya Akademiya*, No. 104: 46.
3040. Tuboly, S., and S. Belak. Ontogenesis of the immune system. 2. Immune response induced by adenovirus in ovine foetuses. *Hungarian Veterinary Journal (Magyar Allatoruosok Lapja)* 34 (11): 772.
3041. Tuboly, S., Szentivanyi, T., and K. Bauer. Fetoproteins and lipids in the ovine fetus. *Zentralblatt für Veterinärmedizin* 26 (1): 20.
3042. Tucker, E. M., and C. Crowley. NADH diaphorase as a genetic marker for sheep red cells. *Animal Blood Groups and Biochemical Genetics* 9 (3): 161.
3043. Tuckova, L. Purification and chemical characterization of antigens from sheep erythrocytes. *Folia Microbiologica* 24 (6): 495.
3044. Tume, R. K. Post mortem electrical stimulation of muscle and its effects on sarcoplasmic reticulum. *Australian Journal of Biological Sciences* 32 (2): 163.
3045. Turecek, K., and A. Bugarsky. Veterinary problems in sheep farming in Slovakia. *Veterinarstvi* 29 (9): 391.
3046. Turner, Helen Newton. Genetic improvement of wool production and reproduction rate. *Indian Journal of Animal Genetics and Breeding* 1 (1): 46.
- 3046-A. Turner, J. C. Transplacental movement of organochlorine pesticide residues in desert bighorn sheep. *Bulletin of Environmental Contamination and Toxicology* 21 (1-2): 116.
3047. Turner, J. C. Osmotic fragility of desert bighorn sheep (*Ovis canadensis cremnobates*) red blood cells. *Comparative Biochemistry and Physiology A. Comparative Physiology* 64 (1): 167.
3048. Turner, J. C. Adaptive strategies of selective fatty acid deposition in the bone marrow of desert bighorn sheep. *Comparative Biochemistry and Physiology* 62A (3): 599.
3049. Turpin, M. A new anthelmintic active against strongylidae: comparative trials in the field. *Bulletin Mensuel de la Societe Veterinaire Pratique de France* 63 (8): 615.
3050. Tyran, B., and J. Lisowski. Immunoglobulins of colostrum. 5. Comparative studies of ovine and bovine serum and colostrum immunoglobulin M. *Archives of Immunology and Experimental Therapeutics* 27 (4): 487.
3051. Tyrrell R. N., and J. W. Plant. Rectal damage in ewes following pregnancy diagnosis by rectal-abdominal palpation. *Journal of Animal Science* 48 (2): 348.

U

3052. Ubilla, E., and V. Caneque. Nutrient value for ruminants of sorghum treated by dry

- heat. An Inst Nac Invest Agrar Ser Prod Anim 0 (10): 31.
3053. Uilenberg, G., Van Corstenbosch, C. J. A. H. V., and N. M. Perie. Blood parasites of sheep in the Netherlands. 1. *Anaplasma msaeterum* sp. n. (Rickettsiales, Anaplasmataceae). Veterinary Quarterly 1 (1): 14.
3054. Ulbrich, F. Rabies of sheep. Monatshefte für Veterinärmedizin 34 (1): 6.
3055. Ulbrich, M., Hakim, N. F. A., and U. Nienke. Investigation of the glucose content of lambs blood. 2. The glucose content of the blood in the course of several hours after feeding. Archiv für Tierernährung 28 (11/12): 679.
3056. Ulbrich, M., Nienke, U., and F. A. Hakim. Investigations of the glucose content of lambs' blood. 1. Reaction on the administration of various carbohydrates. Archiv für Tierernährung 28 (11/12): 673.
3057. Ulyanov, A. N., Ryzhkov, A. V., and V. S. Kondra. Effectiveness of artificial rearing of lambs. Ovtsevodstvo No. 2: 28.
3058. Ulyatt, M. J., and A. R. Egan. Quantitative digestion of fresh herbage by sheep. V. The digestion of four herbages and prediction of sites of digestion. Journal of Agricultural Science 92 (3): 605.
3059. Ulyund, M., and J. Overas. Chronic hepatitis in lambs in Norway: a condition resembling ovine white liver disease in New Zealand. New Zealand Veterinary Journal 28 (1/2): 19.
3060. Umoh, J. R., and E. D. Belino. Rabies in Nigeria: historical review. International Journal of Zoonoses 6 (1): 41.
3061. Ungureanu, C., and P. Darie. Caseous lymphadenitis of sheep. Revista de Cresterea Animalelor 29 (7): 39.
3062. United Kingdom, British Council. The Management and Diseases of Sheep. Papers presented at a British Council special course, Edinburgh, March, 1978. Slough, UK, Commonwealth Agricultural Bureaux, 1979, 469 pp.
3063. United Kingdom Central Statistical Office 1979. Cattle and sheep on agricultural holdings. Monthly Digest of Statistics, No. 405: 37.
3064. United Kingdom. Commonwealth Bureau of Animal Health. Pneumonia in sheep and goats (other than parasitic: 1976-1978), annotated bibliography No. 8A. Weybridge, Surrey, UK, Commonwealth Bureau of Animal Health, 12 pp.
3065. United Kingdom, Edinburgh School of Agriculture. Annual Report 1978. Edinburgh EH9 3JG, UK, West Mains Rd., 186 pp.
3066. United Kingdom, Hill Farming Research Organization. Science and hill farming: twenty-five years of work at the Hill Farming Research Organization, 1954-1979. Penicuik, Midlothian, UK., 184 pp.
3067. United Kingdom, Meat and Livestock Commission, Livestock Business Consultancy. Meat production, margins and performance on farms 1978. Milton Keynes, UK: Livestock Improvement Services, Meat and Livestock Commissioner, 66 pp.
3068. United Kingdom, Ministry of Agriculture. Salmonella incidence of interest in cattle, swine, calves and sheep. Animal Disease Report 3 (2): 2.
3069. United Kingdom, Ministry of Agriculture, Fisheries and Food. Salmonellosis in sheep. Animal Salmonellosis: 1978 annual survey: Weybridge, Surrey, UK, Epidemiology Department, Central Veterinary Laboratory.
3070. United Kingdom, Ministry of Agriculture, Fisheries and Food. Animal Populations of Great Britain: June 1978. Animal Disease Report 3 (2): 10.
3071. United Kingdom, Ministry of Agriculture, Fisheries and Food. Animal Health 1977. Report of the Chief Veterinary Officer, A. C. L. Brown, London, UK, HM Stationery Office, 187 pp.
3072. United Kingdom, Ministry of Agriculture, Fisheries and Food. Veterinary investigation, diagnosis analysis II. 1978. Weybridge, Surrey, UK, Epidemiology Unit, Central Veterinary Laboratory, 17 pp.
3073. United Kingdom, National Sheep Association. First report of a sheep industry strategy group. Tring, UK, 10 pp.
3074. United Kingdom, North of Scotland College of Agriculture. Methods of reducing neonatal lamb mortality in upland and lowground flocks. Research Investigations and Field Trials 1977-1978, Aberdeen, UK: 349 pp.
3075. United Kingdom, North of Scotland College of Agriculture. Management effects on the time of lambing. Research Investigations and Field Trials 1977-1978, Aberdeen, 349 pp.
3076. United Kingdom, North of Scotland College of Agriculture. The effect of zeranol (Ralgro) implantation on the growth performance and some blood characteristics of early weaned lambs. Research Investigations and Field Trials 1977-1978, Aberdeen, 349 pp.
3077. and 3078. United Kingdom, North of Scotland College of Agriculture. Response of wether lambs to treatment with different levels of trenbolone acetate, 17 beta oestradiol and zeranol. Research Investigations and Field Trials 1977-1978, Aberdeen, 349 pp.
3079. United Kingdom, Northern Ireland De-

- partment of Agriculture. Sheep improvement. 38th Annual General Report of the Department of Agriculture, year ended 31 March 1979, Belfast, 158 pp.
3080. United Kingdom, Northern Ireland Department of Agriculture. Northern Ireland Agriculture, 38th General Report, year ended 31 March 1979. Belfast, UK, H. M. Stationery Office, 158 pp.
3081. United Kingdom, Northern Ireland, Department of Agriculture. Sheep. Annual Report on Research and Technical Work of the Department of Agriculture for Northern Ireland, Belfast, UK, 282 pp.
3082. United Kingdom, Rowett Research Institute. Variations in foetal weight in prolific ewes. Annual Report of studies in animal nutrition and allied sciences, Volume 35, Aberdeen, 121 pp.
3083. United Kingdom, Rowett Research Institute. Effect of time of year on breeding activity. Annual report of Studies in Animal Nutrition and Allied Sciences, Volume 35, Aberdeen, 121 pp.
3084. United Kingdom, Rowett Research Institute. Annual report of Studies on Animal Nutrition and Allied Sciences, Volume 35, Bucksburn, Aberdeen, Scotland, 121 pp.
3085. United States Department of Agriculture. Bluetongue bibliography. Hyattsville, Md. 20782, USA, Animal and Plant Health Inspection Service, 6505 Belcrest Rd., 53 pp.
3086. Universities Federation for Animal Welfare. The welfare of the food animals. Proceedings of a symposium. 28th September 1978. South Mimms, Potters Bar, Hertfordshire, UK, 8 Hamilton Close, 68 pp.
3087. Uppal, P. K., and P. Rai. Total serum proteins and electrophoretic pattern of serum proteins in experimental infection of Mandya lambs with *Haemonchus contortus*. Indian Journal of Parasitology 3 (1): 147.
3088. Urguev, K. R. Bivalent emulsified toxoid against ovine infections enterotoxaemia and lamb dysentery. Veterinariya No. 8: 30.
3089. Urman, H. K., Berkin, S., Milli, U., Cuvencer, Y., and G. Alcigir. Corticocortical necrosis in small ruminants. I. Light microscope studies. Veteriner Fakultesi Dergisi Ankara Universitesi 26 (1/2): 59.
3090. USSR, Government Price Commission. Trade prices for animal fibres. Otvodstvo, No. 5: 28.
3091. Valder, W. A., Straub, O. C., Thiel, W., Wachendorfer, G., and K. Zettl. Contagious ecthyma—a change in the clinical picture. Tierärztliche Umschau 34 (12): 828.
3092. Valigura, V. I., and A. V. Zemlyakova. Dietary energy utilization by sheep on diets with different sugar: starch ratios. Doklady Vsesoyuznoi Ordena Lenina Akademii Sel'Skokhozyaistvennykh Nauk, No. 7: 24.
3093. Vallerani, V. Comparison of sheep breeds. Informatore Zootecnico 26 (23): 32.
3094. Valls, M. Contribution to the study of the Galician Spanish Gallego sheep. I. Dimensional characteristics and components of numerical productivity. An Inst Naz Invest Agrar Ser Prod Anim 0 (10): 61.
3095. Van Bruchem, J., De Swart, J. G., and G. A. Bangma. Effect of protein on abomasal emptying in sheep. Annales de Recherches Veterinaires 10 (2/3): 192.
3096. Van den Broek, G. W., Robertson, J., Keim, D. A., and C. A. Baile. Feeding and depression of abomasal secretion in sheep sedated by elfazepam and 9- α -cannabinol. Pharmacology and Biochemical Behaviour 11 (1): 51.
3097. Van Keuren, R. W., and J. A. Stuedemann. Tall fescue in forage animal production systems for breeding and lactating animals. In: Buckner, R. C. and L. P. Bush. Tall Fescue. American Society of Agronomy, Madison, Wisconsin, USA.
3098. Van Nevel, C. J., and D. I. Demeyer. Effect of monensin on some rumen fermentation parameters. Annales de Recherches Veterinaires 10 (2-3): 338.
3099. Van Petten, G. R. Effect on fetal oxygenation of sodium salicylate and phenylephrine infusion in the pregnant ewe. Canadian Federated Biological Societies 22 (0): 979: 86.
3100. Van Petten, G. R., Mathison, H. J., Harris, W. H., and G. J. Meara. Chronic preparation of the pregnant ewe and fetus for pharmacological research. The placental transfer and fetal effects of bunitrolol. Journal of Pharmacology Methods 1 (1): 45.
3101. Van Ryssen, J. B. J. The influence of molybdenum and sulphur on sheep receiving high levels of copper and broiler litter in their rations. South African Journal of Animal Science 9 (1): 21.
3102. Van Tonder, E. M. *Actinobacillus seminis* infection in sheep in the Republic of South Africa. I. Identification of the problem. The Onderstepoort Journal of Veterinary Research 46 (3): 29.
3103. Van Tonder, E. M. *Actinobacillus seminis* infection in sheep in the Republic of South Africa. II. Incidence and geographical distribution. The Onderstepoort Journal of Veterinary Research 46 (3): 29.

- poort Journal of Veterinary Research 46 (3): 135.
3104. Van Tonder, E. M. *Actinobacillus seminis* infection in sheep in the Republic of South Africa. III. Growth and cultural characteristics of *A. seminis*. The Onderstepoort Journal of Veterinary Research 46 (3): 141.
3105. Vance, H. L. S. Control flies and weevils while drying sheep skins. Queensland Agricultural Journal 105 (5): 428.
3106. Vanderlindesipman, J. S., and T. S. G. A. M. Vandeningh. Tricuspid atresia in a foal and a lamb. Zentralblatt für Veterinärmedizin 26 (3): 239.
3107. Vardeplassche, M., Laing, J. A., Melrose, D. R., Reed, H. C. B., and G. F. Smith. Male abnormalities. In: Laing, J. A. Fertility and Infertility in Domestic Animals. 3rd Edition, bailliere and Tindall, London, England.
3108. Vanschalkwyk, P. C., Geysler, T. L., Recio, M., and F. P. G. Erasmus. Anthelmintic efficacy of albendazole against gastrointestinal roundworms, tapeworms, lungworms and liver flukes in sheep. Journal of the South African Veterinary Association 50 (1): 31.
3109. Vantsis, J. T., Linklater, K. A., Rennie, J. C., and R. M. Barlow. Experimental challenge infection of ewes following a field outbreak of border disease. Journal of Comparative Pathology 89 (3): 331.
3110. Varadi, Y., Tashenov, K. T., and Y. Fejesh. Urea content of bile and gastric juice in sheep in relation to blood urea. Sel'Skokhozyaistvennaya Biologiya 14 (5): 605.
3111. Varady, J., Boda, K., Tasenov, K. T., and J. Fejes. Nitrogen secretion into the digestive tract in sheep. Annales de Recherches Veterinaires 10 (2/3): 448.
3112. Varady, J., Tashenov, K. T., Boda, K., Fejes, J., and K. Kosta. Endogenous urea secretion into the sheep gastrointestinal tract. Physiologia Bohemoslova 28 (6): 551.
3113. Varshney, T. R., and Y. P. Singh. Comparative study of anthelmintic effect of naphthalophos and parbendazole against natural infection of gastro-intestinal worms of sheep. Indian Veterinary Journal 56 (3): 207.
3114. Vasilev, V. I., Stoyanov, I. N., and M. P. Milanov. Effect of pentagastrin on smooth muscle strips from the stomach of guinea pig and sheep. Proceedings of the Bulgarian Academy of Science 32 (10): 1429.
3115. Vassileva-Popova, J. J., and D. P. Dimitrov. Investigation of some molecular parameters of prolactin. In: Vassilova-Popova, J. G., and E. V. Jensen. Biophysical and biochemical information transfer in recognition. Plenum Press, New York. p. 811.
3116. Vaughan, T. R., Erdmann, A. J. III, Brigham, K. L., Woolverton, W. C., Weidner, W. J., and N. C. Staub. Equilibration of intravascular albumin with lung lymph in unanesthetized sheep. Lymphology 12 (3): 217.
3117. Vaughan-Jones, R. D. Nonpassive chloride distribution in mammalian heart muscle microelectrode measurement of the intracellular chloride activity. Journal of Physiology 295: 83.
3118. Vaughan-Jones, R. D. Regulation of chloride in quiescent sheep purkinje fibers. Studies using intracellular chloride and pH sensitive microelectrodes. Journal of Physiology 295: 111.
3119. Veen, T. W. S. van. Ovine fascioliasis (*Fasciola gigantica*) on the Ahmadu Bello University farm. Tropical Animal Health and Production 11 (3): 151.
3120. Veenendaal, G. H., and A. S. J. P. A. M. van Miert. Fever and ruminal stasis. Role of humoral mediators. Annales de Recherches Veterinaires 10 (2/3): 202.
3121. Vegad, J. L. The acute inflammatory response in the sheep. Veterinary Bulletin 49 (8): 555.
3122. Veinoglou, B. C., Boyazoglu, E. S., and E. D. Kotouza. The effect of starters on the production of feta cheese. Dairy Industries International 44: 10, 29, 31, 33.
3123. Velle, W., and O. Hulle. Experiences with estrus synchronization in sheep over a twelve-year period using oral map treatment for ten days. Journal of Animal Science 48 (5): 1015.
3124. Veniaminov, A. A., and Ch. Khanazarov. Meat qualities of young Finnish Landrace rams. Ovtsevodstvo, No. 10: 27.
3125. Veniaminov, A. A., and N. I. Sergeev. Increasing the reproductive ability of sheep. Moscow, USSR, Rossel'Khozizdat; Referativnyi Zhurnal (1979) 10.58.432; 11 pp.
- 3125-A. Venkatayan, S., Viswanathan, R. S., Chinnasamy, P., and K. S. Raman. Studies on the adaptability of imported Merino sheep to climatic conditions prevailing at the sheep breeding research station, Sandynallah. Cheiron 8 (1): 6.
3126. Venkateswarlu, K., Prasad, R. D., and V. K. Singh. Note on morphological characters of native forages in relation to its palatability to sheep. Indian Journal of Animal Research 13 (1): 59.
- 3126-A. Vera, R. R., and J. G. Morris. The effects of rainfall on water and heat dynamics in the fleece of sheep. Turrialba 29 (3): 169.
3127. Vera, R. R., and J. G. Morris. Dynamic response of fasting heat production in sheep exposed to varying environmental

- conditions. *Arquivos da Escola de Veterinaria* 31 (3): 437.
3128. Vera, R. R., and J. G. Morris. 1. Effect of fleece length, water load and ambient temperature on the heat production of fasting sheep; and 2. Dynamic response of fasting heat production in sheep exposed to varying environmental conditions. *Arquivos da Escola de Veterinaria da Universidade Federal de Minas Gerais* 31 (3): 421.
3129. Veress, L., and M. Horvath. The effect of light on reproductive performance of sheep. *Allattenyesztes* 28 (4): 355.
3130. Veress, L., Lovas, L., and L. Radnai. Experiments to increase prolificacy in Romanian sheep. *Acta Agronomica Academiae Scientiarum Hungaricae* 28 (3/4): 444.
3131. Veress, L., Lovas, L., Radnai, L., Vegh, J., and I. Turae. Influence of the beginning of puberty on ewe's performance. Paper, 30th annual meeting, European Association for Animal Production, No. MS 4.7.
3132. Veress, L., Vucskits, A., Lovas, L., and L. Radnai. Effect of age, weight and sex on fattening performance of Merino lambs. *Allattenyesztes* 28 (5): 445.
3133. Verite, R., Journet, M., and R. Jarrige. A new system for the protein feeding of ruminants: the PDI system. Small intestine digestible proteins. *Livestock Production Science* 6 (4): 349.
3134. Vernon, R. G. Lipogenesis in ovine adipose tissue in tissue culture. *Annales de Recherches Veterinaires* 10 (2-3): 399.
3135. Verwoerd, D. W., Meyer-Scharrer, E., Broekman, J., and E. de Villiers. The serological relationships of herpesvirus ovis to other herpesviruses and its possible involvement in the aetiology of jaagsiekte. *The Onderstepoort Journal of Veterinary Research* 46 (1): 61.
3136. Vesely, J. A., and H. F. Peters. Lamb growth performance of certain pure breeds and their 2-, 3-, and 4-breed crosses. *Canadian Journal of Animal Science* 59 (2): 349.
3137. Viana, J. A. C., and N. M. Rodriguez. The utilization of fecal phosphorus and calcium for the estimation of their intake in sheep. *Arquivos da Escola de Veterinaria* 31 (3): 403.
3138. Vicary, R. W. G. Coenurosis in sheep. *Veterinary Record* 105 (1): 21.
3139. Vicovan, A., Calatoiu, A., and T. Trandafir. Poultry droppings for feeding sheep. *Revista de Cresterea Animalelor* 29 (6): 25.
3140. Vihan, V. S. Clinical trial with strinacin, quixalin and trinamide in non-specific diarrhoea of sheep and goat. *Indian Veterinary Journal* 56 (9): 805.
3141. Vihan, V. S., and K. L. Sahni. Efficacy of a 4 anthelmintics in growing lambs under semiarid conditions. *Indian Journal of Animal Research* 13 (1): 15.
3142. Vihan, V. S., Sinha, N. K., and K. L. Sahni. A note on comparative efficacy of tetmosol against sarcoptic mange in sheep. *Indian Veterinary Medical Journal* 3 (3): 197.
3143. Vijayakumar, N. K., and J. B. Chowdhury. A note on the bone marrow karyotypes of Nali sheep. *Indian Journal of Animal Science* 49 (9): 767.
3144. Vinnikov, N. I. Three lambings in two years with Finnish Landrace sheep. See *Referativnyi Zhurnal* (1980) 5 (58): 478.
3145. Vipond, J. E. Effect of clipping and diet on intake and performance of housed pregnant and lactating ewes. *Animal Production* 28 (3): 451.
3146. Vipond, J. E., and M. E. King. Synchronization of estrus as an aid to management in small flocks. *Animal Production* 28 (3): 447.
3147. Vishnyauskas, A. I., and T. I. Gudavichyus. Pharmacokinetics and residues of 35 S-sulphene in sheep. *Veterinariya*, No. 3: 66.
3148. Vitkov, M. Study of subclinical mastitis in machine-milked ewes. *Veterinaromeditsinski Nauki* 16 (1): 66.
3149. Vivorodriguez, R., Aparicioruiz, F., and A. Verayvega. Prevention of coccidiosis in suckling lambs by vitamin-A and nitrofurazolidone. *Archivos de Zootecnia* 28 (110): 165.
3150. Vlachos, K. Oestrus synchronization of ewes with prostaglandin (Dinoprost) injections during oestrus and anoestrus. *Deltion Tes Hellenikes Kteniatrikes Hetaireias* (Bulletin of the Hellenic Veterinary Medical Society) 30 (4): 259.
3151. Vodrazka, J., Perezzamora, G., Cellarova, E., and V. Sutiak. Anthelmintics-activities of the plasma enzymes GOT, GPT, and SDH in sheep as influenced by levamisole, mebendazole and carbon tetrachloride. *Biologizace a Chemizace* 15 (5): 447.
3152. Vodrazka, J., Sutiak, V., Cruzcruz, R. M., and E. Cellarova. Anthelmintics-studies of tribromosalane in sheep blood plasma and the effects of antifasciolics on some enzymes activities in sheep. *Biologizace a chemizace Veterinaria* 15 (4): 563.
3153. Vodrazka, J., Sutiak, V., Cruzcruz, R. M., and E. Cellarova. Anthelmintics: dynamics of tribromosalane in blood plasma and the effect of some fasciolicidal agents on some enzyme activities in sheep. *Biologizace A Chemizace Zivocisne Vyroby-Veterinaria* 15 (4): 363.
3154. Vodyanov, A. A. Psoroptic mange in sheep (sheep scab): treatment with a

- mineral oil emulsion of lindane. Veterinariya No. 5: 46.
3155. Voglmayr, J. K., Fairbanks, G., Jackowitz, M. A., and J. R. Colella. Maturation changes in surface proteins of ram spermatozoa. *Biology of Reproduction* 20 (suppl. 1): 81A.
3156. Voglmayr, J. K., and I. G. White. Effects of rete testis and epididymal fluid on the metabolism and motility of testicular and post-testicular spermatozoa of the ram. *Biology of Reproduction* 20 (2): 288.
3157. Vrchlabsky, J. Importance of transport and pre-slaughter treatment of slaughter animals. *Veterinarstvi* 29 (7): 307.
3158. Vrzgula, L., and M. Prosbova. Dynamics of selenium in the blood serum of lambs from birth to weaning with the traditional technology of rearing. *Veterinarni Medicina* 24 (3): 137.
3159. Vrzgula, L., and J. Skalka. Values of N-metabolites and mineral components of the blood serum of lambs in intensive fattening. *Zivocisna Vyroba* 25 (1): 63.
3160. Vsevolodov, E. G. Wool follicles. *Referativnyi Zhurnal* 10.58.102: 192 pp.
3161. Vsyakikh, A. S., and N. A. Makushenko. The progress and the tasks facing zootechnical science in animal hybridization. *S-KH Biol* 14 (3): 349.
3162. Vujic, B., and S. Maric. Epizootiology and pathology of larval stages of *Taenia hydatigena*. XXI World Veterinary Congress, 1-7 July 1979, Moscow, Summaries, Vol. 2, Section III: Parasitology, Moscow, USSR, 63 pp.
3163. Vural, A., Dogru, C., Onar, E., and U. Uzok. Determination of the parasites of lambs in the vicinity of Istanbul and study of their effects on meat production. *Pendik Veteriner Mikrobiyoloji Enstitusu Dergisi* 11 (1): 61.
3164. Vyas, U. K., and P. L. Arya. Placenta and perinate kidneys in renal insufficient sheep and goats. *Indian Journal of Veterinary Pathology* 3: 32.
3165. Vyas, U. K., and P. L. Arya. Histologic explanation for reduced fetal urine production and for reduced amount of amniotic fluid in complicated pregnancy. *Indian Journal of Physiology and Pharmacology* 23 (1): 35.
3166. Wadano, A., Hobus, P. A., and T. H. Liao. Isolation and characterization of multiple forms of ovine pancreatic dnase (EC 1.1.4.5). Chromatographic behavior of the enzyme on concanavalin A agarose and carboxymethyl cellulose columns. *Biochemistry* 18 (19): 4124.
3167. Wagner, T. O. F., Adams, T. E., and T. M. Nett. GNRH interaction with anterior pituitary. I. Determination of the affinity and number of receptors for GNRH in ovine anterior pituitary. *Biology of Reproduction* 20 (2): 140.
3168. Wagner, W. C. Parturition in the sheep and goat: Maturation changes of the pituitary-adrenal axis in the fetal lamb. *Developments in Animal and Veterinary Sciences*, 5. Elsevier, Amsterdam, Netherlands.
3169. Wagner, W. C., Hoffmann, B., and D. B. Killian. Maturation changes of the pituitary-adrenal axis in the fetal lamb. *Animal Reproduction Science* 2 (1/3): 179.
3170. Wahi, S. D., Singh, H., and R. Singh. Genetic divergence in some indigenous and crossbred sheep populations. *Indian Journal of Heredity* 11 (1): 43.
3171. Wahlberg, M. L., and E. H. Cash. Various liquid by-products as a protein supplement to ruminant diets. *Journal of Animal Science* 49 (6): 1431.
3172. Wahle, K. W. J., Duncan, W. R. H., and G. A. Garton. Propionate metabolism in different species of ruminants. *Annales de Recherches Veterinaires* 10 (2/3): 362.
3173. Wakita, M., and S. Hoshino. Changes of reserved polysaccharides contents in sheep rumen ciliates genus *Entodinium* after feeding different diets. *Japanese Journal of Zootechnical Science* 50 (1): 1.
3174. Waldo, D. R., and H. K. Goering. Insolubility of proteins in ruminant feeds by four methods. *Journal of Animal Science* 49 (6): 1560.
3175. Walker, A. M., Cannata, J. P., Dowling, M. H., Ritchie, B. C., and J. E. Maloney. Age-dependent pattern of autonomic heart rate control during hypoxia in fetal and newborn lambs. *Biology of the Neonate* 35 (3/4): 198.
3176. Walker, K. H. Differential diagnosis of muscle conditions of sheep and cattle in New South Wales. *New South Wales Veterinary Proceedings* 15: 53.
3177. Walker, S. K., Hall, G. P., Smith, D. H., Ponzoni, R. W., and G. J. Judson. Effect of selenium supplementation on survival, liveweight and wool weight of young sheep on Kangaroo Island, South Australia. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (101): 689.
3178. Walker, S. K., Obst, J. M., Smith, D. H., Hall, G. P., and P. F. Flavel. Influence of haemoglobin type and selenium status on peripheral plasma progesterone and corticosteroid concentration in ewes grazing oestrogenic pastures. *Australian*

W

- Journal of Biological Sciences 32 (2): 221.
3179. Walker, S. K., Obst, J. M., Smith, D. H., Hall, G. P., and P. F. Flavel. Reproductive performance of sheep grazing oestrogenic pastures on Kangaroo Island, South Australia. *Agricultural Record* 6 (10): 16.
3180. Walker, S. K., Obst, J. M., Smith, D. H., Hall, G. P., Flavel, P. F., and R. W. Ponzoni. Haemoglobin type and reproductive performance of sheep grazing oestrogenic pastures. *Animal Production* 29 (2): 271.
3181. Wallace, A. L. C. Variations in plasma thyroxine concentrations throughout one year in penned sheep on a uniform feed intake. *Australian Journal of Biological Sciences* 32 (3): 371.
3182. Wallace, A. L. C., Nancarrow, C. D., Evison, B. M., and H. M. Radford. The effect of thyrotrophin releasing hormone on pituitary and thyroid function in pre- and post-natal lambs. *Acta Endocrinologica* 92 (1): 119.
3183. Wallace, R. J. Effect of ammonia concentration on the composition, hydrolytic activity and nitrogen metabolism of the microbial flora of the rumen. *Journal of Applied Bacteriology* 47 (3): 443.
3184. Wallace, R. J., Cheng, K. J., Dinsdale, D., and E. R. Oerskov. An independent microbial flora of the epithelium and its role in the ecomicrobiology of the rumen. *Nature* 279 (5712): 424.
3185. Waller, P. J., Dash, K. M., and G. W. Major. Observations on the occurrence of crystal-like structures in nematode parasites of sheep and cattle. *International Journal for Parasitology* 9 (2): 147.
3186. Walsh, S. W., Yutzenka, G. J., and J. S. Davis. Local steroid concentrating mechanism in the reproductive vasculature of the ewe. *Biology of Reproduction* 20 (5): 1167.
3187. Walters, R. J. K., and E. M. Evans. Evaluation of a sward sampling technique for estimating herbage intake by grazing sheep. *Grass and Forage Science* 34 (1): 37.
3188. Walton, E. A., and J. D. Humphrey. Endemic goitre of sheep in the highlands of Papua New Guinea. *Australian Veterinary Journal* 55 (1): 43.
3189. Walton, E. A. Iodine status of ewes in Papua, New Guinea. *Papua New Guinea Agricultural Journal* 30 (1/3): 11.
3190. Wanner, A., Mezey, R. J., Reinhart, M. E., and P. Eyre. Antigen induced broncho spasm in conscious sheep. *Journal of Applied Physiology, Respiratory, Environmental Exercise Physiology* 47 (5): 917.
3191. Wanner, A., Mezey, R. J., and M. E. Reinhart. Antigen induced broncho spasm in sensitized sheep. *American Review of Respiratory Diseases* 119 (4, part 2): 85.
3192. Ward, G. M., Olds, C. A., Greathouse, G. A., and D. D. Caveny. Cement kiln dust in finishing lamb diets. *Journal of Animal Science* 49 (3): 637.
3193. Ward, K. A., and S. E. Kasmarik. Studies on the in vitro metabolism of (3H) cortisol and (3H) oestradiol by sheep skin and wool roots. *Australian Journal of Biological Sciences* 32 (2): 197.
3194. Ward, N. I., and R. R. Brooks. Lead levels in wool as an indication of lead in blood of sheep exposed to automotive emissions. *Bulletin of Environmental Contamination and Toxicology* 21 (3): 403.
3195. Ward, R. M., Singh, S., and B. L. Mirkin. Pulmonary and systemic circulatory responses of neonatal lambs to tolazoline. 89th Annual Meeting of American Pediatric Society and the 49th Annual Meeting of Society for Pediatric Research 13 (4, part 2): 509.
3196. Warnecke, M. A survey of the infestation rate of ixodid ticks with piroplasms in Turkey. In: Wilde, J. K. H., *Tick-borne Disease and Their Vector*, University of Edinburgh Centre for Tropical Veterinary Medicine, p. 166.
3197. Warr, G. J., Gilmour, A. R., and N. K. Wilson. Effect of shearing time and location on vegetable matter components in the New South Wales, Australia. *Australian Journal of Experimental Agriculture and Animal Husbandry* 19 (101): 684.
3198. Warwas, M., Wendt, V., Shams-Borhan, G., and T. Dietl. Anti-acrosin antibodies in sera, colostrum and genital organs of vaccinated ewes: estimation and correlation with fertility. *Andrologia* 11 (5): 367.
3199. Wassmuth, R. Antagonisms of characteristics in sheep breeding. *Zuchtungskunde* 51 (6): 475.
3200. Watanabe, Y., and N. Gotch. On the visco elastic properties of several kinds of meat. *Japanese Journal of Zootechnical Science* 50 (6): 363.
3201. Watson, D. G. Grass wintering of ewes in coastal Southland, New Zealand. *Proceedings of New Zealand Grassland Association* 40: 76.
3202. Watson, D. L., and R. S. F. Campbell. Vaccination against experimental staphylococcosis in sheep—observations on bacteriology and pathology following challenge. *Australian Veterinary Journal* 55 (1): 475.
3203. Watson, W. A. Disease and reproduction in sheep. In: *The Management and Diseases of Sheep*. British Council, Com-

- monwealth Agricultural Bureaux, Slough, UK.
3204. Watson, W. A. Other infectious diseases. In: Laing, J. A. Fertility and Infertility in Domestic Animals, 3rd edition. Bailliere Tindall, London.
3205. Watt, J. A. Diseases of lambs. In: The Management and Diseases of Sheep. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
3206. Watts, J. E., Murray, M. D., and N. P. H. Graham. The blowfly strike problem of sheep in New South Wales. Australian Veterinary Journal 55 (7): 325.
3207. Webb, R., and B. G. England. In vitro estradiol production and human chorionic gonadotropin binding to theca and granulosa cells in individual ovine follicles. Biology of Reproduction 20 (suppl. 1): 48A.
3208. Webb, R. F., and C. H. McCully. Resistance of *Haemonchus contortus* to oxfendazole. Australian Veterinary Journal 55 (7): 347.
3209. Webb, R. F., McCully, C. H., and B. S. Adams. The efficiency of oxfendazole against four field population of benzimidazole resistant *Haemonchus contortus*. Australian Veterinary Journal 55 (5): 249.
3210. Webb, R. F., McCully, C. H., Clarke, F. L., Greentree, P., and P. Honey. The incidence of thiabendazole resistance in field populations of *Haemonchus contortus* on the northern tablelands of New South Wales. Australian Veterinary Journal 55 (9): 422.
3211. Webb, R. H., and S. S. Stielstra. Sheep grazing effects on Mojave Desert vegetation and soils. Environmental Management 3 (6): 517.
3212. Webster, A. J. F. Energy metabolism. In: The Management and Diseases of Sheep. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
- 3212-A. Weekes, T. E. C., Richardson, R. I., and N. Geddes. Effect of ammonia on gluconeogenesis by isolated sheep liver cells. Proceedings of the Nutrition Society 38 (1): A3.
3213. Weiss, M., Martz, F. A., McKown, D., Belyea, R. L., and R. Maus. Abstract. A comparison of dietary marking approaches in passage studies using ¹⁴⁴cerium, stable cerium and stable chromium attached to diets of tall fescue fed to sheep. Journal of Dairy Science 62 (suppl. 1): 158.
3214. Welch, R. A. S. Early onset of the breeding season. Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries, Annual Report of Research Division 1977-78, Hamilton, New Zealand, 252 pp.
3215. Welch, R. A. S. Effect of shearing ewes during the mating period on the subsequent lambing pattern. Agricultural Research in the New Zealand Ministry of Agriculture and Fisheries. Annual Report of Research Division 1977-78, Hamilton, New Zealand, 252 pp.
3216. Wells, P. W. The immune response in sheep. In: The Management and Diseases of Sheep. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
3217. Wells, P. W., Evans, H. B., Burrells, C., Sharp, J. M., Gilmour, N. J. L., Thompson, D. A., and B. Rushton. Inability of passively acquired antibody to protect lambs against experimental pasteurellosis. Infection and Immunity 26 (1): 25.
3218. Wells, P. W., Gilmour, N. J. L., Burrells, C., and D. A. Thompson. A serological comparison of *Pasteurella haemolytica* vaccines containing different adjuvants. Research in Veterinary Science 27 (2): 248.
3219. Wenham, G. Effects of cannulation on intestinal motility. Annales de Recherches Veterinaires 10 (2/3): 157.
3220. Wenk, C. Coffee extraction residues as food. Zeitschrift für Tierphysiologie, Tierernährung und Futtermittelkunde 42 (1): 14.
3221. Wergin, W. P. Cyclic changes in the surface structure of the cervix from the ewe as revealed by scanning electron microscopy. Tissue and Cell 11 (2): 359.
3222. West, D. M., and A. N. Bruere. Accreditation for freedom from ovine brucellosis. New Zealand Veterinary Journal 27 (12): 263.
3223. Westcott, R. B., Shelton, T. A., and N. L. Gates. Anthelmintic efficacy of oxfendazole in sheep. Western Veterinarian 17 (2): 22.
3224. Weston, R. H. Factors limiting the intake of feed by sheep. IX. Further studies of the roughage requirement of the ruminant lamb fed on concentrate diets based on wheat. Australian Journal of Agricultural Research 30 (3): 533.
3225. Weston, R. H. Digestion during pregnancy and lactation in sheep. Annales de Recherches Veterinaires 10 (2/3): 442.
3226. Weston, R. H., and D. E. Margan. Herbage digestion in the stomach and intestines of weaner lambs at different stages of their maturity. Australian Journal of Agricultural Research 30 (3): 543.
3227. Weyhe, D., and F. Ulbrich. Serological studies on the occurrence of para-influenza-3 virus infection in sheep. Monatshefte für Veterinärmedizin 34 (22): 846.
3228. Weyrauch, K. D. Ultrastructure of the tuft cell in different epithelia of cattle, sheep

- and goats. *Anatomischer Anzeiger* 146 (2): 141.
3229. Weyrauch, K. D., and B. Schnorr. Papillary body of the proventricular mucous membrane in the sheep and the goat. *Zentralblatt für Veterinärmedizin* 8 (3): 248.
3230. Weyrauch, K. D., and B. Schnorr. Papillary body of the forestomach mucous membrane in the sheep and the goat. *Anatomia Histologia Embryologia* 8 (3): 248.
3231. Wheaton, J. E. Regional brain content of luteinizing hormone releasing in sheep during the estrous cycle. Seasonal anestrus, and after ovariectomy. *Endocrinology* 104 (3): 839.
3232. Whanger, P. D., Oh, S. H., and J. T. Deagen. Zinc accumulation in tissue cytosolic proteins of sheep and cattle. *Journal of Animal Science* 49 (suppl. 1): 417.
3233. Wheeler, A. S., James, F. M. III, Greiss, F. C. Jr., Meis, P. J., Rose, J. R., Fishburne, J. I., and D. M. Dewan. Nitroglycerin and the uterine vasculature in gravid ewes. *Anesthesiology* 51 (suppl. 3): S291.
3234. Wheeler, A. S., Sadri, S., Guschf, B. B., Devore, J. S., David-Mian, Z., and H. Latyshevsky. Intracranial hemorrhage following intravenous administration of sodium bicarbonate or saline solution in the newborn lamb asphyxiated in utero. *Anesthesiology* 51 (6): 517.
3235. Wheeler, J. L., Ferguson, K. A., and N. T. Hink. Effect of nutrition, genotype, lactation and wool cover on response by grazing sheep to methionine esters and polymer-encapsulated methionine. *Australian Journal of Agricultural Research* 30 (4): 711.
3236. Wheeler, W. E., and R. R. Oltjen. Cement kiln dust in complete diets for finishing steers and growing lambs. *Journal of Animal Science* 48 (3): 658.
3237. Whitelaw, A., Armstrong, R. H., Evans, C. C., and A. R. Fawcett. A study of the effects of copper deficiency in Scottish blackface lambs on improved hill pasture. *Veterinary Record* 104 (2): 455.
3238. Whitelaw, A., and C. C. Evans. Further investigations into copper deficiency in young lambs grazing improved pastures. *Journal of the Science of Food and Agriculture* 30 (7): 744.
3239. Whitelaw, A., and A. F. Russell. Investigations into the prophylaxis of cobalt deficiency in sheep. *The Veterinary Record* 104 (1): 8.
3240. Whitlock, H. V., Kelly, J. D., Gunawan, M., and C. A. Hall. Effect of single and divided dose administration on the efficacy of fendendazole against adult stages of benzimidazole resistant sheep trichostrongylids. *Research in Veterinary Science* 26 (1): 85.
3241. Whitworth, J. A., Coghlan, J. P., Denton, D. A., Hardy, K. J., and B. A. Scoggins. Effect of sodium loading and ACTH on blood pressure of sheep with reduced renal mass. *Cardiovascular Research* 13 (1): 9.
3242. Whitworth, J. A., Coghlan, J. P., Denton, D. A., Graham, W. F., Humphery, T. J., and B. A. Scoggins. Comparison of the effects of glucocorticoid and mineralo corticoid infusions on blood pressure in sheep. *Clinical and Experimental Hypertension* 1 (5): 649.
3243. Wickham, G. A. Review of research on specialty carpet wools at Massey University. *World Textile Abstracts* 11: 4063.
3244. Wiczorowski, S. Gastrointestinal nematodes of sheep in Bialystok Province, *Medycyna Weterynaryjna* 35 (9): 561.
3245. Wiener, G. Breed substitution and crossbreeding as a means of increasing productivity. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
3246. Wiener, G. Review of genetic aspects of mineral metabolism with particular reference to copper in sheep. *Livestock Production Science* 6 (3): 223.
3247. Wiesner, E., Berschneider, F., Neuffer, K., and S. Willer. Effects of addition of selenium to farm animal rations. *Monatshefte für Veterinärmedizin* 34 (11): 401.
3248. Wiggins, J. P., Rothenbacher, H., Wilson, L. L., Martin, R. J., Wangsness, P. J., and J. H. Ziegler. Growth and endocrine responses of lambs to Zeranol implants: effects of preimplant growth rate and breed of sire. *Journal of Animal Science* 49 (2): 291.
3249. Wilberley, E. J. The orcadian sheep of Lihou. *Ark* 6 (9): 282.
3250. Wilhelmsen, C. L. An immunohematological study of chronic copper toxicity. *The Cornell Veterinarian* 69 (3): 225.
3251. Wilkins, J. F. Haemoglobin oxidation in whole blood samples from sheep in relation to glutathione peroxidase activity. *Australian Journal of Biological Sciences* 32 (4/5): 451.
3252. Wilkins, R. J. Conserved forages in sheep production. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
3253. Wilkinson, F. C. Dermatophilosis of sheep. Association with dipping and effects on production. *Australian Veterinary Journal* 55 (2): 74.
3254. Will, R. The anthelmintic efficacy of fe-

- bantel in ruminants. Second National Congress on Parasitology, October 1979, Leon, Spain.
3255. Willadsen, S. M. Embryo transplantation in sheep. In: *The Management and Diseases of Sheep*. British Council, Commonwealth Agricultural Bureaux, Slough, UK.
3256. Willadsen, S. M., and M. Tischner. International exchange of sheep ova stored in vitro for 21 months. *Medycyna Weterynaryjna* 35 (1): 38.
3257. Williams, A. G. Exocellular carbohydrase formation by rumen holotrich ciliates. *Journal of Protozoology* 26 (4): 665.
3258. Williams, A. J., Coleman, B. D., and R. A. Pither. The effect of supplementary cystine and energy on the utilization and distribution of cystine in Merino sheep. *Australian Journal of Agricultural Research* 30 (4): 677.
3259. Williams, E. S., Spraker, T. R., and G. G. Schoonveid. Paratuberculosis (Johne's Disease) in Bighorn sheep and a Rocky Mountain goat in Colorado. *Journal of Wildlife Diseases* 15 (2): 221.
3260. Williams, G. L., and J. B. Owen. Cooperative group breeding schemes for prolific lowland sheep breeds. 30th annual meeting. European Association for Animal Production, No. GS 3.5.
3261. Williams, J. F. Recent advances in the immunology of cestode infections. *Journal of Parasitology* 65 (3): 337.
3262. Williams, H. The sheep industry. Current situation and future developments. The Welfare of the Food Animals: Proceedings of a UFAW symposium held on 28th September 1978, South Mimms, Hertfordshire, UK: Universities Federation for Animal Welfare, 8 Hamilton Close: 37.
3263. Williams, M. C., James, L. F., and B. O. Bond. Emory milkvetch (*Astragalus emoryanus*) poisoning in chicks, sheep and cattle. *American Journal of Veterinary Research* 40 (3): 403.
3264. Willimzik, H. F. Immunological relationship between animal and human adenoviruses as shown by neutralization. Inaugural Dissertation, Fachbereich Tiermedizin, Munchen, 72 pp.
3265. Willinger, H., and A. Weber. *Escherichia coli* infections in domestic animals. Proceedings of symposium, Munich 1978. *Fortschritte der Veterinärmedizin*, No. 29: 81 pp.
3266. Willomitzer, J., and J. Tomanek. Biocoenological problems of pastures. *Veterinarství* 29 (3): 121.
3267. Wilson, B. Motorized cradle for easier shearing. *Power Farming Magazine* 88 (11): 57.
3268. Wilson, J. K. Profits from the lowland ewe (2). *Agriculture in Northern Ireland* 53 (9): 260.
3269. Wilson, J. K. Store lamb fattening on lowland farms. *Agriculture in Northern Ireland* 54 (5): 129.
3270. Wilson, P. A., and B. F. Short. Cell proliferation and cortical cell production in relation to wool growth. *Australian Journal of Biological Sciences* 32 (3): 317.
3271. Wilson, P. R., and K. R. Lapwood. Studies of reproductive development in Romney rams, Part 1. Basal levels and plasma profiles of lutropin testosterone and prolactin. *Biology of Reproduction* 20 (4): 965.
3272. Wilson, P. R., and K. R. Lapwood. Studies of reproductive development in Romney rams. Part 2. Lutropin and testosterone secretion following single or repeated doses of gonadotropin releasing hormone. *Biology of Reproduction* 20 (4): 971.
3273. Wilson, S., Macrae, J. C., and P. J. Buttery. The effects of implanting jugular catheters on plasma glucose concentrations in wethers fed two extremes of diet. *Research in Veterinary Science* 26 (2): 256.
3274. Windon, R. G., and J. K. Dineer. The genetics of the response of lambs to vaccination with irradiated *Trichostrongylus colubriformis* larvae. Abstracts of papers presented at 23rd Conference of Australian Society for Parasitology, Leura, NSW, Australia, 57 pp.
3275. Wintour, E. M., Narelyn, E., Barnes, A., Cahill, F., Hardy, K. J., Horacek, I., and B. A. Scoggins. Potassium: aldosterone relationships in pregnant ewes and chronically cannulated ovine fetuses. *Pediatric Research* 13 (4): 265.
3276. Winward, L. D., Leendertsen, L., and D. T. Shen. Microimmunodiffusion test for diagnosis of ovine progressive pneumonia. *American Journal of Veterinary Research* 40 (4): 564.
3277. Witschi, P. A., and D. L. Michalk. The effect of sheep treading and grazing on pasture and soil characteristics of irrigated annual pastures. *Australian Journal of Agricultural Research* 30 (4): 741.
3278. Wohlt, J. E., Miller, M. E., and D. M. Kniffen. Milk intake and growth of Dorset lambs as affected by number of lambs suckled, sex of lamb and milk yield of ewe. *Journal of Animal Science* 49 (suppl. 1): 130.
3279. Wolanis, M., Dzapo, V., and R. Wassmuth. Determination of biochemical parameters of the energy metabolism and their relationships with vitality, fattening performance, and carcass quality in

- sheep. I. Activities of enzymes representing the glycolyse, citrate cycle, fatty acid oxidation, and respiratory chain in the diaphragm tissue of lambs. *Zeitschrift für Tierzucht und Zuchtungsbiologie* 96 (4): 270.
3280. Wolf, B. T., and C. Smith. Heritability of live weight growth and carcass composition in cross bred meat lambs. *Animal Production* 28 (3): 427.
3281. Wolff, K., and J. Eckert. The efficiency of praziquantel against the lancet fluke, *Dicrocoelium dendriticum* in sheep. Proceedings of IX Symposium of Scandinavian Society for Parasitology, Abo, Finland, June 1979, Institute of Parasitology, Abo Akademi, Finland, No. 15.
3282. Wolfrom, G. W., and J. M. Asplund. Effect of amino acid pattern and level in intravenously and intraruminally infused sheep. *Journal of Animal Science* 49 (3): 724.
3283. Wolfrom, G. W., Asplund, J. M., and T. R. Hoover. Effect of portal versus jugular methionine infusion on circulating amino acids and nitrogen metabolism in sheep. *Journal of Nutrition* 109 (2): 229.
3284. Wolter, R. Nutritional and metabolic diseases (cattle and sheep). *Bulletin des Groupements Techniques Veterinaires*, No. 5: 11.
3285. Wolter, R. Uses, meaning and limitations of biochemical profiles in stock-rearing. *Recueil de Medecine Veterinaire* 155 (9): 677.
3286. Woodson, F. E., Lewis, P. E., and D. P. Walker. Predator losses in sheep. Constraints of production. *Journal of Animal Science* 49 (suppl. 1): 142.
3287. Wool Record. Speciality and rare fibres. *Wool Record, World Textile Abstracts* 11, Abstr. 1979/5789. 136 (3416): 41.
3288. Woolley, D. M. Interpretations of the pattern of sperm tail movements. In: Fawcett, D. W. and J. M. Bedford. The spermatozoon: maturation, motility, surface properties and comparative aspects. Urban and Schwarzenberg, Baltimore, Maryland.
3289. Worbes, H. Veterinary services in industrialized lamb fattening. *Monatshefte für Veterinärmedizin* 34 (19-20): 778.
3290. Worbes, H., and R. Lippmann. Planned control of infectious diseases—step toward more effectiveness in sheep production. *Monatshefte für Veterinärmedizin* 34 (21): 811.
3291. Worthington, C. A., and J. P. Kennedy. Ovarian response to exogenous hormones in six-week-old lambs. *Australian Journal of Biological Sciences* 32 (1): 91.
3292. Worthington, R. W., Bertschinger, H. J., and M. S. G. Mulders. Catecholamine and cyclic nucleotide response of sheep to the injection of *Clostridium welchii* type D Epsilon toxin. *Journal of Medical Microbiology* 12 (4): 497.
3293. Wroth, R. H., and M. J. McCallum. Diagnosing pregnancy in sheep. The "Scanopreg". *Journal of Agriculture, Western Australia* 20 (3): 85.
3294. Wundersee, W. J., Pitschke, H., and P. Hunsdorff. Acorn feeding in zoos. *Erkrankungen der Zootiere. Verhandlungsbericht des XXI. International Symposiums, vom 16 bis 17 Juni in Mulhouse, Berlin. Akademik Verlag*: 357.
3295. Wustinger, J. Morphology and topography of the stomach arteries of the sheep. *Zool Pol* 27 (2): 309.

XYZ

3296. Yabek, S. M., and B. P. Avner. Modification by prostaglandins A-1, E-1 and F-2 alpha of epinephrine induced fetal mesenteric artery constriction. *Pediatric Research* 13 (4, part 2): 375.
3297. Yadav, M. P., and M. S. Sethi. Sero-epidemiological studies on coxiellosis in animals and man in the state of Uttar Pradesh and Delhi (India). *International Journal of Zoonoses* 6 (2): 67.
3298. Yakusheva, O. V., and A. S. Donchenko. Pathology of experimental tuberculosis in sheep (*Mycobacterium avium* and *M. bovis*). *Byulleten Vsesoyuznogo Instituta Eksperimental'noi Veterinari* 37:13.
3299. Yakutsenya, V. F. Performance of crossbreds of Finnish Landrace with fat-rumped ewes. *Ovtsevodstvo* 9: 22.
3300. Yalcin, B. C. The sheep breeds of Afghanistan, Iran and Turkey. *FAO, Rome, Italy*, 155 pp.
3301. Yalcin, B. C., Muftuoglu, S., and B. Yurtcu. Improvement of important production characteristics in Konya Merino sheep through selection. 2. Some environmental factors affecting production characters. *Istanbul Universitesi Veteriner Fakultesi Dergisi* 5 (1): 1.
3302. Yalcin, B. C., Muftuoglu, S., and B. Yurtcu. Improvement of important production characteristics in Konya Merino sheep through selection. 3. Phenotypic and genetic parameters for production characters. *Istanbul Universitesi Veteriner Fakultesi Dergisi* 5 (1): 1.
3303. Yalcin, N. Serotypes of *Listeria* of sheep origin in France. In: I. Ivanov. Problems of Listeriosis. Sofia, Bulgaria, National Agroindustrial Union Center for Scientific Information.
- 3303-A. Yalcin, N., and J. P. Gremillet. Study of immunoprophylaxis against listeriosis in sheep. In: I. Ivanov. Problems in Listeriosis. National Agroindustrial Union Center for Scientific Information, Sofia, Bulgaria.

3304. Yano, F., and R. Kawashina. Effect of calcium phosphorus and magnesium administration on mineral concentration in rumen fluid of sheep. *Japanese Journal of Zootechnical Science* 50 (9): 646.
3305. Yano, H., Kobayashi, T., Magaoka, C., and R. Kawashima. Effects of potassium chloride, glucose and epinephrine administration on magnesium and potassium metabolism in sheep. *Journal of Animal Science* 49 (suppl. 1): 420.
3306. Yano, H., Matsui, H., and R. Kawashima. Effects of dietary calcium levels on concentration and solubility of macro-minerals in the digestive tract of sheep. *Journal of Animal Science* 48 (4): 954.
3307. Yano, H., Matsui, H., and R. Kawashima. Effects of supplemental calcium carbonate on the distribution of iron, copper, zinc and manganese in digestive tract of sheep. *Japanese Journal of Zootechnical Science* 50 (7): 465.
3308. Yano, H., Nokata, M., and R. Kawashima. Effects of supplemental calcium carbonate on the metabolism of iron copper zinc and manganese in sheep. *Japanese Journal of Zootechnical Science* 49 (8): 625.
3309. Yashunin, V. G., Selionov, I. K., Don-skaya, V. I., Zheltobryukh, N. A., Konoplev, V. I., and M. M. Kunizhev. The possibility of continuous production at commercial sheep farms. *Ovtsevodstvo* 7: 21.
3310. Yashunin, V. G., Svinchenko, T. T., and V. T. Sidakova. Artificial rearing of lambs on special experimental farms. *Ovtsevodstvo* No. 5: 20.
3311. Yazwinski, T. A., and H. Featherstone. Evidence of spring and postparturient fecal nematode ova count rises in Arkansas sheep. *Proceedings of the Helminthological Society of Washington* 46 (2): 240.
3312. Yazwinski, T. A., Goode, L., Moncol, D. J., Morgan, G. W., and A. C. Linnerud. Parasite resistance in straightbred and crossbred Barbados Blackbelly sheep. *Journal of Animal Science* 49 (4): 919.
3313. Yesberg, N. E., Henderson, M., and O. E. Budtz-Olsen. Inhibition by angiotensin II of some vasopressin effects on renal function in sheep. *Quarterly Journal of Experimental Physiology and Cognate Medical Sciences* 64 (3): 161.
3314. Yijayakumar, N. K., and J. B. Chowdhury. A note on the bone-marrow karyotypes of Nali sheep. *Indian Journal of Animal Sciences* 49 (9): 767.
3315. Yong, W. K., and D. D. Heath. 'Arc 5' antibodies in sera of sheep infected with *Echinococcus granulosus*, *Taenia hydatigena* and *Taenia ovis*. *Parasite Immunology* 1 (1): 27.
3316. Yoon, Y. D., Kim, J. Y., and Y. S. Jeon. A method of separation of peripheral lymphocytes of various animals for in vitro studies. *Research Reports of the Office of Rural Development, Korea. (Veterinary and Sericulture)* 21: 51.
3317. Yoshida, H., Ikemoto, S., Abe, T., and S. Suzuki. Individual difference within the sheep blood groups detected by *Tulipa gesneriana*. *Japanese Journal of Zootechnical Science* 50 (5): 276.
3318. Young, J. C. Ergot contamination of feedstuffs. *Feedstuffs* 51 (32): 23.
3319. Younis, A. A., and E. A. Afifi. On the occurrence of oestrus in pregnant Barki and Merino ewes. *Journal of Agricultural Science* 92 (2): 505.
3320. Yudin, Yu. I., Tsigankov, M. A., and Z. Bezv. Meat yield of lambs. *Ovtsevodstvo*, No. 5: 26.
3321. Yudin, Yu. I., and O. A. Aibazov. Digestibility by sheep of protein and fibre of fermented straw enriched with protein. *Ovtsevodstvo*, No. 11: 33.
3322. Yutaka, F., and E. M. Roberts. Comparison of methods for estrus synchronization in sheep. *Japanese Journal of Animal Reproduction* 25 (3): 131.
3323. Zaaïmink, W., Garssen, G. J., and A. H. Visscher. Inherited difference in sensitivity to copper in sheep. *Zeist, Netherlands, Instituut voor Veetee Itkundig Onderzoek "Schoonoord"*, 36 pp.
3324. Zach, A. Efficacy and safety of a new cell culture vaccine against contagious echthyma in sheep. *Inaugural Dissertation. Fachbereich Tiermedizin, München*, 80 pp.
3325. Zaharija, I. Leptospirosis in sheep in Croatia. *Veterinarski Arhiv* 49 (2): 91.
3326. Zaiss, U., and H. Kaltwasser. Hydrogenase activity and methanogenesis in anaerobic sewage sludge in rumen liquid and in freshwater sediments. *European Journal of Applied Microbiology and Biotechnology* 8 (3): 217.
3327. Zalucki, G., Dejneka, J., Cebrat, E., Nejmark, L., and W. Zawadzki. Influence of some gastrointestinal hormones on pancreatic secretion in sheep. *Acta Physiologica Polonica* 30 (1): 218.
3328. Zamfirescu, S., Ionescu, F., Bogdan, A. T., and M. Patrascu. Results obtained in freezing ram semen. *Revista de Cresteria Animalelor* 29 (12): 21.
3329. Zamboni, L., Bezard, J., and P. Mauleon. The role of the mesonephros in the development of the sheep fetal ovary. *Annales de Biologie Animale, Biochimie, Biophysique* 19 (B4): 1153.
3330. Zamiri, M. J., and A. W. Blackshaw. Enzyme histochemistry of the sheep uterus during the oestrous cycle. *Australian*

- Journal of Biological Sciences 32 (4-5): 409.
3331. Zamiri, M. J., and A. W. Blackshaw. Microfluorometric study of glycolytic enzymes in histologically defined areas of the sheep uterus and placentomes during pregnancy. *Biology of Reproduction* 21 (5): 1257.
3332. Zanjani, E. D., and M. Banisadre. Hormonal stimulation of erythropoietin production and erythropoiesis in anephric sheep fetuses. *Journal of Clinical Investigation* 64 (5): 1181.
3333. Zanjani, E. D., McGlave, P. B., Bhakthavathsalan, A., and G. Stamatoyannopoulos. Sheep fetal hematopoietic cells produce adult hemoglobin when transplanted in the adult animal. *Nature* 280 (5722): 495.
3334. Zarytovskii, V. S., and A. N. Efremov. Pelleting, an effective method of preparing feeds for sheep. *Zhivotnovodstvo* No. 10: 38.
3335. Zaslavsky, B. Y., Miheeva, L. M., and S. V. Rogozhin. Relative hydrophobicity of surfaces of erythrocytes from different species as measured by partition in aqueous 2 polymer phase systems. *Biochimica et Biophysica Acta* 588 (1): 89.
3336. Zelenak, I., Boda, K., Bucko, J., Jalc, D., Walko, T., and I. Beseda. Wood molasses in the nutrition of ruminants. *Annales de Recherches Veterinaires* 10 (2-3): 457.
3337. Zell, M. Accounts of a sheep and corn farm, 1558-60. *The Agricultural History Review* 27 (2): 122.
3338. Zervas, N., Matsoukas, J., and J. Hatziminaoglou. The effect of duration of suckling on milk production of ewes and the growth of lambs in the Serrai breed (Greece). *Comptes Rendus des Seances de l'Academie d'Agriculture de France* 65 (9): 747.
3339. Zetti, K. Veterinary objectives and measures in sheep industry. 1. Diseases of the ewe. *Tierärztliche Praxis* 7 (4): 439.
3340. Zhabaliev, M. A. Compensatory growth and productivity of highland Corriedale sheep. *Ovtsevodstvo* No. 2: 21.
3341. Zhdanov, V. M. Totaviruses the etiological agent of gastroenteritis. *Voprosy Virusologii* 0 (1): 86.
3342. Zheitobryukh, N. A., and V. K. Ivakhnenko. The addition of sperm agglutinating factor antisera to diluents for frozen ram semen. See *Referativnyi Zhurnal* (1980) 5 (58): 444.
3343. Zielasko, B. Studies on epizootiology of psoroptic mange in sheep and cattle. Thesis. Hanover Veterinary University. 44 pp.
3344. Zidon, J. F., Light, M. R., Johnson, L., Johnson, V. K., Tilton, J. E., and T. Faller. Carcass evaluation of two- and three-way crosses of six breeds of sheep. *Journal of Animal Science* 49 (5): 1151.
3345. Zimmerman, D. R. Selection for reproductive characteristics. In: Hawk, H. W., Beltsville Symposia in Agricultural Research, Vol. 3, Animal Reproduction. Allanheld, Osmun and Co., Montclair, New Jersey.
3346. Zink, J. Response of the fetal cardiovascular system to acute elevation of the intracranial pressure. *Canadian Federation of Biological Societies* 22: 86.
3347. Ziv, G., and J. F. M. Nouws. Serum and milk concentrations of ampicillin and amoxycillin in ruminants. *Refuah Veterinarit* 36 (3): 104.
3348. Zorawski, C., Karpinski, T., Gorski, S., and L. Wojno. Mass outbreak of tuberculosis in sheep caused by *Mycobacterium bovis*. *Zycie Weterynaryjne* 54 (12): 364.
3349. Zubcak, L. Utilization of high fertility and milk yields of east Friesian sheep on Slovak sheep farms. *Mas Chov* 39 (2): 78.
3350. Zugaih, M., Huwayhid, B. S., Vaughn, D. L., Brinkman, C. R. III, and N. S. Asali. Circulatory effects of endotoxin on unanesthetized sheep and the response to dopamine. *Surgery, Gynecology and Obstetrics* 149 (3): 337.
3351. Zupp, W., Wojtowski, J., and K. Strittmatter. Wool yield and quality and live weight development of young ewes of different genotypes. *Wissenschaftliche Zeitschrift der Wilhelm-Pieck Universität Rostock. Mathematisch-Naturwissenschaftliche Reihe* 28 (2): 175.
3352. Zurliiski, P. Survival of *Nematodirus spathiger* larvae in experimentally infected lambs. *Veterinarna Sbirka* 77 (5): 26.
3353. Zurliiski, P. Clinical and paraclinical study of experimental *Nematodirus* infection in lambs. *Veterinarnomeditsinski Nauki* 16 (7): 42.

Section II: Subjects (Key Words)

A

- ABATTOIRS**, humane handling for slaughter—1561
international hygienic and sanitary standards—1663
new method for improving carcass hygiene—1131
- ABNORMALITIES**, jaws, ewe—2512
syndrome of dental, pathology and radiology—2222
urogenital defects in sheep—750
vascular system, congenital malposition of arterial trunk in lamb—2277
- ABOMASUM**, cannulation, with specially designed cannulae and cannula insertion instrument—1610
depression of secretion and feeding elicited by elfazepam and 9 azacannabionol—3096
effect of prostaglandin F-2-alpha on volume, acidity and proteolytic activity of juice—728
effect of protein on emptying—3095
isolation of *Brucella Brucella ovis*—1409
neural and chemical control of secretion—2064
parasites, young sheep, epidemiology—2966
pathology in *Besnotia gilruthi* infections—1809
phytozoar, specific form—264
ribonucleic acid, translational activity—1472
structure of epithelial cells—1622
ultrastructure of globidian parasites—1316
- ABORTION**, bacteriological and serological study of causes, fetuses, submitted to Bor-nova Veterinary Research Institute—2252
clinical evaluation of vaccine against *Chlamydia ovis*—2250
due to salmonellas, a review—2284
duration and intensity of vaginal excretion of *Salmonella abortusovio*—2283
etiology of ovine enzootic abortion—2215
field studies on enzootic abortion in southeast Scotland—1767
in sheep—2028
in sheep near Kano, Nigeria—2206
influence of some physico-chemical factors on *Chlamydia* of ovine—5
isolation of *Brucella ovis* from fetus—1489
myotic, difficulty in confirming a diagnosis—1007
ovine and caprine perinatal chlamydiosis—1637
pathology and bacteriology of experimental infections with *Corynebacterium pseudotuberculosis*—30
review—3203
review—3339
Rift Valley Fever, Egypt, 1977—1944
role of *Listeria monocytogenes*—698
specific prophylaxis of enzootic chlamydial—2821
surveillance in Great Britain—710
- ABSORPTION**, carbohydrates, catheterized fetus in utero—563
rates affected, lactate and glucose, by dietary concentrate level—1376
site, of magnesium from ovine digestive tract—964
- ACARICIDE**, alopecia—2063
clinical evaluation of benzyl benzoate against sheep scab—2006
combination with chlordimeform to control *Psoroptes cunicularis* ovis in a single dip—195
eight, against *Psoroptes ovis*—1953
evaluation of amitraz against castor bean tick—2365
use of HCH as dip for *Psoroptes*—1571
- ACETIC ACID**, protective effect on urea poisoning—2895
- ACETOACETATE**, metabolism in camel and sheep—555
- ACETYLCHOLINE**, calcium movements in hypotonically washed sperm induced by—2862
influence on secretion of principal components of milk—1644
rate of salivation and composition of saliva during infusion with atropine into carotid artery of conscious sodium replete sheep—272
- ACHOLEPLASMA**, isolation from pneumonic lesions from India—227
- ACHOLEPLASMA LAIDLAWII**, isolated from synchronizing sponges from ewes—1910
- ACID-BASE EQUILIBRIA**, lambs from 7 days old to adulthood—2772
- ACID-BASE EQUILIBRIUM**, blood of sheep—1037
blood, effect of dietary lactic acid in lambs switched from low to high concentrate diets—1374
preliminary model, multivariate analysis—852
- ACID-BASE INDICES**, dynamics in blood of lambs from 7th day of post-natal life to adult—2770
- ACIDIC GROUPS**, free, surface of sperm—976
- ACIDOSIS**, biochemical tests of urine and blood—2380
effect of bicarbonate infusion on blood and cerebrospinal acid base in acidotic newborn—692
effect of lactic acid administration on rumen myoelectrical activity and pressure changes—2789
experimental, rumen, biochemical and pathological studies—1415
fetal lamb lung lavage and its effect on lung phosphatidyl choline—2701
lactic, effect of thiopeptin and sodium bicarbonate on prevention—1548
lactic, endotoxin absorption in hay-fed and, sheep—1362
lactic, induced, ruminal changes during onset and recovery—1547
metabolic, etiology—1666
metabolic, in ruminants—1666

- metabolic, pathogenesis—1666
 physiological study—1546
 preliminary model of acid-base balance—852
 recent information on grain processing—2226
- ACORN**, as poisonous plant—3294
- ACROSIN**, antibodies in sera, colostrum and genital organs of vaccinated ewes, estimation and correlation with fertility—3198
 effect of immunizing ewes—2051
 zymogen form, in testicular, epididymal and ejaculated sperm—1256
- ACROSOME**, sperm, localization of proteinase—2611
- ACTASIA**, proximal, animal model for study—661
- ACTH**, effect on aldosterone response to potassium in sheep with adrenal transplants—1801
 effect on blood pressure of sheep with reduced renal mass—3241
 effect on fetal lung maturation—2886
 effect of infusion of prostaglandin E-2 on fetal plasma levels—2466
 effect of prostaglandin F-2 alpha on blood constituents and certain hormones in Najdi sheep—4
 hormonal factors in lung maturation in fetus—1581
 induced hypertension, hemodynamics—2676
 permissive effect on aldosterone response to potassium stimulation in sheep with adrenal transplants—904
 receptor levels in lamb adrenals at late gestation and early neonatal stages—829
- ACTINOBACILLUS SEMINIS**, growth and cultural characteristics—3104
 incidence of infection and geographical distribution in South Africa—3103
 infection of sheep in South Africa—3102
- ACTIVE TRANSPORT**, potassium, temperature dependence—1465
- ADAPTATION**, game domestication for animal production in Kenya, field studies of body-water turnover of game and livestock—1566
 stress, osmotic fragility of erythrocytes—3047
- ADENOHYPOPHYSIS**, cytology, adult sheep—2326
 functional and morphological changes after exposure to X-rays—1852
- ADENOMATOSIS**, pulmonary, course—1616
 pulmonary, enzootic occurrence in Berne area—3009
 pulmonary, herpesvirus—1884
 pulmonary, histopathology—84
 pulmonary, in India—2461
 pulmonary (Jaagziekte), sheep and goats in Punjab, India—225
 pulmonary, pathology and case report—1193
- ADENOVIRUS**, growth in lamb kidney cell culture—14
 immune response induced in fetus—3040
 immunological relationship shown by neutralization—3264
 isolation from sheep—591
 ovine, recall phenomenon—2262
 type 2, infection of tracheal organ in culture—504
 type 2, interaction with cultured sheep lymphocytes—468
 vaccination, lambs, recall phenomenon—2262
- ADENYL CYCLASE**, ultrastructural localization in parathyroid gland—3034
- ADIPOSE**, lipogenesis, tissue culture—3134
- ADIPOSE TISSUE**, cellularity—1343
 characterization of ethyl substituted fatty acids from lamb subcutaneous triacylglycerols—2784
 effect of growth potential, sex and age on cellularity and lipogenic activity—1966
 effect of growth rate, sex and age—2061
 metabolism, comparative in different ruminants—3172
 triacylglycerols, identification of methyl-branched fatty acids—2785
- ADRENAL**, cortex, histogenesis, fetal sheep—2547
 fetus at parturition—2532
 gland, ACTH receptor levels at late gestation and early neonatal stages—829
 gland, effect of prostaglandin on maternal and fetal blood flows—2345
 gland, fetal maturation related to parturition—1758
 in regulation of glucocorticoid secretion during perinatal period—1772
 pituitary axis, maturational changes in fetus—3168
 responses of newborn to rapid massive hemorrhage—2812
 transplants, in sheep, permissive effect of ACTH on aldosterone response to potassium stimulation—904
- ADRENALINE**, effect on oxytocin release in ewe during milk-ejection reflex—248
 metabolic effects of ammonia and adrenaline infusions—1035
- ADRENERGIC**, alpha, receptors, control of secretion of gonadotrophins—2107
 beta, stimulation, parotid salivary secretion—2300a
- AEGYPTIANELLA**, prevalence and significance in northern Nigeria—1717
- AFGHANISTAN**, sheep breeds—3300
- AFLATOXIN**, B₁ and C₁, method for estimation in tissue—1934
 biological effects—1806
 in milk and milk products—2897
 stress-induced pasteurellosis—1227
- AFRICA**, southwest, analysis of breed structure of karakul stud industry—2667
 trypanotolerant livestock—3019
 trypanotolerant livestock—3020
 wool production in semi-arid areas, a review—1623
- AGAR**, gel precipitation, comparison with complement fixation in diagnosis of brucellosis—2080
- AGE**, body weight at 300 days, correction factors—2114

- activity of peroxidases and carbohydrases—1631
- changes in bone strain and stress—1691
- changes in coronary blood flow and resistance in chronically instrumented sheep—2549
- effect in hepatic copper metabolism—2648
- effect on adipose tissue cellularity and lipogenic activity—1966
- effect on aorta, pressure-diameter and elastic stiffness-stress relationships—2254-B
- effect on fattening performance of Merinos—3132
- effect on skeletal muscle and adipose tissue growth and development—2061
- effect on skeletal muscle growth and development—299
- half-life and volume of distribution of trimethoprim and sulphadoxine—170
- influence on intestinal absorption of galactose in lambs—2658
- influence on reproductive pattern and related statistics at Neudamm Karakul stud—2668
- rams, at first mating, subsequent value—2119
- related effects on androgen binding protein in testis and epididymis—525
- relation to wool staple length, fineness, moisture content and vegetable matter—1973
- AGELIN, synchronization of passage of sperm through genital organs, effect of oxytocin—2674
- AGING, and immunity—1907
- AIR, pollution, fluorides, effect on domestic animals—2724a
- pollution, nitrogen, effect on blood and rumen contents—1488
- pollution, sodium nitrate aerosol, effect on cardio-pulmonary function—2599
- AKABANE VIRUS, an epizootic congenital arthrogryposis-hydranencephaly syndrome in cattle, sheep and goats caused by—1393
- congenital abnormalities in newborn lambs following infection in pregnant ewes—1261
- pathogenesis of congenital encephalopathies in sheep experimentally infected—2111
- ALANINE, liver metabolism—2515
- stimulation of insulin secretion in fetus—2347
- ALBENDAZOLE, activity against trichostrongylids—767
- effect on *Moniezia expansa* and *Thysanosoma actinoides*—1712
- efficacy against *Fasciola hepatica* and benzimidazole resistant strains of *Haemonchus contortus* and *Trichostrongylus colubriformis*—503
- efficacy against gastrointestinal roundworms, tapeworms, lungworms and liver flukes—2653
- efficacy against gastrointestinal roundworms tapeworms, lungworms and liver flukes—3108
- efficacy in fascioliasis—1458
- evaluation as thysanosomicide—306
- new results against *Dicrocoelium dendriticum* and *D. lanceolatum*—627
- treatment of benzimidazole-resistant *Trichostrongylus colubriformis* and *Haemonchus contortus*—1182
- treatment of giddy sheep—3138
- trial against *Dicrocoelium dendriticum*—2951
- ALBUMIN, binding of triton X-100 to human and sheep serum—2881
- extravasation from tissues—1334
- intravascular, equilibration with lung lymph in unanesthetized sheep—3116
- value at an average lung microvascular pressure—1937
- ALDOSTERONE, effect of angiotensin II in fetus—2731
- permissive effect of ACTH, on response to potassium stimulation in sheep with adrenal transplants—904
- potassium chloride stimulation in newborn—2728
- potassium relationships in pregnant ewes and chronically cannulated fetuses—3275
- renal response of fetus to hypoxemia—2534
- response to potassium, effect of ACTH—1801
- role on renal sodium and potassium excretion during fetal life and newborn period—2536
- secretion in Na-deficient sheep, effect of adrenal arterial infusion of ^{32}P —342
- ALFALFA, effect of diet and feeding level on taste responses of sheep and calves to sucrose solutions—580
- haylage, proprionic treatment—2836
- moisture content and addition of lactobacillus culture to fermentation, digestion—2505
- substitution value of birdsfoot trefoil in pasture systems—1874
- ALGERIA, seasonal variations in plasma concentrations of testosterone and dihydrotestosterone in ram—694
- ALIMENTARY TRACT, endocrine cells—465
- estimation of microbial protein in duodenal digesta—2726
- protein turnover in lamb throughout development—614
- ALKALINE PHOSPHATASE, activity and characteristics in organs of cattle and sheep—129
- zinc plasma levels as indicators of zinc status in pregnancy and lactation—131
- ALLANTOIC FLUID, origin and developmental pattern of lactase—2390
- origin and developmental patterns of glycosidases—2390
- ALLANTOIN, excretion in urine—128
- ALLANTOIS, fetal fluids—3041
- ALLERGENS, review of relationship to helminth and arthropod parasites in Australia—2186
- ALLERGY, diagnosis of salmonellosis—141
- induction of experimental allergic encephalomyelitis with purified bovine basic protein and adjuvant—44
- ALLIUM CEPA (DOMESTIC ONION), effect of feeding cull—1569

- ALLOIMMUNIZATION, revealed same antigen in sheep and cattle—722
- ALLOXAN, production of diabetes mellitus in lambs—1716
- ALPACA, characteristics—3287
- ALTAI, crossbreeding, biochemical marker, analysis of production characteristics in early stages of breed formation—1093
- fine fleeced, behaviour, relation to pituitary adrenal system—1689
- genetic variability, crossbreeding—1094
- ALTERNARIA, aflatoxins, in milk and milk products—2897
- ALTITUDE, effect on hematological values, in crossbred Merino × Sarplaninas—276
- AMIDE, concentrate supplement in diets for sheep—159
- concentrate supplement in diets for suckling ewes—717
- AMILORIDE, excretion of sodium and potassium—2438
- AMINO ACIDEMIA, free, blood, effects of dietary protein levels—550
- AMINO ACIDS, absorption, effect of diet—2737
- absorption from small intestine, formaldehyde treatment of concentrated diets—923
- and glycosaminoglycan composition of epiphyseal cartilage of neonate and osteroporotic lambs—1311
- blood levels in ewes during pregnancy and lactation, effect of nutritional state during late pregnancy—1158
- branched chain, metabolism by ruminant catabolism and gluconeogenesis in sheep—857
- characteristics of absorption in jejunum and ileum—2350
- circulating, effect of portal versus jugular methionine infusion—3283
- composition, lactoferrin—199
- concentrations in maternal and fetal plasma from conscious catheterized ewes during last 5 weeks of pregnancy—2778
- consumption across intestinal circulation in fetus—565
- degradation by mixed rumen microflora—2409
- digestive utilization, effect of endogenous nitrogen and intestinal microflora—2356
- effect of intravenous glycine infusions on plasma amino acid levels—1033
- effect of Mn-deficient feeding to ewes on certain, and sugars in cartilage of their newborn lambs—1313
- factors affecting concentrations of free, and effect on calculation of requirements in preruminant lambs—2301
- fate in isolated perfused livers—2638
- free, physiological and nutritional regulation—298
- free, plasma levels, effect of energy intake during late pregnancy—1160
- glutamine-glutamate balance in placenta in pregnant ewe—1340
- in ketosis—1607
- in two soybean protein isolates determined with a change-over design, milk replacers for preruminant lambs—2314
- metabolism, passage to duodenum of sheep on diets of hay and concentrates—549
- plasma, reduction during infection with gram-negative bacteria (*Salmonella abortusovis*)—1418
- plasma vs. tissue, in intravenously and intraruminally infused sheep—3282
- requirements, for microbial rumen protein synthesis—1726
- sequence of limiting in groundnut protein isolate for the preruminant lamb—2349
- sequence, pancreatic DNase—3166
- sulphur-containing, effect on productivity and wool quality—836
- uptake by uterus during pregnancy—1340
- uterine uptake in gestation—2047
- AMINOPEPTIDASE, leucine, plasma levels in fascioliasis—2575
- AMINOTRANSFERASE, aspartate, white liver disease—2892
- blood—2327
- l-serine pyruvate (EC 2.6.1.51), activity—2577
- AMITRAZ, acaricidal sheep dip, evaluation against castor bean tick—2365
- evaluation as new acaricidal sheep dip against the castor bean tick—2365
- AMMONIA, and water intake and pH of rumen of sheep fed pelleted feeds—234
- effect of feeding frequency on diurnal changes, rumen—1978
- effect on gluconeogenesis by isolated sheep liver cells—3212a
- effect on pH in rumen—359
- influence of kanamycin on rumen bacteria and ammonia production in supplemented sheep rumen liquor in vitro—1110
- levels in rumen, influence of fasting—1034
- metabolic effects of ammonia and adrenaline infusions—1035
- metabolism, therapeutic efficacy of intravenous administration of titrated l-glutamic acid in urea poisoning—2896
- use in treating straw for digestibility—1014
- AMMONIUM, ion, inhibition of rumen motility—2068
- AMMONIUM TETRATHIOMOLYBDATE, in diet, changes in hepatic copper stores in preruminant and ruminant lambs—2899
- AMNION, fetal fluids—3041
- in surgery, past and present—3025
- AMNIOTIC FLUID, estrone concentration from 50th to 90th day of pregnancy—1221
- human, fetal lamb lung lavage and effect on lung phosphatidyl choline—2701
- nutrient loss across the fetal intestinal circulation—564
- origin and development of lactase—2390
- origin and developmental patterns of glycosidases—2390
- phosphatidate, phosphohydrolase and phospholipids in tracheal and, during gestation—2561

- reduction in volume, complicated pregnancy, histological explanation—3165
- AMOXICILLIN, milk and serum levels—3347
- AMP, c- 5-HT, intracranial injections and feeding—201
- AMP, cyclic, blood and lung lymph levels increased accompanying lung vascular response to endotoxin—1286
- Intracellular mediator in the GNRH activated gonadotroph—27
- maintenance of corpus luteum in early pregnancy, luteotropic properties of embryonic homogenates—879
- AMPm c-, db, intracranial injections and feeding—201
- AMPHISTOME, metacercariae, viability after irradiation—1217
- AMPICILLIN, milk levels and serum levels—3347
- AMPROLIUM, effect on oocyst discharge, feed utilization and ruminal metabolism of lambs with coccidiosis—1357
- for early weaned feedlot lambs with naturally occurring coccidiosis—1356
- AMYLASE, protein fractionation, nucleic acids and enzymatic activity of cytoplasmic extracts from intestinal mucosa—1558
- ANABOLICS, hazards in meat production—1288
- ANAEROBES, in clinical practice—1320
- ANAPHYLAXIS, induced bronchospasm—3191
- ANAPLASMA, control in USSR—1179
- incidence in southern Ghana—167
- prevalence and significance, northern Nigeria—1717
- ANAPLASMA MESAETERUM n. sp. in Netherlands—3053
- ANAPLASMA OVIS, prevalence and respiratory disease among sheep at a large specialized farm—1522
- ANAPLASMOSIS, in Barbary sheep and mule deer in Palo Duro Canyon, Texas—1232
- new vector in Armenia—2389
- splenectomy and hematological changes—123
- ANATOMY, abomasal epithelial cells—1622
- arteries of fatty tail, sheep breeds in Iran—168
- cellularity of adipose tissue—1343
- cholecysto-duodenostomie in ram with obstruction of ductus choledochus communis—1331
- comparative histochemical study of intrinsic laryngeal muscles—1888
- cytoarchitectonics of cortex of the lobus piriformis—908
- development of omental bursa and its significance for topography of abdominal cavity—1284
- distribution of vagus in stomach and certain lymph nodes, prenatal period—2387
- esophageal (reticular) groove and reticulo-omasal orifice—2297
- eye, tapetum lucidum fibrosum—386
- fine structure, endocrinal cells of pancreas—1304
- foot, veins—1612
- illustrated, heart and arteries of head and neck—2740
- lacrimal drainage system—1076
- lamb digestive tract, affected by feeding milk and milk substitutes—788
- luteal cells of corpus luteum—2235
- morphology and topography of thoracic part of vagus nerve in prenatal period—2388
- olfactory mucosa—1606
- papillary body of the forestomach, ultrastructure—3230
- skin surface, scanning electron microscopy—1448
- structure of epidermis—1773
- structure of gastrointestinal mucosa, weaned lambs, to absorb non-protein nitrogen—789
- testis—451
- tight junction network of epithelial cells of choled plexus examined by double replica technique—2024
- ultrastructure of sweat glands after exposure to controlled warm environments—1450
- ANDROGEN, age related effects on binding protein in testis and epididymis—525
- antibodies to, in ewe—2651
- biochemical and physiological studies of androgen binding protein in reproductive tract of ram—1446
- binding protein in ram—1447
- characterization of cytoplasmic receptor in ram testis—2025
- control of spermatogenesis—633
- drug residues, meat production, hazards—1288
- receptors in castrated ram pituitary cytosol—2955
- spermatogenesis in hypophysectomised ram—632
- treatment of castrated rams, serum levels of prolactin—2289
- ANDROSTENEDIONE, immunization, effect on estrus, ovulation and lambing in Merino ewes—1880
- ANEMIA, caused by *Eperythrozoon ovis*—2708
- clinico-pathological study—224
- Finnish sheep, abnormal hemoglobin—176
- hemolytic, chronic copper poisoning—3250
- in splenectomized *Theileria* carrier sheep—2395
- ANESTHESIA, epifurial, effect on serum thyroid hormone and cortisol levels in pregnant ewe—898
- etomidate, plasma esterase activity—499
- respiratory function changes associated with lying in lateral recumbency and with sedation by xylazine—2011
- use of CO₂ for stunning of slaughter animals—1297
- ANESTHETICS, effect of changes in maternal fetal pH on transplacental equilibrium of bupivacaine—1541
- ANESTROUS, effect of timing of ram introduction on fertility in progestagen-PMSG treated ewes—370

- ewes, Finnish Landrace, relation of vaginal temperature to rhythms of eating, drinking, standing, and walking—1371
- ANESTRUS**, action of PMS and sexual steroids on cerebrohypophyseal gonadal axis—2803
- cholinergic control of pituitary gonadotrophin secretion—2106
- comparison of LH and prolactin levels in cycling and anestrus ewes—1425
- effect of estradiol 17-beta on gonadotropin releasing hormone mediated release of LH during—2057
- increased lamb production with rams exposed to short day lengths—2655
- plasma levels of LH and FSH in ewes immunized against estradiol, estrone or testosterone—1875
- regional brain content of luteinizing hormone releasing hormone—3231
- ANEURYSMS**, chronic changes in walls—2852
- ANGIOTENSIN**, blockade nephrectomy, effect on renin angiotensin aldosterone system in newborn—2729
- effect of adrenal arterial infusion of P-113 on aldosterone secretion in Na-deficient sheep—342
- ANGIOTENSIN II**, circulatory effects of blockade in fetal lambs—1421
- effect of A₂ blockade on response of fetal lamb to acute hypoxia and hypovolemia—1899
- effect on blood pressure, plasma renin activity and aldosterone in fetus—2731
- effect on prorenin in fetus—2733
- inhibition of some vasopressin effects on renal function—3313
- vascular insensitivity in newborn—2732
- ANGUINA FUNESTA**, nematode associated with annual ryegrass toxicity—962
- ANHYDRASE**, carbonic, erythrocyte, multiple molecular forms—1935
- carbonic, novel, from ovine parotid gland—950
- ANIMAL TRACKS**, petrified, in ancient desert in USSR—85
- ANIMAL WELFARE LEGISLATION**, Islamic ritual for slaughtering of sheep for religious purposes—816
- ANTHELMINTICS**, activity of albendazole against trichostrongyles—767
- activity of levamisole against benzimidazole resistant *Haemonchus contortus* and *Trichostrongylus colubriformis*—608
- activity of oxfendazole in gastrointestinal nematodes—1104
- activity of trodax—1195
- albendazole against *Dicrocoelium* species—627
- albendazole against lancet fluke—2951
- albendazole in treatment of giddy sheep—3138
- applications of research to flock health—2046
- avermectins, a new family of agents—860
- avermectin B₁, evaluation against nematodes—1710
- benefits accruing from use—702
- benefits accruing from use—1750
- benefits from use—106
- benzimidazole, ruminal bypass—1862
- bibliography—615
- bithionol sulfoxide—1174
- bromfenofos for *Fasciola hepatica* infections—1019
- cambendazole efficiency against *Moniezia* and gastrointestinal strongyles—983
- cambendazole, for lungworms in bighorn sheep—2663
- comparative efficacy of fendendazole and tetramisole on *Protostrongylus* and *Dictyocaulus filaria* in Moroccan sheep—683
- chemoprophylaxis and pathogenetic therapy—768
- chemoprophylaxis with diamfenctide against experimental infections of *Fasciola hepatica*—895
- comparative study of naphthalophos and parbendazole against gastrointestinal worms—3113
- cost benefit analysis—1902
- cost benefit analysis of use in sheep—701
- diamphenethide in treatment of ovine dicrocoeliasis—491
- diamphenetide, plasma enzyme levels in fascioliasis—2575
- dose titration study with oxfendazole against naturally acquired helminths—1578
- dynamics of tribromosalan in blood plasma and effect of fasciolicidal agents on enzyme activities—3153
- effect of albendazole on *Moniezia expansa* and *Thysanosoma actinoides*—1712
- effect of esophageal groove reflex on oxfendazole pharmacokinetics and efficacy against benzimidazole resistant nematodes—2408
- effect of levamisole on gastrointestinal strongyles in Somali sheep—507
- effect of single and divided dose administration on efficacy of fendendazole against adult stages of benzimidazole resistant trichostrongyles—3240
- effect on performance of Awassi sheep in Iraq—82
- effectiveness of levamisole and oxclozanide against paramphistomids in sheep and cows—1059
- effectiveness of morantel tartrate and naphthalophos against levamisole resistant *Ostertagia ostertagi*—1732
- effectiveness of treatment of levamisole-resistant *Ostertagia*—1730
- efficacy and economic advantage in use of oxclozanide with tetramisole—2463a
- efficacy of albendazole against *Fasciola hepatica*—1458
- efficacy of albendazole against *Fasciola hepatica* and benzimidazole resistant strains of *Haemonchus contortus* and *Trichostrongylus colubriformis*—503
- efficacy of albendazole against gastrointestinal roundworms, tapeworms, lungworms and liverflukes—2653

- efficacy of albendazole against gastrointestinal roundworms, tapeworms, lungworms and liver flukes—3108
- efficacy of cambendazole against intestinal nematodes—2126
- efficacy of febantel against spp. of *Dicrocoelium* and *Fasciola*—1208
- efficacy of febantel in ruminants—3254
- efficacy of fenbendazole administered via feed-block carrier—1908
- efficacy of fenbendazole against ovine helminthiasis—483
- efficacy of fenbendazole and albendazole against benzimidazole-resistant *Haemonchus contortus*—1182
- efficacy of fenbendazole and albendazole against benzimidazole-resistant *Trichostrongylus colubriformis*—1182
- efficacy of helatac, nilverm, thiabendole and banminth-11 in growing lambs under semi-arid conditions—3141
- efficacy of oxfendazole—3223
- efficacy of oxfendazole and haloxon against arrested *Haemonchus contortus* larvae—2198
- efficacy of oxfendazole against naturally acquired nematodes and cestodes—1974
- efficiency of oxfendazole against four field populations of benzimidazole resistant *Haemonchus contortus*—3209
- evaluation of albendazole as thysanosomicide—306
- evaluation of fenbendazole for lungworms in bighorn sheep—2663
- fasciolicidal activity of halogenated benzenesulfonamide—1271
- fasciolicidal activity of halogenated benzenesulfonamide—2015
- febantel, a new broad spectrum—2598
- febantel, determination of effect on breeding ewes and their offspring—2940
- febantel, efficacy against natural infections of protostrongyles—1207
- febantel, efficacy against various gastrointestinal parasites of ewes—2620
- feed blocks, new development in worm control—963
- fenbendazole, effect on gastrointestinal nematodes and *Dictyocaulus filaria* in naturally infected sheep—1196
- fenbendazole, efficacy against most important trematodes and cestodes—623
- fenbendazole (Panacur) for controlling nematodes—2455
- for fascioliasis—2878
- influence of levamisole, mebendazole and carbon tetrachloride on plasma enzymes (GOT, GPT and SDH)—3151
- inheritance of resistance to thiabendazole in *Haemonchus contortus*—1734
- inhibition of mammalian brain microtubule assembly in vitro by benzimidazole carbamates—1400
- larval paralysis as in vitro assay of levamisole and morantel tartrate resistance in *Ostertagia*—1882
- levamisole in tropical sheep breeds—2523
- metabolism of clixanide and resorantel and related compounds in vitro by *Moniezia expansa*, *Ascaris suum* and mouse- and sheep-liver enzymes—804
- metabolism of nitrophenolic and 5-arylazorhodanine, by *Ascaris suum*, *Moniezia expansa* and by mouse- and sheep-liver enzymes—805
- Nematodirus* in lambs—1392
- nitroxylin, fascioliasis—2333
- novel 2-pyridinyl-5-isothiocyanato benzimidazoles—1265
- ovacidal activity of febantel—2963
- overdosing as cause of paralysis with parbendazole—2413
- oxfendazole, efficacy against experimental gastrointestinal nematode infections—548
- oxfendazole, efficacy against naturally acquired *Dictyocaulus*—547
- oxfendazole, influence of esophageal groove reflex on pharmacokinetic behaviour and efficacy against benzimidazole resistant nematodes—1294
- oxfendazole (synanthic) for gastro-intestinal nematode and tapeworms under natural conditions—2494
- panacur in Australia—1435
- panacur, ovicidal and larvicidal activity—834
- panacur, ovicidal and larvicidal action—835
- pharmacokinetics and residues of bithionol sulphoxide—3147
- phenothiazine, control by self medication—1520
- praziquantel against lancet fluke—3281
- praziquantel, coenurosis—228
- premix of levamisole and oxcyclozanide for cattle and sheep—687
- program for prophylaxis, natural pasture—909
- rafoxanide and naphthalophos effective against inhibited larvae of *Haemonchus contortus*—1731
- rafoxanide, treatment of fascioliasis of sheep and cattle in tropical Africa—1128
- rapid in vitro method for evaluating pour-on dose forms of levamisole—2371
- recovery of intestinal structure—99
- renal and hepatic calcification in lambs dosed with carbon tetrachloride—101
- reproductive safety studies of oxfendazole—2354
- residues of morantel in meat and internal organs of sheep—2258
- resistance, nematodes, genetic background and methods for field diagnosis—1534
- resistance of *Haemonchus contortus* to oxfendazole—3208
- resistance of levamisole by *Haemonchus contortus* and *Ostertagia circumcincta*—2632
- resistance of *Trichostrongylus colubriformis* to levamisole, morantel tartrate and thiabendazole—2627

- resistance to thiabendazole by *Ostertagia circumcincta*—1223
- resistance to thiabendazole, *Haemonchus contortus* field populations in New South Wales—3210
- retention of nitroxylin in tissues and body fluids of sheep treated with "Fasciolid" injectable solution of nitroxylin—205
- safety for febantel—1351
- some economic implications of dosing lowland ewes prelambling—74
- strategies for weaner sheep in East Gippsland—260
- testing fenbendazole in Australia—1434
- tetramisole granules and mebenvet against strongylata in sheep—1838
- thiabendazole and radoxanide, in control of nematodes, effect on production of Merino wether weaners in two environments—1463
- thiabendazole resistance in field populations of *Haemonchus contortus*—1733
- thiophanate, activity against strongylids—3049
- toxicity of tin arsenate—288
- trials of febantel against nine nematode species common in sheep—2941
- tribromosalan, effect of enzymes—3152
- use in microcoeliasis and fascioliasis—3027
- use of bithionol sulphoxide, niclosamide and menichlopholan in Guinea—2662
- use of fenbendazole in Poland—319
- use of guinea pigs to assay resistance to *Trichostrongylus colubriformis*—2626
- use of sheep nematodes experimentally in rabbits for study of drug resistance—1350
- value and limitation in treatment of gastrointestinal trichostrongylids—801
- ANTHRAX**, immunization, simultaneous with pasteurellosis and clostridial infections—1490
- ANTIBIOTICS**, carrier state use—2602
- in treatment for tetanus—152
- levels in milk and serum—3347
- ANTIBODY**, activation of complement by precipitating and coprecipitating, various species—2320
- anti-acrosin, level in sera, colostrum and genital organs of vaccinated ewes, estimation and correlation with fertility—3198
- arc 5, in sera of sheep, to *Echinococcus granulosus*, *Taenia hydatigena*, and *Taenia ovis*—3315
- blocking, comparison of ways of detecting blocking antibodies using—1559
- collection of lymph from single lymph nodes and intestines of fetal lambs in utero—487
- detection, against glycoprotein of Maedi-Visna virus in cell cultures—450
- HI, to arboviruses in Italy—151
- kinetics, Borna virus infections—1969
- lack of antibodies to chlamydial species in cases of keratoconjunctivitis—2887
- local, *Trichostrongylus colubriformis* infections—19
- Pasteurella haemolytica*, quantitative estimation by ELISHA—470
- precipitating or hemagglutinating, to 4th stage *Nematodirus*—1898
- prevalence of, to *Mycobacterium johnei* in colostrum deprived lambs—2071-B
- to androgens and ovulation in ewe—2651
- to parainfluenza-3 virus in sheep and goats, cattle and dromedaries in Somalia—1015
- to rotavirus, in several animal species—2923
- ANTIBODY RESPONSE**, immune response in sheep, a review—3216
- ANTICOAGULANTS**, physiological effects of stunning in relation to meat quality—1709
- ANTIGEN**, A₂, serum, immunogenetics—1381
- analysis, *Mycobacterium paratuberculosis*—1189
- antigenic composition and source of soluble proteins on surface of skin—1449
- common to sheep and cattle, immunogenetic analysis—722
- effect of extracts of *Moniezia expansa* on blood values—510
- erythrocytes, purification and chemical characterization—3043
- immunogenetics of, identified in both sheep and cattle serum—293
- K99, vaccination of ewes for passive transfer to antibodies via colostrum—2809
- lymphocyte, genetic control, the ola complex and two minor loci—1997
- polymorphic, serum—292
- pregnancy associated, natural and role, and endocrinology of early pregnancy—958
- preparation of *Babesia ovis*, and testing—1662
- relationship of *Fasciola hepatica* and *Cysticercus tenuicollis*—171
- Taenia ovis*, surface changes and secretory processes in oncospheres undergoing activation—2287
- variation in Visna virus—2677
- virus of Maedi-Visna, glycoprotein released in cell cultures—450
- ANTIGENICITY**, *Trypanosoma congolense*—1136
- ANTIHISTAMINE**, failure to prevent increased lung vascular permeability after microemboli—1678
- ANTIPARASITIC AGENTS**, sheep dipping and spraying—38
- ANTITOXIN**, tetanus, use as treatment for tetanus—152
- AOUIDAD**, conservation of nucleolus organizer regions during evolution—1292
- APOPTOSIS**, liver, during prehaemolytic phase of chronic copper poisoning in sheep—1567
- APPARATUS**, robust and inexpensive metabolism cages—1979
- ARAGON**, crossbreeding for production of fat lambs—971
- ARBOVIRUS**, isolated from midges in Kenya—709
- presence and distribution of HI antibodies, Italy—151

- ARCHEOLOGY, petrified ram tracks in ancient desert in USSR—85
sheep in prehistoric settlements of Verona, Italy—2519
- ARID LANDS, wool production, a review—1623
- ARID ZONES, comparative performance of indigenous and exotic sheep in the Indian arid zone—2618
- ARMENIA, new vector of anaplasmosis—2389
- ARTERIAL SYSTEM, technics of study—1172
- ARTERIES, segmentation in spleen—1197
stomach, morphology and topography—3295
- ARTHRITIS, *Erysipelothrix rhusiopathiae* infections—1672
importance of *Erysipelothrix insidiosa* in etiology of infectious arthritis—2152
- ARTHRORHIZOSIS, etiologic agent is Akabane virus—1393
- ARTIFICIAL INSEMINATION, comparison of fresh and frozen semen—1683
effect of inseminating instrument—2799
fertility in ewe using fresh and frozen semen at induced estrus—603
in France—427
semen collection from Suffolk, Texel and Dorsets—2797
single technique at predetermined time—378
- ASCARIS, induced bronchospasm—3191
- ASCARIS SUUM, antigen, modification of hypoxic pulmonary vasoconstriction by antigen challenge in sensitive sheep—1651
cutaneous sensitivity, measurements of physiological functions—3190
metabolism of nitrophenolic and 5-aryiazorhodanine anthelmintics—805
- ASCORBIC ACID, in lambs infected with *Salmonella* and *Escherichia coli*—663
- ASH, content of radius bone, relationship of functional stress and strain to processes of bone remodeling—1691
- ASIA, kids, calories and poverty—928
land-use of semi-deserts, management of sheep and goats—2336
- ASKANIAN, crossbreeding, USSR—1507
- ASPEN, nutritive values of pressure-steamed, for mature sheep—2691
- ASPERGILLUS, aflatoxins, in milk and milk products—2897
- ASPHYXIA, arginine vasopressin during gestation and parturition—2845
electrocardiographic changes in fetus in relation to beta adrenoceptor stimulation and blockade—1333
fetal breathing movements—718
- ASSAF, machine milkability—1441
- ASTRAGALUS EMORYANUS (emory milk-vetch), poisoning—3263
- ASTROVIRUS, pathogenesis of diarrhea in lambs—2806
- ATHEROSCLEROSIS, chronic changes in wall of experimentally produced aneurysms—2852
spontaneous aortic—1194
- ATONY, rumen, association with acute lactic acidosis—2789
- ATP, levels in relation to Hb types in Deccani sheep—2303
- ATPASE, post mortem electrical stimulation of muscle and effect on sarcoplasmic reticulum—3044
sodium potassium, characterization of essential arginyl residues—1157
- ATRAZINE, mixture with simazine, in vitro metabolism—1555
- ATRESIA, tricuspid—3106
- ATRIAL AORTIC PRESSURE, increased lung lymph transport with heart failure after coronary ligation—611
- ATROPINE, cardiovascular response, hypoxemia following autonomic blockade in fetus—1748
no effect on gonadotrophin surge in ewe—2106
rate of salivation and composition of saliva during infusion with acetylcholine into carotid artery of conscious sodium replete sheep—272
use in treatment of alkyl phosphate poisoning—294
- AUJESZKY'S DISEASE VIRUS, immunization—1906
resistance to gamma irradiation—1398
strain modified in cell cultures—1175
- AUREOMYCIN, comparison of effects of monensin with coccidiosis in lambs—2618
- AUSTRALIA, benefits from use of anthelmintics—106
breeding objectives and selection criteria for prime lamb production—2833
control of hydatid disease—1913
Coopworth sheep in—1372
distribution of *Anguina funesta*, the nematode associated with annual ryegrass toxicity—962
export of breeding sheep, need for veterinary involvement—926
four schemes for parasite control and effect on production of Merino weather weaners in two environments—1463
genetic background and methods for field diagnosis of anthelmintic resistance in nematodes—1534
Haemonchus contortus resistant to oxfendazole—3208
helminths of sheep—179
Kangaroo Island, reproductive performance of sheep grazing estrogenic pastures—3179
livestock industry, allergens, immunoglobulin E, relationships—2186
New South Wales, blowfly strike problem—3206
New South Wales, comparison of forage value of buckwheat and sorghum stubbles grown on Southern Tablelands of—2075
New South Wales, effects of shearing time and location on quality of wool—3197
New South Wales, field aspects of selenium deficiency—588

- New South Wales, investigations of low rearing percentages of lambs—362
- New South Wales, sheep grazing in mixed rosewood and belah woodland—1727
- New South Wales, thiabendazole resistance in *Haemonchus contortus*—3210
- New South Wales, wool production—36
- objectives and selection criteria for Merino sheep breeding—2372
- origin and development of Dorset horn sheep—982
- present position of bluetongue virus—988
- Queensland, problems of sheep industry—1995
- Queensland, sarcocystis in sheep—2593
- research on sheep diseases—180
- response to partial selection on clean fleece weight in strong-wool Merino sheep—1234
- review of hydatid disease—157
- south, fungal treniogens associated with ryegrass staggers—1074
- trials with panacur—1435
- use of selenium pellets—1971
- Victoria, efficacy of thiabendazole and levamisole against nematodes—497
- Victoria, epidemiology of *Fasciola hepatica*—1946
- Victoria, serum levels of vitamins B₁₂—1228
- western, *Brucella ovis* in rams—1352
- western, brucellosis in Merino rams—1775
- western, erosion risks with high stocking rates—39
- Western, lupinosis—73
- western, presence of congenital progressive ovine muscular dystrophy—752
- western, secondary and tertiary fly strike—2029
- western, selenium deficiency—1020
- AUTOANTIBODIES**, animal model for glomerulonephritis—2849
- AUTOIMMUNE DISEASES**, spontaneous, sheep—1173
- AUTOLYSIS**, sequential sterile in ovine fetus—770
- AUTOMOTIVE EMISSIONS**, lead levels in wool indicative of blood levels of sheep exposed to—3194
- AUTONOMIC NERVOUS SYSTEM**, vagal deafferentation—931
- AUTOPHAGY**, during prehaemolytic phase of chronic copper poisoning in sheep—1567
- AVERMECTIN**, B₁, evaluation against nematodes—1710
- AZERMECTINS**, new family of anthelmintics—860
- AVITAMINOSIS**, review—721
- AWASSI**, climatic factors and reproduction, in Iraq—2948
- contemporary comparisons between progeny by Finnish Landrace and Romanov rams out of mutton Merino and Awassi ewes—1119
- crossbreeding Daglicsheep—2819
- fat-tailed, thermoregulation—725
- kemp succession in adult fleece in relation to birthcoat—1178
- lambs, use of broiler excretion in fattening—52
- machine milkability—1441
- milk production and milk fat, Macedonia—2999
- milk production, different feeding-management systems; Cyprus—673
- performance—325
- response to *Haemonchus contortus*—66
- sheep, effect of anthelmintic treatment, Iraq—82
- AXENIC**, lambs, production—1127
- 9 AZACANNABINOL**, feeding and depression of abomasal secretion—3096
- AZAPERONE**, use before surgery in field—1403
- AZERBAIJAN**, USSR, development of some sheep breeds, a review—1438
- AZINES**, chronic poisoning with herbazin-50—2163

B

- BABESIA**, control in USSR—1179
- incidence in southern Ghana—167
- prevention and control during grazing season—2891
- prevalence and significance, northern Nigeria—1717
- vectors in Yugoslavia—2337
- BABESIA BIGEMINA**, prevention and control during grazing season—2891
- BABESIA OVIS**, antigen preparation—166
- infectivity and immunogenicity—1550
- preparation of extracts and testing for antigenic properties—1662
- serological diagnosis by fluorescent antibody technique—2251
- BABESIOSIS**, splenectomy and hematological changes—123
- variability in virulence of etiologic agent—566
- BACILLUS THURINGIENSIS**, toxins, effect on sheep—2526
- BACKFAT**, genetic selections—1705
- BACTEREMIA**, epididymitis, rams in Idaho and eastern Oregon flocks—741
- BACTERIA**, adherent epithelial, roles in digestive tract function—570
- contamination, fresh meats—1135
- effect of carcass weight and fat thickness, surface counts—2637
- fecal, nitrogen residues—1890
- influence of kanamycin on rumen bacteria and ammonia production in supplemented sheep rumen liquor in vitro—1110
- isolated from organs during slaughter—2071-A
- lactate, enumeration and isolation from rumen—1817
- residues of non-dietary fecal nitrogen, estimates from 47 digestibility trials—1891
- review of intrinsic bacteria in meat—1078
- rumen, changes in lactate-producing and lactate-utilizing, in relation to pH in rumen during stepwise adaptation to high-concentrate diet—1816
- rumen, effect of pH on growth rate—1576

- rumen, independent flora of epithelium and role in eco-microbiology—3184
- rumen, utilization by rumen—2869
- ureolytic epithelial, role in urea flux—571
- BACTERIAL DISEASES**, a review—3339
- BACTERIOIDES**, laboratory diagnosis—1320
- species in sheep—1320
- BACTERIOIDES NODOSUS**, degrading proteinase test to distinguish benign and virulent ovine isolates—753
- foot rot, a review—236
- role of elastase in differentiation of infections—2861
- treatment of ovine foot rot by vaccination—859
- BALI**, serological survey for brucellosis—2294
- serological survey for leptospirosis—2294
- BANGLADESH**, comparative gestation, sheep breeds—2444
- hydatid disease in Mymensingh District—1407
- hydatid disease in Mymensingh District—2687
- BANMINH-II**, efficacy against gastrointestinal nematodes in growing lambs under semi-arid conditions—3141
- BANNUR**, ewes, reproductive efficiency—2109
- BARBADOS BLACKBELLY**, crossbred, resistance to nematodes—3312
- lambs, nitrogen utilization—2243
- BARBARY SHEEP**, lice, Texas—1137
- serological studies, from Palo Duro Canyon, Texas—1232
- sympatric, serological study with mule deer from Palo Duro Canyon, Texas—419
- ticks, Texas—1137
- BARKI**, estimates of some physical and wool characteristics, semi-arid desert conditions—883
- occurrence of estrus in pregnant ewes—3319
- phenotypic and genetic correlations between some physical wool characteristics, under semi-arid desert conditions—884
- BARLEY**, digestibility after treatment with sodium hydroxide—2231
- effect of acid-preservation of high-moisture grain and pelleting on utilization of all-concentrate diets by early-weaned lambs—2921
- effect of dry matter concentration and preservation method of whole barley on feed utilization of early weaned lambs—2230
- effect of supplements on voluntary intake and digestion of low quality roughages—1671
- fattening lambs, growth of store lambs, with protein or urea—2189
- fed whole, ground or pelleted, performance and carcass fat characteristics of fattened lambs—1741
- BARO REFLEX SENSITIVITY**, depressed responsiveness in conscious newborns—1839
- BARREL MEDIC (MEDICAGO TRUNCATULA)**, digestion of hay and seed pods by sheep—748
- BAVARIA**, *Sarcocystis* and *Toxoplasma* infections—361
- BEEET MOLASSES SLOP**, distillery effluent, in lamb feeding—1840, 1841
- BEEET SOLUBLES**, as protein supplement to diet—3171
- BEEETLES**, blister, cantharidin toxicity, measurement—2470
- BEHAVIOUR**, abnormal, wool eating, a review—261
- analysis of differences in thin fleeced sheep—1690
- animal, humane handling for slaughter—1561
- animal, light intensity, movement through narrow and wide races—1321
- animal, movement on inclines—1322
- assessment of traits of emotionality in crossbred ewes—3015
- conference proceedings—1665
- control during development in ewe reared lambs—1931
- digestive, Ossimi sheep, under summer conditions in Egypt—1613
- ethological manifestations of ewes and lambs after delivery—1354
- feeding, among groups of lambs self-fed varying diets in two slotted floor pen sizes—2865
- feeding, lambs—2867
- feeding, lambs self-fed varying diets in two slotted floor pen sizes—2864
- feeding, method of study—2866
- feeding, monitoring effect of selected compounds—828
- feeding, relation with rumen contents—1307
- feeding, when fed pelleted feeds—2420
- Finnsheep after lambing—177
- free running rhythms in feeding, standing, and walking activities—1377
- grazing—676
- grazing, factors influencing in Mediterranean climate—821
- grazing, on high country summer range—1253
- home range and movements of Scottish Lorchaber, Northwest Scotland—1300
- influence of shape of paddock, type of fence and stocking rate on grazing behaviour and social facilitation—1808
- ingestive, effect of variation in sward characteristics upon, and herbage of intake of calves and lambs under continuous stocking management—1436
- ingestive, under field conditions—461
- male sheep, endocrine function—1389
- males, *Ovis ammon*, during reproduction—946
- management of rams—851
- maternal, effect of lambing induction—2367
- maternal, hormonal induction in non-pregnant ewes—1738
- mating, factors affecting—1718
- mating, genetic and non-genetic variation, under sub-temperate conditions—3004
- mating, influence of flock size in flock-mating of progestagen-synchronized ewes—453
- operant studies in relation to physical environment—219
- pseudoruminant, radiography of intake—756
- ram fighting—327

- relation of functional state of hypothalamic pituitary adrenal system, thin fleeced sheep—1689
- ruminating, automatic analysis—1743
- sex, and hormone responses in ewes given testosterone propionate—1858
- sexual, effect of progesterone on, in adult ovariectomized ewes—917
- sexual, induction of male activity in ovariectomized ewes and ovariectomized-androgenized ewes chronically implanted with estradiol-17 β or testosterone—590
- sexual, Oudah ewe—1023
- sexual, Oudah ram—1024
- sexual, photoperiodic control, cranial sympathetic nervous system—1762
- sexual, rams, tropical conditions—2757
- sexual, review—1266
- social—456
- social, dominance, relation of, and body size to intake of supplements in grazing sheep—1777
- taste preferences—1388
- weaning, social environments and the ontogeny of spatial associations in Bighorn sheep—301
- welfare—218
- BEHAVIOURAL DIVERSITY**, consequence for Bighorn sheep inhabiting desert and mountain environments—300
- BELAH** (*CASUARINA CRISTATA*), sheep grazing in woodland with mixed rosewood shrub (*Heterodendrum oleifolium*) in western New South Wales—1727
- BELGIUM**, toxoplasmosis antibodies in domestic animals—935
- BENZENSULFONANILIDE**, halogenated, anthelmintic action in fascioliasis—2015
- BENZIMIDAZOLE**, carbamates, inhibition of mammalian brain microtubule assembly in vitro—1400
- carbamates, interaction with microtubule protein—1399
- drug resistance, efficiency of oxfendazole against four field populations of *Haemonchus contortus*—3209
- efficacy of oxfendazole—3223
- novel 2-pyridinyl-5-isothiocyanato, sheep helminths—1265
- resistant nematodes, effect of esophageal groove reflex on oxfendazole pharmacokinetics and efficacy—2408
- resistant strains of *Haemonchus contortus* and *Trichostrongylus colubriformis*, efficacy of albendazole—503
- resistant trichostrongylids, effect of single and divided doses of fenbendazole—3240
- resistance, of *Haemonchus contortus* amenable to treatment with fenbendazole and albendazole—1182
- resistance, of *Trichostrongylus colubriformis*, amenable to treatment with fenbendazole and albendazole—1182
- ruminal bypass—1862
- BENZYL BENZOATE**, clinical evaluation against scab—2006
- BERMUDA GRASS**, protein metabolism influence of formaldehyde treatment—87
- BERRICHON-DU-CHER**, seminal characteristics and fecundating power of ram—984
- BESNOITIA** (*GLOBIDIUM*) *GILRUTHI*, pathology of abomasum—1809
- BESNOITIOSIS**, in myocardial tissue of sheep in India—1557
- BETAINE**, metabolism—2008
- BIBLIOGRAPHY**, annotated, pneumonia—3064
- bluetongue—37
- bluetongue—3085
- current awareness bulletin on biology and production, Australia—185
- embryo transfer—2680
- inventory and conservation of farm animal genetic material in France—1702
- sheep anthelmintics—615
- wool—181
- BICARBONATE**, effect of rapid infusion of, on blood and cerebrospinal acid base in acidotic newborn—692
- BIGHORN**, Rocky Mountain, sheep, isolation of chlamydial agent—2308
- BIGHORN SHEEP**, desert, in Nevada—1740
- desert, social structure and reproductive strategy—1737
- detection of pregnancy by determination of progesterin—2456
- evaluation of fall burning on winter range—2310
- evaluation of fendendazole and cambendazole for lungworms—2663
- factors influencing heart rate in free-ranging, physiologic approach to study of wildlife harassment—1811
- (*Ovis canadensis mexicana*), scabies in New Mexico—1682
- Rocky Mountain, energy cost of management—559
- Sierra Nevada, human interactions in California—1303
- BILE**, effect of intraduodenal infusion of HCL and Na₂SO₄ on volume, bicarbonate output and pH—2874
- excretion—2125
- flow and electrolyte composition—247
- neutralizing functions, effect on secretin and chemical stimulation of duodenum—2875
- participation in secretion of endogenous nitrogen into digestive tract—2929
- BILE ACIDS**, clearance, in hereditary hyperbilirubinemia—891
- influence of interruption of enterohepatic circulation of bile acids on their content in bile—358
- BILE DUCT**, comparative aspects of cholestasis—1747
- BILIARY TRACT**, electrical activity, relation to antral and duodenal motility—460
- BILIRUBIN**, maximum excretion, bile flow and

- electrolyte composition of bile associated—247
- BINDING SITES**, identification of beta adrenergic, in fetal myocardium—1575
- BIOCHEMICAL MARKERS**, genetic variability, crossbreeding—1094
- BIOSTIMULATORS**, assessment of growth promoters in fattening of lambs on concentrates—2436
finishing of lambs—369
monensin and fattening performance—493
- BIRTH**, time of, influence of weight-for-age—2369
- BIRTHCOAT**, fibre, relation to adult fleeces, kemp succession in coarse wool breed of sheep—1177
fibre, types in lambs in relation to adult fleece traits—1176
study of kemp succession in adult fleece of two coarse-wool breeds in relation to—1178
- BIRTHS**, multiple, comparison of different weaning policies for ewes suckling triplets at pasture—2224
multiple, development of: lambs—160
- BIRTHWEIGHT**, Chokla and Magra lambs, in subtropical area of northwestern arid zone of Rajasthan, India—321
comparative performance of breed crosses—1442
effect of parasite control during peri-parturient period—1462
embryo transfer study in Finnish Landrace and Targee sheep—1317
inbred lambs—50
influence on digestibility of milk-replacer in newborns—1358
lamb, Churra, effect of ingestion of energy and protein—1106
lamb, factor in production on hill land in Great Britain—659
lambs from ewes given protected lipids during late pregnancy—2851
relation to duration of pregnancy, indigenous and crossbred sheep—2280
some tropical breeds—2463b
Stavropol Merinos—2452
Tsigai and crossbred lambs—1640
under rotational and continuous grazing on hill pastures—2697
- BITHIONOL**, anthelmintic properties—1174
sulphoxide, anthelmintic, Guinea—2662
- BITTERBRUSH**, winter cold damage related to spring sheep grazing—1451
- BLACK DISEASE**, isolation and typing of *Clostridium oedematiens* (*C. novyi*), Iran—136
- BLACKFACE**, comparative performance of breed crosses, lamb production traits—1442
Finnish Landrace, crossbred performance—2788
scottish, genetic and environmental variation in lutropin response of ovariectomized, to lubiberin—1675
- BLACKLEG**, role of sheep in spread—1818
- BLASTOCYST**, proteins—1749
- BLOAT**, effect of rumen insufflation on contraction rate—1794
- BLOCKING AGENTS**, neuromuscular, effect in lambs—760
- BLOOD**, acid base, effect of rapid bicarbonate infusion, in acidotic newborn—692
acid-base, equilibria, lambs—2772
acid-base indices, dynamics in lambs from 7th day of post-natal life to adult—2770
anemia and leukocytosis, extracts of *Moniezia expansa*—510
biochemical composition, air pollution, feeding hay—1488
biochemical tests, appraisal of results—2382
biochemical tests in disease—2380
biochemical tests in disease—2381
chemistry, Chokla lambs, during 3 months after birth—2038
chemistry, effect of intramedullary osteosynthesis with polymer pins—957
chemistry, effect on plasma electrolytes of transfer of rumen-reticulum organisms of bovines to sheep—936
chemistry, metabolic effects of ammonia and adrenaline infusions—1035
chemistry, ovine white liver disease—2892
chemistry, urea content in relation to urea content of bile and gastric juice—3110
coagulation, development in fetus—1574
composition, effect of dietary concentrate levels—1375
composition, effect of heat stress—2630
effect of denutrition—1478
effect of extracts of *Moniezia expansa*—510
effect of implantation of zeranol—3076
effect of long-term intermittent watering pregnant sheep under semi-arid conditions—2039
enzymes, in undernourished ewe—2683
estrone, from 50th to 90th day of pregnancy—1221
flow, coronary, age related changes, in instrumented sheep—2539
flow, fetal organs as function of arterial oxygen content—2311
flow, patterns to uterus and ovaries of ewes during period of luteal regression—966
flow, pulmonary, contribution of left to right ductus arteriosus shunting duct shunt—2863
flow, responses of newborn to rapid massive hemorrhage—2812
gases, changes associated with feeding—2012
gases, continuous variability of fetal blood oxygen tension in chronically catheterized fetal sheep—1437
gases, myocardial performance in newborn—310
gases, renal response of fetus to hypoxemia and following recovery—2534
gases, tension levels, relation to meconium—823
gastric intrinsic factor—1927
groups, individual difference within groups detected by *Tulipa gesneriana*—3317

- groups, phylogenetic relationships among sheep breeds—2748
- groups, variant of transferrin—1090
- hemoglobin polymorphism in relation to performance—2476
- hemoglobin type and reproductive performance of sheep grazing estrogenic pasture—3180
- hemoglobin types, effect on production traits—2752
- hemogram, influence of diet and intestinal parasites—2112
- influence of blood sampling stress on blood values—1101
- kinetics of disappearance of ³⁵S-thiamine—1335
- loss, during *Haemonchus* infections—1837
- metabolites, as indicators of nutritional state in gestating ewes—1807
- metabolites, effect of extended supplementation with magnesium—2712
- mineral levels, relation to infertility—887
- morphology, experimental bovine leukosis virus infections—2616
- oxidative enzymes, activity in various breeds in relation to age—1631
- parasites, incidence, Ghana—167
- picture in parturition—124
- post-surgical changes, in fetus in utero—1582
- presence and evolution of Hb-C—2027
- pressure, comparison of effects of glucocorticoid and mineralocorticoid infusions—3242
- pressure, dose response to vasopressin in fetus—693
- pressure, effect of 9-alpha fluorohydrocortisone—601
- pressure, effect of angiotensin, blockade and nephrectomy on renin angiotensin aldosterone system in newborn—2729
- pressure, effect of angiotensin II, fetus—2731
- pressure, effect of sodium loading and ACTH on, in sheep with reduced renal mass—3241
- pressure, increased pulmonary vascular permeability follows intracranial hypertension—397
- pressure, left atrial pressure, effect on reversible lung vascular permeability increase by air emboli—2847
- pressure, micro, equilibration of intravascular albumin with lung lymph in unanesthetized animals—3116
- pressure, placental, effect of prostaglandins—2460
- proteins, comparative study among domestic animals—1972
- proteins, in caseous lymphadenitis infections—2066
- regulation of flow in placenta—2459
- role of blood factors in lung microvascular injury after emboli in sheep—2846
- separation of immunoglobulins from serum—943
- sera, DNAases—1169
- sera, enzymes—1169
- serum, antigen, immunogenetics—293
- serum, changes in total protein and its fractions during development—2943
- serum, lipids, effect of urea in diet—2359
- serum, protein content during different seasons—2942
- sugar, wethers implanted with jugular catheters—3273
- sulfonamide levels of sheep and calves—297
- supply and bone remodeling following medullary nailing of tibia—2343
- transferrin variant—1090
- transfusion, transmission of *Sarcocystis*—942
- uses, meaning and limitations of biochemical profiles—3285
- values, effect of different altitudes and nutrition, offspring of crossbred Merino and Sarplaninas—276
- values, of hematological indices in intensive lamb fattening in modern breeding systems—2771
- values, sulfamethazine, plasma kinetics—1789
- vessels, acute inflammatory response—3121
- volume, dynamics of vasopressin release and blood volume regulation during fetal hemorrhage in fetus—2538
- BLOWFLY (*LUCILIA CUPRINA*)**, genetic methods of control—1002
- pizzle dropping prevents strike—825
- sheep, biology and control—1366
- strike, problem in New South Wales—3206
- technical details of new sheep insecticide—1257
- BLUETONGUE**, a bibliography—37
- a bibliography—3085
- breeding sites and light-trap collections of *Culicoides* during outbreak in Cyprus—1956
- virus, antibody in domestic and game animals of Botswana—2745
- virus, cytokine production by infected fetal cells—894
- virus, development of inactivated vaccine—2234
- virus, in Barbary sheep and mule deer in Palo Duro Canyon, Texas—1232
- virus, incidence of precipitating antibodies in sera of domestic animals in Sudan—867
- virus, isolation from midges in Kenya—709
- virus, possible origin of epidemic in Cyprus in August 1977—2682
- virus, present position in Australia—988
- virus, temporal appearance and geographic distribution in USA—237
- virus, transmission to sheep of CSIRO 19 strain, type 20—2606
- virus, transplacental infection, overwintering mechanisms—1071
- BODY**, morphological features of some systems, in adaptation to industrial-type management in Altai Mountains—2595
- BODY COMPOSITION**, before, during and after weight loss—2678
- changes in lactating ewes estimated by serial slaughter and deuterium dilution—638
- effect of breed type—1022

- effect on lambing performance in commercial flocks in Britain—1048
- growth rate effects—2087
- lactating ewes, indirect measurement in live animal using tritiated water—990
- lambs—2633
- of Dorset and Muzaffarnagri crossbreds—1495
- measured by isotope dilution technic—1069
- variation with feeding—787
- voluntary feed intake and growth and efficiency quantification of between-animal variation—1951
- BODY CONFORMATION**, selection for uniformity—393
- BODY FAT**, composition, long-term effect of feeding protected sunflower seed supplement—2000
- BODY MEASUREMENTS**, genetic variability in Nali sheep—3002
- prediction of body weight—320
- BODY SIZE**, relation to intake of supplements in grazing sheep—1777
- BODY STRIKE**, selection of Merino sheep for resistance—173
- BODY TEMPERATURE**, Awassi sheep and German mutton Merinos—725
- in Corriedale, Marwai and Magra sheep in Rajasthan desert, India—2019
- BODY WEIGHT**, adult, indigenous and crossbred ewes under semi-arid conditions in India—1948
- adjustment factors for lamb weaning—1486
- adjustment factors for lamb weaning—1487
- at birth for Tsigai and its crossbred lambs—1640
- at sale, effect on lamb performance and profit—1474
- comparison of monensin and aureomycin in lambs with coccidiosis—2618
- comparative productivity of Merino and Leicester ewes—2884
- correction factor to estimate body weight at 300 days of age for Madras Red and Mandya breeds—2114
- correlated with ram's daughters, evaluation of rams—511
- crossbreeding, wool yield and quality, ewes of different genotypes—3351
- development of fat depots—75
- development of new breeds—9
- effect, at breeding, on lamb production, Soviet Merino—2477
- effect of selenium supplementation—3177
- effect on lambing performance in commercial flocks—1048
- embryo transfer study in Finnish Landrace and Targee sheep—1317
- energy and nitrogen utilization of weaned lambs before, during and after weight loss—1132
- factors affecting pre-weaning in Malpura sheep—365
- fecundity relationships in different ewe breeds—1241
- fetus, variations in prolific ewes—3082
- gain, effect of parasite control in the peri-parturient period on growth of lambs—1462
- gain, forages in Yucatan, Mexico—2828
- gain, pre-weaning, relationship to ewe milk production—3013
- gain, response to zeranol implants—3248
- gain, Rosa Aragonesa breed—1696
- genetic divergence of indigenous and crossbred sheep—3170
- genetic improvement of Daglic sheep—914
- genetic selection—1705
- genetic variability, Nali sheep—3002
- grazing irrigated pasture, effect of winter management on pasture regrowth—1272
- heritability in crossbred lambs—3280
- heritability in Romney sheep—210
- improvement through genetic selection, environmental factors—3301
- influence of carcass weight, sex and breed on consumer acceptance of lamb—1959
- in pen fed Romney, Coopworth, Perendale and Corriedales—2882
- lambs, born of Marwari ewes on prolonged salt intake—2756
- live, change, effect of pasture allowance over February–March on ewes—2783
- loss, nitrogen balance in *Fasciola* infection—572
- maturity, crossbreds—2788
- New Zealand Romneys—211
- optimum size of active breeding population of sheep—864
- orcadian sheep of Lihou—3249
- Perendales, genetic and phenotypic parameters—881
- phenotypic and genetic parameters for improvement by selection—3302
- prediction from body measurements—320
- progeny testing of performance tested Welsh mountain rams—1568
- relation, half-life and volume of distribution of trimethoprim and sulphadoxine—170
- Romney, Corriedale, Dorset, Romney × Dorset, and Dorset × Romney—1044
- Romney, Corriedale, Dorset and crossbreds—1047
- sheep with fascioliasis—697
- slaughter, early-weaned lambs on drylot vs. pasture—889
- some tropical breeds—2463b
- technic for estimating effect of errors occurring during culling—1464
- voluntary intake of feed—347
- weaned lambs before, during and after weight loss—2678
- weaning, adjustment factors, sources of variation—865
- BONE**, distribution in carcass, crossbreds—2970
- growth, prediction of body weight from body measurements—320
- jaws of adult culled ewes—2512
- magnesium depletion and repletion effects on levels in—278

- marrow, adaptive strategies of selective fatty acid deposition, desert bighorn sheep—3048
- marrow, collection of lymph from single lymph nodes and intestines of fetal lambs in utero—487
- marrow, karyotypes, Nali sheep—3314
- relationship of functional stress and strain to processes of bone remodeling in radius—1691
- remodeling, blood supply following medullary nailing of tibia—2443
- stimulation, electromagnetic potentials, scintigraphic and histological findings on corticalis defect in sheep—918
- toxic and essential elements, a review—809
- BONE DISEASES**, textbook—282
- BOOKS**, Animal Health Division, Ministry of Agriculture and Fisheries, New Zealand—2140
- Australian Advances in Veterinary Science—621
- Canadian Agriculture Statistics Yearbook for 1978–2004
- cytogenetics in animal reproduction—1250
- cytogenetics of sheep—2088
- increasing reproductive ability of sheep—3125
- intensive sheep management—947
- normal values for animal health and husbandry—2516
- on Kazakh Arkhar Merinos—1405
- operative surgery—1825
- Sainsbury and Sainsbury on livestock health and housing—2605
- sheep breeding by Tomes, Robertson and Lightfoot—3005
- sheep management and production—1116
- wool follicles—3160
- BOOPHILUS**, biological and ecological studies—1754
- BOORoola**, crossbred with Merino, field trials—77
- BORDER DISEASE**, clinical symptoms—2908
- congenital hypomyelinogenesis—2908
- definition, for diagnostician—243
- experimental challenge infection of ewes following a field outbreak—3109
- review—1068
- sequential study of surviving lambs and assessment of effect or profitability—2907
- transfer of copper from ewes to their lambs—2631
- virus, properties as studied in sheep cell line—1698
- BORDER LEICESTER**, carcass evaluation of crosses—3344
- comparative productivity—2884
- comparison with Dorset, Merino, Corriedale and Polwarth for staple strength and depilation force after cyclophosphamide treatment—1121
- crossbred performance—2788
- crosses with Scottish Blackface, body composition changes in lactating ewes estimated by serial slaughter and deuterium dilution—638
- crossbreeding, fat content—619
- growth and carcass of crossbreds with Dorset Horn, Suffolk and Merinos—2010
- Romney cross, with Suffolk, effects of nutrition and castration on meat production and quality—2418
- BORNA VIRUS**, follow-up after spontaneous infection with special emphasis on antibody-kinetics in serum and cerebrospinal fluid—1969
- BORRELIA**, incidence in southern Ghana—167
- prevalence and significance in northern Nigeria—1717
- BOTSWANA**, bluetongue antibody in domestic and game animals—2745
- BOVINE**, teratogenicity and toxicity of coniine in cows, ewes and mares—1526
- BOVINE LEUKOSIS**, transmission to sheep—2127
- virus, detection in cattle and sheep by ELISA technic—949
- virus, experimental infections in sheep, immunology clinical and haematologic studies—1636
- BOVINE ONCOVIRUS**, immunity in lambs experimentally infected—1635
- BOVINE VIRAL DIARRHOEA-MUCOSAL DISEASE**, effect on fetus—2293
- BRACHYGNATHIA**, textbook—282
- BRADYCARDIA**, fetal, relation to maternal administration of lidocaine—2043
- hypoxemia, following autonomic blockade in fetal lambs—1748
- BRAIN**, barrier systems to lipid insoluble molecules in fetal sheep—847
- development and thyroidectomy—1925
- effect of decreased cerebral blood flow on brain tissue oxygenation of newborns—2600
- evaluation of technics for studying arterial system—1172
- development of binocular depth cells in secondary visual cortex of lamb—594
- histophysiology of subcommissural organ of ewes—2130
- LHRH content, chronic LHRH treatment—88
- regional concentrations of serotonin, tryptophan, 5-hydroxyindolacetic acid, dopamine, and norepinephrine—193
- response of newborn to rapid massive hemorrhage—2812
- spongy transformation in lupinosis—72
- subcellular distribution of neurotoxin esterase activity in lambs—2815
- visual thalamocortical connections studied by retrograde transport of horseradish peroxidase—1503
- BRAZIL**, occurrence of *Raillietia auris*—2210
- photosensitization by *Pithomyces chartarum*—2211
- BRAZILIAN WHITE WOOLLESS SHEEP**, effect of high temperatures on spermatogenesis—628

- BREATHING**, movements, fetal—718
 movements, fetal, during moderate asphyxia related to outcome of pregnancy—2938
 movements, fetal, monitored by real time, B mode ultrasound, basal appearance and response to challenges—1055
- BREEDING**, activity, effect of nutrition—2123
 analysis of production and use of blood markers—2835
 analysis of realized genetic gain of useful traits in sheep—1429
 antagonisms of characteristics—3199
 behaviour, influence of domestication, fatted sheep—1318
 changes in physical condition and ejaculate in paddock-mated rams—2744
 comparison of different types of ewes in grading-up program with white karakul rams—2666
 control of season, importance of variations in behavioral and feedback actions of estradiol—1115
 cooperative schemes for prolific lowland breeds—3260
 cross, review—1027
 crossbreds, integrated use of land—1693
 daylength and lamb drops—184
 depressed incidence of estrus in ewes with clover disease at the beginning of breeding season—23
 Dorset horn sheep in Australia—982
 early onset of season—3214
 economic comparison of open and closed nucleus schemes for wool production—1471
 effect of correction factors on fecundity in breeding programs—1470
 effect of early, on production performance of ewes—2853
 effect of growth promoter zeranol in ewe lambs—622
 effect of high temperatures—2644
 effect of light on reproductive performance, a review—3129
 effect of substituting Finnsheep and Dorset breeding for Rambouillet breeding, productivity of young, spring-lambing ewes—2961
 effect of time of year—3083
 effects of substituting Finnsheep and Dorset breeding for Rambouillet breeding, productivity of fall-lambing ewes—2962
 extra-seasonal lambing—1396
 flock-mating of progestagen-synchronized ewes, influence of flock size upon mating behaviour and lambing performance—453
 for improvement—399
 forecast for 2000 A.D.—2443
 genetic aspects concerning the composition of whey proteins and their biological value—1681
 genetic gain—1431
 Greyface ewes, effect of time of mating on ovulation rate and potential lambing rate—1187
 importance of phytoestrogens—2379
 improvement in milk production in Tsigai and Valachian breeds—508
 in Netherlands—415
 increased lamb production with rams exposed to short day length during nonbreeding season—2655
 length of season for 8 breed groups in Wisconsin—1706
 mating behaviour, genetic and non-genetic variation under sub-temperate condition—3004
 measurement for improvement—1432
 Merino long wool sheep—recent results—1299
 mutton sheep, and change in production of crossbred fat lambs—449
 normal animal, a review—2170
 objectives and selection criteria for Australian Merino sheep—2372
 objectives and selection criteria for Australian prime lamb production—2833
 optimum size of active breeding population—864
 orcadian sheep of Lihou—3249
 outcrossing as policy—2706
 performance recording for improvement of sheep and goats—1267
 photoperiodic control, participation of cranial sympathetic nervous system—1762
 preliminary study of program for Tan-Yang sheep—1500
 problems due to antagonism of characteristics—280
 production of new type of sheep—2451
 programs, fleece measurement in Merinos—1924
 recording performance for improvement—172
 role of maternal effects for genetic selection—2168
 Romanov, experiments to increase prolificacy—3130
 schemes, modern developments—863
 season, effect of shearing on subsequent lambing pattern—3215
 season, higher levels of androgen binding protein—1446
 season, mechanism for resumption of ovulation following parturition, is it similar to that for onset of puberty or adult breeding season—1000
- BREEDING**, seasonal, neuroendocrine regulation of estrous cycle—1720
 selection for creation of karakuls with broadtail pelts—1021
 selection for uniformity between sheep—393
 sheep in Mongolia—2617
 should we breed for easier shearing—1923
 spermatogenesis—1960
 standard of reproduction in improved Shumava sheep—656
 standardization of records, correction factors to estimate body weight at 300 days of age of Madras Red and Mandya breeds—2114

- synchronized, for production of fetuses of known gestational age—2827
 text on—3005
 Tsigai × East Friesian, milk yield—3349
- BREEDING ACTIVITY**, effect of shearing on, before mating season—2123
- BREEDING SEASON**, Iceland sheep, a review—842
- BREEDING VALUE**, evaluation—688
 Icelandic sheep—1225
- BREEDS**, analysis of structure of karakul stud industry in southwest Africa—2667
 and export lamb grades—715
 backcrossing in commercial sheep breeding, USSR—1507
 Bannur, reproductive efficiency—2109
 body temperature, respiration and pulse rate of Corriedale, Marwari and Magra sheep in Rajasthan desert—2019
 breeds of sheep in Gotland, Sweden—2990
 Cambridge, performance—708
 carpet wools, review of research at Massey University—3243
 carpet wools, reviews of research at Lincoln College—1291
 Caucasian, reproductive performance—2160
 Churra, protein requirements for maintenance—1105
 coarse-wooled, kemp succession, birthcoat-adult fleece relationship—1177
 coarse-wooled, study of kemp succession in adult fleece of two breeds in relation to birthcoat—1178
 comparative gestation study—2444
 comparative performance of indigenous and exotic sheep in Indian arid zone—2018
 comparative semen characteristics of Corriedale, Marwari and Jaisalmeri rams maintained under hot arid conditions—2017
 comparison of Dorset, Border Leicester, Merino, Corriedale and Polwarth breeds for staple strength and depilation force after treatment with cyclophosphamide—1121
 comparison of performance of Italian breeds—3093
 comparison of Texel- and Suffolk-sired lambs out of Finnish Landrace × Dorset Horn ewes under grazing conditions—1697
 creation of new, Volgograd mutton-finewooled sheep—3036
 crossbreeding, wool yield and quality and live weight development of young ewes of different genotypes—3351
 crosses, comparative performance, lamb production traits—1442
 crosses of Merino and Comisana, production of suckling lambs fed natural milk—1692
 development in Azerbaijan, USSR, a review—1408
 development of fat depots—75
 differences, genetic aspects of reproductive performance in ewes—1604
 differences in carcass grade—1240
 differences in wool and body growth of pen fed Romney, Coopworth, Perendale and Corriedale—2882
 effect of and feed level on dressing percentage body parts and fill—473
 effect of daylength of lamb growth, comparisons of sex, level of feeding, sharing and breed of sire—993
 effect of pasture allowance on performance of different breeds—2469
 effect of substituting Finnsheep and Dorset breeding for Rambouillet breeding, productivity of fall-lambing ewes—2962
 effect of substituting Finnsheep and Dorset breeding for Rambouillet breeding, productivity of young, spring-lambing ewes—2961
 effect on performance of lambs in Iraq—80
 embryo transfer study of birth weight in Finnish Landrace and Targee—1317
 estrus synchronization in Tabasco or Pelibuey ewes—1886
 exotic, evaluation of wool—330
 farm animals charts—1010
 fecundity and body weight relationships—1241
 formation, use of biochemical blood marker in early stages of breed formation—1093
 genetic and environmental effects on disease—2173
 genetic structure of foreign sheep breeds—2026
 genetic variations of conception rates under sub-terrestrial conditions—3003
 Hebridean—139
 hereditary variation in reduced glutathione—1832
 in Afghanistan, Iran and Turkey—3300
 in France—187
 in Malaysia, genetic resources of farm animals for improvement—2074
 increasing reproductive ability, review—3125
 influence of carcass weight, sex and breed on consumer acceptance of lamb—1959
 influence of stocking rate on production from sheep of different genotypes—2467
 influence on lutropin response—1675
 influence on susceptibility of sheep in Kenya to *Haemonchus contortus*—2403
 intensive mid-season lamb production, Ireland—973
 inventory of special herds and flocks—1889
 Lacha, induction of estrus out of season—2353
 live weight at birth and at 120 days for lambs of Tsigai and crossbreeds—1640
 machine milkability, dairy yield, Awassi and Assaf—1441
 Manchega sheep, growth and development—2603
 Mandya, reproductive performance, in Tamil Nadu—1843
 Nali, genetic variability in body weight and measurements—3002
 native to Malaysia, conservation and utilization of indigenous animal genetic resources—759
 new, development—9

- new, mutton-finewooled sheep—3037
 new, production—2451
 new, USSR—2072-B
 origin of fat-rumped sheep—2056
 performance in arid areas—2110
 performance of crossbreds of Masham, Dales, Teeswater, Suffolk, Dorset—2146
 performance of superovulated donor ewes in egg transfers—1244
 performance testing in Denmark—1453
 phylogenetic relationships among indigenous sheep breeds—2748
 production on alpine pastures—779
 progress and tasks in hybridization—3161
 prolific, lowland, cooperative breeding schemes—326^a
 rare, at National Agricultural Centre, Stonleigh United Kingdom—840
 rare, preservation—2591
 review of Spanish breeds—2621
 Russian Merinos, book on development and improvement, its meat, wool and milk production, reproductive performance—1405
 semen collection from Suffolk, Texel and Dorset—2797
 semen ejaculates using teaser estrous ewes—1921
 semen quality in Suffolk, Texel and Dorset Horn rams during non-breeding season—2796
 Serrai, effect of duration of suckling on milk production and growth of lambs—3338
 several, sexual maturity—657
 sheep, changing distribution of, in Scotland during 1795-1965—515
 sheep, production characters and possibilities of using biochemical blood markers—2835
 Sjenica, crossbreeding, main characteristics of R₁ generation—2161
 standardization of breeding records, correction factors to estimate body weight at 300 days of age of Madras Red and Mandya breeds—2114
 transferrin polymorphism, relationship with productivity—2475
 transferrines and weight gain in Rosa Aragona sheep—1696
 tropical, application of levamisole—2523
 tropical, growth rates—2463b
 trypanotolerance in breeds of sheep and goats with experimental infection of *Trypanosoma congolense*—1155
 type, effect on carcass weight and composition—1022
 use of food rations with high straw and non protein nitrogen content—939
 Watish, preweaning growth of lambs and influence of sex, time of birth and management on weight-for-age—2369
 Watish, sex difference in growth—2368
 weaning weights, weight gain, market weights of 4 breeds (Romnelet, Columbia, Suffolk and North Country Cheviot)—3136
 BKTAIN, is toxoplasmosis a problem?—479
 status of selenium in livestock by erythrocyte glutathione peroxidase activity—94
 BRITISH COUNCIL, course in management and diseases of sheep—3062
 BRITISH VETERINARY ASSOCIATION, animal welfare policy—430
 BROILER EXCRETION, use in fattening lambs—52
 BROILER LITTER, in rations, influence of molybdenum and sulphur in animals on high levels—3101
 performance of steers and lambs fed corn stover ensiled with—1113
 BROMFENOFOS, for *Fasciola hepatica* infections—1019
 2-BROMO-ALPHA-ERGOCRYPTINE (CB 154), ultrastructural changes in placenta after long-term intravascular infusion—1796
 BROMOCRIPTINE, effect of long-term infusion on plasma prolactin and ovine chronic somatomammotropic in pregnant sheep and fetal sheep—1795
 reduction of prolactin, post partum reproductive performance of Finnsheep crossbred ewes—995
 BROMOSULPHOPHTHALEIN, clearance rates, in sheep with pyrrolizidine liver damage—1687
 BRONCHI, broncho provocation and tracheal mucous velocity in detecting airway irritation after ozone exposure in conscious sheep—7
 BRONCHIOLE, ultrastructure of non-ciliated epithelial clara cell—2366
 BRONCHOSPASM, antigen induced—3109
 antigen induced—3191
 BROWSING, sheep, repellent to protect pine seedlings—1600
 BRUCELLA ABORTUS, naturally acquired infection—1797
 BRUCELLA MELITENSIS, comparison of ways of detecting blocking antibodies using—1559
 inflammatory response in placental attachments following experimental infections—2101
 BRUCELLA OVIS, comparison of agar gel precipitation and complement fixation test for diagnosis—2080
 epididymis—283
 in Merino rams in western Australia—1775
 isolation from aborted fetuses and serological methods to detect infection of ewes and rams—1409
 isolation from aborted sheep fetuses—1489
 Merino rams in western Australia—1352
 serological methods to detect infection in ewes and rams—1489
 surface R antigen, use in serodiagnosis of ram epididymitis—2095
 vaccines, intraperitoneal administration of saline-in-oil vaccines—2524
 BRUCELLOSIS, a review—2041
 accreditation for freedom, from—3222

- among shepherds' families in Ferrara Province, Italy—55
 as cause of abortion—2252
 epidemiology and prevention—2573
 in Barbary sheep and mule deer in Palo Duro Canyon, Texas—1232
 in India—2696
 in sheep and goats in Cyprus—2370
 legislation in Spain—2824
 New South Wales—1258
 prevalence among sheep and goats in northern Iraq—1505
 prevalence in and around Bassi Jaipur Rajasthan, India—1895
 serological survey in central and east Java and Bali—2294
 technical and administrative procedures for control, France—110
 technics for infertility investigations by field veterinarians—2361
 vaccination, rams—2422
- BRYNDZA**, cheese milk lipids, effect of various technics of heating—757
- BUCKWHEAT**, forage value, grown on Southern Tablelands of New South Wales—2075
- BUFFERS**, rumens rendered nonfermentive after infusion—3282
- BULGARIA**, clinical symptoms of mixed trematode infections—3027
 listeriosis—1416
 new data on life cycle of sarcosporidia—1968
 seasonal and age dynamics of gastrointestinal strongylata infections in sheep—1058
 seasonal variation in strongylids—772
- BULL**, ultrastructure of modified sertoli cells of terminal segment of seminiferous tubules—2239
- BULL SPERMATOZOA**, immunodiffusion data on antigenic relationships with boar, ram and human cells—417
- BULLETINS**, extension, sheep and labs—861
- BUNITROLOL**, placental transfer and fetal effects, chronic preparation of pregnant ewe and fetus for pharmacological research—3100
- BUNOSTOMUM TRIGONOCEPHALUM**, total serum protein and protein pattern—1497
- BUPIVACAINE**, effects of changes in maternal fetal pH on transplacental equilibrium—1541
 intravenous injection in pregnant ewe—641
- BURN**, gram negative sepsis in thermally injured sheep—15
- BUTTER**, production FAO data—987
 world production, FAO statistics—986
- BUTYRIVIBRIO**, characteristic of a lipolytic and fatty acid requiring species, isolated from rumen—1275
- BUTYROGENESIS**, diminishing rumen, in bulls and sheep fed sugar beets—1739
- C**
- CABBAGE**, element and polychlorinated biphenyl deposition and effects in sheep fed, grown on municipal sewage sludge—1260
- CACIORICOTTA CHEESE**, procedures for making—732
- CADMIUM**, and lead and mercury content of meat and organ samples—1599
 chloride, effects of dietary, on digestive functions and short-term mineral balance—444
 content of winter grazings and status in wild sheep—91
 poisoning, Yugoslavia—2335
 retention by sheep fed silicic acid—445
 toxicity—501
- CAECUM**, motility, and diet—959
- CAERULOPLASMIN**, effect of age and dietary levels of copper and zinc—2648
- CAFFEINE**, abolishes slow inward calcium current in cardiac purkinje fibers—868
- CALCITONIN**, inhibition of hypercalcemia inducing effect of dihydroxycholecalciferol—241
- CALCIUM**, dietary lipid, and absorption of Mg and Ca, effect of corn oil infused into rumen—1129
 effect of administration on rumen fluid mineral concentration—3304
 effect of dietary intake on absorption and retention by mature Ca-replete sheep—411
 effect of dietary levels on concentration and solubility of macro minerals in digestive tract—3306
 effect of imbalance on insulin plasma levels—2457
 excretion, effect of dietary concentrate level—1375
 homeostasis in fetus—514
 in chronic infections with *Trichostrongylus vitrinus*—2914
 in hydatid cysts—2492
 ion, free concentration, measure with selective microelectrodes—2810
 levels in bone, muscle, cerebrospinal fluid and plasma affected by magnesium depletion and repletion—278
 metabolism—412
 metabolism—2715
 metabolism, effect of reducing plasma levels on plasma enzymes—690
 metabolism, in lambs injected with cholecalciferols—2959
 metabolism, young and old ewes—2714
 renal excretion, acid or alkaline urine—271
 serum levels, relation to infertility—887
 serum levels, short term response to injection of cholecalciferols—2965
 slow inward current, abolishment by caffeine and tetracaine in cardiac purkinje fibers—868
 transplacental gradient—512
 utilization of fecal, for estimation of intake—3137
- CALCIUM CARBONATE**, effect on metabolism of iron, copper, zinc and manganese—3308
 effect of supplemental, on distribution of iron,

- copper, zinc and manganese in digestive tract—3307
- CALCIUM CHLORIDE**, chemical sclerosing of epididymi—3012
- CALCIUM PHOSPHATE**, retention of magnesium phosphorus and fluorine from—1289
- CALOTROPIS PROCERA**, effect of administration of the latex to sheep and goats—1830
effect of feeding to sheep—1829
- CALVES**, sulfonamide levels in blood—297
- CAMBENDAZOLE**, efficacy against intestinal nematodes—2126
evaluation in Bighorn sheep against lungworms—1663
- CAMBRIDGE**, development, performance and use of this highly prolific breed—708
sheep, performance—708
- CAMEL**, comparative glucose metabolism, sheep—554
comparative ketone metabolism study with sheep—555
- CAMPBELL ISLAND**, population trends and habitat changes for feral sheep and cattle and royal albatrosses—769
- CAMPYLOBACTER**, surveillance in Great Britain—710
- CAMPYLOBACTER FETUS**, etiology of ovine enzootic abortion—2215
prevalence in gall bladder of sheep—586
- CANADA**, Maedi-Visna in sheep—824
Quebec, Ontario, sheep apprenticeship program—2843
- CANCER**, and slow virus diseases, some common features—1165
- CANDIDA LYPOLITICA**, use of single cell proteins in lamb feeding—927
- CANE MOLASSES**, as protein supplement to diet—3171
- CANE SOLUBLES**, as protein supplement to diet—3171
- CANNABINOLS**, and feeding in sheep—1930
- CANNULA**, apparatus, method for re-entrant—1413
in ampulla of oviduct and in tubo-uterine junction, effect on reproduction—222
specially designed for cannulation of rumen and abomasum with an insertion instrument—1610
- CANNULATION**, duodenal and ileal, with "T" shaped cannula designed to replace the re-entrant cannula—1611
method for re-entrant—1413
- CANTHARIDIN**, high pressure liquid chromatographic determination—2470
- CARBACHOL**, cardiovascular and renal functional changes after injection—274
hormones, feeding and body temperature following cerebroventricular injection—818
- CARBAMIDE**, concentrate, feeding to nursing lambs as test for quality criteria—2256
- CARBOANHYDRASE**, in stomachs of lambs—716
activity in breeds of sheep and relation to age—1631
extracellular complex from rumen contents—1040
formation by rumen holotrich ciliates—3257
- CARBOHYDRATE**, consumption across intestinal circulation in fetus—565
digestion and absorption by fetal lamb in utero—561
digestion, in catheterized fetus—563
effect on non-protein nitrogen on metabolism—367
effect of readily available, on performance of lambs and steers fed liquid supplement—1994
factors associated with difference in nutritive value of artificially dried red clover and perennial ryegrass—2055
latest findings regarding metabolism and regulations—1608
metabolism, lumen, industrial mixture B—1645
- CARBON DIOXIDE**, arterial pressure, breathing responses—2058
acid-base equilibria, lambs from 7 days to adulthood—2772
changes associated with feeding—2012
response of new born lambs breathing, during massive hemorrhage—2811
use in stunning of slaughter animals—1297
- CARBON TETRACHLORIDE**, effect on transferases—3153
influence on plasma enzyme levels—3151
renal and hepatic calcification in lambs—101
- CARBONIC ANHYDRASE**, novel, from ovine parotid gland—950
- CARCASS**, air thawing—645
and eating quality, review—668
breed differences—1240
characteristics, heterosis—2939
characteristics, lambs by 9 sire breeds—652
characteristics, large lambs—2010
characteristics, northern highlands of Thailand—933
characteristics of Australian cross-bred sheep breeds—629
characteristics of lambs of different breed crosses, weight and sex—2816
characteristics of Suffolk sired lambs from Panama and Finn × Panama dams—682
characteristics of Volgograd and Caucasian breeds—3039
classification scheme and its commercial use—1853
comparative performance of breed crosses—1442
composition and partitioning of fat, several crossbreds—2969
composition, effect of Finnish Landrace and Galway breeds on fat distribution and fatty acid composition—1243
composition, genetic effects and feed intake—1236
composition, heritability in crossbred lambs—3280
composition, karakul lambs—2633

- composition, lambs sired by Texel, Suffolk, Lleyn and Galway rams—1239
- composition of Edilbaev lambs—1525
- composition, Romney, Corriedale, Dorset, Romney × Dorset, and Dorset × Romney—1044
- crossbreeding with East Friesian sheep in Cyprus—672
- development of fat depots in sheep—75
- distribution of subcutaneous fat, intermuscular fat, muscle and bone, in several crossbreds—2970
- effect of breed-type on weight and composition—1022
- effect of dietary monensin on characteristics—493
- effect of sire breed on eating quality of crossbred lambs—815
- evaluating cuts for protein—1609
- fat characteristics, effect of barley fed whole, ground or pelleted—1741
- fat, grain processing—2226
- fat, petechial hemorrhage—2988
- fattening performance, hybrids—774
- feed efficiency and characteristics of ram lambs slaughtered at four weights—279
- feeding value of grass and grass/clover silages for store lambs—2479
- genetic selection, Icelandic sheep—17
- growth and development, Romney, Corriedale, Dorset and crossbreds—1047
- growth and measurements of crossbred lambs—174
- growth rate effects on chemical composition—2087
- influence of carcass weight, sex and breed on consumer acceptance of lamb—1959
- influence of sex—83
- lamb, attachment of microorganisms—476
- lamb, fat content of heavy-weight animals of several breeds and crosses—619
- lambs, Iraq, effect of breed and castration on performance—80
- lambs raised on alpine pastures—779
- monitoring of bacteriological contaminations—1915
- morphology, muscle characteristics and meat quality of lambs on different nutritional planes—162
- new method for improving hygiene—1131
- pink bones in—2571
- progeny test evaluation of meat yielding quality of rams employed in flock of wheat and sunflower Institute near General Toshevo, Bulgaria in 1976—3007
- progeny testing of performance tested Welsh mountain rams—1568
- quality, activities of enzymes of glycolysis, citrate cycle, fatty acid oxidation, and respiratory chain—3279
- quality, effect of energy levels—61
- quality, factors affecting conformation, composition, meat and fat quality—360
- quality, lambs fed on different nutritional levels—165
- quality, lambs, muscle ultrastructure, lambs fed on different nutritional levels—164
- quality, lambs on different nutritional planes, chemical and biochemical effects on muscle—163
- results of using Romanov and Ile-de-France rams for production of hybrid lambs—130
- sheep breeds—715
- some problems in ascertaining value—1102
- surface bacterial counts during chilling and holding—2637
- traits, effects of artificial lighting on feeder lamb performance—1216
- CARCASS, weights, and physical measurement of Merber and Mandya lambs—156
- CARCASS WEIGHTS, crossbred sheep—2788
- yield, effect of milk and artificial feeding—3320
- CARCINOMA, squamous cell, clinico-immunological studies—1481
- CARDIAC FUNCTION, effect of sodium nitrate aerosols—2599
- CARDIAC OUTPUT, effect of heparin or fibrinogen depletion on lung fluid balance after emboli—333
- CARDIOVASCULAR FUNCTIONS, changes upon injection of transmitter substances and variation in temperature—274
- CARDIOVASCULAR SYSTEM, congenital abnormalities, tricuspid atresia—1764
- fetal, response to acute elevation of intracranial pressure—3346
- hypertension, comparison of effects of glucocorticoid and mineralocorticoid infusions—3242
- illustrated anatomical nomenclature of heart and arteries of head and neck—2740
- responses to hypoxemia following autonomic blockade in fetal lambs—1748
- CARNITINE, and activity of carnitine acyl transferases in seminal plasma and spermatozoa—438
- in luminal fluid of testis—1319
- CAROTENE, effect on fertility of rams on semi-arid pasture—2525
- CAROTID, artery, response to noradrenaline and increased pressure—3016
- CARPET, and Elliottdale sheep—1926
- CARPET, wools, review of research at Lincoln College—1291
- wools, review of research at Massey University—3243
- CARTILAGE, amino acid and glycosaminoglycan composition of epiphyseal, of neonate and osteroporotic lambs—1311
- effect of Mn-deficient feeding to ewes on certain amino acids and sugars in, of their newborn lambs—1313
- CASEIN, alpha S, polymorphism, Comiso ewes—2589
- beta, polymorphism, Comiso ewes—2589
- beta, primary structure—2511

- beta, proteolytic specificity of chymosins and pepsins—2079
- growth and rumen function, supplementation of a low-protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1539
- heat stability and v luminosity and hydration of micelles—2820
- supplementation of low protein-cellulosic diet with, effect on nitrogen digestion—1540
- CASEOUS LYMPHADENITIS, a review—3061
- comparison of five serological tests for diagnosis—2716
- control for cheesy gland experimental vaccine—105
- epidemiology and pathogenesis—2509
- hematological and biochemical studies—2066
- on the increase, New Zealand—107
- CASHMERE, characteristics—3287
- CASSAVA, maize replacement value—32
- CASSOU GUN, effect on AI—2799
- CASTOR BEAN TICK (*IXODES RICINUS*), evaluation of amitraz as new acaricidal sheep dip—2365
- CASTRATION, chemical sclerosing, formaldehyde and calcium chloride—3012
- effect of different methods on production of Romney Marsh lambs—2844
- effect on meat production and quality from male lambs of Suffolk crossed with Romney and Border Leicester—2418
- effect on performance of lambs in Iraq—80
- inhibin activity in rete testis fluid, depression of plasma FSH and LH in, and cryptorchid ram—489
- reversal by testosterone of atrophy of accessory genital glands—3030
- season of birth and response to hemicastration in lambs—1676
- serum gonadotrophin levels in prepubertally altered males treated for long periods with several testosterone—2288
- CASUARINA CRISTATA (BELAH), mixed sheep grazing in rosewood shrub woodland—1727
- CATARRHAL FEVER, bovine malignant, in Nigeria—2417
- CATECHOLAMINES, blood levels during machine milking—249
- dynamics of secretion during inhibition of milk ejection—2903
- fetal maturation related to parturition—1758
- release, effect of acute maternal hemorrhage—153
- response of sheep to injection of *Clostridium welchii* type D epsilon toxin—3292
- CATHERETER, jugular, effect on glucose in plasma—3273
- rumen, technic of establishment—922
- CATTLE, arthrogryposis-hydranencephaly syndrome produced by Akabane virus—1393
- conservation of nucleolus organizer regions during evolution of sheep, goat, cattle and aoudad—1292
- isolation of *Mycobacterium paratuberculosis* from cattle and sheep in Iceland—1188
- pathogenicity of *Mycoplasma mycoides mycoides*—631
- plasma levels of various enzymes and metabolites in Syria—2158
- serological responses of sheep and cattle exposed to natural toxoplasma infection—2083
- serological test for muscle tissue—1851
- topography of skin surface of cattle and sheep revealed by scanning electron microscopy—1448
- transmission of nematodes from wild animals—1355
- CATS, and *Sarcocystis*—2081
- CAUCASIAN, crossbreeding, USSR—1507
- breed, wool production—3038
- meat production—3039
- CELL CULTURE, growth curve of parainfluenza-3 virus—2762
- lamb kidney, ovine adenovirus—14
- modification of Aujeszky's virus—1175
- replication of *Mycoplasma ovipneumoniae*—1831
- sheep cells, properties of Border Disease virus—1698
- CELL DIVISION, alteration associated with toxic principles of lupinosis—2338
- CELL PROLIFERATION, and cortical cell production in relation to wool growth—3270
- CELLULOSE, degradation, electron microscopic study of rumen ciliates—735
- digestion, rumen ciliates—734
- CELLULOSE ENZYMES, grain processing—2226
- CEMENT KILN DUST, lambs fail to improve when fed—1475
- in finishing lambs—3192
- CENCHRUS, nutritive value of, and with mixed pastures for crossbred lambs—326
- CENSUS, population of sheep in world—1742
- sheep in New Zealand—2138
- sheep, Irish Republic—1401
- sheep population in France and its evolution—1742
- United Kingdom—3073
- world, production—986
- CENTRAL NERVOUS SYSTEM, chronic disease caused by slow viruses—2902
- CEREALS, utilization for sheep and implications for processing—2188
- CEREBROCORTICAL NECROSIS, case reports—3089
- textbook—282
- CEREBROCORTICAL NECROSIS (POLIOENCEPHALOMALACIA), induced by experimental thiamine deficiency—2985
- CEREBROSPINAL FLUID, acid base, effect of rapid bicarbonate infusion, in acidotic newborn—692

- copper, zinc and iron levels in, copper poisoned sheep—1117
 magnesium depletion and repletion effects on levels of Mg, Ca and K—278
 normal sheep, contains inhibiting factor for Visna virus—2984
 ultrastructural study in Visna—1063
- CEREBROSPINAL HYPOMYELOGENESIS** (Border disease), a review—1068
- CEREBRUM**, blood flow, effect of ketamine, asphyxiated fetus—2352
 patterns of regional blood flow in fetus during and after prolonged hypoxia—166
 pressure passive blood flow in nonasphyxiated fetus—2295
 regional cerebral blood flow changes during severe fetal asphyxia produced by slow partial umbilical cord compression—1459
- CERIUM**, use of isotope as dietary marker in passage studies of tall fescue—3213
- CERVIX**, changes in mucus in response to estrogen treatment—25
 comparative morphology and mucus histochemistry—1302
 comparative morphology, sheep, goat, and cow—1302
 cyclic changes in surface revealed by scanning electron microscopy—3221
 during parturition—967, 968
 histology, changes following prolonged grazing on estrogenic subterranean clover—1760
 ripening during parturition, prostaglandins—882
 seasonal variation in nature of mucus response to estradiol benzoate in normal and clover-affected ovariectomized ewes—24
- CESTODA**, natural infections, efficacy of oxfendazole—1974
 occurrence of *Railletia auris* in Brazil—2210
- CESTODE INFECTIONS**, recent advances in immunology—3261
- CESTRUM DIURNUM** (DAY BLOOMING JESSAMINE), ectopic calcification in lambs fed plant—2743
- CHAD**, research on respiratory diseases of sheep and goats—542
- CHALKY CURLY TIPS**, kemp succession in adult fleece of two coarse-wool breeds in relation to birthcoat—1178
- CHARMOISE**, crossbreeding for production of fat lambs—971
- CHEESE**, aflatoxins—2897
 application of Cobb-Douglas functions to Greek dairy industry—1062
 caciocotta, procedures for making—732
 content of orotic acid—1695
 effect of cow's and ewe's milk on quality—813
 feta, effect of starters on production—3122
 feta, ewe—3122
 feta, sheepmilk's export potential—1043
 Italian exports—1410
 Kachkaval, packaging in polyethylene—2316
 milk lipids, effect of various technics of heating—757
 mineral content, comparative, review—1171
 mountainous farming, Czechoslovakia—1983
 production, FAO data—987
 world production, FAO statistics—986
- CHEMICAL COMPOSITION**, body, variation with feeding—787
- CHEMOPROPHYLAXIS**, praziquantel in coenurosis—228
 with diamfenetide against experimental infections of *Fasciola hepatica*—895
- CHEMOTHERAPEUTICS**, serum chloramphenicol levels and intramuscular bioavailability of several parenteral formulations of chloramphenicol—2178
- CHEMOTHERAPY**, clinical trial with strinacin, quixalin and trinamide in non-specific diarrhea—3140
 gastrointestinal trichostrongylids, value and limitation of anthelmintics—801
- CHEVIOT**, carcass evaluation of crosses—3344
 crossbred to Dorset, Finn and Romney, genetic and environmental effects on milk production, milk composition and mastitis incidence—3014
 effect of level of nutrition before and after mating on ovulation rate and early embryo mortality in South Country ewes in moderate condition at mating—1186
 effect of level of pre-mating nutrition on ovulation rate and early embryo mortality in North and South country ewes in moderately good condition at mating—1185
 North and South Country, fertility, effect of body condition at mating on ovulation and embryo mortality—1184
 North Country, weaning weights, post-weaning gain and final market weights of purebreds and crosses—3136
- CHICKEN**, effect of feeding rumen contents on glutamate dehydrogenase activity in organs of broilers—1338
 manure, replacing corn with—2217
 waste, feeding transfers a coccidiostat (clopidol) to lambs—2590
- CHILE**, carcass composition of Karakul lambs—2633
 effect of early shearing on young and adult Romney Marsh ewes—1419
- CHINA**, a study of freezing of sheep semen—573
 livestock production—566
 People's Republic, sheep diseases—1380
- CHIOS**, East Friesian crosses, performance, Cyprus—672
 effect of 3 milking methods on milk yield—674
 environmental factors affecting udder conformation—675
 estimation of total lactation from part-lactation records—671
 milk production, different feeding-management systems, Cyprus—673

- CHLAMYDIA**, agents from conjunctival scrapings of sheep with ketatoconjunctivitis—2887
 diagnosis by immunofluorescence—837
 diagnostic titres in infections—1360
 experimental infections, improved recovery of vitamin E treated lambs—2854-A
 isolation from feces from apparently healthy sheep—778
 isolation from Rocky Mountain Bighorn sheep—2380
 isolation in Egypt—1218
 ovine, transmitted to red deer—1934
 specific prophylaxis of enzootic chlamydial ovine abortion—2821
- CHLAMYDIA OVIS**, clinical evaluation of vaccine—2550
 etiology of ovine enzootic abortion—2215
 inactivation by physico-chemical factors—5
 methods for detection—1982
 strains compared—2588
- CHLAMYDIA PSITTACI**, ovine, transmitted to red deer—1934
 strains compared—2588
- CHLAMYDIA PSITTACI OVIS**, isolation in sheep-thyroid cell culture—2540
- CHLAMYDIOSIS**, perinatal, abortion—1637
- CHLORAMPHENICOL**, serum levels and intramuscular bioavailability of several parenteral formulations—2178
- CHLORDIAZEPOXIDE**, treatment for annual ryegrass toxicity—2510
- CHLORDIMEFORM**, combination with acaricide to control *Psoroptes communis ovis* in a single dip—195
- CHLORIDE**, in hydatid cysts—2492
 nonpassive distribution in heart muscle—3177
 regulation, in quiescent sheep purkinje fibers—3118
 secreting cells, histochemical identification in fetal respiratory system—2322
- CHLORIDE ION**, diffusion permeability in placenta—2986
- CHLORINE**, organic compounds, meat residues—268
- CHLORMADINONE ACETATE**, concentration of free 17-beta estradiol in blood plasma of ewes after treatment with, in two synchronized cycles—1222
- 2-CHLORO-N-ISOPROPYLACETANILIDE** (Propachlor) in milk—213
- CHOKLA**, crossbred to Rambouillet and Russian Merino rams, preweaning, survivability and growth—150
 crosses for development of new breeds—9
 hematological changes during 3 months after birth of, lambs under semi-arid conditions—2038
 performance in arid areas—2110
 reproductive performance, in subtropical area of northwestern arid zone of Rajasthan, India—321
- CHOLECALCIFEROL**, metabolism of calcium, phosphorus and magnesium in lambs injected with—2959
 short term response to injection, effect in liver and on serum phosphorus, calcium and magnesium—2965
- CHOLECYSTO-DUODENOSTOMIE**, in ram with obstruction of ductus choledochus communis—1331
- CHOLECYSTOKININ OCTAPEPTIDE**, continuous injections into cerebral ventricles suppress feeding—740
 injected in cerebrospinal fluid causes satiety—739
 intracerebroventricular injections and feeding 948
- CHOLESTASIS**, comparative aspects—1747
 lantadene, a model for human disease—2296
- CHOLESTEROL**, biosynthesis and progesterone production by chorionic cells—1854
 luteal, estrase, activity during several experimental conditions—484
- CHOLINE**, fate of labeled choline given intraruminally to pregnant ewes fed manganese-deficient or supplemented rations—1312
 low availability of dietary—2124
 lysophosphatidyl, effect on excitability of cardiac purkinje fibers—147
 phosphatidyl, secretion and biological half-life of surfactant, in lambs—1454
- CHONDRUS CRISPUS** (IRISH MOSS), effect of feeding during grazing season on condition and fertility of Shropshire ewes—426
- CHORION**, metabolism of progesterone by chorionic cells of early conceptus in vitro—1855
- CHORIONIC GONADOTROPIN**, evidence and evolution for in ewes—1667
 human, response of hypothalamic pituitary gonadal axis in lamb—2642
 nature and role of pregnancy associated antigens and endocrinology of early pregnancy—958
- CHORIONIC SOMATOMAMMOTROPIN**, in mid and late gestation in fetal and maternal circulations—1096
- CHOROID PLEXUS**, cells, in vitro infection by vira virus, evidence for production of fusion factor—2302
 double replica technic to define structure of tight junction network of epithelial cells—2024
- CHRATOXIN**, biological effects—1806
- CHROMIUM**, stable, use as dietary marker, in passage studies of tall fescue—3213
- CHROMOSOME ABNORMALITIES**, a review—721
- CHROMOSOMES**, bone marrow, Nali sheep—3143
 preleptotene, labelling with ³H-thymidine—1798
 significance in Robertsonian translocations—443
³H-thymidine labelling—1798

- CHRYSOMYA BEZZIANA** screw-worm fly threat—122
- CHURRA**, effect of energy concentration and protein content of diet on milk production in Churra coarse wool bearing sheep—2037
nutrition, protein requirements of gestating—1106
protein requirements for maintenance—1105
protein requirements of gestating Churra sheep, effect of energy and protein ingestion during last third of gestation of production of milk in subsequent lactation—1107
- CHYMOSINS**, proteolytic specificity—2079
- CILIATA**, holotrich, rumen, formation of carbohydase—3257
- CILIATES**, effect of zinc on micropopulations in rumen—381
hydrolytic activities in rumen—733, 734
pattern of rumen ciliate populations and interactions—1390
rumen, electron microscopic study of cellulose degradation—735
- CIRCADIAN RHYTHM**, effect of feeding frequency on diurnal changes in microbial protein, volatile fatty acids and ammonia content of rumen—1978
light-induced prolactin rhythms in ram—1761
social behaviour—456
- CIRCULATION**, blood, effect of ethanol in pregnancy—191
pulmonary, responses to 6-keto prostaglandin E_1 —1781
- CIRCULATORY SYSTEM**, blood flow, uterus, effect of alpha and beta sympathetic antagonists in pregnant ewe during heat stress—440
effect of feeding on blood flow in mesenteric blood vessels—2769
effects of endotoxin on unanesthetized sheep and response to dopamine—3350
evaluation of technics for studying arterial system of brain—1172
hemodynamic effects of indomethanin in pre-term lambs with respiratory distress and patent ductus arteriosus—403
preferential streaming of blood to brain and heart in fetal lambs—850
pressure passive cerebral blood flow in non-asphyxiated fetus—2295
system, responses to 6-keto prostaglandin E_1 —1781
- CITARIN-L-SPOT-ON**, levamisole in tropical sheep breeds—2523
- CITRATE**, synthesis by reduction carboxylation of alpha ketoglutarate in rumen of cattle and sheep—2711
- CITRIC ACID**, renal clearance of magnesium in sheep receiving oral—727
- CITRIC ACID CYCLE**, enzymes, in diaphragm of lambs, relation to fattening and carcass quality—3279
- CITRININ**, biological effects—1806
- CLADOSPORIUM**, aflatoxins, in milk and milk products—2897
- CLARA CELL**, bronchiolar epithelium, ultra-structure of non-ciliated cell—2366
- CLAVICEPS PURPUREA**, gangrenous ergotism in sheep—1782
- CLAVICIPITALES**, contamination of feed-stuffs—3318
- CLEFT PALATE**, microcephaly associated with kyphoscoliosis and, in Yankassa lamb—1210
- CLENBUTEROL (N-AB 365)**, use in controlling parturition in ewes—731
- CLIMATE**, adaptability of imported Merino at sheep breeding station at Sandynallah, India—3125a
arid conditions, performance in Rajasthan desert—2754
effect of long-term intermittent watering on some blood and urine attributes of pregnant sheep under semi-arid conditions—2039
factors and reproduction of Awassi sheep at Dujaila farm in Iraq—2948
genetic and non-genetic variation in mating behaviour of ewes under sub-temperate Himalayan conditions—3004
lamb mortality in commercial lowland flock—2419
Mediterranean, factors influencing grazing behaviour—821
possible effect on plasma levels of vitamin A—2285
semi-arid, blood changes of Chokla lambs during 3 months after birth—2038
semi-arid conditions of desert, physical and wool characteristics of Barki sheep—883
tropical, reproductive behaviour and semen quality in rams—2767
- CLINICAL**, changing picture, contagious ecthyma—3091
sub, strongyle infections—1635
- CLINICAL CHEMISTRY**, Swiss sheep breeds—389
- CLINICAL EXAMINATION**, ram fertility—447
- CLINICAL PICTURE**, Border disease—2908
chronic copper poisoning—1382
dicrocoeliasis and fascioliasis—3027
endemic ethmoid tumors—2113
Nematodirus infections, experimental—3353
pulmonary adenomatosis—1616
Rift Valley Fever—3008
Trichostrongylus vitrinus—2935
- CLINICAL PRACTICE**, position of stomach tube into lambs—2481
- CLINICAL STUDIES**, subcutaneous hemorrhagic speckling in lambs—2330
- CLINICAL STUDY**, mycotoxicoses—2318
- CLINICAL SYNDROME**, sheep-on-its back, part played by ectoparasites—2304
- CLIOXANIDE**, metabolism in vitro by *Motiezia expansa*, *Ascaris suum* and mouse- and sheep-liver enzymes—804
- CLIPPING**, prevention, shearing of sheep—2241

- CLOMIPHENE CITRATE**, ovulation rate following treatment with—1677
- CLONIDINE**, control of secretion of gonadotrophins—2107
- CLONING**, a review—2679
- CLOPIDOL**, transfer to lambs by feeding chicken wastes—2590
- CLOPROSTENOL (SYNTHETIC PROSTAGLANDIN)**, synchronization of estrus—1650
use in early embryo death—2104
use in reproduction—328
- CLOSTRIDIAL MUSCULAR DISEASE**, differential diagnosis—3176
- CLOSTRIDIUM**, diagnosis in laboratory—1320
efficacy of antiepzootic measures—2930
immunization, simultaneous with pasteurellosis and anthrax—1490
influence of increased environmental temperature and relative humidity on immunogenesis—1491
species in sheep—1320
vaccine, field study with multicomponent vaccines—1544
- CLOSTRIDIUM OEDEMATIENS (C. NOVYI)**, isolation and typing, cases of black disease of sheep in Iran—136
- CLOSTRIDIUM PERFRINGENS**, enterotoxaemia and glycosuria—2383
incidence and serotypes on carcasses—2782
infection, appraisal of urine and blood biochemical tests—2382
influence of increased environmental temperature and relative humidity on immunogenesis—1491
purification and properties of type C delta toxin—81
- CLOSTRIDIUM SPOROGENES**, thiaminase type 1 producing, effect on cerebrocortical necrosis in lambs—666
- CLOSTRIDIUM TETANI**, immunization—1906
treatment with antitoxin, antibiotics and surgical treatment—152
- CLOSTRIDIUM WELCHII**, type D, catecholamine and cyclic nucleotide response of sheep—3292
- CLOVAX**, vaccine, use in foot rot—490
- CLOVER**, estrogenic, changes in cervical histology following prolonged grazing on—1760
red, effect of grazing by lambs in autumn—1668
red, formononetin content as estrogen for sheep—1537
red, some factors associated with difference in nutritive value of artificially dried, and perennial ryegrass—2055
subterranean, increase in plasma cortisol levels in ewes fed estrogenic—2927
- CLOVER DISEASE**, depression of estrus—23
masculination of ewe's genitalia—22
- CLUSTER-BEAN**, hay, nutritional value—2300
- COAL**, soft fly ash, as source of selenium in un-pelleted sheep rations—1332
- COBALT deficiency**, East Gippsland, treated with cyanocobalamin—2014
deficiency, emergence and treatment—3026
deficiency in growing lambs, comparison of three forms of treatment—1089
deficiency, prophylaxis—3239
dietary deficiency—856
morbidity and mortality after concurrent administration of mineral supplement—2412
relationships between internal diseases and metabolic disorders—2070
supplementation in Yankassa sheep in Zaria, northern Nigeria—1211
- COBALTOUS CHLORIDE**, efficacy in cyanide intoxication—472
- COBB-DOUGLAS FUNCTIONS**, application to data, Greek dairy plants—1062
- COCCIDIA**, cross transmission between sheep and goats—1919
effect of dietary monensin on oocyst numbers—493
in France—382
prevalence in lambs—2278
- COCCIDIOIDOMYCOSIS**, in Barbary sheep and mule deer in Palo Duro Canyon, Texas—1232
- COCCIDIOSIS**, associated with intestinal polyps—2562
comparison of effects of monensin and aureomycin—2618
effect of amprolium and monensin on oocyst discharge, feed utilization and ruminal metabolism of lambs—1357
epizootiology, Spain—1305
experimental, effect of lasalocid and monensin, in confinement-reared lambs from weaning to market weight—997
in Netherlands, 1979—2133a
incidence of subclinical—2493
monensin and amprolium for early-weaned feedlot lambs—1356
prevention, vitamin A and nitrofurazolidone—3149
sheep, textbook—282
- COCCIDIOSTAT**, transfer of clopidol to lambs by feeding chicken waste—2590
- COCKSFOOT**, comparative pasture and animal production, grazing—913
(*Dactylis glomerata*), nutritive value of green fodder and hay—511
- COENUROSIS**, in wild ungulates in Hungary—2084
incidence in Hissar—2276
problems in diagnosis of acute disease—844
survey in northern Iraq—1504
therapy and chemoprophylaxis using praziquantel—228
- COENURUS CEREBRALIS**, outbreak and control—3138
- COFFEE**, extraction residues as feed—3220
- COIMBATORE**, crossbred with Corriedale, survivability of offspring—2005

- COITUM, post, maturation of secretory granules in endosalpinx—2580
- COLD, exposure, response of sheep in relation to selection for survival ability—2780
- COLIBACTERIOSIS, prevention, lambs, Dagestan, USSR—1554
- COLLAGEN, effect of intravenously infused dexamethasone on collagen metabolism in skin of Merinos—1729
- COLLARS, toxic, sodium cyanide—2858
- COLOMBIA, epidemiological study of a field outbreak of toxoplasmosis—2324
- COLOR, canary, Nali sheep, effect of zinc supplementation—1068A
- COLORADO, paratuberculosis in Bighorn sheep and Rocky Mountain goat—3259
- COLOSTRUM, absorption—2723
 absorption of immunoglobulin by bottle-fed lambs—1226
 cow, survival kit for lambs—1783
 effect of ewe nutrition and colostrum deprivation on young lambs—1553
 effect of whey proportion on accuracy of immunoglobulin estimations—2722
 immunity, a review—3339
 immunoglobulin levels—2724
 immunoglobulins, absorption and bactericidal activity of blood serum in developing lamb—1061
 immunoglobulins, comparison of ovine and bovine immunoglobulin M—3050
 induction of estrus cycle—785
 levels of anti-acrosin antibodies, correlation with fertility—3198
 orotic acid—1695
 passive protection against experimental infection with enteric colibacillosis—2809
 passive transfer of immunity to *Taenia ovis*—2901a
 prevalence of antibodies to *Mycobacterium johnei* in colostrum deprived lambs—2071-3
 production and volume ingested by lambs—2723
 separation of immunoglobulins—943
 transfer of immunoglobulins from ewe to lamb—944
 trypsin inhibitor capacity—2624
- COLUMBIA, carcass evaluation of 2- and 3-way crosses of 6 breeds—3344
 comparative performance of breed crosses, lamb production traits—1442
 length of breeding season—1706
 weaning weights, post-weaning gain and final market weights of breed plus crosses—3136
- COMISANA, crossbred with Merino, production of suckling lambs fed natural milk—1692
- COMISO, ewes, polymorphism of milk proteins—2589
- COMMERCIAL, farms, possibilities of continuous production—3309
- COMMERCIAL FLOCKS, effect of body weight and components on lambing performance—1048
- COMMISSION, Sheep and Goat, of European Association for Animal Production, evaluation of breeding animals in sheep—688
- COMPLEMENT, activation by precipitating and coprecipitating antibodies—2320
 method for detecting C₃ on larvae of nematodes—2842
 titration, in frozen sensitized erythrocytes—2096
- COMPLEMENT FIXATION, comparison with agar gel precipitation for diagnosis of brucellosis—2080
- COMPUTER, data banks for livestock systems—2376
- CONCENTRATES, effect of feeding large amounts on health of lambs—2742
- CONCEPTION, effect of estradiol—371
 Galway ewes, controlled breeding—2795
 genetic variation, under sub-temperate conditions—3003
- CONCEPTION RATE, effect of diluting semen with seminal plasma, Ovce Polje-Merino grade rams—3000
 effect of GNRH—2434
 effect of lactation on reproduction—2433
 effect of prostaglandin additives in diluted ram semen on fertilization and lambing outcome in AI bred sheep—377
 effect of ram mating system on fertility in progestagen-PMSG treated anestrus ewes—372
 Galway and Fingalways—2427
 in Caucasian breed—2160
 in progestagen-treated ewes given GNRH, GNRH analogues and gonadotrophins—2435
 superovulation and egg transfer—376
- CONCEPTUS, development, proteins of blastocyst origin—1749
- CONDRIA, prevalence and significance in northern Nigeria—1717
- CONFERENCES, proceedings of the Vth International Symposium on ruminant physiology, digestive physiology and metabolism—2578
- CONFORMATION, dimension, Gallego sheep—3094
- CONGENITAL ABNORMALITIES—751
 a review—3339
 in newborn lambs following Akabane virus infection in pregnant ewes—1261
 nephron obstruction—662
 textbook—282
 tricuspid atresia—1764
- CONGENITAL CEREBROSPINAL HYPOMYELINOGENESIS (Border disease), a review—1067
- CONIINE, teratogenicity and toxicity—1526
- CONTINARIUS SPECIOSISSIMUS (mushroom), poisoning—2248
- CONTRACEPTION, effect of intrauterine threads on fertilization—1012

- CONTROL, adenoviral pneumo-enteritis, fattening lambs—2261
 aspects of planning and evaluation, epidemiological—2675
 assessment of genetical methods for scrapie—1565
 benefits from anthelmintic use—106
 blood parasitic diseases, farms of Apsheron, USSR—1179
 brucellosis—2573
 coyotes, evaluation of toxic collars—2639
 coyotes, sodium cyanide in collars—2858
 coyotes, use of Komondor guard dogs—1765
 current methods for slow virus infections—3029
Dicrocoelium lanceolatum and *Fasciola hepatica* in Bulgaria—3027
 ectoparasites, Mongolian Peoples' Republic—2501
 efficacy of anti-epizootic measures against clostridial infections—2930
Fasciola gigantica, Guinea—2662
 fascioliasis and paramphistomiasis in USSR—1964
 feed block anthelmintic—963
 flystrike, chemicals in control—1365
 flystrike, minimum cost—2325
 foot rot, on large farms—1957
 four schemes of parasite control for production of Merino wether weaners in two environments—1463
 genetic, methods for Australian sheep blowfly (*Lucilia cuprina*)—1002
 helminthiasis of young animals—1296
 helminths, self medication with phenothiazine—1520
 hydatid, New Zealand—2143
 hydatid disease, global view—1052
 hydatid disease, Tasmania, Australia—1913
 management, nematodes—2823
 nematodes, and management of sheep—1016
 parasite, effect during peri-parturient period on lamb birth weight and liveweight gain—1402
 parasite, future of animal livestock production in Great Britain—915
 planned, infectious diseases, as step toward more effective production—3290
 problems with *Escherichia coli*—1860
 progressive pneumonia—1759
 Psoroptes, with HCH—1571
 tapeworms, gastrointestinal and pulmonary nematodes in sheep using fenbendazole—2555
 technical and administrative procedures, brucellosis—110
 use of tin arsenate in Russia—288
 value of fenbendazole (Panacur) for nematodes—2455
- COOMBS TEST, chronic copper poisoning—3250
- COOPERATIVE SELECTION SCHEMES, sheep breeding—863
- COOPERIA HUNGI*, transfer to sheep from impala—1355
COOPERIA spp., pasture infectivity in Nigeria—270
COOPERIOIDES HAMILTONI, transfer to sheep from impala—1355
COOPERIOIDES HEPATICAE, failure to transfer to sheep from impala—1355
 COOPS, breeding schemes, group, for prolific lowland sheep—3260
 COOPWORTH, crossbreeding, fat content—619
 efficiency of wool—2882
 sheep in Australia—1372
 COPPER, altered distribution, Border Disease—2908
 and zinc-binding proteins in liver, effect of dietary levels—2649
 autophagy and apoptosis in liver during the prehaemolytic phase of chronic poisoning—1567
 chronic poisoning—578
 chronic poisoning, biochemical, kinetic, morphologic and comparative studies—2808
 clinical observations on chronic poisoning—1382
 deficiency, Northland, New Zealand—108
 deficiency, young lambs grazing improved pastures—3238
 distribution in digestive tract, effect of supplemental calcium carbonate—3307
 effect of deficiency in Scottish blackface lambs on improved hill pasture—3237
 effect of nitrotriacetic acid on solubility in stomach—1414
 enzootic icterus, a form of chronic poisoning—263
 immunohematological study of chronic toxicity—3250
 in carcass and relationship to trace element requirements for growth—2898
 influence of molybdenum and sulphur in animals on high levels—3101
 inherited differences in sensitivity—3323
 intracellular distribution, liver of normal and copper loaded sheep—1118
 levels in cerebrospinal fluid of copper poisoned sheep—1117
 liver, changes and effect of residual grain on utilization of sweet lupin stubbles, and concurrent changes associated with lupinosis—648
 liver, effect of lupinosis—70
 liver, effects of intravenous administration of d-penicillamine—1856
 liver, in utilization of lupin stubbles—649
 liver stores, pre-ruminant and ruminant lambs given ammonium tetrathiomolybdate in diets—2899
 low content diet, associated with nephropathy—2513
 low levels associated with syndrome of dental abnormalities—446

- metabolism, antagonistic effect of molybdenum—1998
- metabolism, effect of supplemental calcium carbonate—3308
- morbidity and mortality after concurrent administration of mineral supplement—2412
- pathology of poisoning—843
- poisoning, zinc and molybdenum interrelationships—2500
- review, metabolism—3246
- serum levels, relation to infertility—887
- transfer from ewes with Border Disease to their lambs—2631
- COPROLOGIC DIAGNOSIS**, comparison of different solutions of varying density—519
- COPROSCOPY**, study of parasitism in Nievre district, France—382
- CORN**, grain, digestibility and palatability of ensiled—985
- grain ratios, effect on digestibility and nitrogen retention in lambs—1385
- replacing corn with sun-dried manure of laying pullet, mature pig, sheep, and cow—2217
- CORONARY** vascular responses to insulin in diabetic lamb—807
- CORONARY LIGATION**, increased lung lymph transport with heart failure—611
- CORONAVIRUS**, associated with diarrhoea—831
- CORPUS LUTEUM**, activity of luteal cholesterol esterase—484
- control of preovulatory endocrine events, interrelationship of estradiol, progesterone and luteinizing hormone (LH)—1508
- delay regression in ewes immunized against oxytocin—980
- down regulation of receptors for LH and effect on progesterone secretion—2890
- effect of cycloheximide—1053
- effect of exogenous oxytocin on estrous cycle length and corpus luteum lysis in ewes—1264
- effect on function of suppression of plasma prolactin in LH-RH-treated anestrus ewes—1938
- fate of granule membrane—1054
- function, effect of estrogen priming and GNRH on LH release and luteal function during early lactation in spring—1230
- in cheviots, effect of body condition at mating—1184
- LH receptors during estrous cycle and early pregnancy—2167
- life span in non-pregnant ewes, effect of continuous intrauterine administration of prostaglandin F-2—2396
- localization of 3-beta-hydroxy steroid dehydrogenase in luteal cells—2646
- maintenance in early pregnancy, luteotropic properties of embryonic homogenates—879
- maintenance, prostaglandin secretion by endometrium in vitro and in vivo—880
- maternal recognition of pregnancy in ewe and rabbit—878
- nature and role of pregnancy associated antigens and endocrinology of early pregnancy—958
- ovarian response to exogenous hormones in 6 week old lambs—3291
- patterns of blood flow to uterus and ovaries during luteal regression—996
- premature regression of ram-induced Merinos—2007
- prostaglandin forming cyclooxygenase of uterus, relation to luteal function—1379
- proteins of blastocyst origin—1749
- regression following stimulation by ram—1597
- role of microfilaments in steroidogenesis—2735
- small luteal cells—2235
- trophoblastin and antiluteolytic protein present in early pregnancy—1865
- ultrastructural autoradiographic analysis of progesterone secretion—1911
- CORRIEDALE**, bile acid clearance in hereditary hyperbilirubinemia—891
- carcass growth and development—1047
- comparison with Dorset, Border Leicester, Merino and Polwarth for staple strength and depilation force after cyclophosphamide treatment—1121
- crossbred with Coimbatore, survivability of offspring—2005
- crossbreds, carcass characteristics, composition and partitioning of fat—2969
- crossbreds, distribution of subcutaneous fat, intermuscular fat, muscle and bone in carcass—2970
- crossbreeding, fat content—619
- effect of shearing on certain physiological responses of rams under arid conditions during summer—2016
- efficiency of wool—2882
- highland, compensatory growth and productivity—3340
- milk production, milk composition and live weights of ewes in relation to growth of their lambs—1044
- performance of crosses with Nali—1038
- production in mature ewes, first mated at 7 to 11 or 18 months of age—1273
- ram, comparative semen characteristics, maintained under hot arid conditions—2017
- ram, physico-chemical studies on semen and interrelationship during different seasons—543
- CORTEX**, visual, development of binocular depth cells—594
- CORTICOSTEROIDS**, concentration, influence of hemoglobin type and selenium status, ewes grazing estrogenic pastures—3178
- failure of prolactin to initiate lactogenesis—1346
- induction of parturition—2174
- normal fluctuations in plasma of fetal and pregnant sheep—1466
- use in ketosis—1607
- CORTICOSTERONE B**, plasma levels in normally and early weaned lambs—1170

- CORTICOTROPHIC RELEASING FACTOR**, fetus—3169
- CORTICOTROPHIN**, ACTH receptor levels at late gestation and early neonatal stages—829
fetus at parturition—2532
- CORTISOL**, comparison of two rapid radioimmunoassays for use in fetal sheep—1828
effect of illness and thyroidectomy of plasma triiodothyronines in fetus—2182
effect of infusion of prostaglandin E-2 on fetal plasma levels—2466
increase in plasma levels in ewes fed estrogenic subterranean clover—2927
plasma, hormonal factors in lung maturation in fetus—1581
tracheal fluid, correlation with pulmonary surfactant production in chronically catheterized fetus—3010
tritiated, in vitro metabolism by skin and wool roots—3193
validation of radioimmunoassay to measure plasma levels—1827
- CORYNEBACTERIUM**, isolation in visceral caseous lymphadenitis—2491
- CORYNEBACTERIUM OVIS**, action of exotoxin on endothelial cells of blood vessels—522
blood changes in infections—2066
comparison of five serological tests for diagnosis—2716
in Nigeria—29
in vitro hemolytic activity of exotoxin—469
- CORYNEBACTERIUM PSEUDOTUBERCULOSIS**, experimental infections, pathology and bacteriology of abortion—30
- CORYNEBACTERIUM PYOGENES** and *C. ovis* in sheep—29
in Nigeria—29
- COTSWOLD BREED**, at National Agricultural Centre, Stoneleigh, United Kingdom—840
- COTTAGE CHEESE**, content of orotic acid—1695
- COUMESTAN**, feeding, effect of PMSG treatment of ovulation rate—2142
in lucerne and ovulation—2791, 1792
- COW**, colostrum, survival kit for lambs—1783
manure, replacing corn with—2217
summer fescue toxicosis in lactating dairy cows and sheep fed experimental strains of ryegrass-tall fescue hybrids—1290
- COWPEA**, hay, nutritional value—2300
- COXIELLA BURNETI**, screening for detection in herds—2557
sero-epidemiology in India—3297
- COXIELLOSIS**, sero-epidemiological studies, India—3297
- COYOTE**, evaluation of toxic collars for control—2639
Komondor guard dogs reduce sheep losses—1765
- COYOTE DETERRENENTS**, microencapsulation and dissolution of undecenovanillylamide—2271
- CRANIOFACIAL GROWTH**, animal model—2672
- CREAM CHEESE**, content of orotic acid—1695
- CRETINISM**, effects of induced prenatal hypothyroidism on lamb mandibular third primary molars—329
- CREUTZFELD-JAKOB DISEASE**, and sheep scrapie—534
clinical and morphological aspects of transmissible—1847
is disease in man caused by scrapie from sheep?—535
- CRICOPHARYNGEUS MUSCLE**, functional morphology—2614
- CRISTAE**, histogenesis of adrenal cortex—2547
- CROATIA**, leptospirosis—3325
- CRONOLONE**, control of estrus by intravaginal sponge—374
- CROSSBREDS**, assessment of traits of emotionality in ewes—3015
body composition of Muzaffarnagri, Dorset, and Suffolk crosses—1495
carcass and meat characteristics of lambs of different breed, weight and sex—2816
carcass characteristics and composition and partitioning of fat—2969
carcass evaluation, distribution of subcutaneous fat, intermuscular fat, muscle and e—2970
change in production of crossbred fat lambs—449
Columbia and 6 breeds, carcass evaluation—3344
comparative performance of Romanov × Limousin—1887
development of fat depots—75
- CROSSBREDS** (Dorset, Barbados Blackbelly, Landrace, Rambouillet), resistance to parasites—3312
(Dorset, Cheviot, Finn, Romney) genetic and environmental effects on milk production, milk composition and mastitis incidence—3014
evaluation of wool of exotic breeds—330
ewes, genetic and environmental effects on internal parasites, foot soundness and attrition in—2173
factors influencing post-weaning performance of purebred and crossbred lambs—1901
fibre characteristics of Mandya, Mr Jras Red and crossbreds—1501
Finn and Suffolk, growth and endocrine responses to zeraon implants—3248
Finnish, hemoglobin types and production traits, Israel—1120
genetic and environmental effects on disease—2173
genetic divergence—3170
genetic variations of conception rates—3003
growth and carcass characteristics of Dorset Horn, Border Leicester, Suffolk and Merino crosses—2010
inheritance of principal production traits—1523
lambs, heritability of live weight, growth and carcass composition—3280
occurrence of puberty and sexual maturity,

- compared with natives, reared in confinement—2766
 meat production—2788
 Merino × Booroola, field trials—77
 Merino × Comisana, production of suckling lambs fed natural milk—1692
 Merino × Sarplaninas, hematological values, effect of different altitudes and nutrition—276
 milk production, different feeding-management systems—673
 milk production in Scottish Blackface and East Friesland × Scottish Blackface crosses—2309
 performance in arid areas—2110
 rams, fattening performance—1620
 Romney, Corriedale, Dorset crossbreds, carcass growth and development—1047
 skin histology—2991
 some effects of nutrition and castration on meat production from male Suffolk cross (Border Leicester-Romney cross) lambs, meat quality—2418
 2-breed and 3-breed crosses with Tsigai, live weight at birth and at 120 days for lambs—1640
 2, 3, & 4 cross breeds of Romnelet, Columbia, Suffolk and North Country Cheviot breeds studies with respect to weaning weights, post-weaning gain and final market weights—3136
CROSSBREEDING, adult body weights, semi-arid conditions in India—1948
 Awassi and Daglic sheep—2819
 biochemical polymorphism, analysis of production characteristics and biochemical blood markers in early stages of breed formation—1093
 breed differences in carcass grade—1240
 breed substitution as means of increasing productivity—3245
 commercial, USSR—1507
 comparative performance, lamb production traits—1442
 contemporary comparisons between progeny by Finnish Landrace and Romanov rams out of mutton Merino and Awassi ewes—1119
 Corriedale and Coimbatore, survivability of their offspring—2005
 duration of pregnancy in relation to size of lamb at birth—2280
 experiment between north European and local breeds for production of fat lambs carried out with cooperation of five research stations in Mediterranean countries—971
 fat content of heavy weight lamb carcasses—619
 fattening performance—774
 Finn and Suffolk cross yearling ewes, lambing traits and lamb wool production—1518
 for new breeds—9
 for production of ewes with good reproductive performance—1209
 Galway and Lleyn, reproductive activity—1246
 Galway and Suffolk, reproductive performance—2424, 2425
 genetic effects on carcass composition and feed intake—1236
 growth intensity and meat characters, fine/coarse-wooled ewes mated with rams of mutton-wool type—332
 improving reproductive efficiency, a review—1367
 increasing reproductive ability, review—3125
 Ireland—923
 Krasnoyarsk ewes with Australian Merino rams, results—1803
 Lohi sheep, comparative gestation study—2444
 main characteristics of R₁ generation crosses of Sjenica sheep—2161
 maternal heterosis and recombination loss—2939
 milk production, milk composition and live weights of Romney, Corriedale, Dorset, Romney × Dorset, and Dorset × Romney ewes in relation to growth of their lambs—1044
 Nali and Corriedale, performance—1038
 Patanwadi and Deccani, comparative studies on wool production and quality traits—681
 performance of Finnish Landraces with fat-rumped ewes—3299
 performance of first generation of progeny sired by Romney Marsh rams during the formation of an improved type of mountain sheep—677
 production and quality of wool of fattened lambs of different commercial crossbred types from Polish Merino ewes and mutton-type rams—2237
 prolific ewes increase cash income—974
 Rambouillet and Russian Merino rams × Chokla and Nali ewes, preweaning, survivability and growth—150
 Rasa Aragonesa with Romanov, for improvement of reproductive characters—58
 relationship between hemoglobin type and production traits in crossbred ewes—685
 results of using Romanov and He-de-France rams for production of hybrid lambs from different ewes—130
 Romney Marsh, Lincoln and Altai, analysis of production characteristics and biochemical blood markers in early stages of breed formation—1093
 Sardinian and East Friesian sheep in Sardinia—400
 sneep, review—1027
 Tsigai × East Friesian, milk yield—3349
 use of Polish mountain sheep on Polish long-wool rams of Olkuaz type—584
 wool yield and quality and live weight development of young ewes of different genotypes—3351

- CRUFOMATE** (4-TERT-BUTYL-2-CHLOROPHENYLMETHYL METHYLPHOSPHORAMIDATE), metabolism after topical administration—214
- CRYOPRESERVATION**, erythrocytes, complement titrations with frozen sensitized cells—2097
- erythrocytes, polyvinylpyrrolidone and other protective agents—2096
- CRYPTORCHIDISM**, a review—3107
- adult ram, histological testicular parameters in bilateral—1324
- induced, effect on fattening performance—2844
- inhibin activity in rete testis fluid, depression of plasma FSH and LH in castrate and—489
- textbook—282
- CULEX PIPIENS**, transmitter of Rift Valley virus in Egypt—1344
- CULICOIDES**, breeding sites and light-trap collections in outbreak of bluetongue in Cyprus—1956
- isolation of arboviruses in Kenya—709
- transmission to sheep of CSIRO 19 strain, of type 20 bluetongue virus—2606
- CULLING**, methods, and generic selection index in estimation of Polish merino breeding value—1586
- technic for estimating effect of errors during weight assessment—1464
- CULTURE**, cell, modification of Aujeszky's virus—1175
- lymphocytes—2906
- CUMULUS OOPHORUS**, fine structure during follicular development—643
- CYANIDE**, intoxication, enhancement of efficacy of sodium nitrate, sodium thiosulfate and colaltous chloride—472
- CYANOCOBALAMIN**, treatment of white liver disease—2014
- CYANOFENPHOS**, phosphoonothioate insecticide, delayed neuropathy in sheep—886
- CYCLOHEXIMIDE**, effect on corpus luteum—1053
- CYCLOXYGENASE**, uterus, prostaglandin, relation to luteal function—1379
- CYCLOPHOSPHAMIDE**, as chemical defleecing agent—2569
- comparison of breeds, staple strength and depilation force after treatment with—1121
- effect on tumour growth and cell-mediated immunity in sheep with ovine squamous cell carcinoma—1482
- immunosuppression of squamous cell carcinoma—1481
- CYPRUS**, brucellosis in sheep and goats—2370
- estimation of total lactation of Chios ewes from part-lactation records—671
- milk performance of purebred and crossbred sheep under different feeding-management systems—673
- performance of lambs in crosses with East Friesian sheep—672
- possible origin of blueongue epidemic in August 1977—2682
- sites and light-trap collections of culicoides during an outbreak of bluetongue—1956
- CYPRUS WILD SHEEP (OVIS AMMON OPHION)**, taxonomy—2170a
- CYSTIC DEGENERATION**, ovaries, a review—721
- syndrome of dental abnormality—446
- CYSTIC JAW LESION**, pathology—845
- CYSTICERCOSIS**, epidemiology and immunology—182
- in Sokoto State, Nigeria—678
- serological diagnosis—642
- Taenia ovis*, in heart, skeletal muscle, brain and sclera—1810
- wild ungulates in Hungary—2084
- CYSTICERCUS TENUICOLLIS**, antigenic relationship with *Fasciola hepatica*—171
- comparative prevalence—2705
- epizootiology, Yugoslavia—3162
- CYSTINE**, utilization and distribution in Merinos—3258
- CYTOGENETICS**, a review—2088
- in animal production—1250
- reproduction of sheep with Robertsonian translocations—443
- CYTOKINE**, production by bluetongue virus-infected fetal cells—894
- CYTOLOGY**, pars intermedia, adult sheep—2326
- CYTOMEGALOVIRUS**, ovine pulmonary, pathology—1349
- CYTOTOXIC TEST**, leukosis, specificity in sheep experimentally infected with virus—1626
- CZECHOSLOVAKIA**, biocoenological problems of pastures—3266
- sheep farming in mountainous regions, milk yield—1983
- veterinary problems in sheep farming—3045

D

- DACTYLIS GLOMEATA (COCKSFOOT)**, nutritive value of green fodder and hay—511
- DAGLIC**, crossbreeding Awassi sheep—2819
- possibility of improving production through selection, phenotypic and genetic parameters—914
- DAIRY INDUSTRY**, Greece, application of Cobb-Douglas functions—1062
- Greece, milk production—109
- DAIRY LEGISLATION**, Spain—2874
- DAIRYING**, Greece, economic aspects of milk and milk products—111
- Spain, production, processing and consumption of milk and milk products—737
- DALTON'S CURETTE**, use of modified form in treatment of vaginal prolapse—2298
- DAM**, contribution to emotionality in crossbred ewes—3015

- DAMALINIA**, two species, Barbary sheep, Texas—1137
- DATA BANKS**, livestock systems—2376
- DATA SYSTEMS**, economic data, developing countries—1224
- DAY LENGTH**, effect on growth of lambs, blood concentrations of growth hormone, prolactin, insulin and thyroxine, and effect of feeding—992
- effect on lamb growth, comparisons of sex, level of feeding and sharing and breed of sire—993
- increased lamb production with rams exposed to short day lengths during nonbreeding seasons—2655
- DDT**, resistance of ticks in Africa—205
- DEAFFERENTIATION**, vagal, in sheep—931
- DECCANI**, ATP 2,3-diphosphoglycerate levels in relation to Hb types—2303
- crosses with Patanwadi, comparative studies on wool production and quality traits—68
- DEER**, comparison of, with sheep, on digestive capacities—2270
- comment on, versus sheep—2894
- food interrelationships with sheep, California—1790
- seasonal changes of appetite—1521
- DEFAUNATION**, effect on metabolism of rumen microorganisms—743
- rumen—1475a
- rumen, effects on growth of lambs on low-protein-high-energy-diets—335
- DEFLEECING**, chemical—2569
- chemical, as method of harvesting wool—2489
- chemical flumethasone, synergistic effects of thiocyanate—2274
- DEHYDRATASE**, 1-serine (EC 4.2.1.13), activity in liver—2577
- 1-serine, correlation with body size—2577
- DEHYDRATION**, osmotic fragility of erythrocytes—3047
- DEHYDROGENASE**, aldehyde (EC 1.2.1.3), purification and properties, liver—1812
- aldehyde, sheep liver cytoplasmic and mitochondrial, separation by isoelectric focusing—766
- 3-beta hydroxy delta-5 steroid activity in corpus luteum—485
- 3-beta hydroxy, ultracytochemical localization in luteal cells—2646
- beta hydroxybutyrate, in rumen epithelium of camel and sheep—555
- fatty tissues of lambs given diets of different physical structure with fatty acid supplements—64
- glutamate (EC 1.4.1.3), in digestive tract—1337
- glutamate, effect of feeding rumen contents on activity in organs of broilers—1338
- glutamate, in digestive tract—1736
- glutamic, plasma levels in *Fasciola hepatica* infections—2575
- lactic, plasma levels in fascioliasis—2575
- sorbitol, plasma levels in fascioliasis—2575
- sorbitol, white liver disease—2892
- (succinate, lactate and glucose-6-phosphate, isocitrate), uterus, estrus, histochemistry—3330
- succinic, plasma levels, influence of anthelmintics (levamisole, mebendazole and carbon tetrachloride)—3151
- (urea-3-phospho-glycerate, EC 1.1.1.95, glycerate, EC 1.1.1.29 and serine EC 4.2.1.13) in serine metabolism, influence of nitrogen—2411
- DENMARK** performance testing—1453
- sheep sero—1295
- DENTAL ABNORMALITIES**, clinical aspects on a commercial sheen farm in Wairarapa—446
- DENTIS TRY**, measurement of gingival sulcus—45
- DEOXYRIBONUCLEASE**, pancreatic, isolation and characterization—3166
- DEPILATION FORCE**, potential for harvesting weakened wool, comparison of breeds for staple strength and depilation force after cyclophosphamide treatment—1121
- DERMACENTOR ALBIPICTUS**, Barbary sheep, Texas—1137
- DERMATOPHILOSIS**, association with dipping and effects on production—3253
- in France—1719
- in New Zealand sheep and goats—2135
- DERMATOPHYTES**, in high altas of Morocco—2275
- isolated from domestic and feral animals—516
- DESATURASES**, delta-9 and delta-6, placenta, role in supply of fatty acids to fetus—2688
- delta-9 and delta-6, placenta, role in supply of fatty acids to fetus—2773
- DESERT**, body temperature, respiration and pulse rate of Corriedale, Marwari and Magra sheep in Rajasthan desert—2019
- Karakum (USSR), efficiency of sheep rearing—2128
- Mojave, sheep grazing effects on: vegetation and soils—3211
- phenotypic and genetic correlations between physical wool characteristics of Barki sheep—884
- semi-arid, central Asia, management of sheep and goats—2336
- semi-arid conditions, estimates of some physical and wool characteristics of Barki sheep—883
- DEVELOPING COUNTRIES**, economic data systems for livestock production—1224
- DEVELOPMENT**, and growth, lambs, a review—2402
- and growth of Manchega sheep—2603
- embryonic, adrenal gland function in regulation of glucocorticoid secretion—1772
- embryonic, brain barrier systems to lipid insoluble molecules—847
- fetal, thyroidectomy—1925
- inhibited, role in epidemiology of helminths—239

- of omental bursa, and its significance for topography of abdominal cavity—1284
 offspring of iodine supplemented dams—2220
 postnatal, testis—451
 Suffolk sired lambs from Panama and Finn × Panama dams—682
- DEXAMETHASONE**, comparisons of plasma steroid levels and wool growth after administration of two forms of—2273
 effect of fetal perfusion, plasma steroids, prolactin and placental lactogen in intact or hypophysectomized pregnant ewes—387
 effect on ability of sheep to resist reinfection with nematodes—1897
 effect on collagen metabolism in skin of Merinos—1729
 induction of parturition—2174
 placental transfer in near term sheep—93
 treatment of muscular dystrophy—521
- DEXTRAN**, response of newborn to iron-dextran injection—2922
 with iron, effect on hemogram of lambs—390
- DIABETES**, alloxan, influence on blood glucose levels, phentolamine—2240
- DIABETES MELLITUS**, coronary dynamics and myocardial metabolism in newborn—1716
 myocardial and coronary vascular responses to insulin—807
- DIAGNOSIS**, Border Disease—243
 capillary tube centrifugation method for natural trypanosome infections—316
Chlamydia, immunofluorescence—837
 comparison of 5 serological tests for caseous lymphadenitis—2716
 comparison of solutions of different density for coprological diagnosis of ovine parasitoses—519
 foot rot—285
 hydatid, possibility of, estimation of serum ions—2492
 immuno, dictyocauliasis—745
 mastitis, methods of prevention and preventative diagnosis—3023
 microimmundiffusion test, ovine progressive pneumonia—3276
 plasma pepsinogen levels as aid in stomach worm infections—1543
 pregnancy, ultrasonics—2175
 problems in diagnosis of acute coenurosis—844
 relation of fecal egg counts and parasite load in dicrocoeliasis—2553
 Rift Valley Fever—3008
 rinderpest in sheep—2634
Sarcocystis—383
 serological, cysticercosis—642
 serological, toxoplasmosis—1198
 titres, complement fixation *Chlamydia* infections—1360
 toxoplasmosis—144
 use of ELISA technic for detection of bovine leucosis virus infection in cattle and sheep—949
- uses, meaning and limitations of biochemical profiles in stock-rearing—3285
 Visna-Maedi virus—2529
- DIAMFENETIDE**, chemoprophylaxis, against experimental infections of *Fasciola hepatica*—895
- 2,6-DIAMINOPIMELIC ACID**, metabolism by rumen microorganisms—1680
- DIAMPHENETHIDE**, plasma enzyme levels in fascioliasis—2575
 treatment of fascioliasis—2878
- DIAMPHETHIDE**, effectiveness against dicrocoeliasis—491
- DIAPHORASE**, NADH, as marker for erythrocytes—3042
 marker in early stage of breed formation—1093
- DIAPHRAGM**, activity in regurgitation, electromyography—2996
 posturally related tonic activity in awake and sleeping lambs—1249
- DIARRHEA**, bacterial flora of neo-natal—2454
 efficacy of spectinomycin in neonatal lambs—1036
 epithelium cell kinetics in rotavirus infections—2807
 neonatal lambs, etiology—2805
 non-specific, clinical trials with strinacin, quixalin and trinamide in treatment—3140
 pathogenesis, caused by astrovirus—2806
 pathogenesis, *Escherichia coli*—2030
 rotavirus and coronavirus associated—831
- DIAZINON**, dermatophilosis, association with dipping and effects on production—3253
- DIBROMOETHANE**, pulmonary damage—197
- DICROCOELIUM**, effectiveness of diamphenethide—491
 efficacy of febantel—1208
 pathogenesis—1859
- DICROCOELIUM DENDRITICUM**, efficacy of fenbendazole—623
 efficiency of praziquantel—3281
 relationship between fecal egg counts and parasite load in natural infections—2553
 use of albendazole—627
 use of albendazole—2951
- DICROCOELIUM HOSPES**, prevalence in Niger—2920
- DICROCOELIUM LANCEOLATUM**, clinical symptoms—3027
 examination of snails and ants for larvae, island of Cres—506
 use of albendazole—627
- DICTYOCAULIASIS**, immunity, immunodiagnosis, and immunoprophylaxis—745
 in Kazakhstan, USSR—2416
- DICTYOCAULUS**, efficacy against naturally acquired infection—547
- DICTYOCAULUS FILARIA**, comparative efficacy of fendendazole and tetramisole in Moroccan sheep—683
 effect of gamma rays on migration—63
 vaccine, serum protein changes in lambs—62
- DICTYOCAULUS VIVIPARUS**, effect of fenbendazole—1196

- DIET, amide concentration—159
amide concentrate supplement for suckling ewes—717
apple pomace in grazing ewe diets—2582
caecal motility—959
cement kiln dust in complete diets for finishing—3236
cement kiln dust, lambs—3192
cobalt supplementation in Yankassa sheep in northern Nigeria—1211
comparison of fecal, rumen and utilization methods for ascertaining Pronghorn diets—2786
comparison of three methods of diet determination and field application of fecal cuticle analysis—2859
corn oil infusion into rumen, effect on absorption of Mg and Ca—1129
deficiencies in phosphorus, sulphur, cobalt and zinc—856
dehydrogenase activity in fatty tissue of lambs given diets of different physical structure with fatty acid supplements—64
dietary modification of increased pulmonary microvascular permeability in lambs exposed to oxygen—1935
digestion in lambs fed pelleted—2313
dried sugar-beet pulp, with molasses in fattening lambs—2629
duodenal nitrogen flow in response to increasing dietary crude protein—1699
effect of acid-preserved high-moisture barley and pelleting on the utilization of all-concentrate diets by early-weaned lambs—2921
effects of adding sodium bentonite to high grain diets—609
effect of calcium levels on concentration and solubility of macro minerals in digestive tract—3306
effect of clipping and diet on intake and performance of housed pregnant and lactating ewes—3145
effect of diet and feeding level on taste responses of sheep and calves to sucrose—580
effect of dietary lactic acid on rumen lactate metabolism and blood acid-base-status of lambs switched from low to high concentrate diets—1374
effect of energy concentration and protein content on milk production in Churra coarse wool bearing sheep—2037
effect of energy intake during late pregnancy on plasma insulin and blood free amino acids in ewes and lambs—1160
effect of feeding cull domestic onions—1569
effect of feeding latex of *Calotropis procera* to sheep and goats—1830
effect of imbalance of magnesium, calcium and potassium on plasma levels of insulin—2457
effect of implanting jugular catheters on plasma glucose concentrations in wethers fed two extremes of diet—3273
effect of increased levels of urea in, on ruminal protozoa—2177
effect of protein content on feed intake and milk yield of ewes in early lactation—637
effect of readily available carbohydrate and roughage source on performance of lambs and steers fed liquid supplement—1994
effect of season and level of grazing on utilization of heather—2001
effect of single doses of selenium salts on whole blood levels of selenium in ewes on selenium-deficient—1942
effect of source and level of protein on milk production in ewes—1108
effect on absorption of amino acids and polypeptidase activity of digesta—2737
effect on fetal growth—2542
effect on life span and egg maturation of sheep headfly—307
effect on ovulation in Romney ewes—1592
effect upon energy utilization by lambs—951
energy utilization with diets differing in sugar : starch ratios—3092
feed conversion efficiency—636
forage, clearance rate of liquid and fermentation pattern in rumens—2964
forage, digestion and metabolism—2503
forage, effect of glucose addition and formaldehyde treatment on nitrogen metabolism and fiber digestion in wethers—86
further studies on response of lactating ewes to dietary protein—2543
grape waste in lamb feeding—2358
growth of store lambs on cereal-based diets with protein or urea—2227
hepatic copper levels in pre-ruminant and ruminant lambs given ammonium tetrathiomolybdate in diet—2899
high-concentrate, changes in lactate-producing and lactate-utilizing bacteria in relation to pH in rumen during stepwise adaptation to—1816
influence on protozoa in rumen—1133
intestinal parasites, influence on hemogram, lambs—2112
levels of copper and zinc, effects on binding proteins—2649
lignin digestibility by lambs fed both low and high quality roughages—921
low availability of choline—2124
low copper, nephropathy associated—2513
low-quality-roughage, fermentation and nitrogen dynamics in Merino sheep on—2172
magnesium concentration, effect on fecal magnesium loss—79
milk replacers for preruminant lambs, limiting amino acids in two soybean protein isolates determined with a change-over design—2314
orchardgrass hay versus cottonseed hulls as source of roughage, effect of graded levels of zeranol implants—1916
pellet, rumen digestion parameters in lambs—2334
pelleted, rumen function—233
pelleted, volatile fatty acids in digestive tract—235

- physical form, effect on fermentation in rumen—2768
- plasma amino acid relationships in ewes fed nitrogen fertilized orchardgrass—1493
- prediction of protein requirements and implications for diet formulation—1989
- relation to polysaccharide content of rumen ciliates—3173
- replacement of concentrates with roots, early weaned lambs—966
- replacement of corn with manure of several species—2217
- review of wool eating—261
- secretion and absorption of phosphorus in gastrointestinal tract of sheep fed four diets—2385
- sequence of limiting amino acids in groundnut protein isolate for preruminant lamb—2349
- sodium bentonite and sodium bicarbonate in high concentrate diets for lambs—827
- supplementary feeding of range sheep—1977
- supplementation of low protein-cellulosic, with either urea, casein or formaldehyde-treated casein, effect on nitrogen digestion—1540
- supplementation of sheep grazing wheat stubble with urea, molasses and minerals, quality of, intake of supplements and response—2076
- utilization by lambs of energy and protein in dried pelleted grass treated with formaldehyde—2976
- various liquid byproducts as protein supplement—3171
- varying in energy and protein, effect of feeding encapsulated methionine in—492
- varying proportions of sodium hydroxide treated straw, energy retention in growing lambs—2340
- voluntary intake and digestibility of legume and grass diets fed to growing wethers—1562
- waste roughage for fattening early weaned lambs—2364
- DIETARY MARKERS, use of ¹⁴⁴Cerium, stable cerium and stable chromium, tall fescue—3213
- DIGESTIBLE CRUDE PROTEIN, new system to replace—3133
- DIGESTIBILITY, alfalfa haylage treated with propionic acid—2836
- and palatability of ensiled swine waste and corn grain—985
- brown midrib vs. normal corn plants harvested as whole plant or stover and preserved as silage or frozen fresh—354
- cell wall constituents of lucerne hay under influence of physical structure, cutting date and feeding level—1532
- chemical composition and nutritive value of wheat bhusa—2463c
- corn silage, effect of particle size—2880
- determination of acid-insoluble ash as index to digestion trials—2166
- dry matter, validity of in vitro technics using rumen fluid or cellulase for predicting changes in, grasses, caused by fertilizer calcium, sulfur, phosphorus and nitrogen—2482
- effect of energy and protein levels—2757
- effect of formaldehyde treatment before ensiling, wilted grass silage—2727
- effect of four corn silage and corn grain ratios and nitrogen source on—1385
- effect of monensin—2374
- effect of sodium hydroxide on oats, barley, wheat and maize—2231
- effect of sodium hydroxide treatment on oats, barley, wheat and maize—2193
- ensiled swine waste and corn grain—302
- estimation, energy content of food from gas production when incubated with rumen liquor in vitro—1961
- feed, sheep with fascioliasis—697
- feeds, use of indicator method with ash insoluble in HCL—2776
- gas formation in rumen juices in vitro as measures of digestibility and convertible energy content in feeds—2437
- legume and grass diets, and voluntary intake—1562
- lucerne hay, influence of physical structure, cutting date and feeding level—2269
- milk-replacer, influence of birthweight in newborns—1358
- minerals, lambs consuming Na-OH-treated crop residues—145
- nutrient, estimation, straw—1531
- nutritive value of maize cobs, effect of level of sodium hydroxide treatment and volume of solution—1513
- orchard grass, during growth, application of neutral detergent cellulase system to detailed analysis—6
- possibilities of forecasting, crude nutritive substances by fully-grown and growing sheep from rations' content of crude nutritive substances, rations with low content of crude fiber—969
- predicting, straw—970
- protein and fiber of fermented straw enriched with protein—3321
- retention time and, of milled hay—2622
- roughages—1146
- seaweed meal, lambs—2464
- silage, effect of date of cut—2960
- sodium hydroxide-treated tropical grass supplemented with soybean or urea—1075
- straw treated with ammonia or caustic soda—1014
- vegetable-waste silages—258
- DIGESTION, barrel midic (*Medicago truncatula*) hay and seed pods—748
- carbohydrates, catheterized fetus—563
- cement kiln dust—3192
- chewing and physical breakdown of feed—2483
- chronic *Trichostrongylus vitrinus* infections—2914
- clover diet—3226

- comparison of deer and sheep digestive capacities—2270
- comparison of forage value of buckwheat and sorghum stubbles grown on Southern Tablelands of New South Wales—2075
- condensed beet molasses slop distillery effluent as animal feed for lambs—1840, 1841
- digesta flow and mineral absorption in lambs before and after weaning—771
- digestibility of diets containing processed dried lucerne—2967
- digestibility of lignin by lambs fed low and high quality roughages—921
- during pregnancy and lactation—3225
- effect of administration of the latex of *Calotropis procera*—1830
- effect of dietary cadmium chloride on functions and short-term mineral balance—444
- effect of efazepam on digestibility, intake and gain in sheep—1111
- effect of feeding *Calotropis procera*—1829
- effect of feeding cull domestic onions—1569
- effect of milk intake on intake of cut and grazed herbage by lambs—2317
- effect of monensin—68
- effect of nitrogen and energy supplementation on voluntary intake and digestion of heather—2002
- effect of readily available carbohydrate and roughage source on performance of lambs and steers fed a liquid supplement—1994
- effect of sodium hydroxide on efficiency of rumen—303
- effect of supplementary cystine and energy on utilization and distribution of cystine in Merinos—3258
- effect of treatment of silage with a formaldehyde-formic acid mixture—1081
- ensiled swine waste as feed for gestating sows and fattening lambs—1879
- evaluation of feed energy of green forage silages—2661
- factors affecting, grain supplemented straw—1077
- factors affecting voluntary intake of food, role of distension and tactile input from stomach compartments—1167
- factors associated with difference in nutritive value of artificially dried red clover and perennial ryegrass—2055
- feed conversion in Romney, Coopworth, Perendale and Corriedales—2882
- fever and ruminal stasis, role of humoral mediators—3120
- fiber, effect of glucose addition and formaldehyde treatment of forage diets on nitrogen metabolism, in wethers—86
- forage diets—2503
- function of forestomach—2297
- gastric intrinsic factor—1927
- grains, recent information on processing—2226
- herbage, stomach and intestines of weaner lambs at different stages of maturity—3226
- influence of moisture content and addition of *B. thobacillus* culture to alfalfa—2505
- intake, digestibility and nutrient utilization of sodium hydroxide-treated tropical grass supplemented with soybean or urea—1075
- low quality roughages, effect of barley supplements on voluntary intake—1671
- lucerne, sites of digestion of dry matter, organic matter and energy—11
- methods for studying—1056
- nitrogen, in sheep given poor-quality indigenous hill herbage—1820
- parameters, rumen, in lambs fed with pelleted diets—2313
- partition of nitrogen in sheep feces with detergent solutions, and its application to estimation of true digestibility of dietary nitrogen and excretion of non-dietary fecal nitrogen—1892
- possibilities of forecasting digestibility of crude nutritive substances by fully-grown and growing sheep from rations' content of crude nutritive substances, rations with low content of crude fibers—969
- poultry excreta in feeds—2628
- prediction of sites—3058
- protein in ensiled brewers grains—538
- proteins, new system for feeding of ruminants—3133
- quantitative, fresh herbage, utilization of nitrogen in five herbage—858
- rate of passage of digesta—2953
- relative value of single-cell proteins and groundnut-cake as protein supplement in ration of lambs—2115
- replacing corn with sun-dried manure of laying pullet, mature pig, sheep and cow—2217
- review of effect of wilting on fermentation in silo and nutritive value of silage—1864
- role of rumen protozoa—1476
- rumen ciliate *Epidinium* in primary degradation of plant tissues—266
- rumen, disorders, etiology, pathology, clinical examination, therapeutic deductions—448
- rumen, effect of industrial mixtures—1645
- ruminal and post-ruminal digestion of pasture herbage by grazing lambs—626
- secretion and absorption of phosphorus in sheep fed on four diets—2385
- sequence of limiting amino acids in groundnut protein isolate for preruminant lamb—2349
- utilization by lambs of energy and protein in dried pelleted grass treated with formaldehyde—2976
- utilization by yearling Gaddi ewes of mixed *Zea mays* and *Sorghum vulgare* greens supplemented with three levels of linseed-cake—2253
- utilization of amino acids, effect of endogenous nitrogen and intestinal microflora—2356
- varying levels of concentrates in rations of Sudan Desert sheep—872
- DIGESTIVE DISORDERS, multivariate analy-

- sis of rumen overload syndrome and preliminary model of acid-base balance—852
- DIGESTIVE PHYSIOLOGY**, proceedings of conference in Clermont-Ferrand, France, in 1979—2578
- DIGESTIVE SYSTEM**, development of myoelectrical activity—462
vagal deafferentation—931
- DIGESTIVE TRACT**, development in lambs fed milk substitute—788
glutamate dehydrogenase in —1736
nitrogen secretion—3111
participation of bile and pancreas juice in secretion of endogenous nitrogen—2929
passage of digesta in sheep and goats fed nitrogen from different sources—2830
role of adherent epithelial bacteria in functioning—570
site of absorption of magnesium—964
urease activity in contents and tissues—1981
- DIGOXIN**, detection of endogenous digoxin-like substance endoxan in plasma of dog, sheep and man—1168
- DIHYDROALPRENOLOL**, binding in myometrium during estrus—2496
- DIHYDROERGOCRYPTINE**, binding in myometrium during estrus—2495
- DIHYDROTESTOSTERONE**, seasonal variations in plasma concentrations, Algeria—694
serum gonadotrophin levels in castrated males—2288
- DIIODOTHYRONINE**, 3,3' and 3',5', in amniotic fluid in fetal hypothyroidism—576
- DIMETHYLDODECANAMINE**, in fattening lambs—2583
- DIP**, sheep, amitraz, a new acaricidal, for castor bean tick—2365
sheep, field test method for estimation of gamma hexachlorocyclohexane—938
- DIPHENHYDRAMINE**, reduces endotoxin induced increased lung vascular permeability in unanesthetized sheep—2254-A
- DIPLODINIUM**, rumen, effect of increased urea in diet—2177
- DIPTERA**, on ticks, United Kingdom—104
- DISEASE**, a bibliography—181
and management of sheep—3062
animal, and health, information on, in Hungarian National Research Information Center—1707
annual report of Ministry of Agriculture, France—1009
annual report 1978 from Edinburgh School of Agriculture—3065
improving reproductive efficiency, a review—1065
infectious, a review—3204
Netherlands—2133
New Zealand—2134
report of UK Northern Ireland Department of Agriculture—3080
resistance, genetic and environmental effects—2173
sheep, in Australia, research on—180
sheep in New Zealand—2140
sheep industry in Queensland, Australia—1995
sheep, Netherlands—2131
sheep, textbook—282
sheep, United Kingdom—3071
sheep, United Kingdom, statistics—3072
surveillance in Great Britain—710
survey of disease conditions in adult and feeder sheep—2065
veterinary problems in sheep farming in Slovakia—3045
- DISEASE PREVENTION**, applications of research to flock health—2046
- DISINFECTANTS**, see book by Richter, Werner and Bahr—2516
- DISOPHENOL**, metabolism—805
- DISTENSION**, stomach, factors affecting voluntary intake of food—1167
- DISTILLERY EFFLUENTS**, as animal feed, use of condensed beet molasses slop in lamb feeding—1840, 1841
- DISULFIDE**, bond, selective reduction, prolactin—798
- DISULFIRAM**, inhibition of sheep liver enzymes—766
- DIURETICS**, renal sodium and potassium excretion in sheep given amiloride—2438
- DNA**, changes in uterine endometrium and isthmus oviduct—2868
cytophotometric study, ram spermatozoa, influence of storage time in utero—2156
destabilizing action of ovine pancreatic RNase—1018
microphotometry on ruminal epithelial cells—2202
synthesis, cloning and characterization of sequences—295
- DNAASE**, milk and blood sera—1169
- DNASE**, pancreatic, isolation and characterization—3166
- DOG**, control, hydatid, New Zealand—2143
guard, Komondor, reduce sheep losses to coyotes—1765
Hungarian Komondor guards for sheep—1248
hunting, role as definitive hosts for *Taenia hydatigena* and *Taenia multiceps*—853
Sarcocystis and *Toxoplasma*—1721
specific and non-specific reactions to *Taenia ovis*—1280
- DOPAMINE**, circulatory effects of endotoxin on unanesthetized sheep and response to dopamine—3350
levels in response to hypoxia in neonatal lambs—874
levels in response to hypoxia in neonatal lambs—875
regional concentration in brain—193
responses to parturition in premature and full-term fetal sheep—873
treatment of spinal hypotension decreases uterine blood flow in pregnancy—2554
- DORSET**, body composition in native and crossbreds—1495
carcass growth and development—1047

- comparison with Border Leicester, Merino, Corriedale and Polwarth for staple strength and depilation force after cyclophosphamide treatment—1121
- cross with Scottish Blackface Finn, immunity, *Ostertagia* and *Trichostrongylus* infections—2565
- crossbred performance—2788
- crossbred, resistance to nematodes—3312
- crossbred to Cheviot, Finn, Romney, genetic and environmental effects on milk production, milk composition and mastitis incidence—3014
- Down, crossbred with Masham ewes, performance—2146
- Down, crossbreeding, fat content—619
- effect of genotype on wool growth in response to methionine feeding—3235
- effect of substitution, Rambouillet breeding, productivity of fall-lambing ewes—2962
- effect of substitution, Rambouillet breeding, productivity of young, spring-lambing ewes—2961
- glomerulonephritis in cross-bred sheep—100
- horn, crossbreds, carcass characteristics and composition and partitioning of fat—2969
- horn, crossbreds, distribution of subcutaneous fat, intermuscular fat, muscle and bone in carcass—2970
- horn, growth and carcass of crossbreds with Border Leicester, Suffolk and Merinos—2010
- horn, lambs sired by Texel and Suffolk rams, comparison—1697
- horn sheep, their origin and development in Australia—982
- lambing performance of crossbred ewes when mated in January to purebred or crossbred rams—846
- milk production, milk composition and live weights of ewes in relation to growth of their lambs—1044
- poll, crossbreeding, fat content—619
- polled, length of breeding season—1706
- polled, rams, seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin levels—251
- × Romney, milk production, milk composition and live weights of ewes in relation to growth of their lambs—1044
- semen collection—2797
- semen quality during non-breeding season—2796
- DRESSING PERCENTAGE**, effect of breed and feed level—473
- DRUG ABSORPTION**, influence of rumen—1870
- DRUG METABOLISM**, cloxanide, resorantel, in vitro by *Moniezia* and *Ascaris*—804
- DRUG RESIDUES**, hazards in meat production, use of anabolics—1288
- market system to monitor—408
- morantel in meat and organs of sheep—2258
- selective accumulation and depletion of polychlorinated biphenyl components, food animal implications—1247
- serum sulfonamide levels after oral and parenteral administration—1805
- sulfamethazine, normal and anemic sheep—1789
- DRUG RESISTANCE**, activity of levamisole against benzimidazole resistant *Haemonchus contortus* and *Trichostrongylus colubriformis*—608
- antibiotic-resistant *Escherichia coli* in meat chain, prevalence of contamination of carcasses of sheep grazed on previously contaminated pasture—1538
- benzimidazole, influence of esophageal groove reflex on pharmacokinetic behaviour and efficacy of oxfendazole—1294
- benzimidazole resistant strains of *Haemonchus contortus* and *Trichostrongylus colubriformis* treated with albendazole—503
- benzimidazole, trichostrongyles, amenable to treatment with fenbendazole and albendazole—1182
- benzimidazole, trichostrongylids, effect of single and divided doses of fenbendazole—3240
- effect of esophageal groove reflex on oxfendazole pharmacokinetics and efficacy against benzimidazole resistant nematodes—2408
- effectiveness of morantel tartrate and naphthalophos against levamisole resistant *Ostertagia*—1732
- efficiency of oxfendazole against four field populations of benzimidazole resistant *Haemonchus contortus*—3209
- Escherichia coli*—2749
- Escherichia coli* from lambs with diarrhoea—1563
- genetic background and methods for field diagnosis, Australia—1534
- Haemonchus contortus* and *Ostertagia circumcincta* resistant to levamisole—2632
- incidence of thiabendazole resistance in field populations of *Haemonchus contortus* in northern tablelands of New South Wales—3210
- inheritance in *Haemonchus contortus*—1734
- larval paralysis as in vitro assay of levamisole and morantel tartrate resistance in *Ostertagia*—1882
- oxfendazole by *Haemonchus contortus*—3208
- pasteurellas—2692
- salmonellae isolated in Tanzania—1370
- thiabendazole, helminths in Australia—260
- thiabendazole in field populations of *Haemonchus contortus*—1733
- DRUG THERAPY**, ketosis, sorbitol induced hypoglycemia—313
- DRUG TOXICITY**, safety for febantel—1351
- DRUGS**, determinants of disposition and effect in fetus—1145
- placental transfer—92
- DRYLOT**, vs pasture, early-weaned lamb performance to two slaughter weights—889

- DUCTUS ARTERIOSUS**, age dependent changes in response to oxygen and ibuprofen—600
 contribution of left to right shunting duct shunt to pulmonary blood flow in premature lambs during the first hours of life—2863
 developmental response to endogenous prostaglandins, oxygen and indomethacin—596
 implication of prostaglandin E-2 rather than prostacyclin in patency—598
 patent, hemodynamic effects of indomethacin in preterm lambs with respiratory distress—403
 role of prostaglandins, a review—599
- DUCTUS CHOLEDOCHUS COMMUNIS**, obstruction, ram with cholecysto-duodenostomie—1331
- DUCTUS VENOSUS**, preferential streaming of blood to brain and heart in fetal lambs—850
- DUODENUM**, chemical stimulation, effect on neutralizing functions of pancreatic juice and bile—2875
 contribution of protozoa to protein entering—1254
 digesta, estimation of microbial protein—2726
 flow, phosphatidyl choline as marker, rumen protozoa—1456
 motility, relation to electrical activity of gallbladder and biliary tract—460
 nitrogen flow in response to increasing dietary crude protein—1699
- DUTCH HEATH SHEEP**, color variants—1701
- DWARF**, sheep, West African, nutrition during late pregnancy—34
 West African, ewes, pathogenicity of *Fasciola gigantica*—2197
- DWARFISH**, congenital defects—751
- DYSENTERY**, lamb bivalent emulsified toxoid—3088
- DYSTOCIA**, New South Wales—1258
 pelvic measurement of ewes and histories of dystocia and eutocia—1910
 technic for radiographic pelvimetry in ewe—1941
 relation between plasma progesterone in late gestation and incidence of, Romney ewes—1596
- E**
- EAR**, inner, mammals, sound in spirals—1605
- EAST FRIESIAN**, crossbred performance—2788
- EAST FRIESLAND**, lactation of crossbreds with Scottish Blackface—2309
- EC 1.4.1.3 (GLUTAMATE DEHYDROGENASE)**, in digestive tract—1337
- EC 6.3.1.2 (GLUTAMINE SYNTHETASE)**, in digestive tract—1337
- ECHINOCOCCOSIS**, spread and consequences in Valjevo area—1861
- ECHINOCOCCUS**, in Great Britain, review of current position—2860
 intraspecific variation, isoelectric focussing of proteins—1649
 symposium, Australia, May 1978—186
- ECHINOCOCCUS GRANULOSUS**, arc 5 antibodies in sera—3315
 biology and speciation—2973
 control in Tasmania—1913
 cross-protection between cysts of *Taenia hydatigena* and *Taenia ovis*—1281
 hydatid disease in Mymensingh District, Bangladesh—1407
 in vitro culture of strobilar stages—2804
 isoelectric focusing of enzymes—1932
- ECHINOCOCCUS MULTILOCULARIS**, humoral response to sheep red blood cells in mice during early and chronic stages of infection—65
 in vitro culture of strobilar stages—2804
 isoelectric focusing of enzymes—1932
- ECOLOGY**, coprological surveys, prevalence of parasites in Spain—533
 domesticated animals under traditional management in Iran—2183
 effect of *Taenia hydatigena* infection on existing and concurrent infections of *Fasciola hepatica*—502
 feral sheep and cattle and royal albatrosses on Campbell Island, population trends and habitat changes—769
 food interrelationships of deer and sheep in Mendocino and Lake Counties, California—1790
 grazing intensity and productivity of sheep in grasslands—416
 home range and movements of Scottish Blackface sheep in Lochaber, northwest Scotland—1300
 human interactions with Bighorn sheep in California Sierra Nevada mountains—1303
 influenzavirus—291
 management of camels, sheep and goats in northern Kenya—954
 migration of sheep from center of origins—1700
 pattern and interactions of rumen ciliate populations—1390
 production, of British moors and montane grasslands—684
 rhythms of elimination of protostrongyles larvae under natural conditions—2480
 sheep population studies in relation to Snowdonian environment—684
 25 years of work at Hill Farming Research Organisation—3066
- ECONOMICS**, application of Cobb-Douglas functions to Greek dairy industry—1062
 assessment of profitability, Border disease—2907
 benefits accruing from use of anthelmintics—702
 benefits accruing from use of anthelmintics—1750
 classification of carcass scheme and its commercial use—1853

- comparison of lamb production systems—2971
 comparison of open and closed nucleus breeding schemes for wool production—1471
 cost benefit analysis of use of anthelmintics—701
 cost benefit analysis of use of anthelmintics—1902
 dairying in Greece—109
 data systems for livestock production in developing countries—1224
 deer versus sheep, a reply—454
 delivery system for forage livestock production—206
 effect of breed and feed level on dressing percentage body parts and fill—473
 effect of parasites of lambs in area of Istanbul, Turkey, and meat production—3163
 economic aspects of sheep feeding—2495
 effect of nutrition and castration on meat production and quality from male Suffolk cross (Border Leicester-Romney cross) lambs—2418
 effect of saleweight on lamb performance and profit—1474
 effect of technological adaptation on beef and sheep farms, West Virginia University Allegheny Highlar project—207
 effect of trypanosomiasis in sheep and goats at range research station in Kenya—1154
 efficacy and economic advantage in use of oxytetracycline with tetramisole—2463a
 estrus synchronization—1100
 export of breeding sheep from Australia, need for veterinary involvement—926
 farmer income and expenditure patterns in a wheat-sheep region—712
 fattening lambs in northern Ireland—3269
 fattening wether lambs in Northern Ireland—1920
 feeding lambs cereal grains and lucerne hay for finishing—1428
 few changes in the European Community market for lamb—116
 first report of a sheep industry strategy group—3073
 growth of store lambs on cereal-based diets with protein or urea—2227
 immunochromatographic detection of ovine, porcine and equine flesh in beef products with antisera to species myoglobin—1270
 implications of dosing lowland ewes prelambling with anthelmintics—74
 improving reproductive efficiency, a review—1065
 influence of carcass weight, sex and breed on consumer acceptance of lamb—1959
 integrated use of land, sheep breeding—1693
 Italian milk and cheese production and exports—1410
 karakul pelts, comparison of ewes in grading-up program with white karakul rams—2666
 karakul stud industry, analysis of breed structure—2667
 Kentucky ewe profit schools—560
 lamb mortality in commercial flock—2419
 loss, helminths of sheep in Bavaria—1134.
 loss, nematodes—106
 losses due to disease in Nigeria—48
 losses due to stachybotryotoxicosis—217
 losses to fascioliasis—2502
 market system to monitor drug residues—408
 meat production, margins and performance in 1978, United Kingdom—3067
 microbiology of bruised tissue—1079
 monensin and amprolium for early-weaned feedlot lambs with naturally occurring coccidiosis—1356
 need for formation by breeding of a high-quality production type sheep—2451
 New Zealand beef and sheep supply relationships—2506
 New Zealand lamb may be under pressure—1274
 nutritive evaluation of waste wood pulp in diets for finishing lambs—1735
 optimum flock size for sheep under migratory and stationary conditions—2098
 outlook, Canada—505
 performance and skeletal growth of lambs infected with *Ostertagia*—616
 phytoestrogens and their importance in breeding and fattening—2379
 possibilities of lamb and wool production on natural and sown grass swards—1213
 possibility of continuous production at commercial sheep farms—3309
 predator losses, constraints of production—3286
 problems in ascertaining value of carcass—1102
 production and financial analysis, New Zealand—2139
 production in USSR—1653
 production loss in subclinical helminth infections—617
 profits from the lowland ewe, Northern Ireland—3268
 prolific ewes increase cash income—974
 raising of Romanovskii sheep—218
 ram buyers value measurement information—2530
 rugging of sheep with polyolefin fabrics—1
 rugging with polyolefin fabrics—2
 savings on pizzle dropping on wethers at Canaway Downs—825
 sheep farming in mountainous regions of Czechoslovakia—1983
 sheep farming in central Abruzzo, Italy—660
 sheep farming in France—396
 sheep industry, current situation and future developments—3262
 sheep predation in southwestern Utah—2933
 sheep rearing, in Mecheri tract of Salem district—155
 shepherds and reindeer nomads in Soviet Union—1755
 survey of disease conditions in adult and feeder sheep—2065

- systems analysis of production alternatives—2980
- technics for assessment of sheep systems—1904
- traits, sex differences in heritabilities of, in South Africa Merinos—1301
- trends in development of German Federal Republic sheepmeat production under common market conditions—1369
- use of production functions for forecasting and planned calculation of main factors of economic activity—2699
- ways of attaining a good and stable reproductive performance in ewe flocks—2872
- ECOSYSTEM, grazing intensity and productivity in grassland—416
- ECTHYMA, contagious, changing clinical picture—3091
- contagious, efficacy and safety of a new cell culture vaccine—3324
- contagious, in sheep and goat—724
- contagious virus, cellular responses in efferent lymph during infection—2307
- contagious, virus, immunization—1906
- ECTOPARASITES, alopecia—2063
- feral sheep on Campbell Island, New Zealand—1279
- in syndrome of sheep "on its back"—2304
- problems of control in Mongolian Peoples' Republic—2501
- sheep, textbook—282
- ECTOPARASITOSSES, dipping and spraying—38
- ECZEMA, chronic facial, hepatic encephalopathy associated—2972
- facial, affecting palatability of lamb meat—1572
- facial, genetic resistance to—112
- EDEMA, effect of uneven pulmonary artery obstruction on lung fluid balance—2848
- extravasation of albumin in tissues—1334
- pulmonary, dynamics of fluid flow during hemorrhage—1833
- pulmonary, regional extravascular lung water—977
- EDILBAEV, carcass composition—1525
- EDINBURGH, current mycotoxin studies at veterinary investigation centre—1992
- EDUCATION, sheep apprenticeship program in Canada—2843
- EGG TRANSFER, superovulation—376
- EGYPT, detection of antibodies against *Chlamydia*—1218
- ecology of Rift Valley virus infections—1344
- efficacy of oxfendazole against naturally acquired helminth infections—1974
- ingestive behaviour of Ossimi sheep under summer conditions—1613
- isolation of virus of Rift Valley Fever—1391
- Rift Valley Fever epizootic in 1977—1944
- toxoplasmosis, farm animals in North Coastal zone—2520
- EHRlichia**, prevalence and significance in northern Nigeria—1717
- EIMERIA**, prevalence in lambs—2278
- EIMERIA ARLOINGI**, experimental evidence for status different from *E. ovina*—2647
- EIMERIA OVINA**, taxonomically separate from *E. arloingi*—2647
- EIMERIA OVINOIDALIS** N. SP., new species of coccidia from sheep—1919
- EIMERIA PARVA**, lambs, prevention, vitamin A and nitrofurazolidone—3149
- EJACULATION, electro, insemination of sheep—2993
- ELASTASE, role in differentiation of *Bacteroides nodosus* infections—2861
- ELECTRIC, potential, visceral pleura—644
- ELECTRIC POTENTIAL, across nasal mucosa—208
- ELECTRICAL CONDUCTANCE, genitalia tissue—18
- ELECTRICAL CHARGE, sperm—635
- ELECTRICAL STIMULATION, effect of neuromuscular blocking agents in lambs—760
- post mortem, muscle, effect on sarcoplasmic reticulum and ATPase—3044
- ELECTROCUTION, effects of electrical and captive-bolt stunning on incidence of blood-splash in lambs—2826
- ELECTROENCEPHALOGRAM, numerical analysis—2572
- ELECTROLYTES, excretion during estrus—1980
- excretion during estrous cycle—2009
- metabolism, under different conditions of water intake—1479
- plasma, effect of transfer to sheep of bovine rumen-reticulum microorganisms—936
- sorbite, effect on sorbite, fructose, glucose, insulin and free fatty acid levels in plasma—1624
- transport across visceral pleura—644
- transport, effect of angiotensin II on parotid saliva secretion—1929
- ELECTROMAGNETIC FLOW METER, characteristics, for measurement of intestinal flow—1744
- ELECTROMYOGRAPHY, diaphragmatic and esophageal activity in regurgitation—2996
- uterine myoelectrical activity in periparturient ewe—1639
- ELECTRONARCOSIS, electrical stunning of karakul lambs—1648
- humane slaughter—340
- physiological effects of stunning in relation to meat quality—1709
- ELECTRONIC DOORS, use in individual feeding of group-housed lambs—500
- ELECTROPHYSIOLOGY, electrical stimulation, effect of neuromuscular blocking agents in lambs—760
- perinatal development of intestinal myoelectrical activity—462
- ELEMENTS, chemical, in urine patches in ryegrass pastures—1455
- trace, in bone, a review—809

- ELFAZEPAM, effect on apparent digestibility, intake and gain in sheep—1111
feeding and depression of abomasal secretion—3096
review of behavioral and physiological responses—202
- ELISA (Enzyme-linked immunoabsorbent assay), antibody to *Pasteurella haemolytica*—470
detection of bovine leucosis virus infection in cattle and sheep—949
- ELLIOTDALES, and carpet industry—1926
- EMBOLUS, air, reversible lung vascular permeability increase by, effect of left atrial pressure—2847
effect of heparin or fibrinogen depletion on lung fluid balance after—333
micro, failure of antihistamine to prevent increased lung vascular permeability—1678
role of blood factors in lung microvascular injury—2846
- EMBRYO, early mortality, effect of body condition, cheviots—1184
early mortality, in Galway ewe lambs treated with progestagen-PMSG—2423
in vitro fertilization and assessment with embryo culture—406
international trade—3256
preservation and transfer, a review—2679
proteins of blastocyst origin—1749
transfer, a review—1266
transfer, bibliography—2680
transfer, birth weight in Finnish Landrace and Targee sheep—1317
transplantation, review—3255
transplants, regulative capacity in vivo and in vitro—1949
transplants, survival in mature ewes and ewe lambs—2432
- EMBRYO DEATH, effect of radiant heat—2643
- EMBRYO MORTALITY, effect of level of pre-mating nutrition—1185
effect of nutritional level before and after mating, cheviot ewes in moderate condition at mating—1186
Ovce Polje ewes—1824
- EMBRYOLOGY, conservation of nucleolus organizer regions during evolution in sheep, goat, cattle and aoudad—1292
regulative capacity of embryos in vivo and in vitro—1949
- EMBRYONIC DEVELOPMENT, brain barrier systems to lipid insoluble molecules—847
fetus at parturition—1758
role of mesonephros in development of fetal ovary—3329
thyroidectomy and brain—1925
- EMBRYONIC HOMOGENATES, luteotropic properties—879
- EMBRYONIC RESORPTION, effect of intra-uterine threads—1012
- EMORY MILKVETCH, poisoning—3263
- EMOTIONALITY, assessment of contribution of sires and dams genetically to—3015
- ENCEPHALITIS, outbreak of *Listeria* in newborns—286
threshold problems in infection of *Ixodes ricinus* with louping ill virus—275
- ENCEPHALOMYELITIS, induction of experimental allergic disease with purified bovine basic protein and adjuvant—44
- ENCEPHALOPATHY, congenital, pathogenesis, sheep experimentally infected with Akabane virus—2111
- ENDOCRINE, basal levels and plasma profiles of lutropin testosterone and prolactin in Romney rams—3271
cells, in alimentary tract—465
cells, pancreas, fine structure—1304
control of parturition, a review—2981
control of spermatogenesis—633
function and behaviour of rams—1389
lutropin and testosterone secretion following single or repeated doses of gonadotrophin releasing hormone—3272
mechanisms governing transition into adulthood, marked decrease in inhibitory feedback action of estradiol on tonic secretion of LH during puberty—1001
neuro, regulation of estrous cycle and seasonal breeding—1720
response to zeranol implants—3248
- ENDOCRINE FUNCTION, effect of thyrotrophin releasing hormone on pituitary and thyroid function—3182
- ENDOCRINE GLANDS, histophysiology of subcommissural organ of ewes—2130
- ENDOCRINE SYSTEM, peripartal, in sheep—546
- ENDOMETRIUM, patterns of sulfotransferase and sulfatase activities—839
uterine, does progesterone act as an antiestrogen—2868
- ENDOPARASITES, statistical analyses of epidemiologic studies—2342
- ENDOPLASMIC RETICULUM, histogenesis of adrenal cortex—2547
ultrastructure of, in epithelium of epididymis—2148
- ENDORPHIN, beta, stimulation of growth hormone secretion in fetus in vivo—1096
- ENDOSALPINX, maturation of secretory granules, 1 to 4 days post coitum—2580
- ENDOSCOPY, ovary—402
- ENDOTOXIN, absorption in hay-fed and lactic acidotic sheep—1362
bacterial, endogenous pyrogen release by fetus and pregnant sheep blood leukocytes—1511
development of fever in newborn—1510
Escherichia coli, increased lung vascular permeability—428
indomethacin augments, induced increased lung vascular permeability—2196
induces increased lung vascular permeability, diphenhydramine reduces—2254-A
lung vascular responses, accompanied by in-

- creased blood and lung lymph cyclic AMP and cyclic GMP—1286
- pulmonary vascular response in normal and lymphocyte depleted sheep—366
- ENDOTOXIN (ITOX), circulatory effects, unanesthetized sheep and response to dopamine—3350
- ENDOXAN, detection of digoxin-like substance in plasma of dog, sheep and man—1168
- ENERGY, concentration, effect on milk production in Churra sheep—2037
- diet and stage of growth upon utilization by lambs—951
- effect of nitrogen and energy supplementation on voluntary intake and digestion of heather—2002
- effect of ratios of sugar and starch—3092
- effect of supply on ewes during pregnancy, on birthweights and growth of lambs—2995
- effect of supply on hormone and metabolite concentrations in blood—357
- effect of *Trichostrongylus colubriformis* in lambs—1821
- effect on nutrient digestibility and wool production—2757
- efficiency of utilization of volatile fatty acids for maintenance and energy retention—2229
- feed, for milk production in Sardinian ewes—705
- intake, dietary energy levels for lactating ewes—888
- intake, effect during late pregnancy on plasma insulin and blood free amino acids in ewes and their lambs—1160
- levels, effect on mutton production and carcass quality of Muzaffarnagari lambs—61
- maintenance for growing lambs—2979
- metabolism, during experimental underfeedings and refeedings—1086
- metabolism, effect of monensin—1477
- metabolism, management of sheep—3212
- metabolizable—54
- model for calculation of requirements of pregnant ewe—1049
- model for effect of energy nutrition on pregnant ewe—1050
- net, explanation of differences in net values of 1st and 3rd cut dried grass—2504
- requirements, hand feeding and rearing—1364
- retention, efficiency of utilization of volatile fatty acids—2190
- retention in growing lambs fed diets with different proportions of sodium hydroxide treated straw—2340
- utilization by weaned lambs before, during and after weight loss—1132
- utilization, of maize silage fodder rations by growing sheep—467
- ENTAMOEBIA DILIMANI**, in sheep in Egypt—1549
- ENTAMOEBIA HISTOLYTICA**, sheep as possible reservoirs—1549
- ENTEROBACTER**, detection of nasal carriers—1031
- ENTEROBACTERIA**, detection of nasal carriers—1031
- ENTEROTOXEMIA**, antibody neutralization test—331
- biochemical tests of urine and blood—2380
- appraisal of urine and blood biochemical tests for diagnosis—2382
- bivalent emulsified toxoid—3088
- blood chemistry—2381
- due to *Clostridium perfringens* and glycosuria—2383
- ENTODINIUM**, polysaccharide content—3173
- rumen, effect of increased urea in diet—2177
- ENTROPION**, textbook—282
- ENVIRONMENT**, arid, comparative performance of indigenous and exotic sheep in Indian arid zone—2018
- dynamic response of fasting heat production in sheep exposed to varying conditions—3127
- effect on internal parasites, foot soundness and attrition in crossbred ewes—2173
- factors affecting improvement of production characteristics in Konya Merino sheep through selection—3301
- factors affecting wool fibre diameter in merinos—1928
- genetic variation in lutropin response of ovariectomized sheep to luliberin—1675
- physical, operant studies on behaviour—219
- poisons, occurrence and importance in Norway—1539
- pollution, influence of feeding hay from areas, biochemical parameters of blood and rumen contents—1488
- pollution, lead levels in wool as indicator of exposure to automotive emissions—3194
- pollution, transplacental movement of organochlorine pesticide residues in desert bighorn sheep—3046a
- semi-arid conditions in India, adult body weight of indigenous and crossbred ewes—1948
- semi-arid, efficacy of four anthelmintics in growing lambs under—3141
- thermal, adaptation—2069
- ENZYME-LINKED IMMUNOABSORBENT ASSAY (ELISA)**, detection of bovine leucosis virus infection in cattle and sheep by ELISA technic—949
- ENZYMES**, acid and alkaline phosphatases, protein transmission in intestine of newborn—1276
- acid phosphatase in lysosomes of placenta—2094
- acrosomal proteinase, testis—2611
- action of methyl mercury hydrolase and mercuric reductase in transformation of mercury compounds—1630
- activity and characteristics of alkaline phosphatase in organs of cattle and sheep—129
- adenylcyclase, ultrastructural localization in parathyroid gland—3034
- alanine and aspartate aminotransferases, values in blood—2327

- aminoacyl transfer RNA synthetase, ararose
gelfiltration behaviour of purified high mo-
lecular weight complexes of seven enzymes
from sheep liver—425
- ATPase, post mortem electrical stimulation of
muscle, effect on—3044
- automated method for determination of am-
monia in rumen fluid, gut fluid and plasma—
200
- caeruloplasmic amine oxidase, effect of tetra-
thiomolybdate—1529
- carbohydrase, extracellular complex from ru-
men contents—1040
- carbohydrase, formation by rumen holotrich
ciliates—3257
- carbonic anhydrase, from parotid gland—950
- cellulose, grain processing—2226
- circulating plasma, in utilization of lupin stub-
bles—649
- comparative study of ketone metabolism in
sheep and camel—555
- dehydrogenase activity in fatty tissue of lambs
given diets of different physical structure
with fatty acid supplements—64
- dehydrogenase and isomerase in corpus lu-
teum—485
- delta-9 and delta-6 desaturases in placenta and
role in supply of fatty acids to fetus—2688
- desaturases, role in supply of fatty acids to fe-
tus—2773
- digestive, effect of protein, medium reaction
and intestinal microflora—1203
- effect of anthelmintics on transferases—3153
- effect of intraruminal selenium pellets on tissue
glutathione peroxidase activities—2305
- evolution of alkaline phosphatases of placen-
ta—1103
- fatty acid synthetase, comparative metabo-
lism, ruminants—3172
- forestomach of lambs—716
- gamma butyrobetaine hydroxylase activity in
human and ovine liver and skeletal muscle—
539
- glutamate dehydrogenase and glutamine syn-
thetase in digestive tract of sheep and chick-
en—1337
- glutamate dehydrogenase in digestive tract—
1736
- glutathione peroxidase in erythrocytes, activi-
ty as measure of selenium status in live-
stock—94
- glutathione peroxidase, in sheep with selenium
dependent myopathy—803
- glutathione peroxidase, semiquantitative spot
test for assessment of biological selenium
status—311
- gluicytic, microfluorometric study of, in his-
tologically defined areas of uterus and pla-
centomes during pregnancy—3331
- histochemistry, blood leukocytes from clini-
cally healthy and leukaemic sheep—2579
- histochemistry of uterus during estrus—3330
- hyaluronidase, testis—2610
- hydrolytic, semiquantitative assay for rapid
characterization of mixed microbial popula-
tions rumen, cecum and feces—1688
- inheritability of differences in sensitivity to
copper—3323
- inhibitors, proteinase inhibitor of lamb mecon-
ium and feces—1506
- interrelationships of zinc and molybdenum in
copper poisoning, aspartate transaminase—
2500
- isoelectric focusing, *Echinococcus granulosus*
and *E. multilocularis*—1932
- isolation and characterization of pancreatic
dnase (EC 1.1.4.5)—3166
- lipoprotein lipase, measurements of clearing
factor activity in adiposal muscular and lung
tissues of 10 animal species—654
- liver, sheep, metabolism of anthelmintics in
vitro by *Moniezia* and *Ascaris*—804
- luteal cholesterol esterase, activity during sev-
eral experimental conditions—484
- milk, DNAases—1169
- mouse- and sheep-liver, metabolism of nitro-
phenolic and 5-arylazorhodanine anthelmin-
tics—805
- multiple molecular forms of erythrocyte car-
bonic anhydrase—1935
- NADH diaphorase, as marker for erythro-
cytes—3042
- neurotoxin esterase, subcellular distribution in
lamb brain—2815
- origin and developmental patterns in fetal
membranes—2390
- oxytocinase activity in pregnancy—2118
- pancreatic colipase, comparative study of ef-
fect on lipase activity of mammals and fungi—
1480
- patterns of sulfo transferase and sulfatase in
endometrium during pregnancy—839
- peroxidases and carbohydrases in relation to
age and breed—1631
- phosphohydrolase, in tracheal and amniotic
fluids during gestation—2561
- plasma, affected by reducing plasma calcium
levels—690
- plasma, influence of anthelmintics (levamisole,
mebendazole and carbon tetrachloride)—
3151
- plasma levels, cattle and sheep in Syria—2158
- plasma levels, effect of tribromosalan—3152
- plasma levels in *Fasciola hepatica* infections—
2575
- polypeptidase activity, effect of dietary struc-
ture—2737
- prostaglandin synthetase, inhibitors stimulate
breathing movements in fetus—1757
- purification and characterization of high mo-
lecular weight complexes of 7 aminoacyl
transfer RNA synthetases from sheep liver—
1530
- purification and properties of liver aldehyde
dehydrogenase (EC 1.2.1.3)—1812
- relationship between glutathione and selenium-
responsive unthriftiness in Merino lambs—
2306

- role of elastase in differentiation of *Bacteroides nodosus* infections—2861
 semen—1032
 l-serine dehydratase and l-serine pyruvate aminotransferase, in several species—2577
 serine synthesis and degradation, influence of supplemental nitrogen—2411
 sheep liver aldehyde dehydrogenases, separation by isoelectric focusing—766
 significance of plasma 5'-nucleotidases—838
 transferases, lymphocytes—2329
 ultracytochemical localization of 3-beta hydroxy steroid dehydrogenase in luteal cells—2646
 urease (EC 3.5.1.5) activity in gastrointestinal tract of, contents and tissues—1981
 white liver disease—2892
- EOSINOPHILIA**, associated with inoculation of *Moniezia expansa* extracts—510
- EPERYTHROZOON**, incidence in southern Ghana—167
 prevalence and significance in northern Nigeria—1717
- EPERYTHROZOON OVIS**, anaemia, reduced production and decreased exercise tolerance—679
 cause of anemia, reduced production and decreased exercise tolerance—2708
 effect of infection on reductive potential of erythrocytes—2900
 pathology—2901
 transmission of sheep strain to goats and development of carrier state in goats—680
- EPHEMERAL FEVER VIRUS**, isolation from midges in Kenya—709
- EPIDEMIOLGY**, abomasal parasites of young sheep during winter and spring—2966
 antibodies for toxoplasmosis in Belgium—935
Brucella abortus naturally acquired—1797
 brucellosis, toxoplasmosis and hydatidosis among shepherds' families in Ferrara province, Italy—55
 caseous lymphadenitis—2509
 cats and *Sarcocystis* of sheep—2081
 cross transmission of coccidia between sheep and goats—1919
 cysticercosis—182
 cysticercosis in lambs, USSR—2705
 detection of nasal carriers of *Salmonella* and other enterobacteria—1031
 ecology of free-living stages of *Trichostrongylus vitrinus*—495
 effect of *Taenia hydatigena* infection on existing and concurrent infections of *Fasciola hepatica*—502
 estimation of development and death rate parameters of parasite life cycles—496
 excretion of *Listeria monocytogenes*—1162
 experimental infection of sheep with *Leptospira interrogans*, serovars. *hardjo* and *balkanica*—1263
 experimental transmission of gastrointestinal nematodes between sheep and Thomson's gazelle—2405
 fascioliasis in Denmark, seasonal availability of metacercariae and parasite stages overwintering on pasture—2686
 fascioliasis in marsupials—1933
 helminths of sheep in Bavaria—1134
 helminths of sheep in Uzbekistan area of USSR—192
 hydatid disease, aspects of planning and evaluation of control—2675
 hydatid disease in Mymensingh District, Bangladesh—1407
 incidence of ovine progressive pneumonia in North Dakota State University flocks as determined by agar-gel immunodiffusion—2022
 incidence of toxoplasmosis in North Coastal zone of Egypt—2520
 influenza virus, USSR—291
 inhibited development of trichostrongylids of sheep in northern Nigeria—2201
 listeriosis, excretion of organism in flocks with clinical disease—1163
 listeriosis in France—2508
 louping ill—2484
 Maedi-Visna virus in sheep—723
 Maedi-Visna virus in sheep—1293
 matrix formulation of life cycle of liver fluke—1066
 moniezirosis, peculiarities in Morocco—2244
 most frequent parasitic species in sheep of Estremadura, Spain—520
 nematodes in Switzerland—2341
 nematodes, transmission to sheep, goats and cattle of parasites from wild animals—1355
 nematodiasis, farm animals—2473
 nematodiasis, farm animals—2474
 new data on life cycle of sarcosporidia—1968
Oestrus ovis infections in southern France—2949
 outbreak of toxoplasmosis in Colombia—2324
 ovine *Chlamydia* produced pneumonia in deer—1934
 ovine diseases in Nigeria—48
 ovine enzootic abortion—2215
 parasites of lambs in vicinity of Istanbul, and effect on meat production—3163
 prevalence of brucellosis among sheep and goats in northern Iraq—1505
 prevalence of *Dicrocoelium hospes* in Niger—2920
 prevalence of lungworms in sheep in Tehsil Kargil of District Ladakh (Jammu and Kashmir) India—761
 prevalence of parasites in Spain—533
 prevalence of *Salmonella typhimurium*, in clinically healthy flock—2947
 prevalence of salmonellas at slaughter—1499
 prevalence of sarcocystis in sheep in Hissar area of India—1200
 protostrongylids in snails—1842
 progressive pneumonia—1759
 psoroptic mange—3343
 ringworm—567
 role of dogs and foxes as definitive hosts and

- of sheep as intermediate hosts for *Taenia hydatigena* and *T. multiceps*—853
- role of inhibited larvae of *Haemonchus contortus*—239
- role of seasonal inhibition of development of *Haemonchus* and *Ostertagia*—703
- role of sheep and goats in human staphylococcosis in Nigeria—31
- role of sheep in spread of blackleg of rape-seed—1818
- Sarcocystis* and *Toxoplasma* in New Zealand—2141
- sero, coxiellosis, India—3297
- serological, listeriosis—1190
- serological survey for viral diseases in Kenya—2266
- serotypes in listeriosis—832
- sheep and goats as possible reservoirs of *Entamoeba histolytica*—1549
- sheep parasites, a review—143
- statistical analyses of endoparasites of sheep—2342
- strongylosis during 1977 in a sheep flock on permanent pasture—1363
- survey, Italy—2660
- survey for mycoses in New Zealand—2135
- survey of coenurosis in northern Iraq—1504
- survey of disease in adult and feeder sheep—2065
- survey of rotavirus in Kenya—2091
- Taenia ovis* in sheep and dogs—1280
- termination of arrested development of trichostrongyles of sheep in northern Nigeria—2199
- toxoplasma antibodies among slaughter sheep in Jordan—2049
- toxoplasmosis in sheep and goats in Granada, Spain—2551
- transmission of sarcocystis by blood transfusion—942
- transmission of sheep strain of *Eperythrozoon ovis* to goats and development of carrier state in goats—680
- transmission of toxoplasmosis by tachyzoites—1013
- transmission of Wad-Medani virus by ticks—1621
- transplacental infection of bluetongue virus in sheep, overwintering mechanism—1071
- transplacental transmission of protostrongylids in California bighorn sheep—1577
- trypanosomiasis in sheep and goats in Kenya—1153
- Visna-Maedi virus infections—2945
- EPIDERMIS, skin, structure—1773
- EPIDIDYMAL DUCT, ultrastructure of principal cells of initial segment of—2147
- EPIDIDYMITIS, age related effects on androgen binding protein—525
- carnitine in luminal fluid—1319
- contraction by chemical sclerosing with formaldehyde and calcium chloride—3012
- fluid, effect on metabolism and motility of testicular and post-testicular spermatozoa—3156
- occurrence of intraepithelial lymphocytes—2233
- ultrastructure of endoplasmic reticulum in epithelium—2148
- EPIDIDYMITIS, a review—3107
- bacterial isolates from rams in Idaho and eastern Oregon flocks—741
- intraperitoneal vaccination—2422
- serodiagnosis by counterimmunoelectrophoresis using *Brucella ovis* surface R antigen—2095
- EPIDINIUM, rumen ciliate, primary degradation of plant tissues—266
- EPINEPHRINE, effect of administration on magnesium and potassium metabolism—3305
- effect of infusion on maternal and uterine oxygen uptake in pregnant ewe—585
- fetal maturation related to parturition—1758
- induced fetal mesenteric artery constriction, modification by prostaglandins—3296
- levels in response to hypoxia in neonatal lambs—874
- levels in response to hypoxia in neonatal lambs—875
- pacemaking mechanism at plateau potentials in cardiac purkinje fibers—2281
- responses to parturition in premature and full-term fetal sheep—873
- EPITHELIAL CELLS, abomasum, structure—1622
- EPITHELIUM, cell kinetics, rotavirus infections—2807
- cervical and vaginal, altered response to estradiol after prolonged exposure to estrogenic pasture—21
- intestinal, mechanisms of association of *Escherichia coli*—2030
- pulmonary, tight junctions, structure, during lung liquid absorption in newborns—2664
- ultrastructure of tuft cell—3228
- EPIZOOTIC HEMORRHAGIC DISEASE, in Barbary sheep and mule deer in Palo Duro Canyon, Texas—1232
- EPIZOOTIOLOGY, biocenological problems of pastures—3266
- coccidiosis in Spain—1305
- Cysticercus tenuicollis*, Yugoslavia—3162
- leptospirosis—49
- Maedi-Visna virus in sheep—1293
- seasonal and age dynamics of gastrointestinal strongyles in sheep—1058
- sheep, Hungary, trichostrongylids—1601
- Visna-Maedi disease—2945
- ERGOT, contamination of feedstuffs—3318
- ERGOT SCLEROTIA, chemical composition—1792
- ERGOT, symptoms of poisoning—3318
- toxicity, a review—1792
- ERGOTISM, gangrenous, case in grazing sheep—1782

- gangrenous, case in grazing sheep—1786
 review in animals due to claviceps—1792
- ERUCTATION**, oesophageal reactions—523
- ERYSIPELOTHRIX INSIDIOSA**, importance in etiology of infectious arthritis—2152
- ERYSIPELOTHRIX RHUSIOPATHIAE**, epidemiology and infection—1672
 serological classification of Australian strains isolated from pigs, sheep, turkeys and man—650
 vaccination—1672a
- ERYTHROCYTE**, binding of *Trypanosoma congolense*—229
 biochemical polymorphism, types—3011
 cation dimorphic, temperature dependence of active potassium transport—1465
 cryopreservation, complement titrations with frozen sensitized cells—2097
 cryopreservation, polyvinylpyrrolidone and hydrolyzed starch as protective agents—2096
 effect of biochemical characters on production traits in sheep, wool—2752
 effect of *Eperythrozoon ovis* infection on reductive potential—2900
 expression of receptor by a murine lymphoma—494
 fragility, Nigerian species of dwarf sheep—2216
 hydrophobicity—3335
 importance of surface area to volume ratio to rate of oxygen uptake—1467
 incorporation of ⁷⁵Se—3028
 lysosomal breakdown in placenta—2094
 lysosomes in epithelial cells of placenta—2093
 metabolism, in phosphorus deficient sheep—1822
 osmotic fragility—3047
 purification and chemical characterization of antigens—3043
 reduction in count, sedation with rompun—379
 sickling, nature—474
 splenectomized *Theileria* carrier sheep—2395
- ERYTHROPOIESIS**, inhibition by plasma components from sheep, goats and rabbits—2122
- ERYTHROPOIETIN**, endogenous erythroid colony-forming cells in fetal and newborns—2559
 stimulation of production in anephric fetuses—3332
- ESCHERICHIA**, detection of nasal carriers—1031
- ESCHERICHIA COLI**, antibiotic resistant, in meat chain, prevalence of contamination of carcasses of sheep grazed on previously contaminated pasture—1538
 association with intestinal epithelium—2030
 drug resistance, isolated from lambs with diarrhoea—1563
 endotoxins, increased lung vascular permeability—428
 enteric colibacillosis, passive protection by colostrum transfer of antibodies from ewes vaccinated with K99—2809
 experimental infections of lambs with invasive and enteropathogenic strains—2790
 isolated from organs at slaughter—2071-A
 isolation, serotyping and antibacterial sensitivity—2749
 lambs, ascorbic acid changes—663
 neonatal lambs, diarrhoea—2805
 prevention and control problems—1860
 prevention, lambs, Dagestan, USSR—1554
 proceedings of symposium, Munich 1978—3265
 234 strains in neonatal disease in lambs—2623
- ESERINE SALICYLATE**, calcium movements in hypotonically washed sperm—2862
- ESOPHAGEAL (RETICULAR) GROOVE**, morphology and physiology—2297
- ESOPHAGUS**, activity in regurgitation, electromyography—2996
 effect of groove reflex on oxfendazole pharmacokinetics and efficacy against benzimidazole resistant nematodes—2408
 groove reflex, influence on pharmacokinetic behaviour and efficacy of oxfendazole against benzimidazole resistant nematodes—1294
 reactions during eructations—523
- ESTERASE**, luteal cholesterol, activity during several experimental conditions—484
 neurotoxin, subcellular distribution in lamb brain—2815
 plasma, action on etomidate—499
- ESTRADIOL BENZOATE**, secretion of gonadotrophins and prolactin in ovariectomized ewes—2954
- ESTRADIOL**, 17-beta, effect on estrogen and progesterone receptors in mammary gland—1527
 17-beta, effect on gonadotropin releasing hormone mediated release of LH during estrous and anestrus season—2057
 17-B, induction of male behaviour in ovariectomized ewes and ovariectomized-androgenized ewes chronically implanted—590
 17-beta, pituitary response of prepuberal lambs—3021
 17 beta, response of wether lambs to implantation at two levels of dietary protein—3078
 17 beta, response of wether lambs to treatment—3077
 blood plasma levels, ewes, after treatment with chlormadinone acetate in two synchronized cycles—1222
 changes in cytoplasmic receptors in uterine endometrium and isthmic oviduct, progesterone—2868
 cholinergic control of pituitary, ewe—2106
 concentration in blood and amniotic fluid from 50th to 90th day of pregnancy—1221
 decrease in inhibitory feedback on tonic secretion of LH during puberty—1001

- effect of hypothalamus lesions on induced changes in LH release—2442
- effect on conception rate—371
- fertility of ewes with low doses of, during synchronized estrus—1394
- immunization against, in anestrus ewes, LH and FSH plasma levels—1875
- importance of variations in behavioral and feed back actions of, to control of seasonal breeding in ewe—1115
- in vitro production and binding to theca and granulosa cells in individual ovine follicles—3207
- induction of changes in vagina of ovariectomized ewes, transducer probe for measurement—385
- induction of estrus and fertility in anestrus ewe with hormones and controlled lighting—1943
- pituitary response of prepuberal lambs to—579
- postpartum reproductive performance of Finn crossbred ewes—995
- ram-induced ovulation in seasonally anovular Merino ewes, effect of, on frequency of ovulation, estrus and short cycles—1878
- receptor in castrated ram pituitary cytosol—2955
- receptors, effect of exogenous estradiol and progesterone, uterus—849
- relation with progesterone and LH in control of preovulatory endocrine events—1508
- seasonal variation in nature of cervical mucus response to, in normal and clover-affected ovariectomized ewes—24
- serum gonadotrophin levels in castrated males—2288
- short-term passive immunization of cyclic ewe—2472
- tritiated, in vitro metabolism by skin and wool roots—3193
- ESTRADIOL VALERATE**, synchronized breeding of cycling ewes to produce fetuses of known gestational age—787
- ESTRIOL**, levels in blood and amniotic fluid from 50th to 90th day of pregnancy—1221
- ESTROGEN**, a review—1266
- altered response of cervical and vaginal epithelia to estradiol after prolonged exposure to estrogenic pasture—21
- changes in cervical mucus in response—25
- changes in concentration in sheep given medroxyprogesterone acetate and PMS—1220
- conception rates—371
- control of placental steroid synthesis at parturition—981
- effect of an inhibitor of prostaglandin synthesis on uterine motility of castrated ewe treated with—2414
- effect of GnRH on LH release and luteal function during early lactation—1230
- effect of priming—1230
- effect of progesterone on estrogen-stimulated uterus—1287
- effect on selective transfer of I_4G-1 , into mammary secretion—700
- ewes flushed on lucerne—2650
- failure of prolactin to initiate lactogenesis—1346
- hemoglobin type and reproductive performance of sheep grazing estrogenic pasture—3180
- in formononetin from red clover—1537
- in milk reflecting reproductive changes, a review—991
- influence on response of uterine arterial smooth muscle to norepinephrine—2377
- pastures and feeds—814
- receptor control of prostaglandin F-2 alpha secretion of uterus—1914
- receptors in castrated ram pituitary cytosol—2955
- receptors, mammary gland, effect of 17-beta estradiol—1527
- reproductive performance of ewes grazing Pwera red clover at mating—1536
- synthetic, hazards in meat production—1288
- transformation by rumen microorganisms of 19-norgestagens to—1323
- treatment of castrated rams, serum levels of prolactin—2289
- uterine receptors, a review—2970
- ESTROGENIC CLOVER**, grazing, cervical histologic changes after prolonged grazing on—1760
- ESTRONE**, concentration in blood and amniotic fluid from 50th to 90th day of pregnancy—1221
- immunization against, in anestrus ewes, LH and FSH plasma levels—1875
- immunization, effect on estrus, ovulation and lambing in Merino ewes—1880
- protein conjugate, active immunization—2471
- sulfate, in pregnant ewe—3032
- ESTROPHILIN**, immunochemistry—1142
- ESTRUS**, a review—2956
- annual variations of radioimmunoassayable melatonin—138
- clearance in milk of tritium-labeled fluorogestone in lactating ewe treated for synchronization of—1848
- comparison between intravaginal sponges and subcutaneous implants for synchronising, Karakul ewes—940
- comparison of LH and prolactin levels in cycling and anestrus ewes—1425
- comparison of methods of synchronization—3322
- comparison of two methods of synchronizing, commercial sheep flock—1215
- concentration of free 17-beta estradiol in blood plasma of ewes after treatment with chlormadinone acetate in two synchronized cycles—1222
- control by ear implant or intravaginal sponge (cronolone)—374
- control of preovulatory endocrine events, in-

- terrelationship of estradiol, progesterone and LH—1508
- cycle in Libyan ewes—1212
- depression in clover disease—23
- determination of duration, optimal insemination time in Karacabey Merinos—541
- dihydroergocryptine and dihydroalprenolol binding in myometrium during—2496
- dose effect of prostaglandin in double injection regime—1150
- effect of embryo transplants—1949
- effect of estradiol 17-beta on gonadotropin releasing hormone mediated release of LH during—2057
- effect of exogenous oxytocin on estrous cycle length and corpus luteum lysis in ewes—1264
- effect of high temperatures—2645
- effect of immunization against androstenedione or estrone—1880
- effect of time of year—3083
- effectiveness of hormonal stimulation, different levels of nutrition—1652
- effect of LHRH on behaviour—2758
- 8 breed groups in Wisconsin—1706
- enzyme histochemistry of uterus—3330
- fertility of ewes on low doses of estradiol during synchronized—1394
- histophysiological characteristics of subcornu-missural organ of ewes—2130
- impedometric properties—18
- in progestagen-treated ewes given GNRH and GNRH analogues and gonadotrophins—2435
- in progestagen-PMSG treated Galway ewe lambs—2423
- induced, estimation of genetic parameters of Lacaune ewe lamb size after fecundation on natureel-litte—363
- induced, FSH, LH and prolactin release—2954
- induction and fertility in anestrus ewe with hormones and controlled lighting—1943
- induction, injection of colostrum—785
- induction in Lacha breed out of season—2353
- interval to next, after removal of preovulatory follicle and ovary—606
- length, Oudah ewe—1023
- maintenance of corpus luteum in early pregnancy, luteotropic properties of embryonic homogenates—879
- management of ovarian function, a review—720
- maternal recognition of pregnancy in ewe and rabbit—378
- Merino ewes—355
- mucus histochemistry, cervix—1302
- neuroendocrine regulation—1720
- occurrence in pregnant Barki and Merino ewes—3319
- ovarian effects of bovine follicular fluid—1993
- plasma concentrations of LH follicle stimulating hormone and progesterone in ewes immunized against androstenedione or testosterone—1867
- practical significance of progesterone estimation and use of prostaglandin F-2 alpha analogue (cloprostenol) in sheep reproduction—325
- pre-puberal plasma LH and progesterone during and early pregnancy in Galway and Fingalway lambs—2429
- progesterone and LH concentrations in ewes after ICI 80996, an analogue of PGF-2 alpha, at 2 different stages of breeding season—12
- prostaglandin E-2 and F-2-alpha in follicles before and during—2086
- prostaglandin for synchronization—1802
- ram-induced ovulation in seasonally anovular Merino ewes, effect of estradiol on frequency of ovulation estrus and short cycles—1878
- ram mating system on fertility in progestagen-PMSG treated ewes—372
- regional brain content of luteinizing hormone releasing hormone—3231
- seasonal and cyclical changes in ovaries of Libyan ewes—196
- secretion of LH, Finnish Landrace—2421
- synchronization, aid to management in small flocks—3146
- synchronization and economic efficiency—1100
- synchronization, artificial—2428
- synchronization, by ICI 80,996 (cloprostenol)—1650
- synchronization, dosage and time of prostaglandin administration following progestagen pretreatment—1151
- synchronization, Galway ewes—2795
- synchronization in Tabasco or Pelibuey ewes—1886
- synchronization over 12 year period using oral map treatment for 10 days—3123
- synchronization, using ICI 80996—1590
- synchronization with prostaglandin injections during estrus and anestrus—3150
- use of prostaglandins to synchronize—2558
- uterine estrogen and progesterone receptors, a review—2870
- uterine prostaglandins, production and content during second half—83A
- water and electrolyte excretion—1980, 2009
- ETHANOL, effect on circulation and acid base balance of pregnant sheep—191
- ETHYLENEDIBROMIDE, effect on differentiation of acrosome nucleus and transient nuclear appendages in spermatids—1361
- ETIOLOGY, importance of *Erysipelothrix insidiosa* in arthritis—2152
- ETHIOPIA, occurrence of two new serotypes of *Pasteurella haemolytica*—2312
- two new serotypes of *Pasteurella haemolytica* from sheep—2400
- ETHOLOGY, behaviour of ewes and lambs after delivery—1354
- ETHOMOTURBINATE TUMOURS, in sheep—920

- ETHYLENEDIBROMIDE**, pattern and dynamics of teratospermia induced by parenteral treatment—876
- ETOMIDATE**, plasma esterase activity—499
- EUROPE**, census of sheep—3073
- EUROPE**, ecology and distribution of Q-fever rickettsiae—1752
- EUROPEAN ASSOCIATION FOR ANIMAL PRODUCTION**, sheep and goat commission—688
- EUROPEAN COMMON MARKET**, sheepmeat trends in development of German Federal Republic production under conditions
- EUROPEAN COMMUNITIES COMMISSION**, draft decision of Council concerning negotiations of autolimitation arrangements with non-member countries in sheep meat sector—907
- EUROPEAN COMMUNITY**, few changes in market for lamb—116
- EUROPEAN ECONOMIC COUNCIL**, sheepmeat and—1996
- EUTOCIA**, pelvic measurements of ewes and histories of dystocia and eutocia—1940
- EVOLUTION**, conservation of nucleolus organizer regions during evolution in sheep, goat, cattle and aoudad—1292
- models of distribution for populations of sheep after migration from center of origin—1700
- EWE**, autumn lactating, reducing partum-to-mating period in, through exogenous hormones—1229
- changes in cervical histology following prolonged grazing on estrogenic clover—1760
- circles, modern developments and selection schemes in sheep breeding—863
- comparison of different weaning policies for ewes suckling triplets at pasture—2224
- comparison of LH and prolactin levels in cycling and anestrus—1425
- concentration of free 17-beta estradiol in blood plasma after treatment with chlormadinone acetate—1222
- Corriedale, production, first mated at 7 to 11 or 18 months of age—2373
- cull, jaws of adults—2512
- during pregnancy and lactation, glucose, urea, and amino acids levels, effect of nutritional state during late pregnancy—1158
- effect of exogenous oxytocin on estrous cycle length and corpus luteum lysis in—1264
- effect of intrauterine threads on fertilization—1012
- effect of Mn-deficient feeding to ewes on certain amino acids and sugars in cartilage of their newborn lambs—1313
- effect of single dose of selenium salts on whole blood level of selenium in, on a selenium-deficient diet—1942
- effect of timing of ram introduction on fertility in progestagen-PMSG treated anoestrous ewes—370
- estrus, ovulation and ovum transport, Merino—355
- evidence and evolution of chorionic gonadotropin—1667
- exercising, metabolism of glucose—553
- fetal and maternal hormonal response to starvation—2670
- Finn, postpartum reproductive performance of crossbreds—995
- Finnish Landrace, vaginal temperature and eating, drinking, standing and walking activity rhythms of four anoestrous—1371
- Gaddi, utilization of mixed *Zea mays* and *Sorghum vulgare*—2253
- Greyface, effect of time of mating on ovulation rate and potential lambing rate—1187
- highly fertile, feed intake—777
- Icelandic, fecundity—16
- induction of male behaviour after ovariectomy and ovariectomized-androgenized ewes chronically implanted with estradiol-17B or testosterone—590
- isolation of species of *Ureaplasma* in Northern Ireland—1909
- Kentucky profit schools—560
- Lacha, induction of estrus out of season—2353
- lactating, effect of iodine supplementation, on growth and maturation of their offspring—2220
- local steroid concentrating mechanism in reproductive vasculature—3186
- management for control of reproductive performance—1183
- masculination of genitalia, clover disease—22
- Merino, stimulation of seasonally anovular, by rams, time from introduction of ram to pre-ovulatory LH surge and ovulation—2208
- milk, production of feta cheese—3122
- non-pregnant, life span of corpus luteum, effect of continuous intrauterine administration of prostaglandin E-2—2396
- nutrition, effect of colostrum deprivation on young lambs—1553
- outbreak of vulvitis, possible association with *Lyperosia irritans*—686
- patterns of blood flow to uterus and ovaries during period of luteal regression—996
- peripartal, uterine myoelectrical activity—1639
- pregnant, chronic preparation for pharmacological research, placental transfer and fetal effects of bunitrolol—3100
- pregnant, congenital abnormalities in newborns following infection with Akabane virus—1261
- pregnant, fate of labeled choline given intraruminally to animals fed manganese-deficient or supplemented ration—1312
- pregnant, rupture of vagina—569
- prolific, accretion of nutrients in fetus and adnexa—1918
- radiographic pelvimetry—1941
- rise in intramammary pressure after injection of water into inguinal artery—1664
- Ronney, relation between plasma progesterone in late gestation and incidence of dystocia—1596

- serologic methods for detection of brucellosis—1409
- sexual behaviour, effect of progesterone on steroid-induced male and female sexual behaviour in adult ovariectomized—917
- stimulation of seasonally anovular Merino, premature regression of ram-induced corpora lutea—2207
- teratogenicity and toxicity of coniine—1526
- use of lactating, in evaluating protein sources for ruminants—1109
- uterine uptake of amino acids throughout gestation in unstressed animals—2047
- EXCRETION**, of ⁷⁵Se, bile, urine and feces—729
- oxytetracycline, wethers—407
- partition of nitrogen in sheep feces with detergent solutions, and its application to estimation of true digestibility of dietary nitrogen and the excretion of non-dietary fecal nitrogen—1892
- phenols—1502
- sodium and potassium, amiloride—2438
- EXERCISE**, effect of somatostatin on plasma glucagon and insulin and glucose turnover in exercising sheep—436
- glucagon responses—433
- tolerance, reduced by infections with *Eperythrozoon ovis*—2708
- EXOPHTHALMOS**, therapeutic management—1703
- EXOTOXIN**, *Corynebacterium ovis*, action on endothelial cells of blood vessels—522
- EXPERIMENTAL DESIGN**, utilization of concomitant variables—1028
- EXPORT**, live sheep, Irish Republic—1401
- regulations, France—1009
- sheep from Australia, need for veterinary involvement—926
- sheepmilk's potential—1043
- EXTENDERS**, new, for freezing ram semen—961
- EYE**, anatomy, tapetum lucidum fibrosum—386
- identification of *Moraxella bovis* and *Neisseria ovis* from cattle and sheep—1011
- rapid movements, fetal breathing movements—718
- EYE DISEASES**, keratoconjunctivitis, isolation of *Neisseria ovis*—458
- Mycoplasma* as etiological agent of keratoconjunctivitis—2887
- F**
- FABABEAN**, starch, as energy source with urea in liquid supplements for finishing lambs—2850
- FABRICS**, polyolefin, rugging, benefits and economics—2
- synthetic, rugging of sheep with polyolefin fabrics, benefits and economics—1
- FACTOR XII**, or Hageman Factor, studied by immunological technics plasmas—2609
- FALLOPIAN TUBE**, maturation of secretory granules in endosalpinx 1-4 days post coitum—2580
- FAO**, data on production of milk, cheese, ghee, etc.—987
- world production statistics—986
- FARMERS**, sheep, apprenticeship program in Canada—2843
- FARMING**, in Italy—660
- large operation, veterinary work—2279
- Northern Ireland, fattening lambs—3269
- science and hill farming, 25 years of work at Hill Farming Research Organization from 1954 to 1979—3066
- sheep, and reindeer nomads in Soviet Union—1755
- sheep, central Karakum desert—2128
- sheep, economic technics for assessment of sheep systems—1904
- sheep, intensification of production and world trade in sheepmeat, France—396
- FASCIOLA**, efficacy of febantel—1208
- FASCIOLA GIGANTICA**, in Guinea—2662
- on Ahmadu Bello University farm, Nigeria—2718
- outbreaks at Ahmadu Bello University in Nigeria—3119
- pathogenicity in West African Dwarf ewes—2197
- snail intermediates in Nigeria—3119
- FASCIOLA HEPATICA**, antigenic relationship with *Cysticercus tenuicollis*—171
- chemoprophylaxis with diamfenetide—895
- clinical symptoms—3027
- comparative study of patho-physiological repercussions of experimental infection—1711
- comparison of pathological effects of experimental infections in rabbits, sheep and cattle—254
- economic losses—2502
- effect of existing or concurrent infections on *Taenia hydatigena* infections—502
- effect of prior infection on resistance—1945
- effect of route of infection on acquired resistance—1533
- efficacy of albendazole—503
- efficacy of albendazole—1458
- efficacy of fenbendazole—623
- epidemiology, Northern Victoria, Australia—1946
- fasciolicidal activity of halogenated benzene-sulfonanilide—1271
- in cattle, sheep and molluscs in Macedonia—98
- infections, clinical picture—2575
- influence of protein intake on albumin metabolism of infected sheep—696
- nitrogen balance studies—572
- pathophysiology, feed intake and digestibility, body weight and nitrogen balance of sheep given hay and pelleted diet—697
- sheep, Great Britain—1138
- FASCIOLIASIS**, anthelmintic activity of halogenated benzene-sulfonanilide—2015
- epidemiology, Denmark—2686

- epizootiology, course of infection and treatment—2878
 in Macedonia—98
 in Yugoslavia—98
 mountainous pastures, Yugoslavia—2641
 on Ahmadu Bello University farm, Nigeria—2718
 prognosis and prophylaxis—1964
 treatment of cattle and sheep in tropical Africa with Rafoxanide—1128
 use of nitroxynil—2333
- FASTING**, influence on volatile fatty acids and ammonia levels in rumen—1034
 mitochondria in liver—362
 response of plasma growth hormone to short-term, and spontaneous meals—817
- FAT**, body, composition, long-term effect of feeding protected sunflower seed supplement—2000
 body content, in chronic infection with *Trichostrongylus vitrinus*—2914
 carcass, characteristics, effect of barley fed whole, ground or pelleted—1741
 carcass, petechial hemorrhage—2988
 carcass, Romney, Corriedale, Dorset, and cross-breeds—1047
 content of heavy-weight lamb carcasses of several breeds and crosses—619
 development of depots in carcass—75
 distribution, carcass, effect of Finnish Landrace and Galway breeds—1243
 evaluation of subcutaneous and intermuscular, in several crossbreeds—2970
 in Muzaffarnagri, Dorset and Suffolk, natives and crossbreeds—1495
 milk, and milk production in Awassi ewes in Macedonia—2999
 milk, Spanish ewe—1029
 thickness, carcass, surface bacterial counts during chilling and holding—2637
 yellow, nature—2576
- FAT-RUMPED**, ewes, crossbred with Finnish Landrace, performance—3299
- FAT-RUMPED SHEEP**, origin—2056
 several breeds, Karakul, Hissar, Tajik and Saraja—2056
- FAT TAIL**, anatomy of arteries, breeds in Iran—168
- FAT-TAIL**, impediment to pregnancy—1318
- FATTENING**, activities of enzymes of glycolytic, citrate cycle fatty acid oxidation and respiratory chain in diaphragm tissue of lambs—3279
 cement kiln dust in complete diets—3236
 criteria for effective use of urea—2255
 effect of age, weight, and sex, Merinos—3132
 effect of breed and castration on performance of Iraqi lambs—80
 effect of complete mixed feeds with different protein content—2164
 growth of store lambs on cereal-based diets with protein or urea—2189
 importance of phytoestrogens—2379
 intensive lamb, values of hematological indices—2771
 lambs, assessment of use of biostimulators—2436
 lambs, corn silage, nitrogen source and zeranol implants for—1386
 lambs, effect of zeranol implants—2323
 lambs, ensiled swine waste as feed—1863
 lambs, ensiled swine waste as food—1879
 lambs, feeding of dimethyldodecanamine—2583
 lambs, feeding of ensiled and dehydrated maize whole plant—405
 lambs, on lowland farms in northern Ireland—3269
 lambs, phase feeding—773
 lambs, production and quality of wool of, from different commercial crossbred types of Polish Merino ewes and mutton-type rams—2237
 lambs to 35 kg, weaned at 2 days—1617
 lambs, urea as substitution for sunflower oil-meal—1387
 lambs, value of grass and grass/clover silages for store lambs—2479
 meat quality in relation to quantity of pelleted feed—1633
 performance and meat production of progeny of Romanov ewes mated at different ages—1778
 performance, crossbred rams—1620
 performance, effect of method of castration—2844
 performance, hybrid lambs—774
 performance, in relation to age at first mating of dams—1768
 performance of lambs in crosses with East Friesian sheep, Cyprus—672
 performance, results of using Romanov and Ile-de-France rams for production of hybrid lambs—130
 protein and vitamin concentrates—1140
 ratios of digestible protein and energy—1095
 sustenance by intragastric infusion of volatile fatty acid and protein—2912
 use of anabolic steroids—1776
 use of dried sugar-beet pulp with molasses, Karakul lambs—1126
 use of pellets—1660
 value of nitrogen metabolites and mineral components of serum—3159
 waste roughage in diets for fattening early weaned lambs—2364
 wether lambs, Northern Ireland—1920
 young male Turcana sheep by different methods in mountain area—188
- FATTY ACID OXIDATION**, enzymes, in diaphragm of lambs, relation to fattening and carcass quality—3279
- FATTY ACIDS**, adaptive strategies of selective deposition in bone marrow of desert bighorn sheep—3048

- characterization of ethyl substituted forms—2784
 composition, carcass, effect of Finnish Landrace and Galway breeds—1243
 dehydrogenase activity in fatty tissue of lambs given diets of different physical structure with fatty acid supplements—54
 desaturases, role in supply to fetus—2773
 efficiency of utilization of, for maintenance and energy retention—2229
 (free), blood plasma, effect of endogenous insulin and glucagon—906
 free, plasma levels, effect of infusion of sorbite electrolyte and sorbite solution—1624
 identification of methyl-branched, from triacylglycerols of subcutaneous adipose tissue—2785
 role of desaturases of placenta in supply to fetus—2688
 rumen, effect of feeding frequency on diurnal changes—1978
 rumens rendered nonfermentive after infusion—3282
 transfer across placenta—885
 volatile, efficiency of utilization for maintenance and energy retention—2190
 volatile, level in digestive tract of sheep fed pelleted diets—235
 volatile, levels, rumen, influence of fasting—1034
 volatile, neurotoxicity of molasses—826
 volatile, sustenance of growing and fattening by intragastric infusion of—2192
FEATHER, meal, hydrolyzed, effect of inclusion in liquid supplements when fed with low quality roughages—1143
FEBANTEL, anthelmintic efficacy in ruminants—3254
 determination of effect on breeding ewes and their offspring—2940
 efficacy against natural infections of *Dicrocoelium* and *Fasciola* spp.—1208
 efficacy against natural infections of protostrongyles—1207
 efficacy against nine nematodes common in sheep—2941
 efficacy against various gastrointestinal parasites of ewes—2620
 new broad-spectrum anthelmintic—2598
 ovacidal activity—2963
 safety—1351
FECES, bacterial residues nitrogen, estimates from 47 digestibility trials—1891
 cuticle analysis, diet determination and field application—2859
 non-dietary fecal nitrogen from bacterial residues—1890
 proteinase inhibitor of lamb meconium and—1506
 swine, digestibility and palatability in ensilage—302
FECUNDITY, body weight relationships in different ewe breeds—1241
 effect of correction factors—1470
 effect of quality of ram—2685
 hormonal indicators of genetic variation—1245
 Icelandic ewes—16
 Texel and Texel-cross ewes—1237
FEED, additives, animal production—1602
 and feeding, a monograph—655
 chewing and the physical breakdown of feed—2483
 conversion efficiency—905
 digestibility, determination of acid-insoluble ash as index of digestion—2166
 digestibility, male lambs—1556
 effect of dry matter concentration and preservation method of whole barley on utilization—2230
 effect of level on dressing percentage—473
 effective utilization—1042
 efficiency, coccidiosis, lambs on monensin and aureomycin—2618
 efficiency, effect of monensin on—1477
 efficiency, effects of artificial lighting on feeder lamb performance—1216
 estimation of digestibility and metabolizable energy content when incubated with rumen liquor in vitro—1961
 estrogenic activity—814
 insolubility of proteins—3174
 intake stimulant, review of behavioral and physiological responses to alfazepam—202
 mixtures with different amounts of urea—2264
 pelleted, composition—855
 pelleted, sheep, rumen function and morphology of epithelium—232
 sheep as pilot animals—1277
 typical composition—2406
 urea as important component of pelleted form—1519
 utilization of chopped and pelleted lucerne by growing lambs—2958
 utilization of oats and barley treated with sodium hydroxide—2231
FEED BLOCKS, new anthelmintic in worm control—963
FEED CONVERSION, genetic aspects—1604
 in pen fed Romney, Coopworth, Perendale and Corriedale—2882
FEED CONVERSION EFFICIENCY, relationship between eating rate and gastrointestinal tract fill—581
FEED EFFICIENCY, and carcass characteristics of ram lambs slaughtered at 4 weights—279
FEED INTAKE, effect of photoperiod—442
 milk by suckling lambs, technics of estimation—800
 performance—581
 sheep with fascioliasis—697
FEEDING, a review—432
 absorption of amino acids from small intestine, formaldehyde treatment of concentrated diets—923
 alkali treated straw and urea for pregnant ewes—1990

- alkali treatment of paddy straw, effect of energy and nonprotein nitrogen supplementation on digestibility and intake—1445
- amide concentrate supplement in diets—159
- amide concentrate supplement in diets for suckling ewes—717
- ammoniated straw—1704
- and depression of abomasal secretion elicited by elfazepam and Δ^9 -cannabinol-3—96
- and feeds, a review monograph—655
- apple pomace—2582
- artificial, on special experimental farms—3310
- assessment of growth promoters in fattening of lambs on concentrates—2436
- automatic analysis of feeding and ruminating behaviour—1743
- availability of nutrients on pastures—2257
- barley supplements on voluntary intake and digestion of low quality roughages—1671
- behaviour, among groups of lambs self-fed varying diets in two slotted floor pen sizes—2865
- behaviour, among groups of self-fed lambs in two locations and two pen types—2867
- behaviour, lambs self-fed varying diets in two slotted floor pen sizes—2864
- behaviour monitoring effect of selected compounds—828
- behaviour of Ossimi sheep under summer conditions in Egypt—1613
- behaviour of sheep given pelleted feeds—2420
- behaviour, relationship with rumen contents—1307
- biologic evaluation of ensiled and dehydrated maize, influence of drying temperature—404
- blood gas changes during—2012
- breeds compared, effect of pasture allowance on performance—2469
- brown midrib vs. normal corn plants harvested as whole plant or stover and preserved as silage or frozen fresh—354
- cannabinols—1930
- cement kiln dust for finishing—3236
- cement kiln dust, lamb diets—3192
- certain metabolic indices in rumen and blood of sheep fed granulated and pelleted feed mixtures with different urea levels—2263
- characterization of ethyl substituted fatty acids from lamb subcutaneous triacylglycerols by combined gas chromatography mass spectrometry—2784
- chemicals, metabolism—856
- cobalt supplementation in Yankassa sheep in northern Nigeria—1211
- coffee extraction residues—3220
- compensatory growth—2987
- concentrates affect glucoregulatory hormones, implications in ketosis—314
- conversion efficiency—636
- corn silage grown on sludge-amended soil, performance of lactating goats and lambs—2272
- comparison of forage value of buckwheat and sorghum stubbles grown on Southern Tablelands of New South Wales—2075
- continuous injection into cerebral ventricles of cholecystokinin octapeptide suppresses food intake—740
- coumestan, effect of PMSG treatment on ovulation rate—2142
- diet and caecal motility in sheep—959
- dietary energy levels for lactating ewes—888
- dietary lipid, effect on absorption of Mg and Ca—1129
- different sources of protein in rations of lambs weaned early—1643
- digestibility of protein and fiber of fermented straw enriched with protein—3321
- digestibility of straw treated with ammonia or caustic soda—1014
- digestion of partially hydrolyzed starch in milk replacers—2957
- distillery effluents, condensed beet molasses slop for lambs—1840, 1841
- dried sugar beet pulp with molasses in fattening lambs—2629
- dried sugar-beet pulp with molasses as concentrate feed for feedlot Karakul lambs—1126
- dry-matter intake and nutrient digestibility, Muzaffarnagari lambs fed diets with varying concentrate-roughage rations—60
- duodenal nitrogen flow in response to increasing dietary crude protein in sheep—1699
- economic aspects—2495
- ectopic calcification in lambs from feeding the plant *Cestrum diurnum*—2743
- effect of adding selenium to diets—3247
- effect of adding sodium bentonite to high grain diets for ruminants—609
- effect of, and effect of daylength on lamb growth, blood levels of GH, prolactin, insulin and thyroxine—992
- effect of barley fed whole, ground or pelleted and of a high level of supplementation, performance and carcass fat characteristics of lambs fattened on concentrate diets—1741
- effect of *Chondrus crispus* (Irish moss) on condition and fertility of Shropshire ewes—426
- effect of chopped and ground hay on ruminating behaviour—2203
- effect of complete mixed feeds with different protein content on fattening lambs—2164
- effect of diet and stage of growth upon energy utilization by lambs—951
- effect of dietary intake of calcium and phosphorus on absorption and retention by mature Ca-replete sheep—411
- effect of dietary lactic acid on rumen lactate metabolism and blood acid-base-status of lambs switched from low to high concentrate diets—1374
- effect of different amounts of hay intake on ruminating behaviour—1259
- effect of dry-matter concentration and preservation method of whole barley on feed utilization by early-weaned lambs—2191
- effect of elfazepam on apparent digestibility, intake and gain in sheep—1111
- effect of feeding *Calotropis procera*—1829
- effect of feeding cull domestic onions—1569
- effect of 5-hydroxytryptamine—201

- effect of four corn silage and corn grain ratios and nitrogen source on digestibility and nitrogen retention in lambs—1385
- effect of four corn silage and corn grain ratios and nitrogen source on rumen function and plasma urea nitrogen—2974
- effect of frequency, on diurnal changes in microbial protein, volatile fatty acids and ammonia contents of rumen—1978
- effect of graded levels of zeranol implants on growing-finishing lambs fed orchardgrass hay versus cottonseed hulls as their source of roughage—1916
- effect of including hydrolyzed feather meal in liquid supplements when fed with low quality roughages—1143
- effect of insulin—2150
- effect of large amounts of concentrates on health of lambs—2742
- effect of latex of *Calotropis procera* in sheep and goats—1830
- effect of level and amount of herbage on intake and performance of ewes with twin lambs at pasture in early lactation—2003
- effect of level of urea nitrogen on its utilization in alkali-treated wheat straw in pelleted rations—59
- effect of litter size on intake and performance of ewes given concentrates and grass silage in late pregnancy—2223
- effect of lupin grain and recently cut lucerne on intake and digestibility of mature weathered herbage by border Leicester x Merino ewes—2531
- effect of nitrogen and energy supplementation on voluntary intake and digestion of heather—2002
- effect of nitrogen, phosphorus and potassium fertilization on chemical content of sheep diets—808
- effect of particle size of corn silage on digestibility and rumen fermentation—2880
- effect of pelletized feeds on morphological changes of epithelium of proventriculi in rams—2777
- effect of protein content on the diet on feed intake and milk yield of ewes in early lactation—637
- effect of readily available carbohydrate and roughage source on performance of lambs and steers fed liquid supplement—1994
- effect of roughage or concentrates and rumen retention time on total degradation of protein in rumen—1026
- effect of season and level of grazing on utilization of heather by sheep—2001
- effect of size and density of dried forage packages on intake and performance—2950
- effect of supplemental calcium carbonate on distribution of iron, copper, zinc and manganese in digestive tract—3307
- effect on blood flow in mesenteric blood vessels—2769
- effect on milk production—706
- effect on nitrogen digestion of supplementing low protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1540
- effective utilization of feeds—1042
- effectiveness of artificial rearing—3057
- effects of acid-preserved high-moisture barley and pelleting on utilization of all-concentrate diets by early-weaned lambs—2921
- effects of magnesium fertilization on mineral utilization and nutritional quality of alfalfa—2485
- element and polychlorinated biphenyl deposition and effects in sheep fed cabbage grown on municipal sewage sludge—1260
- encapsulated methionine supplementation of diets varying in energy and protein—492
- endocrine, enzyme and fetal weight in undernourished ewe—2683
- energy utilization of maize silage fodder by growing sheep—467
- ensiled and dehydrated maize—2100
- ensiled soybean residues with various additive—1988
- ensiled swine waste and corn grain, digestibility and palatability—302
- ensiled swine waste as feed for gestating sows and fattening lambs—1879
- estimation of nutrient digestibilities of straw as single forage and as ration component—1531
- estimation of rumen load through measuring consistency of rumen contents—1306
- evaluation of waste wood pulp in diets for finishing lambs—1735
- factors affecting concentrations of free amino acids in blood and their effect on the calculation of amino acid requirements in preruminant lambs—2301
- factors affecting feed utilization—905
- factors affecting voluntary food intake by sheep—1166
- factors affecting voluntary intake of food, role of distension and tactile input from stomach compartments—1167
- factors limiting intake—3224
- fattening and meat quality of meat in relation to quantity of pelleted feed—1633
- fattening, lambs, feeding of dimethyldodecanamine—2583
- fattening of wether lambs in Northern Ireland—1920
- feed additives in animal production—1602
- feed intake of non-pregnant, pregnant and lactating ewes on native pasture and lucerne hay—892
- feed mixtures with varying urea—2264
- feed value of straw, influence of additional preincubation with rumen fluid of animals deprived of food on the in vitro rate of protein synthesis—1262
- feedlot performance affected by monensin—493
- fermentation and nitrogen dynamics in Merino sheep given a low-quality-roughage diet—2172
- fibrous hay, intake and digestibility by sheep

- fed sewage solids in supplemental feed—2219
- fish protein hydrolysates as milk substitutes for lambs—2814
- fodder containing urea in North German Moorland, digestibility of dry masses and nitrogen in single gastrointestinal sections—423
- following injection of neurotransmitters and carbachol—818
- food intake and rumen osmolality—1516
- forages in Yucatan, Mexico—2828
- function of rumen after use of pelleted rations—233
- further studies on responses of lactating ewes to dietary protein—2543
- grass silage, low quality, at end of gestation and beginning of lactation—2994
- grazing Pawera red clover at mating, reproductive performance—1536
- grinding and age of corn stover effect on digestion, intake and growth of sheep—1545
- growth and productivity of different constitutional-productive types of sheep in relation to nutrition—2871
- growth of store lambs on cereal-based diet with protein or urea—2227
- hand, sheep, energy and protein requirements—1364
- haylage for suckled lambs—1628
- increase in protein—1632
- influence of birthweight on digestibility of milk-replacer in newborns—1358
- influence of different organizations of pasturing ewes on intensively cultivated permanent grass stands on growth of grass mass and productiveness of ewes—1659
- influence of formaldehyde-treated protein, changes in rumen fermentation—2449
- influence of hay from area with heavy pollution of atmosphere with nitrogen compounds on some biochemical parameters of blood and rumen contents—1488
- influence of length of feeding milk substitutes on early weaned lamb growth—2817
- influence of season on behaviour of sheep getting green forage in a wet tropical zone—1975
- ingestive behaviour under field conditions—461
- intake and carcass composition of lambs sired by Texel, Suffolk, Lleyn and Galway rams—1239
- intake and digestibility of fababean crop residue—2982
- intake, genetic effect—1236
- intake, seasonal—1521
- intakes by highly fertile ewes—777
- intensive system of pasture in New Zealand—1252
- interrelationships of deer and sheep in Mendocino and Lake Counties, California—1790
- interval, in lamb raising and lamb fattening—1328
- intracerebroventricular injections of cholecystokinin octapeptide—948
- iodine supplementation of pregnant and lactating ewes on growth and maturation of their offspring—2220
- lamb growth, effect of daylength, comparisons of sex, level of feeding, sharing and breed of sire—993
- lambs, cereal grains and lucerne hay for finishing—1428
- lambs, ensiled and dehydrated whole plant maize—405
- lambs fail to improve with cement kiln dust supplements—1475
- lambs, nitrogen utilization, Barbados Blackbelly—2243
- lambs, seaweed meal—2464
- lambs, tritiated water turnover rate as estimate of milk intake—806
- large amounts of fresh and ensiled sugar beet leaves—2391
- late pregnancy, and perinatal mortality—337
- late pregnancy ewe, and lamb performance in early life, factors associated with perinatal lamb mortality—1552
- level of lucerne hay, influence of physical structure and cutting date, digestibility—2269
- long-term control of voluntary food intake—2282
- long-term effects of feeding protected sunflower supplement on composition of body fat in growing sheep—2000
- low availability of dietary choline—2124
- low magnesium diets, metabolism—2714
- lucerne, utilization—2978
- maintenance requirement of growing lambs—2979
- maize stover, nutritive value of thermo ammoniated and steam treated, intake, digestibility and nitrogen retention—2246
- mefluidide treatment of fescue, effect on nutrient utilization—2527
- method of studying behaviour among groups of lambs by recording feeder usage—2866
- milk intake and growth of Dorset lambs as affected by number of suckled lambs, sex and milk yield of ewe—3278
- NaOH-treated crop residues, mineral balance and digestibility—145
- nephropathy associated with semi-purified diet of low copper content—2513
- nervous symptoms in ewes fed fescue silage—1952
- nitrogen supplementation to maize silage for early weaned lambs—388
- nursing lambs, testing objectivity of quality criteria for carbamide concentrate—2256
- nutritional value of cowpea, moth (dewgram) and cluster-bean fodders fed as hay—2300
- nutritive value of pressure-steamed aspen for mature sheep—2691
- pasture utilization—1917

- pelleted diets, level of volatile fatty acids in gut—235
 pelleting, an effective method of preparing feeds—3334
 performance of steers and lambs fed corn stover ensiled with broiler litter or soybean meal—1113
 performance of Watish lambs when fed different levels of energy and protein concentrate supplement—40
 phase, lambs, fattening—773
 potatoes and grain sorghum in production of prime lamb—134
 poultry dropping—3139
 poultry excreta in concentrate mixtures, growth response and feed intake—2628
 predicting digestibility, straw, 970
 prediction of protein requirements and implications of these predictions for diet formulation—1989
 pregnancy levels, and perinatal lamb mortality—1551
 productivity of lambs reared on milk substitutes with protein and vitamin concentrates—464
 radiography of intake and pseudoruminant behaviour—756
 recent information on processing of grains—2226
 relationship between eating rate and gastrointestinal tract fill—581
 relationship between hay intake and ruminanting behaviour—2204
 relationship between voluntary food intake during pregnancy and forage intake during lactation and after weaning—989
 relative value of single-cell proteins and groundnut-cake as protein supplement in ration of lambs—2115
 replacement of concentrates with roots in diet of early weaned lambs—966
 response of hill lambs to vitamin B₁₂—2292
 response to infusion of graded levels of histidine—937
 responses to intraportal propionate following denervation of liver—103
 rice straw treated with sodium hydroxide to improve nutritional values—1444
 role of enzyme preparations during feeding on straw—2698
 rumen contents, effect on glutamate dehydrogenase activity in organs of broilers—1338
 rumen digestion in lambs fed pelleted diet—2313
 rumen metabolism of sheep fed different levels of urea—2265
 satiety, injection into cerebrospinal fluid of cholecystokinin—739
 sequence of limiting amino acids in groundnut protein isolate for preruminant lambs—2349
 silage-fed, metabolism of methionine—1080
 silage for sheep, a fast food—1345
 silage for summer diets of ewes—1618
 silage intakes in relation to energy requirements of ewes in late pregnancy—2700
 sodium bentonite and sodium bicarbonate in high concentrate diets for lambs—827
 sodium hydroxide-treated tropical grass supplemented with soybean or urea, intake, digestibility and nutrient utilization—1075
 soft coal fly ash as source of selenium in un-pelleted sheep rations—1332
 spontaneous, response of plasma growth hormone to short-term fasting and spontaneous meals—817
 state and prospects, German Democratic Republic—1330
 substitution value of birdsfoot trefoil for alfalfa-grass in pasture systems—1874
 summer annual hays and silages for growing lambs—2179
 sun-dried manure of chicken, pig, sheep and cow as replacement for corn—2217
 supplementary, range sheep—1977
 supplementation of sheep grazing wheat stubble with urea, molasses and minerals-quality of diet, intake of supplements and animal response—2076
 supplementation with magnesium, effect on blood metabolites—2712
 swine waste, fattening lambs—1863
 synthetic protein sources, wool yield—1642
 taste preferences—1388
 toxicologic studies with sheep fed colored magazines and newsprint—2209
 tracheitis in sheep after oral administration of a mineral supplement—2412
 transfer of clopidol to lambs from chickens—2590
 under, ewes, at start of lactation, milk production—797
 uniform, in large scale production—1963
 urea and ketogenesis—368
 urea as partial substitute for protein—2750
 urea as substitute for sunflower oilmeal in mixed feeds for fattening lambs—1387
 urea in diets for lactating ewes, effect on blood serum lipids—2359
 urea, skin morphology and wool quality—790
 use of anabolic steroids in fattening of hoggets—1776
 use of broiler excretion in fattening Awassi lambs—52
 use of electronic doors in group-housed lambs—500
 use of food rations with high straw and NPN content in various breeds—939
 use of grape waste in lambs—2358
 use of pellets for fattening—1660
 use of phosphorus from three different supplements—148
 use of single cell proteins in lamb feeding—927
 utilization by lambs of energy and protein in dried pelleted grass treated with formaldehyde—2976
 utilization by yearling Gaddi ewes of mixed

- Zea mays* and *Sorghum vulgare* greens supplemented with three levels of linseed-cake—2253
- utilization of cereals and implications of processing—2188
- utilization of chopped and pelleted lucerne by growing lambs—2958
- utilization of feed mixtures based on haylage—2690
- utilization of partially hydrolyzed starch in milk replacers—2813
- utilization of roughages—1146
- utilization of sodium hydroxide treated oats, barley by lambs—2193
- utilization of urea-molasses enriched paddy straw and tapioca residue in lamb rations—2478
- value of ensiled mixtures containing rumen residues—2149
- value of grass and grass/clover silages for store lambs—2479
- variation of body composition—787
- various liquid byproducts as protein supplement—3171
- varying levels of concentrates in rations of Sudan Desert sheep—872
- vegetable-waste silages—258
- voluntary intake, growth, body composition and efficiency, quantification of between-animal variation—1951
- voluntary intake of feed and equilibrium body weight—347
- wheat and lucerne hay, survival feeding, pregnant and lactating ewes—595
- whey-grown yeast as protein source for lambs—47
- whey or processed fababeen starch as energy source with urea in liquid supplements for finishing—2850
- zinc supplementation, effect of zinc on canary colouration in Nali sheep—1068A
- FEET, soundness, genetic and environmental effects, in crossbred ewes—2173
- FENBENDAZOLE, against helminths in digestive tract—483
- control of tapeworms and gastrointestinal and pulmonary nematodes—2555
- effect on gastrointestinal nematodes and *Dictyocaulus viviparus*—1196
- effect of single and divided doses on efficacy against benzimidazole resistant trichostrongyles—3240
- efficacy against most important trematodes and cestodes—623
- efficacy against *Protostrongylus* and *Dictyocaulus filaria* in Moroccan sheep—683
- efficacy given via feed-block carrier—1908
- evaluation as anthelmintic in bighorn sheep—2663
- in Poland, use—319
- ovicidal and larvicidal activity—834
- testing in Australia—1434
- treatment of benzimidazole-resistant *Trichostrongylus colubriformis* and *Haemonchus contortus*—1182
- value for controlling nematodes of family Protostrongylidae—2455
- value and limitation in treatment of gastrointestinal trichostrongylids—801
- FENCING, type, influence on grazing behaviour and social facilitation in Merinos—1808
- FERAL ANIMALS, artificial transmission of nematodes from blesbok and impala to sheep, goats and cattle—1355
- FERAL SHEEP, ectoparasites, Campbell Island, New Zealand—1279
- population trends and habitat changes on Campbell Island—769
- FERMENTATION, and nitrogen dynamics in Merino sheep given a low-quality-roughage diet—2172
- effect of particle size of corn silage—2880
- FERTILITY, affected by number of motile sperm and plane of nutrition—3
- after artificial insemination with fresh and frozen semen at induced estrus—603
- altered response of cervical and vaginal epithelia to estradiol after prolonged exposure to estrogenic pasture—21
- anti-acrosin antibodies in sera, colostrum and genital organs of vaccinated ewes—3198
- and trace element deficiencies, a review—1308
- application of sex hormones—391
- Caucasian breed—2160
- Cheviot, effect of body condition at mating on ovulation rate and early embryo mortality—1184
- Cheviot, effect of pre-mating nutritional level on ovulation rate and early embryo mortality—1185
- economic losses due to fascioliasis—2502
- effect of carotene and vitamin A, rains on semi-arid pasture—2525
- effect of dilution of semen with seminal plasma, Ovce Polje-Merino grade rams—3000
- effect of exposure to high temperatures—2645
- effect of immunizing ewes with ram sperm acrosin and hyaluronidase—2051
- effect of induced parturition on subsequent fertility of Karakul ewes—2073
- effect of intrauterine threads on fertilization—1012
- effect of timing introduction of rams to progestagen-PMSG treated anestrus ewes—370
- effect of vaccinating with biochemically defined fractions of ram spermatozoa—2050
- estrus synchronization over 12 year period using oral map treatment for 10 days—3123
- ewes at Deleni Farm inseminated with fresh diluted or frozen semen from Merino rams—2556
- ewes on low doses of estradiol during synchronized estrus—1394
- ewes with highest reproductive efficiency—657
- examination of rams—447
- factors affecting, ewe—3022
- factors affecting, in rams—764

- frozen ram semen—1341
 genetic aspects of reproductive performance—1604
 hemoglobin polymorphism in relation—2476
 importance of the ram—1560
 increased lamb production with rams exposed to short day length—2655
 induction of estrus in anestrus ewe with hormones and controlled lighting—1943
 influence of hogget growth on subsequent ewe—2036
 low, cause of low lamb marking percentages in New South Wales—2362
 need for and possible methods of application of hormone assay technics for improving reproductive efficiency—1958
 normal—1669
 photoperiodic regulation of spermatogenesis, relationship to serum hormones—2656
 post weaning management to increase, range ewe lambs—897
 quantitative analysis of sperm dimensions, Soviet Merino rams—149
 ram semen after storage—2615
 relation of metabolic profile—887
 reproductive safety of oxfendazole in sheep and cattle—2354
 review of estrus—2956
 technics for infertility investigations by field veterinarians—2361
 Texel and Texel-cross ewes—1237
- FERTILIZATION**, effect of intrauterine threads—1012
 effect of prostaglandin or progestagen—373
 in Galway ewe lambs treated with progestagen-PMSG—2423
 in vitro, and assessment of embryo culture—406
 land, effect of nitrogen, phosphorus and potassium on chemical contents of sheep diets—808
 magnesium, effect on mineral utilization and nutritional quality of alfalfa—2485
 modifications in plasma membrane of epididymal ram spermatozoa during maturation and incubation in utero—635
 prostaglandins and fertilizing ability of ram semen, correlation between 9 keto prostaglandins concentration and conception rate—1060
- FERTILIZER**, influence of different intensities on cheese and wool production—1657
- FERTILIZERS**, effect on downslope movement of nutrients in hill pastures—1912
- FESCUE**, summer toxicosis, in lactating dairy cows and sheep fed experimental strains of ryegrass-tall fescue hybrids—1290
 tall, comparison of dietary marking approaches in passage studies, use of Cerium, and chromium—3213
 tall, hybrids with ryegrass, summer fescue toxicosis in lactating dairy cows and sheep fed experimental strains of ryegrass-tall fescue hybrids—1290
- tall, in forage animal production systems for breeding and lactating animals—3097
- FESCUE FOOT**, relationships with other fungal diseases, a review—1791
- FETUIN**, hydrophobic interaction of fluorescent probes—2597
- FETUS**, absorption of methionine, colon—2794
 ACTH receptor levels of adrenals—829
 age-dependent pattern of autonomic heart rate control during hypoxia—3175
 alanine stimulation of insulin secretion—2347
 arginine vasopressin during gestation and parturition—2911
 asphyxiated, effect of ketamine on regional cerebral blood flow—2352
 at parturition—2532, 2544, 2545
 beta endorphin stimulated growth hormone secretion in vivo—1097
 blood flow to fetal organs as function of arterial oxygen content—2311
 breathing during moderate asphyxia related to outcome of pregnancy—2938
 breathing movements—718
 breathing movements monitored by real time, B mode ultrasound, basal appearance and response to challenges—1055
 calcium homeostasis—514
 cardiovascular responses to hypoxemia following autonomic blockade—1748
 chronically catheterized, correlation of tracheal fluid cortisol and pulmonary surfactant production—3010
 comparison of continuous transcutaneous and intermittent intravascular PO₂ measurement—1438
 compensatory renal hypertrophy—2033
 compliance of vascular system of liver—1057
 consumption of carbohydrates, amino acids and oxygen across intestinal circulation—565
 continuous variability of blood oxygen tension—1437
 cytokine production by bluetongue virus-infected cells—894
 delta-9 and delta-6 desaturases of placenta and their role in supply of fatty acids—2773
 determinants of drug disposition and effect—1145
 developmental aspects of renal tubular reabsorption of water—2535
 development, interconversion of glutamate and glutamine in placenta—2315
 development of blood coagulation in fetus—1574
 development of intestinal myoelectrical activity—462
 digestion and absorption of carbohydrates in utero—561
 distribution in uterine horns—3082
 dose response to vasopressin—693
 ductus arteriosus, prostaglandin E-2 rather than prostacyclin in patency—598
 effect of ACTH on lung maturation—2886

- effect of acute maternal hemorrhage on release of catecholamines in pregnant ewe and—153
- effect of angiotensin II and saralasin on prorenin—2733
- effect of angiotensin II A₂ blockade response to acute hypoxia and hypovolemia—1899
- effect of bovine viral diarrhoea-mucosal disease—2293
- effect of glucose infusion upon hypoxic—2596
- effect of long-term infusion of bromocriptine on plasma prolactin and ovine chronic somatomammotropic and fetus—1795
- effect of prostaglandin on maternal and fetal adrenal blood flows—2345
- effect of removal of endometrial caruncles on size and metabolism—2546
- effect of thyroxine on lung maturation in hypothyroid fetus—899
- effect on oxygenation of sodium salicylate and phenylephrine infusion in pregnant ewe—3099
- elevation of triiodothyronine as possible marker for intrauterine distress—2181
- endogenous erythroid colony-forming cells—2559
- experimental aortic stenosis—1745
- factors affecting insulin release—1006
- fetal circulation, fetal to maternal transfer of palmitic and linoleic acids across placenta—2171
- function of pituitary and thyroid glands affected by thyrotrophin releasing hormone—3182
- gluconeogenesis from lactate, in vivo—2410
- growth and development of recirculating lymphocytes—488
- growth, effect of plane of maternal nutrition—1955
- growth, joint effect of dam and fetus—2946
- growth, mathematical description and effects of maternal nutrition—2542
- growth patterns and maternal reproductive effort—2528
- hemodynamic responses to vasopressin infusion—1422
- histochemical identification of chloride secreting cells in respiratory system—2322
- hormonal factors in lung maturation—1581
- hormonal response to starvation of ewe—2670
- hormone ontogeny, dopaminergic regulation of prolactin secretion—1098
- hypophysectomized, perfusion of dexamethasone, plasma steroids, prolactin, and placental lactogen in intact or hypophysectomized pregnant ewe—387
- hypoxemia, vasopressin and renal water excretion—2537
- identification of beta adrenergic binding sites in myocardium—1575
- immune response induced by adenovirus—3040
- inhibitors of prostaglandin synthetase stimulate breathing movements—1757
- intracranial hemorrhage in preterm—2499
- is alleviation of maternal stress beneficial to—2045
- isolation of *Brucella ovis*—1409
- inuration related to parturition—1756
- maturation related to parturition—1758
- measurement of transplacental magnesium fluxes—513
- membranes, origin and developmental patterns of glycosidases—2390
- metabolism of progesterone by chorionic cells of early conceptus in vitro—1855
- nutrient loss across intestinal circulation—564
- ontogeny of beta endorphin mediated growth hormone secretion—1099
- ontogeny of intrarenal solute gradients—2034
- ontogeny of serotonergic regulation of growth hormone and prolactin—1876
- ovine, sequential sterile autolysis, microscopic changes—770
- patterns of regional cerebral blood flow during and after prolonged hypoxia—166
- placental transfer and fetal effects of bunitrolol chronic preparation of pregnant ewe and fetus for pharmacological research—3100
- plasma levels of corticosteroids and adrenocorticotrophins—1466
- plasma levels of progesterone, effect of nephrectomy—793
- phospholipid metabolism during renal compensatory growth—2032
- postsurgical changes in blood parameters in utero—1582
- potassium:aldosterone relationships in pregnant ewes and chronically cannulated fetuses—3275
- pre-ejection period of cardiac cycles—2085
- pressure passive cerebral blood flow in non-asphyxiated fetus—2295
- prolific ewes, accretion of nutrients in, and adnexa—1918
- propranolol disposition and biliary excretion in pregnant sheep and fetus—1871
- prostaglandin control of renal circulation in response to, in fetus in utero—1986
- prostaglandin levels in plasma, spontaneous and induced parturition—2013
- proteins and lipids in—3041
- redistribution of cardiac output and oxygen delivery in hypoxemic fetus—2702
- regulation of respiration, in utero—2059
- relationship between fetal and maternal plasma 25-hydroxy vitamin D—2566
- release of endogenous pyrogens—1511
- renal hepatic comparison of metallothionein—290
- renal response to hypoxemia and following recovery—2534
- response of cardiovascular system to acute elevation of intracranial pressure—3346
- reversible induction of surfactant production in, treated with glucocorticoid—441
- role of delta-9 and delta-6 desaturases in supply of fatty acids—2688

- sex differences in weights of kidneys—792
 size, variations, prolific ewes—3082
 spontaneous decrease of tracheal fluid prior to birth—1579
 stimulation of breathing by inhibitors of prostaglandin synthesis—1580
 thyroidectomy and brain development—1925
 transfer of copper from dams with Border Disease—2631
 ultrastructural changes in placenta of ewe after long-term intravascular infusion of 2-bromo-alpha-ergocryptine (CB 154) into mother or fetus—1796
 uptake of amino acids—1340
 urinary excretion of meperidine—2918
 weight, undernourished ewe—2683
- FEVER**, development in newborn—1510
 endogenous pyrogen release by fetal sheep and pregnant sheep blood leukocytes—1511
 role of vasopressin in natural suppression—620
- FIBER**, animal, classification and trade prices in USSR—3096
 characteristics of Mandya, Madras Red and crossbreds—1501
 diameter, efficiency in Romney, Coopworth, Perendale and Corriedales—2882
 diameter, Merino wool, genetic and environmental factors—1928
 diameter, Perendales—881
 diameter profile, in individual sheep—1427
 fleece, adult traits in relation to birthcoat of lambs—1176
 growth, regulation—3160
 length, relation to pelt—1404
 wool, types—3287
- FIBRINOGEN**, effect of depletion on lung fluid balance after emboli—333
 value at an average lung microvascular pressure—1937
- FINE STRUCTURE**, modified sertoli cells in terminal segment of seminiferous tubules of the bull, ram and goat—2239
- FINISHING**, lambs, whey or processed faba-bean starch as energy source with urea in liquid supplements—2850
- FINN**, abnormal hemoglobin—176
 and Galway cross (Fingalway), pre-puberal plasma LH levels and progesterone concentrations during estrous cycle and early pregnancy—2429
 behaviour during and shortly after lambing—177
 crossbreeding with fat-rumped ewes, performance—3299
 crossbreeding with Suffolk, ewes, lambing traits and lamb and wool production—1518
 crossbred to Dorset, Cheviot, Romney, genetic and environmental effects on milk production, milk composition and mastitis incidence—3014
 crossbred with Panama dams, performance and carcass—682
 effect of substituting Finnsheep and Dorset breeding for Rambouillet breeding, productivity of young spring-lambing ewes—2961
 effect of substituting for Rambouillet, productivity of fall-lambing ewes—2962
 genetic and environmental variation in lutropin response of ovariectomized, to luliberin—1675
 glomerulonephritis in crossbreds—100
 lambing performance of crossbred ewes when mated in January to purebred or crossbred rams—846
 lambs sired by Texel and Suffolk rams, comparisons—1697
 phenotypic and genetic association between production/reproduction traits and blood biochemical polymorphic characters—175
 postpartum reproductive performance of crossbred ewes—995
 Suffolk crosses, growth and endocrine responses to zeranol implants—3248
 three lambings in two years—3144
- FINN, LANDRACE**, breed effect on carcass composition, fat distribution and composition of fatty acids—1243
 contemporary comparisons between progeny by Finnish Landrace and Romanov rams out of mutton Merino and Awassi ewes—1119
 crosses with Galway and Lley, reproductive activity—1246
 embryo transfer study of birth weight—1317
 heritability and repeatability of ovulation rate—1242
 performance of superovulated donor ewes in egg transfers—1244
 rams, quality of meat—3124
 secretion of LH during estrus—2421
 studies on mesangiocapillary glomerulonephritis—2905
 vaginal temperature and eating, drinking standing and walking activity rhythms of four anestrus ewes—1341
- FISH**, protein hydrolysates, as milk substitutes for lambs—2814
- FISTULA**, chronic lymphatic, collection of lymph from single lymph nodes and intestines of fetal lambs in utero—487
 method for rumen infusion without open fistula—2213
 rumen, technic and utility—2020
- FLEECE**, adult traits and birthcoat fibre type of lambs—1176
 birthcoat and adult fleece relationship, kemp succession in coarse wool breed of sheep—1177
 characteristics, yearling Perendales—881
 comparison of breeds, staple strength and depilation force after treatment with cyclophosphamide—1121
 crossbreeding Krasnoyarsk ewes and Australian Merino rams—1803
 genetic selection, Polish merinos—1586
 hemoglobin polymorphism in relation—2476

- kemp succession in adult fleece of two coarse wool breeds in relation to birthcoat—1178
- length, effect on heat production of fasting sheep—3128
- measurement in Merino breeding programs—1924
- methods of estimating clean fleece weights—262
- orcadian sheep of Lihou, Channel Islands, UK—3249
- response to partial selection on clean, in South Australian strong-wool Merino sheep, genetic parameters—1234
- stocking rate, influence on production from sheep of different genotypes—2467
- weight, backcrossing in commercial breeding, USSR—1507
- FLEECE ROT**, effect of disruption of sebaceous layer of skin on incidence of fleece rot—1433
- selection of Merinos for resistance—173
- FLEECE WEIGHT**, development of new breeds—9
- effect of clipping and diet on intake and performance of housed pregnant and lactating ewes—3145
- heritability in Romney sheep—210
- New Zealand Romneys—211
- correlated with sperm agglutinin titres—551
- skin folds affect—204
- FLIES**, control, drying sheepskins—3105
- FLOCK SIZE**, optimum under migratory and stationary conditions—2098
- FLORA**, microbial, rumen, effect of ammonia concentration on composition, hydolytic activity and nitrogen metabolism—3183
- FLUMETHASONE**, synergistic effects of thiocyanate with, in inhibiting wool growth in merino wethers—2274
- FLUORESCENT ANTIBODY TECHNIC**, diagnosis of *Babesia ovis*—2251
- FLUORIDE**, effects in domestic animals, review—2724a
- FLUORINE**, acute poisoning, pathology—2997
- retention from magnesium and calcium phosphates—1289
- FLUOROGESTONE**, clearance in milk of tritium-labeled fluorogestone in lactating ewe treated for synchronization of estrus—1848
- FLUSHING**, response of Welsh mountain ewes, winter—78
- FLY**, control, minimum cost—2325
- sheep head (*Hydrotaea irritans*), biology of immature stages in soil—2541
- soldier, effect of stocking rate on emergence, dispersal and behaviour—780
- FLYSTRIKE**, control at minimum cost—2325
- control by chemicals—1365
- secondary and tertiary flies striking in western Australia—2029
- FODDER**, cowpea, moth and cluster-bean, nutritive value—2300
- effect of size and density of dried forage packages on intake and performance—2950
- possibilities of forecasting digestibility of crude nutritive substances by fully-grown and growing sheep from rations' content of crude nutritive substances, rations with low content of crude fibers—969
- timothy hay, quality affected by magnesium fertilization or dietary magnesium supplementation—2486
- FOLLICLE**, in ewe under different gonadotrophin levels—486
- ovarian, effect of chronic LHRH treatment—88
- ovary, fine structure of cumulus oophorus—643
- FOLLICLE STIMULATING HORMONE**, cholinergic control of pituitary in ewe—2106
- FOLLICULAR FLUID**, bovine, ovarian effects in sheep—1993
- FOLLITROPIN**, receptor control of prostaglandin F-2 alpha secretion of uterus—1914
- FOOD**, conversion, for wool production—477
- conversion, sex difference of Watisl. lambs—2368
- deprivation, weaned lambs, before, during and after period of weight loss—2678
- intake, and rumen osmolality—1516
- intake, blood gas changes during—2012
- intake, brown midrib vs. normal corn plants harvested as whole plant or stover and preserved as silage or frozen fresh—334
- intake, conceptual approach to modelling of herbage intake by hill sheep—2725
- intake, effect of elfazepam—1111
- intake, effect of glucose, insulin and FFA on food intake—1315
- intake, effect of marihuana—1930
- intake, effect of milk intake on intake of cut and grazed herbage by lambs—2317
- intake, effect of season and level of grazing on utilization of heather, diet selection and intake—2001
- intake, effect of variation in sward characteristics upon ingestive behaviour and herbage intake of calves and lambs under continuous stocking management—1436
- intake, factors affecting voluntary food intake—1166
- intake, factors affecting voluntary intake, role of distension and tactile input from stomach compartments—1167
- intake, lambs, infected with *Ostertagia*—616
- intake, long-term control of voluntary—2282
- intake, radiography, and pseudoruminant behaviour—756
- intake, relation between voluntary food intake during pregnancy and forage intake during lactation and after weaning—989
- intake, suppression, continuous injection into cerebral ventricles of cholecystokinin octapeptide—740
- intake, voluntary, rumen flow dynamics—1950

- protection, attachment of microorganisms to pork skin and surfaces of beef and lamb carcasses—476
- supply, Asia, kids, calories and poverty—928
- utilization, in chronic *Trichostrongylus vitrinus* infections—2914
- FOOT, lameness—394
- veins, anatomy—1612
- FOOT AND MOUTH DISEASE, epidemic in Normandy—763
- outbreak—2278a
- seasonal prevalence in Assam, India—544
- serologic survey in Kenya—2266
- viraemia in sheep—2695
- FOOT AND MOUTH DISEASE VIRUS, immunity in sheep inoculated with various doses—2450
- FOOT ROT—230, 394
- a review—236
- applications of research to flock health—2046
- biological properties of causal agent (*Fusiformis nodosus*)—140
- control, large farms—1957
- crossbreeding, effect of genetic and environmental factors—2173
- diagnosis—285
- etiology—1515
- evaluation of vaccines—1517
- in Lici region of Yugoslavia—2581
- in Netherlands during 1979—2132
- role of elastase in differentiation of disease—2861
- treatment by vaccination with specific etiological agent *Bacteroides nodosus*—859
- use of clovax vaccine—490
- FORAGE, comparative pasture and animal production from cocksfoot and perennial ryegrass varieties under grazing—913
- comparison of forage value of buckwheat and sorghum stubbles grown on Southern Tablelands of New South Wales—2075
- conserved, in sheep production—3252
- differences in net energy values of 1st and 3rd cut dried grass—2504
- estimation of digestibilities of straw—1531
- evaluation of crosses of *Agropyron repens* and *Agropyron spicatum* as forage grass—2321
- intake and rumination—198
- intake, effect of variation in sward characteristics upon ingestive behaviour and, of calves and lambs under continuous stocking management—1436
- morphological characters in relation to palatability—3126
- relation between voluntary food intake during pregnancy and forage intake during lactation and after weaning—989
- retention time and digestibility of milled hay—2622
- tall fescue, use in production, a review—3097
- Yucatan, Mexico—2828
- FORAMEN OVALE, patent—3106
- FORESTOMACH, papillary body of mucous membrane, ultrastructure—3230
- FORMALDEHYDE, chemical sclerosing of epididymis—3012
- effect of treatment before ensiling on digestion of wilted grass silage—2727
- treated casein, responses in growth and rumen function to supplementation—1539
- treated casein, supplementation of a low protein-cellulosic diet, effect on nitrogen digestion—1540
- treated concentrate mixture, growth, wool yield and utilization of nutrients in growing lambs—322
- treated protein, influence of feeding on rumen fermentation—2449
- treatment, influence on metabolism of Bermudagrass protein by wethers—87
- treatment of concentrated diets, absorption of amino acids from small intestine—923
- treatment of grass, utilization by lambs of energy and protein in dried pelleted grass—2976
- use in sterilization—2363
- FORMONONETIN, content of "Grasslands pawera" red clover and its estrogenic activity to sheep—1537
- FOX, role as definitive host for *Taenia hydatigena* and *Taenia multiceps*—853
- Sarcocystis* and *Toxoplasma*—1721
- FRANCE, annual report of 1978 from Ministry of Agriculture—1009
- artificial insemination—427
- coccidia in sheep—382
- dermatophilosis in—1719
- epidemic of foot and mouth disease in Normandy—763
- epidemiology of listeriosis—2508
- inventory and conservation of farm animal genetic material, a bibliography for 1961–1979—1702
- serotypes of *Listeria*—3303
- sheep breeds—187
- sheep in mountain areas—1008
- southern, *Oestrus ovis* infections—2949
- technical and administrative procedures for control of brucellosis—110
- FREEZING, deep, semen, storage, motility of sperm, lambing rate—2441
- ram semen, new extenders—961
- semen, factors influencing vitality during—1342
- FRIESIAN, East, crossbred to Sardinian, in Sardinia, performance—400
- East, crossbred with Tsigai, milk yield—3349
- FRIGHT, effect on uterine motility—1725
- FRUCTOSE, concentration in maternal and fetal plasma, last 5 weeks of pregnancy—2778
- hepatocellular extraction and retention in conscious sheep—1348

- plasma levels, effect of infusion of sorbite electrolyte and sorbite solution—1624
 vasectomy, long term effects—2238
- FSH**, alpha adrenergic control of gonadotrophin secretion in ewe—2107
 binding to ovine ovarian follicle during follicular growth and atresia—526
 binding to ovine ovarian follicle during follicular growth and atresia—527
 characterization of gonadal factor involving control of secretion—2709
 depression of plasma levels, inhibin activity in ram rete testis fluid, in castrate and cryptorchid ram—489
 effect of antibody against GnRH on preovulatory LH and FSH—2108
 immunological relationships—2608
 light regulation of spermatogenesis—2656
 new homologous radioimmunoassay—344
 pituitary response of prepuberal lambs to estradiol—3021
 plasma concentrations during anestrus in ewes immunized against estradiol, 17-beta estrone or testosterone—1875
 presence of large molecular weight in pituitary—308
 regulation of secretion in rams—2654
 role of testicular fluid on blood plasma levels—343
 secretion in ovariectomized ewes under hormonally induced estrous cycles—2954
- FUMIGANTS**, grain, pulmonary damage in sheep caused by dibromoethane—197
- FUNGAL DISEASES**, relationship with fescue foot, a review—1791
- FUNGI**, anaerobic, rumen—265
 dermatophilosis, association with dipping and effect on production—3253
 mycotoxins, zinc sulphate orally for prevention of lupinosis—69
 photosensitization, Brazil—2211
 rumen anaerobic, as colonizers of plant fibers—267
 tremorgenic, isolation from soil—2721
 tremorgenic mycotoxins, and animal diseases, a review—2721
 tremorgens associated with ryegrass staggers in South Australia—1074
- FUROSEMIDE**, blockade and nephrectomy, effect on renin angiotensin aldosterone system in newborn—2729
- FUSARIUM**, aflatoxins, in milk and milk products—2897
- FUSIFORMIS NODOSUS**, biological properties—140
- FUSOBACTERIUM**, evaluation of vaccine—1517
 foot rot—230
 foot rot, a review—236
- FUSOBACTERIUM NECROPHORUM**, prophylactic and therapeutic value of hyperimmune serum—1514
- G**
- GABA**, and thermoregulation—352
 thermoregulatory effect when injected intracerebroventricularly—351
- GADDI**, a genetic variations in conception rates under sub-temperate conditions—3003
 ewes, utilization of mixed *Zea mays* and *Sorghum vulgare* greens supplemented with three levels of linseed-cake—2253
- GAIGERIA PACHYSCELIS**, histopathological changes—126
 in vitro action of immune lamb serum on larvae—125
- GALACTOSAMINE**, in cartilage of lambs born of ewes fed Mn-deficient diets—1313
- GALACTOSE**, influence of age and rumen development on intestinal absorption, lambs—2658
- GALACTOSYLDIGLYCERIDE**, mono, in vitro lipolysis and biohydrogenation by whole rumen contents and its fractions—2759
- GALL BLADDER**, electrical activity, relationship with antral and duodenal motility—460
 prevalence of *Campylobacter fetus*—586
- GALLEGO**, dimensional characteristics and components of numerical productivity—3094
- GALWAY**, breed effect on carcass composition, fat distribution and composition of fatty acids—1243
 comparison of reproductive performance—2424
 comparison with Suffolk, reproductive performance, crossbreds—2425
 crossbreeding, genetic effects on carcass composition—1236
 crosses with Lleyn, reproductive activity—1246
 ewe lambs, estrus, ovulation, fertilization and early embryo mortality, treated with progestagen-PMSG—2423
 ewes, controlled breeding—2795
 performance of superovulated donor ewes in egg transfers—1244
 rams, feed intake and carcass composition of lambs sired by—1239
 recording scheme for tracking selection, litter size, etc—1238
- GAMMA AMINOBUTYRIC ACID**, see GABA
- GAMMA BHC**, resistance in Africa—209
- GAMMA RAYS**, effect on migrating *Dictyocaulus filaria*—63
 viability of amphistome metacercariae—1217
- GASTRIC INTRINSIC FACTOR**, sheep—1927
- GASTRIN**, tissue and serum, ostertagiasis—2498
- GASTROENTERITIS**, nematode, Zaire, epidemiology—2669
 totaviruses as etiologic agent—3341
- GASTROINTESTINAL NEMATODES**, effect of fenbendazole—1196
 immune response of sheep/2to—12●

- GEL DIFFUSION, technic for differentiation of meats—2707
- GENE, frequencies, crosses of Romney Marsh, Lincoln and Altai—1093
- frequency, genetic polymorphism of hemoglobin and transferrin F₁ sheep (Corriedale × Criollo)—2007
- phylogenetic relationships between sheep breeds—2748
- selection, reproductive performance—1604
- GENETICS, analysis of production characters and possibilities of using biochemical blood markers—2835
- analysis of realized genetic gain of useful traits in sheep—1429
- antagonisms of characteristics in breeding—3199
- antigen identified in both sheep and cattle sera—722
- assessment of contribution of sires and dams to emotionality in crossbred ewes—3015
- assessment of genetical methods of control of scrapie—1565
- bone-marrow karyotypes of Nali sheep—3314
- comparison of single trait and index selection—1705
- conservation and utilization of indigenous animal genetic resources in Malaysia—759
- considerations for development of new breeds—9
- divergence, indigenous and crossbred populations—3170
- effect on carcass composition and feed intake—1236
- erythrocyte glutathione in Mandya Madras Red and their crossbred offspring—324
- establishment of selection scheme in Texel sheep—2319
- estimation of genetic change in a performance testing program—2703
- estimation of parameters of Lacaune ewe lamb size after fecundation on natureel-litte and induced estrus—363
- factors causing variation in wool fibre diameter in Merino sheep—1928
- gain, analysis of realized, of useful traits—1429
- gain, in breeding—1431
- gain, mathematical model—1431
- genetic control of lymphocyte antigens, the ola complex and two minor loci—1997
- genetic effect on internal parasites, foot soundness and attrition in crossbred ewes—2173
- HADH deaphorase as marker for erythrocytes—3042
- hemoglobin E, a third beta chain allele—1457
- heritability of live weight, growth and carcass composition in crossbred lambs—3280
- hereditary variation in reduced glutathione in various breeds—1832
- host, response of lambs to vaccination with larvae of *Trichostrongylus colubriformis*—3274
- improvement of wool production and reproduction rate—3046
- improving reproductive efficiency, a review—1065
- improving wool quality of fine-wooled sheep—1573
- inheritance of content of pigmented fibers in wool of Saraja sheep—154
- inheritance of taillessness—528
- intraspecific variation in *Echinococcus*, a biochemical approach, esoelectric focussing of proteins—1649
- inventory and conservation of farm animal genetic material in France, a bibliography for 1961 to 1979—1702
- labelling of preleptotene chromosome condensation stages in fetal sheep ovary with ³H-thymidine—1798
- methods of control of Australian sheep blowfly (*Lucilia cuprina*)—1002
- parameters, New Zealand Romney sheep—211
- pool, sheep in Mongolia—2617
- repeatability, improvement of production characters in Konya Merino sheep—3302
- reproductive performance in ewes—1604
- resources of farm animals for improvement in Malaysia—2074
- response to partial selection on clean fleece weight in South Australian strong-wool Merino sheep—1234
- Robertsonian translocations—443
- selection and breeding for creation of Karakuls with broadtail pelts—1021
- selection, experience with Icelandic sheep—17
- selection for disease resistance—902
- selection for reproductive traits, a review—1406
- selection, influence of stud—2989
- selection, improvement of methods—2159
- selection, improvement of production—3301
- selection, maternal effects and ram evaluation—2169
- selection, Merino sheep for resistance to fleece-rot and body strike—173
- selection, Polish Merinos—1586
- selection, role of maternal effects—2168
- selection, whey proteins, composition and biological value—1681
- should we be breeding for easier shearing—1923
- specialty carpet wools, review of research at Massey University—3243
- structure of foreign sheep breeds—2026
- trends, forecast for 2000 A.D.—2443
- variability, genetic distances between crossbreds—1094
- variants of milk proteins in Comiso sheep—2589
- variants of transferrin—1090
- variation in lutropin response of ovariectomized sheep to luliberin—1675

- variation in mating behaviour of ewes under sub-temperate Himalayan conditions—3004
 variation in reproductive performance—1674
 variation, mineral metabolism, copper—3246
- GENITAL DISEASES**, changing clinical picture of contagious ecthyma—3091
 clinical test of chlamydial vaccines—2550
 male, vaccination—2422
 ureaplasmas, vagina—1469
- GENITAL GLANDS**, accessory, ram, distribution, uptake and effect on testosterone of zinc and manganese—1309
- GENITALIA**, ewe, masculination, clover disease—22
 ewe, morphology, Libyan ewes—1212
 tissue, impedometric properties—18
- GENTILE DI PUGLIA**, lambs born from synchronized ewes—1893
- GEOTRICHUM CANDIDUM**, aflatoxins, in milk and milk products—2897
- GERMAN BLACKHEADED MUTTON**, rams, crossbred with Polish Merinos, production and quality of wool of fattened lambs—2237
- GERMAN DEMOCRATIC REPUBLIC**, formation of outposts, veterinary practice, for more efficient work organization—478
 local supplies of trace elements—102
 rabies in sheep—3054
 results and prospects of parasitological research in service of parasite control under conditions of high-intensity livestock production—1314
 state and prospects of feeding methods for sheep—1330
 veterinary practice, industrialized lamb fattening—3289
- GERMAN MUTTON MERINO**, thermoregulation—725
- GERMANY**, Bavaria, epidemiology of helminths of sheep—1134
 ecology and distribution of Q-fever rickettsiae—1752
 ultrastructural study of globidial parasites of abomasum of sheep in—1316
- GESTATION**, biochemical and histochemical changes in placental attachments during—704
 length, ewes, Chokla and Magra, in subtropical area of northwestern arid Rajasthan, India—321
 Lohi sheep—2444
 phosphatidate, phosphohydrolase and phospholipids in tracheal and amniotic fluids during—2561
 time, Oudah ewe—1023
- GHANA**, southern, incidence of blood parasites—167
- GHEE**, production, FAO data—987
 world production, FAO statistics—986
- GILBERT'S SYNDROME**, animal model for study—661
- GINGIVA**, measurement of sulcus—45
- GINGIVAL SULCUS**, method of measurement—45
- GLOBIDIAN PARASITES**, abomasum ultrastructure—1316
- GLOBULIN**, immuno G, characterization of breakdown products in blood and tissues after injection into duodenum—413
 lambs with *Dictyocaulus filaria*—62
 value at an average lung microvascular pressure—1937
- GLOMERULAR FILTRATION**, dose response to vasopressin in fetus—693
- GLOMERULAR FILTRATION RATE**, hypoxemia in fetus—2534
- GLOMERULONEPHRITIS**, comparative pathology—2779
 experimental autoimmune anti-glomerular basement-membrane, animal model—2849
 mesangiocapillary, in Dorset-Finnish Landrace crosses—100
 mesangiocapillary, in Finnish Landrace sheep—2905
- GLOMERULUS**, cultures from normal and disease states—2121
- GLUCAGON**, changes in binding to hepatocyte receptors in lactating and nonlactating ewes—1082
 effect of somatostatin suppression on glucose production—435
 effect of somatostatin suppression, glucose production—437
 effect on free fatty acids in circulating blood plasma—906
 fetal and maternal hormonal response to starvation in the ewe—2670
 plasma, effect of somatostatin on, in exercising sheep—436
 response to exercise—433
 responsiveness of isolated hepatocytes of adult sheep—795
 role in ketosis—434
- GLUCOCORTICOIDS**, control of placental steroid synthesis at parturition—981
 reversible induction of surfactant production in fetal lambs treated with—441
 synthetic, treatment of muscular dystrophy—521
 use in veterinary medicine—56
- GLUCONEOGENESIS**, and amino acid catabolism—857
 effect of ammonia, isolated liver cells—3212a
 effect of undernutrition during late pregnancy—2490
 from isobutyric acid—2840
 from lactate by fetus in vivo—2410
 in isolated hepatocytes—2514
 quantitative measurement from isobutyrate—2839
 suppression by exogenous insulin administration in newborn lamb—2888
- GLYCOSAMINOGLYCAN**, composition of epiphyseal cartilage of neonate and osteoporotic lambs—1311

- glucosamine, in cartilage of lambs born of ewes fed Mn-deficient diets—1313
- GLUCOSE**, bidirectional placental transfer and turnover in fetal and maternal sheep—90
- blood, diurnal changes in relation to energy intake of adult sheep—785
- blood, effect of hyperammonemia—238
- blood levels in ewes during pregnancy and lactation, effect of nutritional state during late pregnancy—1158
- blood levels, lambs, after feeding—3055
- blood levels, sheep with alloxan diabetes, influence of phentolamine—2240
- comparative study of metabolism between camel and sheep—554
- concentration in maternal and fetal plasma, last 5 weeks of pregnancy—2778
- dietary concentrate level affects absorption rates and metabolism of lactate and glucose—1376
- effect of administration on magnesium and potassium metabolism—3305
- effect of implanting jugular catheters on plasma concentrations—3273
- effect of somatostatin suppression of glucagon secretion on production—437
- effect on food intake—1315
- indices of stress in housed experimental sheep—2487
- influence of abomasal infusions on nitrogen balance in wethers—2031
- influence of addition, and formaldehyde treatment of forage diets on nitrogen metabolism and fiber digestion in wethers—86
- infusion, effect on hypoxic fetus—2596
- is it ketogenic in rumen epithelium—2838
- metabolism, effect of environmental heat exposure—2630
- metabolism, effect of trienbolone acetate in normal and ketotic sheep pregnant with twins—994
- metabolism, in cold exposed sheep—3035
- metabolism in exercising pregnant ewe—553
- nutrient loss across the fetal intestinal circulation—564
- placental transfer, effect of insulin infusion to mother—89
- plasma levels, effect of infusion of sorbite electrolyte and sorbite solution—1624
- plasma levels, effect of triamcinolone acetate—2458
- plasma levels, lamb, after administration of various carbohydrates—3056
- production, effect of somatostatin suppression of glucagon secretion—435
- response of fetal and newborn to infusions—2348
- rumens rendered nonfermentive after infusion—3282
- tolerance, effect of abomasal added oils—647
- total entry rate in twin pregnant hypoglycaemic ketotic sheep—2458
- turnover, effect of somatostatin on, in exercising sheep—436
- use in ketosis—1607
- GLUTAMATE DEHYDROGENASE**, in digestive tract—1736
- GLUTAMATE**, interconversion with glutamine in placenta during development of fetus—2315
- GLUTAMIC ACID**, therapeutic efficacy of intravenous administration, urea poisoning—2896
- GLUTAMINE**, interconversion with glutamate in placenta during development of fetus—2315
- GLUTAMINE-GLUTAMATE**, balance in placenta in pregnant ewe—1340
- GLUTATHIONE**, Deccani breed, India, red cell ATP and 2,3-diphosphoglycerate levels—2303
- effect of duodenal infusion of methionine—2883
- erythrocyte, genetics in Mandya Madras Red and their crossbred offspring—324
- reduced, erythrocyte, effect of duodenal infusion of methionine—2775
- reduced, erythrocyte, effect of duodenal infusion—2883
- reduced, hereditary variation in different breeds—1832
- GLUTATHIONE PEROXIDASE**, effect of intraruminal selenium pellets on tissue glutathione peroxidase activities—2305
- erythrocyte, activity as measure of selenium status in livestock in Britain—94
- hemoglobin oxidation in whole blood in relation to activity—3251
- relationship between glutathione and selenium-responsive unthriftiness in Merino lambs—2306
- semiquantitative spot test for assessment of biological selenium status—311
- GLYCINE**, effect of intravenous infusions on plasma amino acid levels—1033
- thermoregulatory effect when injected intracerebroventricularly—351
- GLYCOGEN**, fetal maturation related to parturition—1758
- in vitro variation, three sheep nematodes—2401
- GLYCOLYSIS**, enzymes of, in diaphragm of lambs during fattening and in carcass quality—3279
- GLYCOPROTEINS**, composition, secreted by tracheal explants—1494
- sperm acrosome—975
- surface of sperm—976
- GLYCOSIDASE**, origin and developmental patterns in amniotic and allantoic fluid—2390
- GLYCOSIDE HYDROLASES**, origin and developmental patterns in fetal membranes—2390
- GLYCOSURIA**, and enterotoxemia—2383
- GMP**, cyclic, blood and lung lymph levels in-

- crease accompanying lung vascular response to endotoxin—1286
- GNRH, effect of analogues on reproduction—2434
- effect on LH release and luteal function during early lactation in spring—1230
- effect on preovulatory LH and FSH—2108
- estrus, ovulation time and rate, conception rate in progestagen-treated ewes given GNRH or GNRH analogues and gonadotrophins—2435
- interaction with anterior pituitary—27
- interaction with anterior pituitary, role of divalent cations, microtubules and microfilaments—26
- receptors, anterior pituitary, number—3167
- GOATS, arthrogryposis-hydranencephaly syndrome produced by Akabane virus—1393
- as possible reservoir of *Entamoeba histolytica* along with sheep—1549
- bibliography of pneumonia—3064
- breeds, trypanotolerance to experimental infection of *Trypanosoma congolense*—1155
- brucellosis in sheep and goats in Cyprus—2370
- buck, ultrastructure of modified sertoli cells of terminal segment of seminiferous tubules—2239
- bulletin on mohair—1788
- comparison of goat and sheep forms of *Mycobacterium paratuberculosis*—2983
- conservation of nucleolus organizer regions during evolution in sheep, goat, cattle and aoudad—1292
- cross transmission of coccidia—1919
- dermatophilosis in New Zealand—2135
- disease syndrome in sheep and goats naturally infected with *Trypanosoma congolense*—1152
- economic effect of trypanosomiasis at range research station in Kenya—1154
- effect of administration of the latex of *Calotropis procera*—1830
- effect of increased levels of urea in diet on rumen protozoa—2177
- epidemiological survey of paratuberculosis in 3 mixed flocks with sheep after vaccination—96
- epidemiology in sheep and goats of Kenya—1153
- infectious diseases of sheep and—2398
- infectious keratoconjunctivitis, Nigeria—2242
- infectivity of *Anaplasma mesaeterum* n. sp.—3953
- inhibition of erythropoiesis by plasma components from sheep, goats and rabbits—2122
- isolation of Peste-des-Petits Ruminants virus in Nigeria—2936
- listeriosis in Maharashtra, India—2344
- management, central Asia, in semi-deserts—2336
- parturition—665
- pathogenicity of *Mycoplasma mycoides mycoides*—631
- performance of lactating goats and lambs fed corn silage grown on sludge-amended soils—2272
- perinatal chlamydiosis—1637
- pregnancy, placenta and perinate kidneys in renal insufficient—3164
- preservation of rare breeds—2591
- prevalence of brucellosis among sheep and, in northern Iraq—1505
- prevalence of salmonellas, isolation and anti-biogram—2760
- rate of passage of digesta in sheep and goats fed on nitrogen from different sources—2830
- Rocky Mountain, paratuberculosis in Colorado—3259
- serological survey for viral diseases in Kenya—2266
- serological test for muscle tissue—1851
- species affinities with domestic sheep—2407
- transmission of nematodes from wild animals—1355
- transmission of sheep strain of *Eperythrozoon ovis* and development of carrier state—680
- trypanosomiasis in Liberia—1947
- sweating, India—2446
- GOITER, congenital, a review—721
- congenital, spontaneous animal model of human disease—2439
- congenital, thyroglobulin structure and pathophysiology—1769
- endemic, sheep in highlands of Papua, New Guinea—3189
- inherited—714
- GONADOTROPINS, chorionic, binding to ovine ovarian follicle during follicular growth and atresia—526
- chorionic, binding to ovine ovarian follicle during follicular growth and atresia—527
- chorionic, evidence and evolution of in ewes—1667
- chorionic, human, reduction of luteolytic effect of prostaglandins in ewes—380
- control of spermatogenesis—633
- early onset of breeding season—3214
- effect of analogues on reproduction—2434
- effect of antibody on preovulatory LH and FSH—2108
- effect of chronic LHRH treatment on brain LHRH content, pituitary and plasma LH and ovarian follicular activity in anestrus ewe—88
- effect of feeding coumestan on ovulation rates—2142
- effect of heat stress on plasma levels in ewes—1347
- effect on ovarian activity and estrus behaviour—2758
- estrus, ovulation time and rate, conception rates in progestagen-treated ewes given GNRH, GNRH analogues and—2435
- estrus synchronization and economic efficiency—1100
- exogenous, effect on antral follicle populations—802
- follicular populations in ewe—486
- immunological relationships—2608

- in ovariectomized ewes in induced estrous cycles—2954
- indicators of genetic variation in fecundity—1245
- induction of estrus and fertility in anestrus ewe with hormones and controlled lighting—1943
- interaction with anterior pituitary—27
- levels in prepubertally castrated males treated for long periods with propionated testosterone, dihydrotestosterone, 19-hydroxytestosterone or estradiol—2288
- pituitary, determination of affinity and number of receptors of GnRH—3167
- plasma, effect of suppression of plasma prolactin in LH-RH-treated anestrus ewes—1938
- PMS and sexual steroids effect on cerebrohypophysio-gonadal axis of anestrus sheep—2803
- practical significance of progesterone estimation and use of prostaglandin F-2 alpha analogue in reproduction—328
- receptors of ovarian follicle during follicular growth and atresia—526
- receptors of ovarian follicle during follicular growth and atresia—527
- GONADOTROPHINS**, releasing hormone, luteotropin and testosterone secretion following single or repeated doses of—3272
- responses of testes and accessory organs to exogenous, prepuberal rams—1784
- secretion in ewe—2106
- secretion of during prostaglandin induced luteolysis—1353
- secretion under control of alpha adrenergics—2107
- sequential hormonal changes and activation of the hypothalamic-pituitary-gonadal axis—820
- testing and introduction of synthetic releasing hormones for control of reproduction—1615
- GONADS**, accessory genital glands, reversal by testosterone of atrophy, castrated rams—3030
- characterization of gonadal factor involved in control of FSH secretion—2709
- GOT**, plasma levels, influence of anthelmintics (levamisole, mebendazole and carbon tetrachloride)—3151
- GOTLAND**, breeds of sheep—2990
- GPT**, plasma levels, influence of anthelmintics (levamisole, mebendazole and carbon tetrachloride)—3151
- GRAFTING**, lambs, how to—1368
- GRAIN**, recent information on processing—2226
- sorghum, weathered, nutritive value—1751
- GRAIN CONCENTRATES**, effect of feeding large amounts on health of lambs—2742
- varying levels in rations of Sudan Desert sheep—872
- GRAINS**, brewers, digestion of protein—538
- GRAMINAE**, biological effects of mycotoxins on ruminants—1806
- GRANULOMA**, foot—394
- GRASS**, dried pelleted, utilization by lambs of energy and protein—2976
- legumes, digestibility and voluntary intake—1562
- tropical, intake, digestibility and nutrient utilization by sheep of sodium hydroxide-treated, supplemented with soybean or urea—1075
- wintering of ewes in coastal Southland New Zealand—3201
- GRASSLANDS**, temporary infertility of Merino ewes grazing improved pastures in western Australia—1903
- GRAZING**, behaviour—676
- behaviour, influence of shape of paddock, type of fence and stocking rate—1808
- behaviour on high country summer range—1253
- belah-rosewood shrub woodland in western New South Wales—1727
- berseem, performance of Watish lambs when fed different levels of energy and protein concentrate supplement—40
- case of gangrenous ergotism in sheep—1786
- central Oklahoma rangeland response to fire, fertilization and grazing by sheep—2394
- chemical elements of herbage at urine patch sites in ryegrass pasture—1455
- clean, for sheep—2825
- comparative pasture and animal production from cocksfoot and perennial ryegrass varieties—913
- comparison of Texel- and Suffolk-sired lambs out of Finnish Landrace × Dorset Horn ewes under grazing conditions—1697
- diets under excellent range conditions—452
- effect by lambs in autumn on a red clover-perennial ryegrass sward—1668
- effect of intensity on annual vegetation—2360
- effect of pasture species and sheep grazing on establishment of sown *Ulex europaeus*—1420
- effect of season and level of, on utilization of heather—2001
- effect of treading on pasture, and soil characteristics of irrigated annual pastures—3277
- effect on downslope movement of nutrients in hill pasture—1912
- effective utilization of feed—1042
- effects on Mojave Desert vegetation and soils—3211
- estrogenic, changes in cervical histology following prolonged on—1760
- estrogenic pasture, altered response of cervical and vaginal epithelia to estradiol after prolonged exposure to estrogenic pasture—21
- estrogenic pastures, Kangaroo Island, South Australia, reproductive performance—3179
- evaluation of a sward sampling technic for estimating herbage intake by grazing sheep—3187

- evaluation of mixed kikuyu and ryegrass pastures—317
- factors influencing behaviour in Mediterranean climate—821
- forage selection by mule deer on winter range grazed by sheep in Spring—2793
- gangrenous rototism in sheep—1782
- importance of rotational, intensive animal production in New Zealand—1268
- influence of different intensities of nitrogen on cheese and wool production—1657
- intensity, and productivity in grassland ecosystem—416
- intensive system on lowland grass—2145
- long-term effect of quantity of superphosphate applied on nutritive value of diet selected by sheep grazing pasture originally sown to *Phalaris aquatica* and *Trifolium repens*—1684
- low lambing rate in Australia—2568
- management, interrelation with nematodes—1016
- measurement of digesta flows—624
- mixed, sheep and cattle, compared with single grazing—418
- of irrigated pasture with sheep, effect of winter management on pasture regrowth—1272
- Ossimi sheep, summer conditions, Egypt—1613
- pasture in winter—336
- performance of sheep under rotational and continuous grazing on hill pastures—2697
- performance of twin lambs at 6, 8, 10 or 14 weeks of age—1070
- possibilities of lamb and wool production on natural and sown grass swards—1213
- relation of social dominance and body size to intake of supplements—1777
- resource allocation alternative in an Andean herding system—1939
- response of grass swards to fertilizer nitrogen—1426
- supplementation of sheep grazing wheat stubble with urea, molasses and minerals—quality of diet, intake of supplements and animal response—2076
- systems, in relation to pasture efficiency—1658
- temporary infertility grazing improved pastures in western Australia—1903
- 25 years work at Hill Farming Research Organisation—3066
- urinary methylmalonic acid as indicator of vitamin B₁₂ status of sheep—1985
- winter cold damage to bitterbrush related to spring sheep grazing—1451
- GREAT BRITAIN**, animal disease surveillance—710
- review of current position of echinococcosis—2860
- see also United Kingdom
- technical development of sheep production from hill land—659
- GREECE**, dairying—109
- economic aspects of milk and milk products—111
- epidemiological survey of paratuberculosis in 3 mixed sheep and goat flocks after vaccination—96
- listeriosis, present state—2741
- GREYFACE**, effect of time of mating on ovulation rate and potential lambing rate—1187
- lactation, effect of rearing type and prepartum nutrition on intake and performance—1905
- GROUNDNUT**, cake, relative value of single-cell proteins and, as protein supplement in ration of lambs—2115
- protein isolate, sequence of limiting amino acids, for preruminant lamb—2349
- GROUP BREEDING SCHEME**, modern developments and selection schemes—863
- GROWTH**, and development, lambs, a review—2402
- body composition changes in lactating ewes estimated by serial slaughter and deuterium dilution—638
- body weight gains of Romnelets, Columbias, Suffolks and North Country Cheviots and their crosses—3136
- cell proliferation and cortical cell production, wool growth—3270
- cobalt deficiency in growing lambs—1089
- comparisons of progeny by Finnish Landrace and Romanov rams out of mutton Merino and Awassi ewes—1119
- compensatory—2987
- compensatory, and productivity of highland Corriedale sheep—3340
- copper, iron and zinc in carcasses and relationship to trace element requirements—2898
- crossbred Sardinian and East Friesian sheep in Sardinia—400
- crossbreeds of Teeswater, Dales and Dorsets—2146
- crossbreeding, fine/coarse-wooled ewes mated with rams of mutton-wool type—332
- crossbreeding, review—1027
- effect of clipping and diet on intake and performance of housed pregnant and lactating ewes—3145
- GROWTH**, effect of diet and stage of, upon energy utilization by lambs—951
- effect of elfazepam on digestibility, intake and gain in sheep—1111
- effect of freeze dried rumen fluid on fattening lambs—231
- effect of implantation of zeranol—3076
- effect of milk yield of lowland ewes on, lambs—1496
- effect of monensin on, lambs—1477
- effect of pH on specific growth rates of rumen bacteria—1576
- effect of promoter zeranol on reproductive characteristics in ewe lambs—622
- effect of ralgro implants—1473
- effect of rate, sex and age on skeletal muscle and adipose tissue—2061

- effect of rearing type and prepartum nutrition on intake and performance of lactating Grey-face ewes at pasture—1905
- effect of removal of endometrial caruncles on fetal size and metabolism—2546
- effect of *Sarcocystis ovis* on rate and haematocrit in lambs—2082
- evidence for renotropic activity in ovine pituitaries—2151
- factors influencing post-weaning performance of purebred and crossbreds—1901
- fetal and neonatal growth patterns and maternal reproductive effort—2528
- fetal, effect of maternal nutrition—1955
- fetal, joint effect of dam and fetus—2946
- grinding and age of corn stover effect on digestion—1545
- heritability in crossbred lambs—3280
- heritability in Romney sheep—210
- hoguet, influence on subsequent ewe fertility—2036
- GROWTH, in *Ostertagia* infections—616
- in Romney, Coopworth, Perendale and Corriedales—2882
- inbred lambs—50
- influence of sex—83
- integrated use of land—1693
- intrauterine, retardation, experimental, somatomedin-like activity in plasma—929
- lamb, crossbred Australian breeds—629
- lamb, early weaned, influence of length of feeding milk substitutes—7817
- lamb, effect of implants of zeranol—2323
- lambs, affected by number of lambs suckling, sex of lamb and milk yield of ewe—3278
- lambs, after iodine supplementation of dams—1598
- lambs, and rumen function, supplementation of a low-protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1539
- lambs, effect of daylength, comparisons of sex, level of feeding, sharing and breed of sire—993
- lambs, effect of duration of suckling on milk production and—3338
- lambs, effect of early weaning—782
- lambs, effect of energy supply on pregnant ewes—2995
- lambs, effect of feeding formaldehyde treated concentrate mixture—322
- lambs, effect of milk intake on intake of cut and grazed herbage—2317
- lambs, effect of readily available carbohydrate and roughage source on performance, fed liquid supplement—1994
- lambs, energy maintenance—2979
- lambs, from Romney, Corridale, Dorset, Romney × Dorset and Dorset × Romney—1044
- lambs, on diet with cement kiln dust—3192
- lambs on low protein-high energy diets—335
- long-term effect of feeding protected sunflower seed supplement on composition of body fat in growing sheep—2000
- Manchega sheep—2603
- mathematical description, fetus, maternal nutrition—2542
- merino lambs, effect of feeding creep mixture—323
- merino sheep—67
- microbial, rumen, influence of some theoretical and experimental factors—1298
- of large lambs—2010
- offspring of iodine supplemented ewes—2220
- potential, effect on adipose tissue cellularity and lipogenic activity—1966
- potential, effect on skeletal muscle growth and development—299
- preweaning, Watish lambs—2369
- promoters, assessment in fattening of lambs on concentrates—2436
- promoters, efficacy and mechanism of action of anabolic agents—1287
- GROWTH, rate effect on chemical composition of carcass and muscle tissue—2087
- GROWTH, response of wether lambs to treatment with different levels of trenbolone acetate, 17 beta estradiol and zeranol—3077
- response to zeranol implants—3248
- Romney, Corriedale, Dorset, and crossbreds—1047
- some tropical breeds—2463b
- skeletal, in chronic *Trichostrongylus vitrinus* infections—2914
- stimulant, a novel compound—161
- stimulation, use of salinomycin—369
- store lambs on cereal-based diets with protein or urea—2189
- store lambs on cereal-based diets with protein or urea—2227
- utilization of lupin stubbles by Merion sheep—649
- voluntary feed intake, and body composition and efficiency, quantification of between-animal variation—1951
- weaned lambs before, during and after period of weight loss—2678
- weight gains, Churra sheep, effect of ingestion of energy and protein—1106
- weights, Merino ewes, survival feeding of pregnant and lactating ewes with combinations of wheat and lucerne hay—595
- wether lambs, implantation with trenbolone acetate and 17 beta estradiol at two levels of dietary protein—3078
- wool fibre, stimulation—3160
- young male Turcana sheep—188
- GH, effect of daylength on growth of lambs, blood levels of GH, prolactin, insulin and thyroxine and effect of feeding—992
- GROWTH HORMONE (GH), estimates of repeatability in temperal patterns—713
- GH, immunocytochemical localization in perinatal sheep pituitary—2290
- GROWTH HORMONE, importance in artificial induction of lactation—955
- in plasma of castrated growing lambs—930

- GH, ural mechanisms in control—818**
no effect of morphine and naloxone in fetal or adults—1936
- GROWTH HORMONE, ontogeny of serotonergic regulation in fetus and neonate—1876**
plasma, response to short-term fasting and spontaneous meals—817
- GH, secretion, mediated by beta endorphin, ontogeny—1099**
stimulation by beta endorphin in fetus in vivo—1097
- GROWTH PROMOTERS, hazards—1288**
- GROWTH RATE, lamb, factor in production in hill land of Great Britain—659**
- GROWTH REGULATOR, plant (Miffluidide), treatment of fescue, effect on nutrient utilization—2527**
- GUARD DOGS, Komondor, reduce sheep losses to coyotes—1765**
- GUINEA PIGS, use for assay of anthelmintic resistance to *Trichostrongylus colubriformis*—2626**
- GUSTATORY SYSTEM, senses after olfactory bulbectomy—289**
- H**
- HAEMAGGLUTINATION, indirect reaction, use in diagnosis of *Sarcocystis* and *Toxoplasma*—1721**
- HAEMATOXENUS, prevalence and significance in northern Nigeria—1717**
- HAEMOBARTONELLA, prevalence and significance in northern Nigeria—1717**
- HAEMONCHUS, epidemiology of gastroenteritis, Zaire—2669**
role of seasonal inhibition of development in epidemiology—703
- HAEMONCHUS BISPINOSUS, identity with *H. contortus*—2604**
- HAEMONCHUS CONTORTUS, activity of levamisole against resistant benzimidazole resistant—608**
anthelmintic efficacy of oxfendazole and haloxon against arrested larvae—2198
benzimidazole resistant, efficacy of albendazole—503
benzimidazole resistant, effect of esophageal groove reflex on oxfendazole pharmacokinetics and efficacy—2408
benzimidazole-resistant forms amenable to treatment with fenbendazole and albendazole—1182
comparison of irradiated larvae and transfer factor treatment—2563
crystal-like intracellular inclusions—3185
effect of abomasal nematodes on subsequent challenge with *H. contortus*—2488
efficacy of rafoxanide and naphthalophos against inhibited larvae—1731
efficiency of oxfendazole against four field populations of benzimidazole resistant—3209
- experimental infections in Mandya lambs, total serum proteins and their electrophoretic patterns—3087
in vitro variation of glycogen content—2401
influence of breed on susceptibility of sheep in Kenya—2403
influence of hemoglobin phenotype on susceptibility of sheep in Kenya—2404
inheritance of resistance to thiabendazole—1734
measurement of blood loss—1837
pasture infectivity in Nigeria—2200
predicting resistance—2521
resistance to lavamisole—2632
resistance to oxfendazole—3208
resistance to thiabendazole in New South Wales—3210
response of Awassi and Merino sheep—66
role of inhibited larvae in epidemiology—239
sex ratio—1654
some factors influencing degree of resistance in sheep immunized with attenuated larvae—2801
thiabendazole resistance in field populations—1733
variations in populations in two Moroccan areas—482
- HAEMONCHUS PLACEI, transfer to sheep from impala—1355**
- HAEMAPHYSALIS PUNCTATA, vector of *Anaplasma mesaeterum*—3053**
- HAGEMAN FACTOR, in mammalian plasmas, immunological study—2609**
- HALOPERIDOL, biphasic prolactin release, lactating cows and ewes—2689**
- HALOXON, anthelmintic efficacy against arrested *Haemonchus contortus* larvae—2198**
- HAMDANI, kemp succession in adult fleece in relation to birthcoat—1178**
- HAMPSHIRE, carcass evaluation of crosses—3344**
comparative performance of breed crosses, lamb production traits—1442
in Wisconsin, length of breeding season—1706
- HAO HAIR, kemp succession in adult fleece of two coarse-wool breeds in relation to birthcoat—1178**
- HAPTOGLOBIN, development during intrauterine development—284**
- HARDWICK SHEEP, immunoglobulin G in sera from natural infections of scrapie—612**
- HARRASSMENT, wildlife, physiological approach to factors influencing heart rate in free-ranging bighorn sheep—1811**
- HAY, chopped and ground, effect on ruminating behaviour of sheep—2203**
cowpea, moth and cluster-bean, nutritional value—2300
effect of variable intake on ruminating behaviour—1259
fababean crop residues, intake and digestibility—2982
feeding lambs—2179

- fibrous, intake and digestibility by sheep fed sewage solids in supplemental feed—2219
- influence of feeding hay from area with heavy pollution of atmosphere with nitrogen compounds on some biochemical parameters of blood and rumen contents—1488
- quality of timothy (*Phleum pratense*) as affected by magnesium fertilization or dietary magnesium supplementation—2486
- relationship between intake and rumen function—2204
- silage, nutritive value—3252
- HAYLAGE**, alfalfa, proprionic treatment, responses of sheep—2836
- for suckled lambs—1628
- utilization of feed mixtures based on—2690
- HEADFLY**, sheep, effect of diet on life span and egg maturation—307
- HEALTH**, survey, sheep and goats in Italy—2660
- HEART**, autonomic heart rate control, age-dependent pattern during hypoxia in fetal and newborns—3175
- blood flow, age related changes in instrumented sheep—2539
- cardiac function, effect of sodium nitrate aerosols—2599
- cardiac output, blockade of angiotensin II in fetal lambs—1421
- coronary blood flow, changes related to age and resistance in chronically instrumented sheep—2549
- cysticercus of *Taenia ovis*, pathology—1810
- effect of lysophosphatidyl choline on excitability of purkinje fibers—147
- effect of reserpine on cold stressed sheep—2236
- electrocardiographic changes in fetus in relation to beta adrenoceptor stimulation and blockade—1333
- epinephrine and pacemaking mechanism at plateau potentials in sheep purkinje fibers—2281
- function in newborn lamb—309
- function in newborn—310
- function in thermally injured sheep—3018
- importance of platelets for isolated organ perfused at 13°C—2876
- increased lung lymph transport without failure after ligation—611
- kinetic model of electrophysiological effects of tinofedrin on purkinje fibers—10
- metabolism, diabetes mellitus, newborn—1716
- pre-ejection period of cardiac cycles in fetus—2085
- radioimmunoassay of cardiac contractile proteins in diagnosis of myocardial infarction—658
- HEART RATE**, factors influencing, in free-ranging bighorn sheep—1811
- redistribution of cardiac output in hypoxemic fetus—2702
- skeleton immuno reactivity in purkinje fibers—901
- species differences in isolated cardiac sarcoplasmic reticulum function—348
- tricuspid atresia—1764
- HEAT**, body, effect of reserpine in cold stressed sheep—2236
- effect of rainfall on dynamics in fleece—3126a
- gram negative sepsis in thermally injured sheep—15
- nasal exchange—1685
- HEAT**, production, central excitatory serotonergic or serotonergic-like synapse on pathway to—350
- production, effect of fleece length, water load and ambient temperature, fasting sheep—3128
- production, role of l-serine dehydratase—2577
- production under fasting conditions, effect of varying environmental conditions—3127
- radiant, effect on duration of estrus, clical estrous activity, plasma progesterone, LH levels and fertility of ewes exposed before mating—2645
- radiant, effect on pregnancy—2643
- stress, effect on plasma concentrations of prolactin and LH in ewes—1347
- thermal adaptation—2009
- thermostability of parainfluenza-2 virus -2/61
- tolerance of different genetic groups of sheep exposed to elevated temperatures—2753
- HEAT EXPOSURE**, effect of environmental, on physiological responses, blood constituents and parameters of blood glucose metabolism—2630
- HEATH**, Dutch, sheep, color variants—1701
- HEATHER**, digestion, effect of nitrogen and energy supplementation on voluntary intake—2002
- effect of season and level of grazing on utilization of—2001
- HEBRIDES**, breeds of sheep—139
- HELATAC**, efficacy against gastrointestinal nematodes in growing lambs under semi-arid conditions—3141
- HELICIDAE (SNAILS)**, experimental infection with ovine protostrongyles—2048
- HELIOTROPIUM EUROPAEUM**, effect of chronic liver damage caused by ingestion, on bile formation—509
- HELMINTHIASIS**, applications of research to flock health—2046
- Australia, use of panacur—1435
- chemoprophylaxis and pathogenetic therapy—768
- ovicidal and larvicidal action of panacur—835
- stomach, pepsinogen in plasma as diagnostic aid—1543
- HELMINTHIC DISEASES**, a review—3339
- New South Wales—1258
- HELMINTHS**, a review of *Muellerius capillaris*—1064
- controlled by self medication—1520
- dose titration with oxfendazole—1578

- efficacy of fenbendazole against forms in digestive tract—483
- efficacy of thiabendazole and levamisole in western Victoria, Australia—497
- egg output in low level infections of *Ostertugia circumcincta* in lambs—1424
- epizootiology, pasture, Czechoslovakia—3266
- gastrointestinal, analysis of trace elements of serum, liver and pancreas—2736
- in Poland—1423
- in Uzbekistan of USSR—192
- potential anthelmintic, novel 2-pyridinyl-5-isothiocyanato benzimidazoles—1265
- serum minerals, gastrointestinal trichostrongylids—2259
- sheep, Australia—179
- sheep, management control—2823
- sheep, textbook—282
- South Africa—2822
- Switzerland, epidemiological study—2341
- HELMISAN, premix of levamisole and oxyclozanide as anthelmintic for sheep and cattle—687
- HEMAGGLUTINATION, differentiation of 3 isolates of parainfluenza virus—2765
- HEMAGGLUTINATION INHIBITION TEST, measles, usefulness in detecting rinderpest antibodies after inoculation of tissue culture rinderpest vaccine—1443
- HEMATOCRIT, effect of intramuscular injections of iron-dextran—390
- in splenectomized *Theileria* carrier sheep—2295
- effect of *Sarcocystis ovis*, lambs—2082
- in trichostrongylid infections—746
- lambs from ewes given protected lipids during late pregnancy and early lactation—2851
- HEMATOLOGY, anemia, clinical study—224
- changes during anaplasmosis and babesiosis—123
- changes in Chokla lambs during 3 months after birth, under semi-arid conditions—2038
- effect of intramuscular injections of iron-dextran—390
- Swiss sheep breeds—389
- HEMATOPOIESIS, endogenous erythroid colony-forming cells in fetal and newborn—2559
- HEMATOPOIETIC CELLS, fetal, produce adult hemoglobin when transplanted to adult—3333
- HEMICASTRATION, season of birth and response to, in lambs—1676
- HEMODYNAMIC RESPONSES, vasopressin, fetus—1422
- HEMODYNAMICS, of ACTH induced hypertension—2676
- HEMOGLOBIN, abnormal, Finnish sheep—176
- and blood potassium polymorphism in Nilagiri sheep—1498
- biochemical polymorphism, types—3011
- presence and evolution in lambs—2027
- digested by phagosomes of placenta—2984
- a third beta chain allele—1457
- effect of intramuscular injections of iron-dextran—390
- fetal hematopoietic cells produce hemoglobin when transplanted in the adult animal—3333
- fetal maturation related to parturition—1758
- genetic polymorphism, F₁ cross of Corriedale × Criollo—2007
- in vitro switching of erythroid precursors—240
- levels in splenectomized *Theileria* carrier sheep—2395
- levels in trichostrongylid infections—746
- oxidation in whole blood in relation to glutathione peroxidase activity—3251
- performance of sheep having AA, BB and AB types—2214
- phenotypes, correlation with erythrocyte sickling—474
- phenotypes, influence on susceptibility of sheep in Kenya to *Haemonchus contortus*—2404
- polymorphism in relation to productivity—2476
- relationship of types and production traits in Finnish crosses in Israel—1120
- switching, synthesis, cloning and characterization of DNA sequences, coding for the beta B-, beta C- and Nu-globin Mnas—295
- type and reproductive performance of sheep grazing estrogenic pastures—3180
- type, and selenium status, influence on peripheral plasma progesterone and corticosteroid concentration in ewes grazing estrogenic pastures—3178
- type, relation with production in crossbred ewes—685
- types, effect on production traits—2752
- types in Deccani sheep, ATP and 2,3-diphosphoglycerate levels—2303
- types, Nilagiri sheep—1498
- types, phenotypic and genetic associations—175
- variants in Karakuls and blood electrolytes—2751
- HEMOGLOBIN ESTERASE, marker in early stage of breed formation—1093
- HEMOLYSIS, in sodium chloride, glucose and phosphate buffer solutions—1896
- in vitro activity of exotoxin of *Corynebacterium ovis*—469
- HEMORRHAGE, acute maternal, effect on release of catecholamines in pregnant ewe and fetus—153
- intracranial, following intravenous administration of sodium bicarbonate or saline solution in newborn asphyxiated in utero—3234
- intracranial, in preterm fetus—2499
- massive, responses of new born lambs breathing room air and 4.5 percent carbon dioxide during—2811
- massive, responses of newborn—2812
- petechial, carcass fat—2988

- plasma vasopressin levels in mature and immature fetuses—2584
 pulmonary transvascular fluid dynamics during—1833
 shock, effect of plasma oncotic pressure on pulmonary microcirculation—744
- HEMORRHAGIC SPECKLING**, subcutaneous—2330
- HEPARIN**, effect of depletion on lung fluid balance after emboli—333
- HEPATIC ENCEPHALOPATHY**, associated with chronic facial eczema—2972
- HEPATITIS**, chronic, lambs, Norway, resembling white liver disease in New Zealand—3059
 leptospirosis—1708
- HEPATOCYTES**, changes in binding of insulin and glucagon to receptors, lactating and non-lactating ewes—1082
 isolated, gluconeogenesis—2514
 palmitate metabolism, fed and fasted sheep—1787
 responsiveness to glucagon and viability—795
- HEPATOZOON**, prevalence and significance in northern Nigeria—1717
- HERBAGE**, digestion, stomach and intestines of weaner lambs at different stages of maturity—3226
 effect of level of concentrate feeding and amount of herbage on intake and performance of ewes with twin lambs at pasture in early lactation—2003
 effect of milk intake on intake of cut and grazed, by lambs—2317
 indigenous hill, nitrogen digestion—1820
 intake, effect of variation in sward characteristics upon ingestive behaviour and, of calves and lambs under a continuous stocking management—???
- intake, evaluation of sward sampling for estimating intake—3187
 quantitative digestion of fresh, utilization of nitrogen—858
 weathered, digestibility, effect of lupin grain and recently cut lucerne—2531
- HERBAZIN-50**, chronic poisoning—2163
- HERBICIDES**, chronic poisoning with herbazin-50—2163
- HEREDITARY DISEASES**, congenital defects—751
 congenital nephron abnormalities—662
 textbook—282
- HERITABILITY**, differences in sensitivity to copper—3323
 Romney sheep—210
- HERPESVIRUS**, of sheep pulmonary adenomatosis—1884
- HERPESVIRUS OVIS**, serological relationships in other herpesviruses and possible involvement in etiology of jaagsiekte—3135
- HETERODENDRUM OLEIFOLIUM** (ROSEWOOD SHRUB), mixed woodland with beulah, sheep grazing in western New South Wales—1727
- HETEROSIS**, crossbreeding for new breeds—9
 estimation and estimates of individual, maternal heterosis and recombination loss—2939
 lymphocyte cultures in sheep—2906
- HEXACHLOROBENZENE**, meat residues—268
- HEXACHLOROCYCLOHEXANE**, gamma, field test method for estimation in sheep dips—938
- HEXACHLOROPARAXYLENE**, use in dicercosiasis and fascioliasis—3027
- HEXACHLOROPHENE**, toxicity, a review—2393
- HEXOSAMINE**, in cartilage of lambs born of ewes fed Mn-deficient diets—1313
- HIDES**, and skins in Karakul farming in USSR—2992
- HILL FARMING RESEARCH ORGANISATION**, 25 years work from 1954 to 1979—3066
- HISSAR**, history of fat-rumped sheep—2056
 incidence of coenurosis—2276
- HISTAMINE**, acute inflammatory response—3121
 effect of infusion into pulmonary or bronchial artery on pulmonary fluid balance—2102
 hormones, feeding and body temperature following injection—818
 induced shifts in circulatory and tissue homeostasis of proteins—43
 occurrence and disappearance in rumen—1402
- HISTIDINE**, response to infusion of graded levels—937
- HISTOCHEMISTRY**, mucus, cervix—1302
- HISTOGENESIS**, fetal adrenal cortex—2547
- HISTOLOGY**, cellularity of adipose tissue—1343
 cervix, changes following prolonged grazing on estrogenic subterranean clover—1760
 changes in sheep organs as result of chronic poisoning of simazine—819
 fine structure of principal cells in initial segment of epididymal duct—2147
 pineal gland in ewes during pregnancy—2129
 qualitative and quantitative changes in oviduct and uterus after exposure to X-rays—2841
 skin, structure of epidermis—1773
 testicular parameters in bilateral cryptorchid adult rams—1324
- HISTOPATHOLOGY**, experimental sheep pox—1202
 in sheep with *Gaigeria pachyscelis*—126
 pulmonary adenomatosis—84
- HISTOPHYSIOLOGY**, subcommissural organ of ewes—2130
- HISTORY**, accounts of a sheep and corn farm, 1558 to 60—3337
 changing distribution of breeds in Scotland from 1795 to 1965—515
 domestic sheep and use of wool in ancient Near East—28
 John's Disease—1844
 of fat-rumped sheep—2056
 origin and development of Dorset horn sheep in Australia—982

- HOGGET**, growth, influence on subsequent ewe fertility—2036
- HOLLAND**, color variants in Dutch heath sheep—1701
nematodiosis in lambs following exceptionally cold spring—1067
- HOMEOSTASIS**, histamine induced shifts in circulatory and tissue, proteins—43
- HOOF AND CLAW DISEASES**, changing clinical picture of contagious ecthyma—3091
- HORMONE**, gonadotrophin releasing, lutropin and testosterone secretion following single or repeated doses of—3272
growth, immunocytochemical localization in perinatal sheep pituitary—2290
growth, secretion, mediated by beta endorphin, ontogeny—1099
- HORMONE RECEPTORS**, ACTH, levels at late gestation and early neonatal stages—829
- HORMONES**, adenohypophysis, ewe—2106
adenohypophysis, immunological relationships—2608
adrenocortical steroid, in production of hypertension—475
adrenocorticotropin in regulation of glucocorticoid secretion during perinatal period—1772
alpha melanocyte stimulating, in regulation of glucocorticoid secretion during perinatal period—1772
comparison of LH and prolactin levels in cycling and anestrus ewes—1425
corpus luteum, granule secretion by luteal cell and fate of granule membrane—1054
effect of energy supply on blood concentrations—357
effect of heat stress on plasma levels of prolactin and LH in ewes—1347
effect of photoperiod on plasma levels—442
effects of prostaglandin F-2 alpha on blood constituents—4
estimation of half-life and metabolic clearance rate of thyrotropin-releasing hormone in sheep using a double antibody radioimmunoassay—1588
follicular populations in ewe under different gonadotrophin levels—486
follicle stimulating, new homologous radioimmunoassay technic—344
follicle stimulating, presence of large molecular weight, and LH fraction and free alpha subunit in pituitary—308
genetic and environmental variation in lutropin response of ovariectomized sheep to luteal phase—1675
growth, prolactin and thyrotropin, repeatability in temporal patterns of secretion—713
in undernourished ewe—2683
increasing reproductive ability, review—3125
induction of estrus and fertility in ewe with anestrus—1943
induction of lactation—1849, 1850
induction of maternal behaviour in non-pregnant ewe—1738
- interaction of GNRH with anterior pituitary, role of divalent cations, micro-tubules and microfilaments—26
- long-term secretion from auto-transplanted sheep pancreas—135
- LH follicle stimulating, plasma concentrations during breeding season in ewes immunized against androstenedione or testosterone—1867
- local steroid concentrating mechanism in reproductive vasculature of ewe—3186
- gastrointestinal, influence on pancreatic secretion—3327
- maternal recognition of pregnancy in ewe and rabbit—878
- neurohypophysis, dopaminergic regulation of prolactin secretion—1098
- ontogeny in fetus, chorionic somatomammotropin in mid and late gestation in fetal and maternal circulations—1096
- parturition, actions of steroid, on contractile myometrical function—665
- pituitary, superovulation—376
- progestational, application to small ruminants—391
- progestational, need for and possible methods of application of hormone assay technics for improving reproductive efficiency—1958
- prolactin, ontogeny, mid and late gestation and in newborn—2072-A
- radioimmunoassayable melatonin-circulating patterns—137
- receptor binding and conformational properties of prolactins after chemical modification of two tryptophan residues—1603
- reducing the partum-to-mating period in autumn lactating ewes through use of exogenous—1229
- sequential changes and activation of hypothalamic-pituitary-gonadal axis—820
- sex, application during the reproductive period in small ruminants and pigs—391
- sex behaviour and hormone responses in ewes given testosterone propionate—1858
- sex, need for and methods of assay for improving reproductive efficiency—1958
- HORSE**, teratogenicity and toxicity of coniine in cows, ewes and mares—1526
- HORSERADISH PEROXIDASE**, use in retrograde transport study of thalamocortical connections—1503
- HOUSING**, animal, laboratory, metabolism cages—1979
book by Richter, Werner and Bahr—2516
effect on milk production—706
indices of stress in experimental sheep—2487
plastic house for 200 ewes—1004
respiratory infections in housed sheep—1468
response of Welsh mountain ewes, winter—78
- HUMAN**, interactions with bighorn sheep in California—1303
- HUMAN SPERMATOZOA**, immunodiffusion data on antigenic relationship with bull, boar, and ram cells—417

- HUMANE TREATMENT**, animals—529
- HUMIDITY**, influence on immunogenesis in clostridial infections—1492
- problems of transport of animals by air—2078
- relative, influence on clostridial infections—1491
- HUNGARY**, *Brucella ovis* from aborted fetuses—1489
- cysticercosis, coenurosis and hydatidosis in wild sheep—2084
- epizootiology of trichostrongylids—1601
- information on animal health and diseases in National Research Information Center—1707
- Komondor guard dogs for sheep—1248
- HUNGER**, Asia, kids, calories and poverty—928
- effect of marihuana—1930
- HUSBANDRY**, behaviour and welfare—218
- Intensification, northern Ireland—3081
- intensive, German Democratic Republic, veterinary practice—3289
- intensive, indices of stress in housed experimental sheep—2487
- intensive, response of lambs—2089
- large scale, *Anaplasma ovis* and respiratory disease among sheep—1522
- large-scale, organization of veterinary work—2279
- methods of management control of nematodes of sheep—2823
- HYALOMMA**, biological and ecological studies—1754
- HYALOMMA ANATOLICUM ANATOLICUM**, transmission of Wad-Medani virus—1621
- HYALOMMA IMPRESSUM**, biology under laboratory conditions—2195
- HYALURONIDASE** (EC 3.2.1.35), effect of immunizing ewes with ram—2051
- immunohistochemical demonstration in testis—2610
- HYBRIDIZATION**, progress and tasks—3161
- HYDATID DISEASE**, control, a global view—1052
- control in Tasmania—1913
- epidemiological aspects of planning and evaluation of control—2675
- in Australia, review—157
- in Mymensingh District, Bangladesh—1407
- in Sokoto State, Nigeria—678
- past, present and future—2176
- HYDATID**, in Mymensingh district, Bangladesh—2687
- incidence in New Zealand—2143
- pathology—2492
- spread and consequences in Valjevo area—1861
- HYDATIDOSIS**, among shepherds' families in Ferrara province, Italy—55
- in wild ungulates in Hungary—2084
- slaughter sheep in central Sudan—870
- symposium—186
- HYDRANENCEPHALY**, Akabane virus as etiologic agent—1393
- HYDROCARBONS**, halogenated aromatic, selective accumulation and depletion of polychlorinated biphenyl components, food animal implications—1247
- HYDROCHLORIC ACID**, effect of intraduodenal infusion on volume of secretion, bicarbonate output and pH of pancreatic juice and bile—2874
- HYDROCORTISONE**, blood pressure and metabolic effects—601
- F, in plasma, normally and early weaned lambs—1770
- hormonal factors in lung maturation in fetus—1581
- pH, abomasum juice, effect of prostaglandin F-2-alpha—728
- and trimethoprim, effect on mammary and renal excretion—169
- and water intake and ammonia levels in rumen of sheep fed pelleted feeds—234
- changes in lactate-producing and lactate-utilizing bacteria in relation to, in rumen during stepwise adaptation to high-concentrate diet—1816
- effect on digestive enzymes—1203
- effect on specific growth rates of rumen bacteria—1576
- postnatal, relation to meconium—823
- HYDROGENASE**, activity in anaerobic sewage sludge in rumen liquid—3326
- HYDROLASES**, glycoside, origin and developmental patterns in fetal membranes—2390
- methyl mercury, action in transformation of mercury compounds—1630
- phosphoric monoester, significance—838
- HYDROPHOBICITY**, erythrocytes—3335
- HYDROTAEA IRRITANS** (SHEEP HEAD FLY), biology of immature stages in soil—2541
- β -HYDROXYBUTYRATE**, metabolism in camel and sheep—555
- HYDROXYCHOLECALCIFEROL**, pharmacokinetics and quantity in sheep affected by osterodystrophy—1310
- 5-HYDROXYINDOLACETIC ACID**, regional concentration in brain—193
- HYDROXYLASE**, gamma butyrobetaine, activity in human and ovine liver and skeletal muscle—539
- 19-HYDROXYTESTOSTERONE**, serum gonadotrophin levels in castrated males—2288
- 5-HYDROXYTRYPTAMINE**, cardiovascular and renal functional changes after injection—274
- effect on feeding—201
- HYGIENE**, and antitoxoplasmic alimentary antibodies, Belgium—934
- carcass, a new method for improving—1131
- standards, international, for abattoirs—1663
- HYPERALDOSTERONEMIA**, vascular insensitivity responsible, newborn—2730
- HYPERAMMONEMIA**, effect on blood glucose and plasma insulin—238
- HYPERBILIRUBINEMIA**, bile acid clearance with hereditary—891

- HYPERCALCEMIA** inhibition of dihydroxy cholecalciferol effect by calcitonin—241
- HYPERCARBIA**, lung fluid balance in awake newborns with pulmonary edema from rapid intravenous infusion of isotonic saline—345
- HYPERGASTRINAEMIA**, ostertagiasis—2498
- HYPERMAGNAESAEMIA**, fetal plasma magnesium levels—242
- HYPERNATRAEMIA**, pregnancy—833
- HYPEROXIA**, permeability increase—421
- HYPERRENINEMIA**, vascular insensitivity responsible, newborn—2730
- HYPERROXALURIA**, spontaneous renal disease resembling, young lambs—1766
- HYPERTENSION**, adrenal steroid, comparison of effects of glucocorticoid and mineralocorticoid infusions—3242
- cardiovascular response to hypoxemia following autonomic blockade in fetal lambs—1748
- circulatory effects of blockade of angiotensin II in fetal lambs—1421
- effect of sodium loading and ACTH on blood pressure of sheep with reduced renal mass—3241
- experimental aortic stenosis in fetal lambs—1745
- hemodynamics of ACTH induced—2676
- intracranial, increased pulmonary vascular permeability—397
- nitroglycerin effect in pregnant ewe—640
- HYPERTHERMIA**, telemetry system for interactive maintenance, in ewes with psychometric chambers—1591
- HYPERTROPHY**, biochemical changes—349
- compensatory renal, fetus—2033
- HYPOALBUMINEMIA**, in chronic infections with *Trichostrongylus vitrinus*—2914
- in ovine fascioliasis—696
- HYPOCALCEMIA**, alkali treated straw and urea for pregnant ewes—1990
- appraisal of urine and blood tests—2382
- biochemical tests of urine and blood—2380
- blood chemistry—2381
- calcium homeostasis in fetus—514
- case of paresis with 2 relapses—2739
- changes in plasma inorganic phosphorus levels in induced states—691
- HYPOGLOBULINEMIA**, in chronic infections with *Trichostrongylus vitrinus*—2914
- HYPOGLYCEMIA**, effect of triamcinolone acetate on plasma glucose and ketones and on total entry rate of glucose in twin pregnant kit foxes—2458
- neural and chemical control of abomasal secretion—2064
- response of fetal and newborn to glucose and tolbutamide infusions—2348
- sorbitol induced—313
- HYPOMAGNESEAEMIA**, a review—1535
- effect of cold stress on mineral metabolism of sheep fed on herbage—2713
- experimental studies, metabolism of magnesium and calcium—2715
- fetal plasma magnesium levels—242
- magnesium and calcium metabolism in young and old ewes fed low magnesium diets—2714
- prevention—118
- sheep—3284
- HYPOMYELINOGENESIS**, congenital, Border disease, postnatal neurochemical recovery in CNS—2908
- HYPOPHYSECTOMY**, fetal, somatomedin-like activity in plasma—929
- plasma steroids, prolactin and placental lactogen in intact or hypophysectomized pregnant ewes with an hypophysectomized fetus—387
- ram, endocrinology of spermatogenesis—632
- serum somatomedin activity—429
- short and long term effects on follicular populations—822
- HYOSPIADIAS**, in Merino lambs—749
- HYPERTENSION**, adrenocortical steroid hormones in production—475
- response of newborn to rapid massive hemorrhage—2812
- spinal, dopamine treatment decreases uterine blood flow in pregnancy—2554
- HYPOTHALAMUS**, FSH and LH release in ovariectomized ewes under hormonally induced estrous cycles—2954
- Lesions, effect on estradiol-induced changes in LH release—2442
- Uptake of tritium labeled testosterone following intracerebroventricular infusion—220
- HYPOTHYROIDISM**, amniotic fluid, 3,3'- and 3',5'-diiodothyronine in fetal—576
- effect of induced prenatal, lamb mandibular third primary molars—329
- fetus, effect of thyroxine on lung maturation in fetus—899
- HYPOVOLEMIA**, effect of angiotensin II A₂ blockade on response of fetus—1899
- HYPONEMIA**, cardiovascular responses following autonomic blockade, fetus—1748
- intravenous injection of bupivacaine in pregnant ewe—641
- lung fluid balance in awake newborns with pulmonary edema from rapid intravenous infusion of isotonic saline—345
- prostaglandin control of renal circulation in response to, in fetus in utero—1986
- renal response of fetus—2534
- HYPONEMIA**, age-dependent pattern of autonomic heart rate control, fetus and newborn—3175
- blood flow to fetal organs as a function of arterial oxygen content—2311
- direct and indirect pulmonary vascular effects of tolazoline in newborns—1780
- direct relationship between pulmonary vascular resistance and lung fluid filtration in lambs given intravenous tolazoline—420

dose response to vasopressin in fetus—693
 effect of angiotensin II A₂ blockade on response of fetus to acute hypoxia and hypovolemia—1899
 effect of glucose infusion upon fetus—2596
 effect of tolazoline on blood flow and pressures, lambs—1147
 effect on pituitary thyroid axis in lambs—1584
 fetal breathing movements—718
 maturation of ventilatory response in newborn lamb—287
 neonatal lambs, norpinephrine, epinephrine and dopamine levels in response to—875
 norepinephrine, epinephrine and dopamine levels in response—874
 prolonged, patterns of regional cerebral blood flow, fetus—166
 pulmonary and systemic vascular responses to 6-keto prostaglandin E₁—1781

I

- IBUPROFEN, age dependent changes in response of ductus arteriosus—600
 ICELAND, breeding season for sheep—842
 breeding value of sheep—1225
 isolation of *Mycobacterium paratuberculosis* from sheep and cattle—1188
 ultrastructural study of cerebrospinal fluid from sheep with visna virus—1063
 ICELANDIC EWES, effect of live weight and body condition on fecundity—16
 ICELANDIC SHEEP, experience with index selection—17
 ICI 80,996 (CLOPROSTENOL), synchronization of estrus—1650
 ICTERUS, enzootic, a form of chronic copper poisoning—263
 IDAHO, epididymitis in rams—741
 I_gG-1, effect of estrogen on selective transfer into mammary secretion—700
 ILE-DE-FRANCE, crossbreeding for production of fat lambs—971
 rams, crossbred with Polish Merinos, production and quality of wool of fattened lambs—2237
 rams, use in crossbreeding—130
 seminal characteristics and fecundating power of ram—984
 IMMUNE REACTIONS, comparison of ways of detecting blocking antibodies using *Brucella melitensis*—1559
 IMMUNE RESPONSE, chlamydial infections—2854-A
 fetus—3041
 IMMUNITY, and aging—1907
 antibodies to androgens and ovulation in ewe—2651
 antibodies to rotavirus—2923
 antigenic composition and source of soluble proteins on skin surface—1449
 antigenic relationships between *Fasciola hepatica* and *Cysticercus tenuicollis*—171
 antigenic variation in Visna virus—2677
 arc 5 antibodies in sera of sheep to *Echinococcus granulosus*, *Taenia hydatigena*, and *Taenia ovis*—3315
Babesia ovis antigen preparation—1661
 cell-mediated, effect of cyclophosphamide on growth—1482
 cell-mediated, effect of removal of ovine squamous cell carcinoma on lymphocyte stimulation by tumour extracts and phytohaemagglutinins—1483
 chronic toxoplasmosis depressed humoral response—2834
 colostrum, a review—3339
 colostrum trypsin inhibitor capacity in different animal species—2624
 combined vaccines—1906
 comparison of irradiated larvae and transfer factor treatment in *Haemonchus contortus* infections—2563
 concentrations of immunoglobulin classes in subcompartment of lung—1123
 contagious ecthyma virus—2307
 cross-protection between cysts of *Echinococcus granulosus*, *Taenia hydatigena* and *T. ovis*—1281
 cross, with *Anaplasma* species—3053
 diagnosis of cysticercosis—642
 dictyocauliasis—745
 effect of dexamethasone on ability of sheep to resist reinfection with nematodes—1897
 effect of immune response on *Nematodirus battus*—1881
 effect of prior infection with *Fasciola hepatica* on resistance—1945
 effect of route of infection on acquired resistance to *Fasciola hepatica*—1533
 effect of thymus extract on immune response—1836
 effect of thymosin on PHA and Con A responses by fetal lamb lymphocytes—1728
 elevated levels of serum immunoglobulins due to ovine progressive pneumonia virus infections—2021
 experimental challenge infection of ewes following a field outbreak of Border Disease—3109
 expression of a sheep red blood cell receptor by murine lymphoma—494
 ewes, with ram acrosin and hyaluronidase—2051
 genetic resistance to facial eczema—112
Haemonchus contortus, effect of abomasal nematodes on subsequent challenge with *H. contortus*—2488
Haemonchus contortus, some factors influencing degree of resistance in sheep immunized with attenuated larvae—2801
 Hageman Factor in mammalian plasmas—2609
 humoral response to sheep red blood cells in mice during early and chronic stages of infection with *Echinococcus multilocularis* cysts—65

- immune response in sheep—3216
 immunochemistry of estrophilin—1142
 immunogenetics of antigen from both sheep and cattle sera—293
 immunoglobulins in serum during course of infection with trypanosomes—1815
 in vitro action of immune lamb serum on larvae of *Gaigeria pachyscelis*—125
Listeria monocytogenes infections—1162
 listeriosis, in flocks with clinical disease—1163
 local antibody responses, and infection with *Trichostrongylus colubriformis*—19
 location of immunoglobulins in skin of cattle and sheep—1774
 lymphocyte sensitization in sheep inoculated with extracts of spontaneously occurring malignant lymphomas—1461
 mouse model of *Pasteurella haemolytica* infections for testing vaccines—910
Nematodirus—1898
 new freeze-dried living virus vaccine against sheep pox—2399
 passive, a review in sheep—3216
 passive, inability to protect lambs against pasteurellosis—3217
 passive protection of lambs against *Taenia ovis* larvae—1283
 passive transfer via colostrum, enteric colibacillosis—2809
 passive transfer via colostrum, *Taenia ovis* in lambs—2901a
 predicting resistance to *Haemonchus contortus*—2521
 preparation and testing of *Babesia ovis* antigens—1662
 prevalence of antibodies to *Mycobacterium johnei*—2071-B
 protection of sheep by vaccination against artificial challenge with *Leptospira interrogans serovar hardjo*—1873
 protective effect of vaccination against experimental adenoviral pneumo-enteritis in fattening lambs—2260
 recent advances, cestode infections—3261
 relationship of adenoviruses—3264
 resistance of crossbreds to parasites—3312
 resistance of lambs under conditions of intense husbandry—2090
 response induced by adenovirus in fetus—3040
 response of lambs experimentally infected with bovine oncovirus—1635
 response of sheep to gastrointestinal nematodes—1255
 response to helminths and arthropods—2186
Sarcocystis—2185
 sheep inoculated with freeze-dried sheep pox vaccine—900
 sheep inoculated with various doses of foot and mouth disease virus—2450
 slow infections—20
 suppression of blastogenic response of peripheral lymphocytes by serum from ovine squamous cell carcinoma bearing sheep—1484
 synthesis of immunoglobulins in lungs and mediastinal lymph nodes—1122
Taenia ovis in sheep and dogs—1280
 testis, experimental studies—2926
 transfer factor activity in *Trichostrongylus axei* infections—2564
 transfer factor in immunity to *Ostertagia circumcincta* and *Trichostrongylus colubriformis* infections—2565
 transfer of immunoglobulins from ewe to lamb—944
Trichostrongylus colubriformis, lambs—1509
 vaccination of lambs with larvae of *Trichostrongylus colubriformis*, genetics of response—3274
 whole blood method for measuring nitrogen-induced transformation of lymphocytes—1694
 IMMUNIZATION, active, against estrone protein conjugate—2471
 against androstenedione or estrone, effect on estrus, ovulation and lambing in merino ewes—1880
 appearance of immunoglobulin A in intestinal cells—1378
 ascorbic acid in lambs infected with *Salmonella* or *Escherichia*—663
Babesia ovis—1661
 brucellosis—2573
 clinical evaluation of chlamydial vaccine—2550
Clostridium, influence of environmental temperature and relative humidity—1491
 clovax for foot rot—490
 development of new methods—1906
 development of pre- and post-immunization antibodies—2328
 epidemiological survey of paratuberculosis in 3 mixed flocks of sheep and goats—96
Erysipelothrix insidiosa infections—2152
 ewes, androstenedione or testosterone, plasma concentrations of LH follicle stimulating hormone and progesterone—1867
 foot rot—230
 immunizing potential of various stages of *Taenia ovis* eggs injected subcutaneously into neonatal or sixteen-week-old lambs—1282
 inactivated saponin vaccine against salmonella abortion—1088
 intestinal response to intraperitoneal route—280
 listeriosis—3303a
 modification of Aujeszky's virus in cell culture—1175
Oesophagostomum columbianum—2694
 oxytocin, delayed luteal regression—980
 parasites—113
 passive protection of lambs against *Taenia ovis*—1283
 passive, to cyclic ewe against estradiol—2472
 plasma levels of LH or FSH during anestrus in ewes, against estradiol, 17-beta estrone or testosterone—1875

- pneumonic pasteurellosis—1085
relationships among glycoprotein hormones—2608
Salmonella abortus ovis, evolution of antibodies—2919
Schistosoma bovis, using irradiated schistosomal vaccine—2932
sheep pox virus, use of cell culture attenuated virus—2818
simultaneous, against anthrax, pasteurellosis and clostridial infections—1490
vaccine, *Salmonella abortusovis*—2153
- IMMUNOASSAY**, radio, new homologous technique for measurement of FSH—344
- IMMUNOCHEMICAL DETECTION**, of ovine, porcine and equine flesh in beef products with antisera to species myoglobin—1270
- IMMUNOCHEMISTRY**, two polymorphic antigens in serum—292
- IMMUNODEFICIENCY SYNDROME**, severe combined—2329
- IMMUNODIAGNOSIS**, dictyocauliasis—745
- IMMUNODIFFUSION**, agar-gel, evaluation in diagnosis of progressive pneumonia—2023
agar gel, for diagnosis of ovine progressive pneumonia—2022
data on antigenic relationship of bull, boar, ram and human spermatozoa—417
immunoglobulins determination—1627
- IMMUNOGENESIS**, clostridial infections, influence of temperature and humidity—1492
clostridial infections, influence of environmental temperature and relative humidity—1491
- IMMUNOGENETICS**, antigen identified in both sheep and cattle sera—293
- IMMUNOGENICITY**, *Babesia ovis*—1550
- IMMUNOGLOBULIN A**, cells in intestine following intraperitoneal and local immunization—1378
- IMMUNOGLOBULIN E**, relationship to helminths and arthropods of sheep in Australia—2186
- IMMUNOGLOBULIN G**, absorption of iodine labeled, from small intestine and rumen—414
characterization of breakdown products in blood and tissues following injection into duodenum—413
in sera of Hardwick sheep with natural scrapie—612
kinetic behaviour, derived from different sources in adult sheep and neonatal lambs—646
- IMMUNOGLOBULIN M**, colostrum, comparison of ovine and bovine—3050
- IMMUNOGLOBULINS**, absorption from colostrum by bottle-fed lambs—1226
antitrypsin activity, parallels—2624
beta and gamma, response to trichostrongylid infections—746
blood serum and colostrum—943
caseous lymphadenitis infections—2066
collection of lymph from single lymph nodes and intestines of fetal lambs in utero—487
colostral, absorption and bactericidal activity of blood serum in developing lamb—1061
colostrum, comparative study of ovine and bovine serum and colostral immunoglobulin M—3050
colostrum, production and volume ingested by lambs—2723
concentrations of classes in subcompartments of lung—1123
effect of whey proportion on accuracy of estimations in colostrum—2722
elevated levels in progressive pneumonia—2021
immunosuppressive effect of immune serum against salmonellosis—945
location in skin—1774
quantitative determination—1627
serum levels during course of trypanosomiasis—1815
synthesis in lungs and mediastinal lymph nodes—1122
transfer from ewe to lamb—944
- IMMUNOLOGICAL DISEASES**, animal model for glomerulonephritis—2849
- IMMUNOLOGY**, cysticercosis—182
in vitro response of lymphocytes of normal and ovine squamous cell carcinoma-bearing sheep to phytomitogens and tumour extracts—1485
JOS virus, Nigeria—919
- IMMUNOPROPHYLAXIS**, dictyocauliasis—745
foot rot—1515
listeriosis—3303a
- IMMUNOSUPPRESSION**, blastogenic response of lymphocytes by serum from ovine squamous cell carcinoma bearing sheep—1484
effect of immune serum against ovine salmonellosis in relation to time of administration and classes of immunoglobulin present—945
effect of removal of ovine squamous cell carcinoma on lymphocyte stimulation by tumour extracts and phytohaemagglutinins—1483
in vitro response of lymphocytes of normal and ovine squamous cell carcinoma-bearing sheep to phytomitogens and tumour extracts—1485
squamous cell carcinoma—1481
- IMMUNOSUPPRESSIVE AGENTS**, effect of cyclophosphamide—1482
- IMPALIA NUDICOLLIS**, pasture infectivity in Nigeria—2200
- IMPORTATION**, regulations, France—1009
- IMPOTENCE**, a review—3107
- IMPROVEMENT**, genetic, reproductive performance—784
sheep in Northern Ireland—3079
- INBREEDING**, growth and development of inbred lambs—50

- INCIDENCE**, progressive pneumonia, natural infections—1759
- INDIA**, adult body weight of indigenous and crossbred ewes under semi-arid conditions—1948
- Assam, seasonal prevalence of foot and mouth disease—544
- besnoitiosis, occurrence in sheep—1557
- birth weight of Stavropol Merinos—2452
- brucellosis in Uttar Pradesh and Delhi—2696
- climatic adaptability of imported Merino sheep—3125a
- current status of research on toxoplasmosis—1039
- first report of *Muellerius* in sheep—762
- Hissar, incidence of coenurosis—2276
- Hissar area, prevalence of sarcocystis in sheep—1200
- isolation of mycoplasmas and acholeplasmas from pneumonic lesions—227
- Jaipur (Rajasthan), incidence of Q fever among sheep and goats—1894
- Maharashtra, listeriosis in sheep and goats—2344
- nematodes in sheep and larval stages on pastures near Bangalore—2684
- prevalence of brucellosis in and around Bassi Jaipur Rajasthan—1895
- prevalence of lungworms in sheep in Tehsil Kargil of District Ladakh (Jammu and Kashmir)—761
- pulmonary adenomatosis (Jaagsiekte) in sheep—2461
- Punjab, Maedi in sheep and goats—225
- Punjab, pulmonary adenomatosis in sheep and goats—225
- rinderpest in sheep and cattle—2634
- ringworm in sheep—567
- Uttar Pradesh, sero-epidemiology of coxiellosis—3297
- viral pneumonia in sheep and goats in Punjab—226
- INDIRECT HAEMAGGLUTINATION REACTION**, use in serodiagnosis of *Sarcocystis* and *Toxoplasma*—1721
- INDOMETHACIN**, augments endotoxin induced increased lung vascular permeability—2196
- developmental response of ductus arteriosus—596
- hemodynamic effects in preterm lambs with respiratory distress and patent ductus arteriosus—403
- inhibitor of prostaglandin synthetase stimulated breathing movements in fetus—1757
- INDUSTRY**, sheep, current situation and future developments—3262
- sheep, first report of industry strategy group—3073
- INFECTIOUS DISEASES**, a review—3204
- planned control as step toward more effective sheep production—3290
- sheep and goats—2398
- INTERFERON**, effect of chick, on growth of ovine parainfluenza-3 virus in lamb kidney cell culture—2099
- INFERTILITY**, a review—1266
- as cause of low lamb marking percentages in New South Wales—2362
- effect on fertility of immunizing ewes with ram sperm acrosin and hyaluronidase—2051
- female, applications of research to flock health—2046
- incidence—1669
- male, problems of sheep industry in Queensland—1995
- methods for investigation by field veterinarians—2361
- temporary, in Merino ewes grazing improved pastures in western Australia—1903
- INFLAMMATION**, extravasation of albumin—1334
- INFLAMMATORY RESPONSE**, acute—3121
- INFLUENZA VIRUS**, ecology—291
- thermolabile inhibitors, blood—2218
- INFORMATION RETRIEVAL**, current awareness bulletin Australia—185
- INFRARED RAYS**, preliminary tests to assess usefulness of infrared measurement technique in veterinary medicine—2552
- INGESTION**, behaviour, effect of variation in sward characteristics upon, and herbage intake of calves and lambs under continuous stocking management—1436
- INHERITANCE**, body weight characteristics—1523
- common antigen—722
- creation of Karakuls with broadtail pelts—1021
- economic traits, sex differences in South Africa Merinos—1301
- fleece weight—1523
- meat-wool type—1523
- principal production traits in crossbreds—1523
- INHIBIN**, in ram rete testis fluid—711
- INSECTICIDE**, blowflies—1366
- control of flies and weevils while drying sheepskins—3105
- delayed neuropathy by phosphonothioate, cyanofenphos—886
- dipping and spraying of sheep—38
- gamma hexachlorocyclohexane, field test method for estimation in sheep dips—938
- technical details of new sheep blowfly—1257
- use of turbulent air flow to apply a mist to sheep—1999
- INSECTS**, controlling—613
- INSEMINATION**, artificial, a requisite for further increase in wool and mutton production—862
- artificial, a review—2060
- artificial, comparison of fresh and frozen semen—1683
- artificial, comparison with natural mating on reproductive performance, five strains of sheep during anestrus, in intensive system—1214

- artificial, effect on uterine motility—1725
 artificial, in France—427
 artificial, sperm, motility, fertilizing ability—1005
 artificial, use of electro-ejaculated semen—2993
 caucasian breed—2160
 effect of heating before and after—2644
 ewes at Deleni Farm, summary of experiment over 7 year period—2556
 time, optimal, Karacebey Merino ewes—541
- INSULIN**, blood levels, effect of daylength on lamb growth—992
 changes in binding to hepatocyte receptors in lactating and non-lactating ewes—1082
 control of secretion—1826
 early release following suckling—2386
 effect of dietary imbalance of magnesium, calcium and potassium—2457
 effect of infusion to mother on placental transfer of glucose and its turnover—89
 effect on eating and rumination—2150
 effect on food intake—1315
 effect on free fatty acids in circulating blood plasma—906
 endogenous secretion and metabolic clearance rates in neonatal lamb—2889
 factors affecting release in fetus—1006
 fetal and maternal hormonal response to starvation in ewe—2670
 fetal maturation related to parturition—1758
 maturation of early phase release in neonatal lamb—2346
 myocardial and coronary vascular responses to, diabetic lamb—807
 neural and chemical control of abomasal secretion—2064
 not destroyed by proteases if stored under low temperature conditions—246
 plasma concentrations during infusion of potassium and sodium chloride solutions into conscious splenectomized sheep—273
 plasma, effect of hyperammonemia—238
 plasma, effect of somatostatin on, in exercising sheep—436
 plasma levels, effect of energy intake during late pregnancy, ewes and their lambs—1160
 plasma levels, effect of infusion of sorbite electrolyte and sorbite solution—1624
 plasma levels, ewes during pregnancy and lactation, effect of nutritional state during late pregnancy—1159
 reduced response in sheep stressed to cold—2635
 response of fetal and newborn to glucose and tolbutamide infusions—2348
 role in ketosis, review—434
 secretion stimulated by alanine—2347
 suppression of gluconeogenesis in newborns—2888
 X-ray diffraction of crystals of half-synthetic—667
- INTERSEXUALITY**, a review—721
- INTERSTITIAL FLUID**, regional extravascular lung water—977
- INTESTINAL POLYPS**, associated with coccidiosis—2562
- INTESTINE**, absorption of immunoglobulins from colostrum by bottle-fed lambs—1226
 absorption of iodine labeled immunoglobulin G—414
 activity of gut receptors in conscious sheep—2570
 cells containing immunoglobulin A after intraperitoneal and local immunization—1378
 enzymes—716
 epithelium, mechanisms of association of *Escherichia coli*—2030
 flow, electromagnetic flow meter for measurement—1744
 method for re-entrant cannulation—1413
 motility, contraction force—3033
 motility, effects of cannulation—3219
 motility, measurement of flow of digesta—624
 motility, rate of passage of digesta—2953
 recovery of structure following anthelmintic use—99
 small, absorption of amino acids, formaldehyde treatment of concentrated diets—923
 small, morphology, rotavirus infections—2807
 vascular system, nutrient loss—564
- INTRAUTERINE THREADS**, effect on fertilization—1012
- INTRINSIC FACTOR**, gastric, in sheep—1927
- IODINE**, absorption by labeled immunoglobulin G from small intestine and rumen—414
 effect of supplementation of pregnant and lactating ewes on growth and maturation of their offspring—1598
 effect of supplementation of pregnant and lactating ewes on growth and maturation of offspring—2220
 physiologic status of ewes in Papua, New Guinea—3188
- IRAN**, anatomy of arteries of fatty tails of sheep breeds in—168
 ecology of domesticated animals under traditional management, preliminary results from Turan Biosphere Reserve—2183
 isolation and typing of *Clostridium oedematiens* (*C. navyi*) from cases of Black disease—136
 Kusistans, morphological study of ovaries for assessing seasonal influences on reproduction—2652
 nematodes from wild sheep—903
 sheep breeds—3300
- IRAQ**, climatic factors and reproduction of Awassi sheep at Dujaila farm—2948
 effect of anthelmintics on performance of Awassi sheep—82
 effect of breed and castration on performance of lambs—80
 prevalence of brucellosis among goats and sheep—1505
 pulmonary adenomatosis—84
 survey for coenurosis—1504

- IRELAND, development of fat depots in sheep—75
 Northern, annual report, 1979—3080
 Northern, fattening lambs—3269
 Northern, fattening wether lambs—1920
 Northern, intensification of sheep husbandry—3081
 Northern, isolation of species of *Ureaplasma*—1909
 Northern, profits from lowland ewes—3268
 Northern, sheep improvement—3079
- IRISH MOSS (*CHONDRUS CRISPUS*), effect of feeding Shropshire ewes on condition and fertility—426
- IRISH REPUBLIC, live sheep exports—1401
 sheep census—1401
- IRON, absorption and duodenal flow, effect of nitrilotriacetic acid—1412
 changes in blood, trichostrongylid infections—2259
 dextran, response of newborns to injection—2922
 distribution in digestive tract, effect of supplemental calcium carbonate—3307
 effect of nitrilotriacetic acid on solubility in stomach—1414
 in carcasses and relationship to trace element requirements for growth—2898
 interrelationships with aluminum and iron—2560
 levels in cerebrospinal fluid of copper poisoned sheep—1117
 metabolism, effect of supplemental calcium carbonate—3308
 serum levels, relation to infertility—887
 with dextran, effect on hemogram of lambs—390
- IRRADIATION, gamma, resistance of Aujeszky's disease virus—1398
- ISLAMIC RITUAL, slaughter of animals for religious purposes, protection by statute—816
- ISOBUTYLIDENE DIUREA, metabolism—305
- ISOBUTYRATE, quantitative measure of gluconeogenesis—2839
- ISOBUTYRIC ACID, gluconeogenesis—2840
- ISOELECTRIC FOCUSING, enzymes of *Echinococcus granulosus* and *E. multilocularis*—1932
 proteins, intraspecific variation in *Echinococcus*—1649
- ISOMERASE, delta 5, delta 4, activity in corpus luteum—485
- ISOTRICHA, rumen, effect of increased urea in diet—2177
- ISRAEL, hemoglobin types and production traits in Finnish crosses—1120
- ITALY, comparison of performance of breeds—3093
 Ferrara province, prevalence of brucellosis, toxoplasmosis and hydatidosis among shepherds' families—55
 milk and cheese production and exports—1410
 presence and distribution of HI antibodies to arboviruses—151
- Rome, serological study of leptospirosis—583
 sheep farming in central Abruzzo—660
 survey of health of sheep and goats—2660
 Venice, *Salmonella* serotypes isolated during 1974—75—312
 Verona, sheep in prehistoric settlements—2519
- IXODES RICINUS* (CASTOR BEAN TICK), evaluation of amitraz, a new acaricidal sheep dip—2365
 threshold problems in infection with louping ill virus—275
 vector of *Anaplasma mesaeterum*—3053
- IXODID TICKS, of Barun Glacier region, Nepal, Himalayas—689
- IXODIDAE, prevention and control of haemsporidial infections during grazing season—2891
 resistance to ixodicides in Africa—209
 sheep dipping and spraying—38

J

- JAAGSIEKTE (Pulmonary Adenomatosis), in India—2461
 in sheep and goats in Ludhiana area of Punjab—2251
 possible etiology due to herpesvirus ovis and other herpesviruses—3135
- JAISALMERI, performance in arid area—2110
 rams, comparative semen characteristics, maintained under hot arid conditions—2017
- JATROPHA-CURCAS, toxicity—41
- JAUNDICE, leptospirosis—1708
- JAVA, serological survey for brucellosis—2294
 serological survey for leptospirosis—2294
- JEJUNUM, experimental occlusion, evaluation of histological and histochemical changes in liver—2249
- JESSAMINE, day blooming (*Cestrum diurnum*), ectopic calcification in lambs from feeding—2743
- JOHNE'S DISEASE (PARATUBERCULOSIS), in Bighorn sheep and Rocky Mountain goat in Colorado—3259
 in sheep and other animals—1180
 history—1844
- JORDAN, toxoplasma antibodies among slaughter sheep—2049
- JOS VIRUS (TOGAVIRUS), Nigeria—919

K

- KALININ, lambs, effect of methionine and sulphur-containing amino acids on productivity and wool quality—836
- KANAMYCIN, influence on rumen bacteria and ammonia production in supplemented sheep rumen liquor in vitro—1110
- KARACEBEY, Merino, determination of duration of estrus, optimal insemination time—541
- KARAKUL, analysis of breed structure of Karakul stud industry in southwest Africa—2667

- biological aspects of development of lambs from multiple births—16)
- black, comparison of inbred and outbred lambs—50
- blood electrolytes and hemoglobin variants—2751
- carcass composition, lambs—2633
- comparison of ewes in grading-up program using white Karakul rams—2666
- electrical stunning—1648
- ewes, comparison between intravaginal sponges and subcutaneous implants for synchronising estrus—940
- ewes, effect of induced parturition on subsequent fertility—2073
- farming in USSR—2992
- feedlot feeding, dried sugar-beet pulp with molasses—1126
- history of fat-rumped sheep—2056
- influence of age on reproduction pattern and related statistics—2668
- pregnancy duration—871
- KARYOTYPES**, bone-marrow, Nali sheep—3314
- KARAKUM (USSR)**, desert, efficiency of sheep rearing—2128
- KAZAKHSTAN, USSR**, new sheep breeds—2072-B
- KEMP SUCCESSION**, study in adult fleece of two coarse-wool breeds in relation to birthcoat—1178
- wool, birthcoat-adult fleece relationship—1177
- KENTUCKY**, ewe profit schools—560
- KENYA**, ecology and management of camels, sheep and goats in northern—954
- economic effect of trypanosomiasis in sheep and goats at range research station—1154
- epidemiology of trypanosomiasis in sheep and goats—1153
- game domestication for animal production in, body-water turnover of game and livestock—1566
- influence of breed of sheep on susceptibility to *Haemonchus contortus*—2403
- influence of hemoglobin phenotype on susceptibility of sheep to *Haemonchus contortus*—2404
- isolation of arboviruses from midges—709
- rotavirus antibodies in animals—2091
- serologic survey, foot and mouth disease—2266
- KERATIN**, wool, biuret reaction, quantitative determination of insoluble proteins—1125
- KERATINOMYCES AJELLOI**, isolated from sheep—516
- KERATINS**, thymic corpuscles, histological study—531
- KERATOCONJUNCTIVITIES**, chlamydial agents isolated—2887
- infectious, in goats and sheep in Nigeria—2242
- infectious, isolation of *Neisseria ovis*—458
- KETAMINE**, effect on regional cerebral blood flow in asphyxiated fetus—2352
- KETOGENESIS**, effect of rumen epithelial development—1073
- effect of undernutrition during late pregnancy—2490
- urea feeding—353, 368
- KETONES**, comparative study of metabolism, camel and sheep—555
- diurnal changes in relation to energy intake of adult sheep—786
- plasma levels, effect of triamcinolone acetonide—2458
- KETOSIS**, a review—434
- appraisal of urine and blood tests—2282
- biochemical and pathobiochemical aspects of origin and prevention—1607
- biochemical tests of urine and blood—2380
- blood chemistry—2381
- concentrate feeding affects glucoregulatory hormones—314
- effect of triamcinolone acetonide on plasma glucose and ketones and on total entry rate of glucose in twin pregnant hypoglycaemic sheep—2458
- effect of trienbolone acetate on glucose metabolism in normal and ketotic sheep pregnant with twins—994
- in ruminants—114
- sheep—3284
- sorbitol induced hypoglycemia—313
- KIDNEY**, characterization of essential arginyl residues of sodium potassium ATPase—1157
- compensatory growth, phospholipid metabolism in fetus—2032
- compensatory renal hypertrophy in fetus—2033
- development of fetal sheep and pig—1124
- developmental aspects of renal tubular reabsorption of water in fetus—2535
- effect of sodium loading and ACTH on blood pressure of sheep with reduced renal mass—3241
- evidence for renotropic activity in ovine pituitaries—2151
- excretion of labeled metabolites of prostaglandin F-2-alpha—775
- excretion of sulphadimidine—2120
- function in thermally injured sheep—3018
- histologic explanation for reduced fetal urine production and amount of amniotic fluid in complicated pregnancy—3165
- ontogeny of intrarenal solute gradients in post-natal life—2034
- pathology, acidosis, high alkaline phosphatase activity—1415
- renal clearance of magnesium in sheep receiving oral KCL and/or citric acid—727
- renal components of feed-dependent potassium excretion—1141
- renal excretion, pH and protein binding, trimethoprim—169

- response of newborn to rapid massive hemorrhage—2812
 role of aldosterone on renal sodium and potassium excretion during fetal life and newborn period—2536
 sex differences in weights of fetus—792
 spontaneous renal disease resembling hyperoxaluria—1766
 urea synthesis, development—2465
 urinary flow rate, response of fetus to hypoxemia and following recovery—2534
 water excretion, effect of fetal hypoxemia—2537
- KIDNEY DISEASE**, congenital abnormalities—662
 perinate kidneys and the placenta—3164
- KIKUYU**, evaluation of mixed ryegrass pastures grazed by sheep—317
- KINETIC (TONIC) ACTIVITY**, sleep, posturally related, recorded from diaphragm—1249
- KINETICS**, effect of variation in light intensity on sheep movement through narrow and wide races—1321
 movement of sheep on inclines—1322
- KLEBSIELLA**, detection of nasal carriers—1031
- KOMONDOR**, guard dogs for sheep—1248
 guard dogs reduce sheep losses to coyotes—1765
- KONYA**, Merino, improvement of important production characteristics through selection, environmental factors—3301
 Merino, sheep, phenotypic and genetic parameters for improvement of production—3302
- KRABBE'S DISEASE**, globoid cell leukodystrophy—2746
- KRASNOYARSK**, ewes, crossbreeding with Australian Merino rams—1803
- KUSISTANS**, Iranian, morphological study of ovaries for assessing seasonal influence of reproduction—2652
- KYPHOSCOLIOSIS**, microcephaly associated with, and cleft palate in Yankassa lamb—1210
- L**
- LABORATORY DIAGNOSIS**, *Chlamydia ovis*—1982
 of *Clostridium*—1320
- LACAUNE**, crossbreeding for production of fat lambs—971
 ewe lamb, estimation of genetic parameters of, after fecundation on naturee-litte and induced estrus—363
- LACRIMAL SYSTEM**, anatomic and radiographic studies—1076
- LACTALBUMIN**, polymorphism, Comiso ewes—2589
- LACTASE**, origin and developmental pattern in amniotic and allantoic fluid—2390
 protein fractionation, nucleic acids and enzymatic activity of cytoplasmic extracts from intestinal mucosa of sheep—1558
- LACTATE**, blood, indices of stress in housed experimental sheep—2487
 gluconeogenesis, by fetus in vivo—2410
 metabolism, rumen, effect of dietary lactic acid, lambs switched from low to high concentrate diets—1374
 nutrient loss across the fetal intestinal circulation—564
- LACTATE DEHYDROGENASE**, marker in early stages of breed formation—1093
- LACTATING HORMONE (LH)**, comparison with prolactin, levels in cycling and anestrus ewes—1425
 pituitary response of prepuberal lambs to estradiol—3021
 relation with estradiol and progesterone in control of preovulatory endocrine events—1508
 secretion in ovariectomized ewes under hormonally induced estrous cycles—2954
- LACTATION**, alkaline phosphatase activity and zinc levels in plasma as indicators of zinc status during—131
 artificial induction, importance of prolactin and growth hormone for initiation induced by prostaglandin F-2 alpha—955
 autumn ewes, reducing the partum-to-mating period in, through exogenous hormones—1229
 biphasic prolactin release by haloperidol and perphenazine—2689
 blood levels of glucose, urea and amino acids of ewes during pregnancy and lactation, effect of nutritional state during late pregnancy—1158
 body composition in lactating sheep and its indirect measurement in live animal using tritiated water—990
 clearance in milk of tritium-labeled fluorogestone, in ewes treated for synchronization of estrus—1848
 digestion during—3225
 duration, New Zealand—1045
 early, effect of estrogen priming and GnRH on LH release and luteal function—1230
 effect of energy and protein ingestion in Churra sheep during last third of gestation on milk production in subsequent lactation—1107
 effect of iodine supplementation on growth and maturation of offspring—2220
 effect of low dietary zinc levels—132
 effect of rearing type and prepartum nutrition on intake and performance of Greyface ewes at pasture—1905
 effect on reproduction—2433
 evaluation of milking abilities of purebred or crossbred Romanov ewes—972
 feed intake of lactating ewes on native pasture and lucerne hay—892
 hormonal induction—1849, 1857
 interrelationship between bile function and mammary gland activity during—2928
 iodine supplementation, effect on growth and maturation of offspring—1598

- milk production and duration, Piva ewes—35
 performance, Romney, Corriedale, Dorset, Romney × Dorset and Dorset × Romney—1044
 plasma levels in ewes during pregnancy and lactation, effect of nutritional state during late pregnancy—1159
 relation between voluntary food intake during pregnancy and forage intake during lactation and after weaning—989
 relation to machine milkability—1441
 response to dietary protein—2543
 Scottish Blackface and East Friesland × Scottish Blackface cross breeds—2309
 summer fescue toxicosis in cows and sheep fed experimental strains of ryegrass-tall fescue hybrids—1290
 use of lactating ewes in evaluating protein sources for ruminants—1109
- LACTIC ACID**, dietary concentrate level affects absorption rates and metabolism—1376
 disease in sheep—3284
 effect of dietary, on rumen lactate metabolism and blood acid-base-status of lambs switched from low to high concentrate diets—1374
 effect on rumen myoelectrical activity and pressure changes—2789
 rumen, metabolism, energy levels—480
- LACTIC ACIDOSIS**, effect of thiopeptin and sodium bicarbonate on prevention—1548
- LACTOFERRIN**, amino acid composition—199
 isolation and partial characterization—199
- LACTOGEN**, placenta—552
 placental, endocrinology of early pregnancy—958
 placental, in intact or hypophysectomized pregnant ewe with hypophysectomized fetus, effect of fetal perfusion of dexamethasone—387
- LACTOGENESIS**, failure of prolactin to initiate—1346
- LACTOGLOBULIN**, polymorphism, Comiso ewes—2589
- LACTONES**, sesquiterpene, inhibition of oxidative phosphorylation—127
- LACTOPROTEINS**, precursors, enzymic processing of prelactoproteins by mammary microsomal membranes—1041
- LAMB**, absorption and levels of immunoglobulins—2724
 absorption of immunoglobulin from colostrum by bottle-fed lambs—1226
 amino acid and glycosaminoglycan composition of epiphyseal cartilage of neonate and osteoporotic—1311
 anatomy of testis—451
 birthcoat fibre type and some adult fleece traits—1176
 birthweight and liveweight gain, effect of control of parasites during peri-parturient period—1462
 birthweight, effect of winter management on pasture regrowth—1272
 carcass and meat characteristics, of different breed crosses, weight and sex—2816
 care and feeding—334
 coccidiosis, effect of amprolium and monensin on oocyst discharge, feed utilization and ruminal metabolism—1357
 comparison of performance and carcass characteristics, 9 sire breeds—652
 comparisons of production systems—2971
 confinement-reared lambs, weaning to market weight, effect of lasalocid and monensin on experimental coccidiosis—957
 conservability of meat and nutritive value—537
 cow colostrum as survival kit for—1783
 development and plasticity of neuronal connections in lamb visual system—593
 digesta flow and mineral absorption before and after weaning—771
 diseases, a review—3205
 early weaned, influence of length of feeding milk substitutes on growth—2817
 effect of body weight on attainment of puberty and reproductive performance, Galway and Fingalways—2427
 effect of daylength on growth, blood concentrations of growth hormone, prolactin, insulin and thyroxine, and effect of feeding—992
 effect of diet and stage of growth upon energy utilization—951
 effect of energy intake during late pregnancy on plasma insulin and blood free amino acids in ewes and their lambs—1160
 effect of ewe nutrition and colostrum deprivation on young—1553
 effect of feeding large amounts of concentrates on health—2742
 effect of Mn-deficient feeding to ewes on certain amino acids and sugars in cartilage of their newborn—1313
 effect of milk intake on intake of cut and grazed herbage by—2317
 effect of monensin on growth, feed efficiency and energy metabolism—1477
 effect of ralgro implants on growth—1473
 effect of readily available carbohydrate and roughage source on performance, fed a liquid supplement—1994
 effects of grazing in autumn on a red clover-perennial ryegrass sward—1658
 egg output in low level infections of *Ostertagia circumcincta*—1424
 energy and nitrogen utilization, before, during and after weight loss—1132
 European, "Cocktail"—2533
 experimental infection with bovine respiratory syncytial virus—670
 factors influencing post-weaning performance of both purebred and crossbreds—1901
 fattened, effect of barley fed whole, ground or pelleted—1741
 fattening, effect on growth of freeze dried rumen fluid—231

- fattening, ensiled swine waste as feed—1879
 fattening, protective effect of monovalent and bivalent vaccines against adenoviral pneumo-enteritis—2261
 fattening, protective effect of vaccination against experimental adenoviral pneumo-enteritis—2260
 fed cereal grains and lucerne hay for finishing—1428
 feeder, effect of artificial lighting on performance—1216
 feeding, utilize silage—1528
 feeding, use of electronic doors—500
 fetal, interconversion of glutamate and glutamine in placenta during development—2315
 fetal, lung lavage and its effect on lung phosphatidyl choline—2701
 grades in relation to sires—715
 growing, energy retention, on diets with different proportion of sodium hydroxide treated straw—2340
 growth and maturation after iodine supplementation of ewes—1598
 growth and rumen function, supplementation of a low-protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1539
 growth, effect of daylength, comparisons of sex, level of feeding, and sharing and breed of sire—993
 growth, effect of zeranol implants—2323
 growth, from ewes treated with protected lipids—2851
 herbage digestion, at different stages of maturity—3226
 how to graft—1368
 immunizing potential of various stages of *Taenia ovis* eggs injected subcutaneously into neonatal or sixteen-week-old lambs—1282
 incidence of perinatal mortality—1638
 influence of carcass weight, sex and breed on consumer acceptance—1959
 interhemispheric connections between primary visual areas in newborns—2462
 Karakul, electrical stunning—1648
 losses, a review—1367
 Mecheri and Mandya, physical measurements and cold dressed carcass grades and weights—156
 milk intake and growth as affected by number of suckled lambs, sex and milk yield of ewes—3278
 milk replacers for preruminant, limiting amino acids to two soybean protein isolates determined with a change-over design—2314
 minimal nitrogen metabolism—2228
 mortality, in commercial lowland sheep flock with reference to influence of climate and economics—2419
 mortality, perinatal, and pregnancy feeding levels—1551
 neonatal, early insulin release following suckling—2386
 neonatal, efficacy of spectinomycin in diarrhoeal disease—1036
 newborn, congenital abnormalities, after Akabane virus infection in pregnant ewe—1261
 newborn, influence of birthweight on digestibility of milk-replacer—1358
 newborn, maturation of ventilatory response—287
 newborn, suppression of gluconeogenesis and endogenous glucose production: by exogenous insulin—2888
 New Zealand, may be under pressure, economics—1277
 nitrogen retention of early weaned—1329
 non-extracted, pelleted olive-cake, chemical composition, digestibility and nutritive value—8
 nutritive evaluation of waste wood pulp in diets for finishing lambs—1735
 ontogeny of intrarenal solute gradients in post-natal life—2034
 performance, drylot vs. pasture—889
 performance of grazing twin lambs at 6, 8, 10 or 14 weeks of age—1070
 performance of lactating goats and lambs fed corn silage grown on sludge-amended soils—2272
 perigestational, arterio-venous extracorporeal membrane oxygenation for neonatal respiratory support—1156
 pharmacokinetics of sulfamerazine—1269
 polyarteritis nodosa associated with sarcocystosis—1679
 preferential streaming of ductus venosus blood to brain and heart—850
 prevalence of antibodies to *Mycobacterium johnei* in colostrum deprived—2071-B
 pre-weaning weight gain, relationship to milk production—3013
 prime production, breeding objectives and selection criteria—2833
 problems in ascertaining carcass value of fattened lambs—1102
 production, effect of ewe weight at time of service—2477
 production, Karakuls—2668
 production, model, from autumn catch crop—1051
 proteinase inhibitor of meconium and feces—1506
 qualitative characteristics from Gentile di Puglia synchronized ewes—1893
 ram, feed efficiency and carcass characteristics—279
 relative value of single-cell proteins and groundnut-cake as protein supplement in ration—2115
 response to intensive husbandry—2089
 rumen digestion parameters in, fed with pelleted diets—2313
Sarcocystis free, for research—605
 season of birth and response to hemicastration—1676

- sequence of limiting amino acids in groundnut protein isolate for—2349
- small lesions in anterior lobes of lungs—2339
- spontaneous renal disease resembling hyperoxaluria—1766
- subcutaneous hemorrhagic speckling—2330
- systems analysis of production alternatives for management—2980
- thermoregulatory responses in newborns during first 36 hours—1962
- trauma caused by porcupine grass seeds—1570
- use of salinomycin in finishing—369
- use of single cell proteins in feeding—927
- waste roughage in diets for fattening early weaned—2364
- weaned, structure of gastrointestinal mucosa, for absorption of non-protein nitrogen—789
- whey-grown yeast as protein source—47
- LAMBING, behaviour of Finn sheep after—177
- Galway ewes, controlled breeding—2795
- in cyclic ewes bred by natural service after synchronization—375
- Lohi sheep—2444
- Merino crosses with Comisana—1692
- on schedule—2781
- performance, effect of body weight and components, commercial flocks in Britain—1048
- performance, effect of ram to ewe ratios and joining date, Romney ewes—1594
- rate, affected by skin folds—204
- rate, daylength and lamb drops—184
- rate, effect of freezing semen—2441
- rate, effect of immunization against androstenedione or estrone—1880
- rate, effect of prostaglandin additives in dilute ram semen on fertilization and lambing outcome in AI bred sheep—377
- rate, effect of shearing during mating season—3215
- rate, effect of time of mating on ovulation rate and potential lambing rate of Greyface ewes—1187
- rate, 8 breed groups in Wisconsin—1706
- rate, hemoglobin type and reproductive performance of sheep grazing estrognic pasture—3180
- rate low, Cuttaourra, Australia—2568
- rate, orcadian sheep of Lihou—3249
- rate, results of using Romanov and Ile-de-France rams for production of hybrid lambs—130
- traits in crossbred Finn and Suffolk ewes—1518
- LAND, use, central Asia, semi-arid deserts, management of sheep and goats—2336
- LANDRACE, crossbred, resistance to nematodes—3312
- Finnish, rams, quality of meat—3124
- Finnish, secretion of LH during estrus—2421
- genetic and environmental variation in lutropin response of ovariectomized, to luliberin—1675
- LANTADENE, toxicity—2296
- LARYNX, chemoreflex patterns in newborns—1628a
- comparative histochemical study of intrinsic muscles—1888
- LASALOCID, effects of lasalocid and monensin against experimentally induced coccidiosis in confinement-reared lambs from weaning to market weight—997
- LAVAGE, fetal lung, its effect on lung phosphatidyl choline—2701
- LEAD, cadmium and mercury contents of meat and organs of sheep and lambs—1599
- in diets of cement kiln dust—3192
- poisoning, Yugoslavia—2335
- wool levels, indicative of lead in blood of sheep exposed to automotive emissions—3194
- LEGISLATION, animal welfare—529
- animal welfare, Islamic ritual for slaughtering of animals for religious purposes—816
- milk, Spain—2824
- LEGS, forelimb, anatomy—1612
- LEGUMES, voluntary intake and digestibility—1562
- LEICESTER, Border, crossbreds, carcass characteristics composition and partitioning of fat—2969
- Border, crossbreds, distribution of subcutaneous fat, intermuscular fat, muscle and bone in carcass—2970
- carcass evaluation of crosses—3344
- crossbred with Merino, effect of lupin grain and recently cut lucerne on intake and digestibility of mature weathered herbage by ewes—2531
- LEPTOSPIRA BALCANICA, experimental infection of sheep—1263
- LEPTOSPIRA HARDJO, experimental infection of sheep—1263
- LEPTOSPIRA INTERROGANS, experimental infection of sheep—1263
- LEPTOSPIRA INTERROGANS BALCANICA, experimental infections—830
- LEPTOSPIRA INTERROGANS SEROVAR HARDJO, protection by vaccination—1873
- LEPTOSPIRA SEROVAR, experimental infection of sheep—1263
- LEPTOSPIROSIS, epizootiology—49
- in Barbary sheep and mule deer, Palo-Duro Canyon, Texas—1232
- in Croatia—3325
- pathology—1708
- serological study in Province of Rome, Italy—583
- serological survey in central and east Java and Bali—2294
- LEUCAENA LEUCOCEPHALA, review of nutritive value and toxic aspects—1970
- LEUCINE, effect of infusion on various nitrogen parameters in sheep—1452
- LEUKEMIA, histochemical, enzyme histochemistry and electron microscopic studies of blood leukocytes from clinically healthy and leukaemic sheep—2579
- scanning electron microscopy of cells in domestic animals—1845

- LEUKERGY, provocation by tuberculin—1965
- LEUKOCYTE, acute inflammatory response—3121
- histochemical, enzyme histochemistry and electron microscopic studies, from clinically healthy and leukaemic sheep—2579
- in splenectomized *Theileria* carrier sheep—2395
- pregnant sheep, release of endogenous pyrogens—1511
- preparation of transfer factor, immunity to *Ostertagia circumcincta* and *Trichostrongylus colubriformis*—2565
- transformation, in normal and ovine squamous cell carcinoma-bearing sheep—1485
- LEUKOCYTOSIS, following inoculation of extracts of *Moniezia expansa*—510
- LEUKODYSTROPHY, globoid cell (Krabbe's disease), in sheep—2746
- LEUKOSIS, bovine, experimental infections, blood morphology—2616
- bovine, specificity of cytotoxic test in sheep experimentally infected—1626
- bovine, virus, experimental infections in sheep, immunologic, clinical and haematologic studies—1636
- experimental, bovine oncovirus infection—466
- transmission to sheep—2127
- LAVAMISOLE, activity against benzimidazole resistant *Haemonchus contortus* and *Trichostrongylus colubriformis*—608
- and oxyclozanide against paramphistomids—1059
- effect on gastrointestinal strongyles in Somali sheep—507
- efficacy against nematodes in western Victoria Australia—497
- influence on plasma levels—3151
- larval paralysis as in vitro assay of resistance in *Ostertagia*—1882
- morbidity and mortality after concurrent administration of mineral supplement—2412
- premix with oxyclozanide, as anthelmintic for cattle and sheep—687
- rapid in vitro method for evaluating pour-on dose forms—2371
- resistant *Ostertagia*, effectiveness of anthelmintics against—1730
- resistant *Ostertagia ostertagi*, effectiveness of morantel tartrate and naphthalophos—1732
- resistance of *Haemonchus contortus* and *Ostertagia circumcincta*—2632
- resistance of *Trichostrongylus colubriformis* and *Ostertagia circumcincta*—2627
- some economic implications of dosing lowland ewes prelambling—74
- use against *Nematodirus* in lambs—1392
- LIBERIA, trypanosomiasis in domestic animals—1947
- LIBIDO, factors affecting libido and fertility in rams—764
- LIBYA, seasonal and cyclical changes in ovaries of ewes—196
- LICE, Barbary sheep, Texas—1137
- feral sheep, Campbell Island, New Zealand—1279
- LIDOCAINE, pharmacokinetics in fetal and neonatal lambs and adult sheep—2042
- relationship of fetal bradycardia—2043
- LIFE CYCLE, *Cepaea nemoralis* as intermediate host of *Muellerius capillaris*—2636
- effect of gamma rays on migrating *Dictyocaulus filaria*—63
- Fasciola*, Denmark—2686
- Fasciola gigantica* in Nigeria—3119
- Hyalomma impressum*, under laboratory conditions—2195
- inhibited development of trichostrongylids in northern Nigeria—2201
- liver fluke, a matrix formulation—1066
- parasites, estimation of development and death rate parameters—496
- role of hunting dogs and foxes as definitive hosts and of sheep as intermediate hosts for *Taenia hydatigena* and *T. multiceps*—853
- role of inhibited larvae of *Haemonchus contortus* in epidemiology—239
- termination of arrested development of trichostrongyles of sheep in northern Nigeria—2199
- LIGHT, control of seasonal breeding, participation of cranial sympathetic nervous system—1762
- daylength and lamb drops—184
- effect of artificial, on feeder lamb performance—1216
- effect of variation in intensity on sheep movement through narrow and wide races—1321
- effect of various regimens on semen production, Romney rams—250
- effect on reproductive performance, a review—3129
- induced rhythms of prolactin in ram, effect of cranial sympathectomy—1761
- influence on free running rhythms—1377
- photoperiodic regulation of spermatogenesis, relationship to serum hormones—2656
- variations of radioimmunoassayable melatonin—138
- LIGHTING, controlled, induction of estrus in ewes with hormones—1943
- LIGNIN, ammonium sulfonate, as protein supplement to diet—3171
- digestibility by lambs fed both low and high quality roughages—921
- LIHOU (CHANNEL ISLANDS, UK), orcadian sheep, breeding—3249
- LIMBS, fore, anatomy—1612
- LIMESTONE, in diets, lambs—3192
- LIMOUSIN, comparative performance of Romanov crossbred ewes managed relatively intensively—1887
- LINCOLN, crossbreeding, biochemical marker, analysis of production characteristics in early stages of breed formation—1093
- genetic variability, crossbreeding—1094
- LINCOLN COLLEGE, review of research on speciality carpet wools—1291

- LINDANE**, treatment of psoroptic mange in an oil emulsion—3154
- LINOLEIC ACID**, content in body after long term feeding of protected sunflower seed supplement—2000
fetal to maternal transplacental transfer—2171
- LINSEED-CAKE**, supplement at three levels, Gaddi ewes, utilization of *Zea mays* and *Sorghum vulgare* greens—2253
- LIPASE**, in stomachs of lambs—716
lipoprotein (EC 3.1.1.34), measurements-of-clearing factor activity in adiposal muscular and lung tissues of 10 animal species—654
mammals, comparative study of effect of pancreatic colipase on—1480
- LIPIDS**, acceptor of sheep lung microsomes—1746
blood serum, effect of urea in diet—2359
changes during epididymal maturation of ram sperm collected seasonally—912
dietary, effect of infusion of corn oil into rumen on absorption of Mg and Ca—1129
diurnal changes in relation to energy intake of adult sheep—786
effect of non-protein nitrogen on metabolism—367
in fetus—3041
insoluble molecules, development of brain barrier systems in fetal sheep—847
metabolism, mammary gland—2035
milk cheese, effect of various technics of heating—757
myelin, deficiency, Border disease—2908
role of maternal triglycerides in supplying fetus—2687a
subcutaneous tissue extract, microfiltration procedure for purification—1001
- LIPOGENESIS**, adipose tissue in tissue culture—3134
- LIPOPROTEINS**, blood serum—2302a
in sheep—1634
low-density, value at an average lung microvascular pressure—1937
size in intestinal lymph of sheep and suckling lambs—1114
- LISTERIA**, outbreak in newborns—286
serotypes in France—3303
- LISTERIA MONOCYTOGENES**, excretion in healthy sheep—1161
frequency and role in abortion—698
strains isolated from sheep—1857
excretion of organism and immunological state in healthy sheep—1162
excretion of organism and immunological state in sheep in flocks with clinical listeriosis—1163
isolation in Sudan—2717
isolation of organism from grass silage—1164
- LISTERIOSIS**, epidemiology of sheep listeriosis in France—2508
excretion of *Listeria monocytogenes* in healthy sheep—1161
excretion of organism and immunological state in sheep in flocks with clinical listeriosis—1163
excretion of organism and immunological state in healthy sheep—1162
immunoprophylaxis—3303a
in Bulgaria—1416
in sheep and goats in Maharashtra (India)—2344
isolation of organism from grass silage—1164
new data on epizootiology of ovine, due to serotype—832
present state in Greece—2741
prevention—1206
serological prevalence—1190
spread in domestic animals in Yugoslavia, 1965 to 1977—1629
- LITHIUM**, changes in blood, trichostrongylid infections—2259
- LITTER SIZE**, a review—3345
crossbred Masham ewes—2146
effect of body weight on puberty and reproductive performance of Galway and Fingalway lambs—2427
effect of clipping and diet on intake and performance of housed pregnant and lactating ewes—3145
Finnsheep—3144
relationships of bodyweight and fecundity—1241
selection, hormonal indicators of genetic variation in fecundity—1245
- LIVER**, agarose gel filtration behaviour of the extensively purified high molecular weight complexes of seven aminoacyl transfer RNA synthetases from sheep liver—425
autophagy and apoptosis in, during prehaemolytic phase of chronic copper poisoning—1567
changes in hepatic copper stores in preruminant and ruminant lambs given ammonium tetrathiomolybdate in diets—2899
comparative aspects of cholestasis—1747
copper, effects of intravenous administration of d-penicillamine—1856
damage caused by ingestion of *Heliotropium europaeum*, effect on bile formation—509
denervation, feeding responses to intraportal propionate—103
dysfunction, white liver disease associated with vitamin B₁₂ deficiency—2893
effect of lupinosis on levels of copper, selenium and zinc—70
effect of short term injections of cholecalciferols—2965
excretion of propranolol in pregnant sheep and fetus—1871
fetal maturation related to parturition—1758
function, aminotransferases—2327
gamma butyrobetaine hydroxylase activity in human and ovine—539
hepatocellular extraction and retention of fructose in conscious sheep—1348
hepatocytes, isolated, gluconeogenesis—2514

- histological and histochemical changes in experimental occlusion of jejunum—2249
- influence of interruption of enterohepatic circulation of bile acids on their content in bile—358
- interrelationship between bile eliminating function and mammary gland activity during lactation—2928
- intracellular distribution of copper, in normal and copper loaded sheep—1118
- isolated cells, effect of ammonia on gluconeogenesis—3212a
- metabolism of alanine and propionate—2515
- obstruction of ductus choledochus communis in ram with cholecysto-duodenostomie—1331
- perfused, fate of amino acids—2638
- pyrrolizidine damage, bromosulphophthalein clearance rates—1687
- rot, sheep—1138
- soluble fraction, metabolism of tetrachlorvinphos—51
- synthesis of urea, embryonically—2465
- trace elements in sheep infected with gastrointestinal helminths—2736
- vascular compliance, fetus—1057
- white, disease, clinical biochemistry—2892
- white, disease, cobalt deficiency, treated with cyanocobalamin—2014
- white, disease, hepatic dysfunction associated with vitamin B₁₂ deficiency—2893
- white disease, New Zealand, resembling chronic hepatitis of lambs in Norway—3059
- LIVER DISEASES**, hepatic encephalopathy associated with chronic facial eczema—2972
- ovine white liver disease, clinical biochemistry—2892
- pathology, of copper poisoning—843
- relation to metabolic disorders—2070
- LIVER FLUKE**, efficacy of albendazole—2653, 3108
- matrix formulation of life cycle—1066
- sheep—1138
- LIVESTOCK FARMING**, part time, Scotland—1373
- LIVESTOCK**, production in China—556
- trypanotolerant, West and Central Africa—3019, 3020
- LLEYN**, crossbreeding, genetic effects on carcass composition and feed intake—1236
- crosses with Galway, reproductive activity—1246
- rams, feed intake and carcass composition of lambs sired by—1239
- LOBUS PIRIFORMIS**, cytoarchitectonics of cortex—908
- LOCOMOTION**, free running rhythms—1377
- LOHI**, sheep breed, gestation—2444
- LONGISTRONGYLUS SABIE**, transfer to sheep from impala—1355
- LOUPING ILL**, epidemiology—2484
- LOUPING ILL VIRUS**, threshold problems in infection of *Ixodes ricinus*—275
- LUCERNE**, coumestan contents and ovulation rates—2792
- coumestans in, and ovulation—2791
- digestibility of diets containing processed dried lucerne—2967
- feed intake of non-pregnant, pregnant and lactating ewes on native pasture land—892
- hay, digestibility of cell wall constituents under influence of physical structure, cutting date and feeding level—1532
- hay, influence of physical structure, cutting date and feeding level on digestibility—2269
- influence of technical processes on digestion—11
- nutritional studies—2977
- LUCERNE SILAGE**, quality—2505
- utilization of chopped and pelleted, growing lambs—2978
- LUCILIA CUPRINA**, blowfly, genetic methods of control—1002
- LULIBERIN**, genetic and environmental variation in the lutropin response of ovariectomized sheep to—1675
- LUNGS**, antigen induced bronchospasm—3191
- concentrations of immunoglobulin classes in subcompartments—1123
- contribution of left to right ductus arteriosus shunting duct shunt to pulmonary blood flow in premature lambs during first hours of life—2863
- damage caused by grain fumigant, dibromoethane—197
- diseases, pulmonary adenomatosis, enzootic occurrence in Switzerland—3009
- effect of infusing histamine into pulmonary or bronchial artery on pulmonary fluid balance—2102
- effect of uneven pulmonary artery obstruction on lung fluid balance—2848
- experimental aortic stenosis in fetal lamb—1745
- failure of antihistamine to prevent increased vascular permeability after microemboli—1578
- fetal lamb lavage, effect on lung phosphatidyl choline—2701
- fetal maturation related to parturition—1758
- fluid balance, effect of heparin or fibrinogen depletion after emboli—333
- fluid, effect of stimulation of stellate ganglion—1219
- fluid, effect of untreated hemorrhagic shock, in unanesthetized sheep—742
- function, in thermally injured sheep—3018
- histochemical identification of chloride secreting cells in fetal lamb respiratory tract—2322
- increased pulmonary vascular permeability follows intracranial hypertension—397
- isolation and partial characterization of proteoglycans—2619
- lipidic and protein acceptor of microsomes—1746
- lymph, equilibration with intravascular albumin in unanesthetized sheep—3116

- macromolecular transport, pore models—1937
- maturation, effect of thyroxine in hypothyroid fetus—899
- maturation, fetus, effect of ACTH—2886
- microvascular barrier, models—1937
- microvascular injury, role of blood factors, after emboli—2846
- microvascular permeability, prolonged breathing of oxygen increases—422
- pulmonary adenomatosis, pathology and case report—1193
- pulmonary epithelial tight junctions, during lung liquid absorption in newborn—2664
- pulmonary microcirculation, effect of plasma oncotic pressure—744
- pulmonary microvascular permeability to protein in unanesthetized fetal and newborns—346
- pulmonary responses of neonatal lambs to tolazoline—3195
- pulmonary vascular responses to prostaglandins in conscious newborn—1779
- regional alveolar gas composition and function—2548
- regional extravascular water—977
- sensitivity of broncho provocation and tracheal mucous velocity in detecting airway irritation after ozone exposure in conscious sheep—7
- small lesions in anterior lobes—2339
- ultrastructure of non-ciliated bronchiolar epithelial clara cell—2366
- vascular permeability, indomethacin augments endotoxin induced—2196
- vascular permeability, reversible by air emboli, effect of left atrial pressure—2847
- vascular response to prostacyclin in fetus—1144
- vascular responses to endotoxin accompanied by increased blood and lung lymph cyclic AMP and cyclic GMP—1286
- vascular resistance, direct relationship between, and lung fluid filtration to hypoxemic lambs given intravenous tolazoline—420
- vascular response to endotoxin in normal and lymphocyte depleted sheep—366
- water and vascular permeability in newborn—2885
- water flow during hemorrhage—1833
- LUNGWORMS**, efficacy of albendazole—2653
- efficacy of albendazole—3108
- prevalence in Tehsil Kargil of District Ladakh (Jammu and Kashmir), India—761
- LUPIN**, stubbles, utilization, effect of residual grain—648
- LUPINOSIS**, alteration in cell division, morphology and motility—2338
- effect of residual grain on utilization of sweet lupin stubbles—648
- effect on liver copper, selenium and zinc concentrations in Merino sheep—70
- prevention by oral zinc sulphate therapy—69
- spongy transformation of brain—72
- utilization of lupin stubbles by Merino sheep—649
- Western Australia—73
- LUTEAL CELLS**, ultracytochemical localization of 3-beta hydroxy steroid dehydrogenase—2646
- LUTEINIZATION**, hormonal control—557
- LUTEINIZING HORMONE (LH)**, alpha adrenergic control of gonadotrophic secretion in ewe—2107
- blockade of episodic secretion by antibodies to LHRH—1763
- concentrations in ewes after ICI 80996, an analogue of PGF-2 alpha, at 2 different stages of breeding season—12
- depression of plasma levels, inhibin activity in ram rete testis fluid, in castrate and cryptorchid ram—489
- down regulation of receptors and effect on progesterone secretion—2890
- effect of antibody against GNRH—2108
- effect of estradiol 17-beta on gonadotropin releasing hormone mediated release, during estrous and anestrus seasons—2057
- effect of high temperatures—2645
- effect of hypothalamic lesions on estradiol-induced changes—2442
- follicle stimulating hormone, levels during first 2 months of life—2642
- fraction, in pituitary—308
- immunological relationships—2608
- indicator of genetic variation in fecundity—1245
- levels after ICI 80996, an analogue of PGF-2 alpha at 2 different stages of breeding season—13
- levels, seasonality, in rams—252
- light regulation of spermatogenesis—2656
- luteotropic properties of embryonic homogenates—879
- pituitary and plasma levels, effect of chronic LHRH treatment—88
- plasma concentrations during anestrus in ewes immunized against estradiol, 17-beta estrone or testosterone—1875
- plasma levels, effect of heat stress—1347
- plasma, ventricle, third, electron microscopy, wethers treated with testosterone propionate—597
- preovulatory surge, time from introduction of ram to—2208
- pre-puberal levels, estrus, Galway and Fingal ways—2429
- post partum reproductive performance of Finn-sheep crossbred ewes—995
- receptors in corpus luteum during estrous cycle and early pregnancy—2167
- release, effect in ewes of estrogen priming and GNRH—1230
- releasing hormone (LHRH), antibodies to, blockade of episodic secretion of LH in ram—1763

- role of testicular fluid on blood plasma levels—343
- seasonality in Romney, Merino and Polled Dorset rams—251
- secretion during estrus in Finnish Landrace—2421
- LUTEINIZING HORMONE, RELEASING HORMONE (LHRH)**, effect of chronic treatment on brain LHRH content, pituitary and plasma LH and ovarian follicular activity in anestrus ewe—88
- effect on, season of birth—524
- effects on ovarian activity and estrus behaviour—2758
- pregnancy diagnosis based on evaluation of pituitary responsiveness to—1003
- regional brain content during estrus, seasonal anestrus and after ovariectomy—3231
- LUTEOLYSIS**, induced, prostaglandin F-2 and progesterone release in vitro by ovine luteal tissue during—2497
- inhibition of prostaglandin F release following administration of progesterone—925
- uterine prostaglandin forming cyclo oxygenase relationship to—2802
- LUTROPIN**, basal levels and plasma profiles, Romney rams—3271
- characterization by end group analysis, tryptic peptide mapping, electrophoresis and biological activity—2607
- genetic and environmental variation in lutropin response of ovariectomized sheep to luliberin—1675
- ovine, subunits alpha and beta prepared by salt precipitation—2607
- receptor control of prostaglandin F-2 alpha secretion by uterus—1914
- secretion following single or repeated doses of gonadotrophin releasing hormone—3272
- LYMPH**, cyclic AMP and cyclic GMP, increased lung vascular response to endotoxin—1286
- dynamics of flow during hemorrhage—1833
- intestinal, size of lipoproteins, suckling lambs and sheep—1114
- lung flow, effect of histamine—2102
- pulmonary flow, effect of stimulation of stellate ganglion—1219
- ratio of lung to plasma concentrations—1937
- regularity of morphogenesis—2594
- LYMPH NODES**, distribution of vagus nerve, prenatal period—2387
- hemal, ultrastructure of cytoplasmic and intranuclear structure in plasma cells—53
- pathology, *Trypanosoma brucei* infections—253
- role of regional and distant, in rejection of feline sarcoma virus induced tumors—2952
- trypanosomes of *Trypanosoma congolense* in—1799
- LYMPHADENITIS**, caseous, a review—3061
- caseous, control for cheesy gland experimental vaccine—105
- caseous, epidemiology and pathogenesis—2509
- caseous, hematological and biochemical studies—2066
- caseous, on the increase, New Zealand—107
- visceral caseous, in thin ewe syndrome—2491
- LYMPHOBLASTOMA**, T-cell—2127
- LYMPHOCYTE**, antigens, genetic control—1997
- blood, peripheral, method of separation—3316
- collection of lymph from single lymph nodes and intestines of fetal lambs in utero—487
- concentration, synthesis and utilization of phosphoribosylpyrophosphate—2329
- cultures in sheep—2906
- effect of thymosin on PHA and Con A responses by fetal—1728
- growth and development in fetus—488
- Mycoplasma* interactions—604
- occurrence of intraepithelial, in epididymis—2233
- peripheral, suppression of blastogenic response by serum from ovine squamous cell carcinoma-bearing sheep—1484
- pulmonary vascular response in sheep depleted of cells—366
- sensitization, in sheep inoculated with extracts of spontaneously occurring malignant lymphomas—1461
- sheep, cultured, interaction with adenovirus type 2—468
- LYMPHOCYTE TRANSFORMATION**, effect of removal of ovine squamous cell carcinoma—1483
- normal and ovine squamous cell carcinoma-bearing sheep—1485
- LYMPHOCYTE**, whole blood method for measuring mitogen-induced transformation of—1694
- LYMPHOCYTOSIS**, and virus-like particle in lymphocytes in sheep inoculated with cell-free extracts of ovine malignant lymphomas—1460
- LYMPHOID ORGANS**, regularity of morphogenesis—2594
- LYMPHOMA**, lymphocyte sensitization in sheep inoculated with extracts of spontaneously occurring malignant lymphomas—1461
- murine, expression of a sheep red blood cell receptor—494
- ovine malignant, persistent lymphocytosis and virus-like particles in lymphocytes of sheep inoculated with cell-free extracts—1460
- LYPEROSIA IRRITANS**, outbreak of vulvitis in ewes—686
- LYSOSOME**, breakdown of erythrocytes in sheep placenta—2094
- epithelial cells of placenta—2093

M

- MACEDONIA**, fascioliasis—98
- milk production and milk fat in Awassi ewes—2999

- MACHINE MILKING**, blood levels of catecholamines—249
 characteristics for ewes—1205
- MACROPHAGE**, bluetongue virus infection, cytokine production—894
- MADRAS**, genetics of erythrocyte glutathione in crossbreds—324
- MADRAS RED**, fibre characteristics—1501
 standardization of feeding records, correction factor to estimate body weight at 300 days—2114
- MAEDI**, and Visna syndromes—941
 in sheep and goats in Ludhiana area of Punjab, India—225
- MAEDI VIRUS**, diagnosis—1084
- MAEDI-VISNA VIRUS**, demonstration in Great Britain—719
 epidemiology—723
 epizootiology—1293
 evaluation of complement fixation methods for detection of antibodies in Canadian flocks—1087
 in Canadian sheep—824
- MAGNESIUM**, absorption, effect of increasing potassium intake—1813
 absorption *in vivo* of, from rumen—1866
 depletion and repletion effects on Mg, Ca and K in bone, muscle, cerebrospinal fluid and plasma—278
 dietary lipid and absorption of Mg and Ca, effect of corn oil infused into rumen—129
 effect of administration on rumen fluid mineral concentration—3304
 effect of diet and blood-plasma levels on endogenous fecal loss—79
 effect of dietary calcium levels on concentration and solubility in digestive tract—3306
 effect of extended supplementation with, on blood metabolites—2712
 effect of fertilization on mineral utilization and nutritional quality of alfalfa—2485
 effect of imbalance on insulin plasma levels—2457
 effect of magnesium fertilization or dietary magnesium supplementation on quality of timothy hay—2486
 fetal levels during maternal hypomagnesaemia or hypermagnesaemia in ewes—242
 levels in bone, muscle, cerebrospinal fluid and plasma affected by magnesium depletion and repletion—278
 measurement of transplacental fluxes—513
 metabolism—2715
 metabolism, effect of administration of potassium chloride, glucose and epinephrine—3305
 metabolism in lambs injected with cholecalciferols—2959
 metabolism, young and old ewes—2714
 renal clearance in sheep receiving oral KCL and/or citric acid—727
 renal excretion, acid or alkaline urine—271
 retention from magnesium and calcium phosphates—1289
 serum levels, relation to infertility—887
 serum levels, short term response to injection of cholecalciferols—2965
 site of absorption from ovine digestive tract—964
 variations in response to experimental deficiency—212
- MAGNESIUM PHOSPHATE**, retention of magnesium, phosphorus and fluorine from—1289
- MAGRA**, ewes, reproductive performance, in subtropical area of northwestern arid Rajasthan, India—321
 performance in arid areas—2110
- MAIZE**, biologic evaluation of ensiled and dehydrated, influence of drying temperature—404
 biological evaluation of ensiled and dehydrated—2100
 biological evaluation of ensiled and dehydrated whole plant, trials with fattening lambs and weaned lambs—405
 cobs, effect of level of sodium hydroxide treatment and volume of solution—1513
 digestibility after treatment with sodium hydroxide—2231
 replacement value of fermented cassava—32
 silage, fed to lactating goats and lambs, grown on sludge-amended soil, performance—2272
- MAIZE SILAGE**, fodder, energy utilization by growing sheep—467
 in lamb feeding—1528
- MAIZE STOVER**, grinding and age, effect on digestion and intake and growth—1545
 nutritive value of thermo-ammoniated and steam-treated, intake, digestibility and nitrogen retention—2246
 nutritive value of thermoammoniated and steam-treated, rumen metabolites and rate of passage—2247
- MALAYSIA**, conservation and utilization of indigenous animal genetic resources—759
 genetic resources of farm animals for improvement—2074
- MALE**, infertility, one cause of low lamb marking percentages in New South Wales—2362
- MALLOPHAGA**, wool eating, a review—261
- MALPURA**, crosses for development of new breeds—9
 factors affecting pre-weaning body weights—365
- MAMMARY GLAND**, environmental factors affecting conformation in Chios ewes—675
 excretion, influence of pH and protein binding by trimethoprim—169
 excretion of labeled metabolites of prostaglandin F-2-alpha—775
 lipid metabolism—2035
 localization of nerve centers—978
 rise in pressure after injection of water into in-
 quinal artery—1664
- MANAGEMENT**, and behaviour of rams—851
 and diseases of sheep—3062
 and ecology, camels, sheep and goats in northern Kenya—954
 bighorn sheep in Sierra Nevada mountains—1303

- care and feeding of lambs—334
 central Oklahoma rangeland response to fire, fertilization and grazing by sheep—2394
 comparative performance of Limousin and Romanov crossbred ewes—1887
 comparison of different weaning policies for ewes suckling triplets at pasture—2224
 comparisons of lamb production systems—2971
 control of nematodes—2823
 delivery system for forage livestock production—206
 diets under excellent range conditions—452
 differences in net energy values of 1st and 3rd cut dried grasses—2504
 diseases and reproduction in sheep, a review—3203
 downslope movement of nutrients in hill pasture, effect of season, grazing and fertilizer—1912
 ecology of domesticated animals under traditional, Iran, preliminary results from Turan Biosphere Reserve—2183
 economics of sheep predation in southwestern Utah (USA)—2933
 effect of feeding and housing on milk yield—706
 effect of grazing intensity on annual vegetation—2360
 effect of stocking rate on emergence, dispersal and behaviour of soldier fly adults—780
 effect of treading and grazing on pasture and soil characteristics of irrigated annual pastures—3277
 effect of variation in sward characteristics upon ingestive behaviour and herbage intake of calves and lambs under continuous stocking management—1436
 effective flystrike control—2525
 effects of technological adaptation on beef and sheep farms—207
 energy cost of Rocky Mountain Bighorn sheep—559
 energy metabolism, review—3212
 epizootiology of trichostrongylids in Hungary—1601
 erosion risks with high stocking rates—39
 evaluation of fall burning on bighorn sheep winter range—2310
 ewe, reproductive performance—1183
 ewes, influence of pasturing methods on growth of grass mass and productiveness of ewes—1659
 feeding in a large-scale operation—1963
 forage selection by mule deer on winter range grazed by sheep in Spring—2793
 forages, evaluation of crosses of *Agropyron repens* and *Agropyron spicatum* as grass—2321
 future of animal livestock production in Great Britain—915
 grazing irrigated pasture with sheep, effect of winter management on pasture regrowth—1272
 helminths in Spain—1885
 identification of barren ewes by vasectomized rams—1595
 importance of rotational grazing for intensive animal production in New Zealand—1268
 indices of stress in housed experimental sheep—2487
 influence, Watish lambs, on weight-for-age—2369
 ingestive behaviour under field conditions—461
 integrated use of land, sheep breed—1693
 intensity of grazing as related to pasture efficiency—1658
 intensive—947
 intensive grazing systems on lowland grass—2145
 interval feeding in lamb raising and lamb fattening—1328
 Kentucky ewe profit schools—560
 Komondor guard dogs reduce sheep losses to coyotes—1765
 lambs, systems analysis of production alternatives—2980
 methods of reducing neonatal lamb mortality in upland and lowground flocks—3074
 milk performance of purebred vs. crossbred sheep—673
 mixed grazing with sheep and cattle, compared with single grazing—418
 optimum flock size for sheep under migratory and stationary conditions—2098
 pasture, for control of ryegrass staggers—481
 pastures, grazing—1420
 phytoestrogens and their importance in breeding and fattening—2379
 plastic house for 200 ewes—1004
 possibilities of lamb and wool production on natural and sown grass swards—1213
 post weaning, to increase fertility of range ewe lambs—897
 recording scheme for Galway flock—1238
 reducing partum-to-mating period in autumn lactating ewes through exogenous hormones—1229
 relation to nematodes—1016
 respiratory infections in housed sheep—1468
 response of grass swards to fertilizer nitrogen under cutting or grazing—1426
 review of protein metabolism in—1819
 sheep and goats, central Asia—2336
 sheep in China—556
 sheep in French mountain regions—1008
 some economic implications of dosing lowland ewes prelambling with anthelmintics—74
 some factors involved in natural weaning process—146
 supplementary feeding of range sheep—1977
 synchronization of estrus as an aid—3146
 technical development of sheep production from hill land in Great Britain—659
 therapeutic, exophthalmos in a lamb—1703
 time of lambing—3075

- use of electronic doors for individual feeding of group-housed lambs—500
winter cold damage to bitterbrush related to spring sheep grazing—1451
- MANCHEGA**, growth and development—2603
- MANDYA**, fibre characteristics—1501
genetics of erythrocyte glutathione in crossbred sheep—324
lambs, experimental infections with *Haemonchus contortus*, total serum proteins and their electrophoretic patterns—3087
- MANDYA**, reproductive performance, in Tamil-Nadu—1843
standardization of breeding records, correction factors to estimate body weight at 300 days of age—2114
- MANDYA LAMBS**, physical measurements and cold dressed carcass weights and grades—156
- MANGANESE**, absorption and duodenal flow, effect of nitrilotriacetic acid—1412
distribution in digestive tract, effect of supplemental calcium carbonate—3307
effect of deficient feeding to ewes on certain amino acids and sugars in cartilage of their newborn lambs—1313
effect of nitrilotriacetic acid on solubility in stomach—1414
fate of labeled choline given intraruminally to pregnant ewes fed deficient or supplemented rations—1312
in accessory genital gland of male, distribution, uptake and effect on testosterone—1309
metabolism, effect of supplemental calcium carbonate—3308
radio, effects of intraruminal dosing with nitrilotriacetic acid—1411
- MANGE**, comparative efficacy of tetmosol—3142
psoroptic, epidemiology—3343
psoroptic, treatment in cattle and sheep with phosphoric acid ester phoxim—1753
sarcoptic, clinical picture, Nigeria—574
sarcoptic, in Nigerian Kaduna State—574
- MANNITE**, effect of intravenous infusion on various metabolic factors—1625
- MANURE**, sun-dried, of laying pullet, mature pig, sheep and cow, replacing corn with—2217
- MANX LOAGHTAN BREED**, at National Agricultural Centre, Stoneleigh, United Kingdom—840
- MARIHUANA**, effect of feeding to sheep—1930
- MARKET**, comments, New Zealand lamb may be under pressure—1274
commercial, comments, wool clip sellout likely—1273
- MARKET WEIGHTS**, OF romnelets, Columbias, Suffolks, and North Country Cheviots and their crosses—3136
- MARKETING**, farmer income and expenditure patterns in wheat-sheep regions—712
in crofting counties of Scotland—1373
lambs, interval feeding in raising and fattening—1328
sheepmilk's export potential—1043
- MAROCCAIN**, some parameters in reproduction of breed—1092
- MARROW**, bone, karyotypes of Nali sheep—3143
- MARSHALLAGIA**, in wild sheep from Iran—903
- MARWARI**, effect of prolonged salt intake on reproduction of ewes and weight of lambs born—2756
performance in arid areas—2110
ram, comparative semen characteristics, maintained under hot arid conditions—2017
- MASCULINIZATION**, ewe's genitalia in clover disease—22
- MASHAM**, performance—2146
- MASSEY UNIVERSITY**, review of research on specialty carpet wools—3243
- MASTICATION**, chewing and physical breakdown of food—2483
- MASTITIS**, bacterial carrier state—2602
incidence in crossbred ewes—3014
methods of prevention and preventative diagnosis—3023
subclinical, in machine-milked ewes—3148
survey, Italy—2660
- MATERNAL BEHAVIOUR**, hormonal induction in non-pregnant ewe—1738
- MATING**, activity increase, lamb production with rams exposed to short day lengths during nonbreeding season—2655
behaviour, factors affecting—1718
behaviour, influence of domestication, fat-tailed sheep—1318
comparison of artificial insemination vs. natural mating on reproductive performance—1214
effect of early mating of rams on subsequent value—2119
effect of time of, on ovulation rate and potential lambing rate of Greyface ewes—1187
effect on uterine motility—1725
first, age at—3131
first, body weight—3131
reproductive performance during, in young female sheep—1233
- MEAT**, breeding of mutton sheep—449
carcass yield, effect of milk and artificial feeding—3320
changes in free nucleotides, nucleosides and bases during thermal processing—158
characteristics, from mechanically desinedew lamb breasts—956
characteristics of lambs of different breed crosses, weight and sex—2816
differentiation by gel diffusion—2707
downgrading due to subcutaneous hemorrhagic speckling—2330
economic losses due to fascioliasis—2502
effect of polycarbacin on quality—2613
effect of sire breed on eating quality of meat from crossbred lambs—815
evaluating lamb carcass cuts for protein—1609
fat quality—360
fresh, bacterial association—1135

- hygiene, new method for carcass hygiene—1131
- hygiene, sarcosporidiosis research sheds new light on old problem in sheep industry—133
- hygiene, service, France—1009
- immunochemical detection of ovine, porcine and equine flesh in beef products with antisera to species myoglobin—1270
- incidence and serotypes of *Clostridium perfringens* on carcasses—2782
- increased production, use of AI—862
- inspection, sarcosporidiosis research sheds new light on old problem in sheep industry—133
- isolation and characteristics of *Yershinia enterocolitica*-like bacterium from—1235
- lamb and sheep, levels of lead, cadmium and mercury—1599
- microbiology of bruised tissue—1079
- palatability, facial eczema—1572
- physico-chemical studies of model meat emulsions in relation to preparation of stable sausage—568
- production, and fattening performance of progeny of Romanov ewes mated at different ages—1778
- production and quality, effect of nutrition and castration on male Suffolk lambs crossed with Romney and Border Leicester—2418
- production, breeding objectives and selection criteria for Australian prime lamb production—2833
- production by new breed, Volgograd, and by Caucasian—3039
- production, crossbred sheep—2788
- crossbreeding Krasnoyarsk ewes and Australian merino rams—1803
- production, hazards in use of anabolics—1288
- production, Turkey—3163
- production, United Kingdom, margins and performance in 1978—3067
- quality, in relation to amount of pelleted feed—1633
- quality, influence of waiting period before slaughter—2998
- quality, lambs fed on different nutritional levels—165
- quality, muscle characteristics of lambs on different nutritional planes—162
- quality of young Finnish Landrace rams—3124
- quality, physiological effects of stunning—1709
- relation between nervous and hormonal mechanisms in live animals and variations in quality—1771
- residues, bithionol sulphoxide—3147
- residues, hexachlorbenzene—268
- residues of morantel—2258
- review of intrinsic bacteria—1078
- selenium residues—2855
- serological test for bovine, sheep, goats and deer—1851
- sheep, and the European Economic Council—1996
- sheep, draft decision of European Communities Commission concerning negotiations of autolimitation arrangements with non-member countries—907
- sheep, farming in France, economics—396
- sheep, trends in development of German Federal Republic production under common market conditions—1369
- tenderness, comparative—3200
- 13th annual report of Australian Meat Research Committee—183
- MEBENDAZOLE, anthelmintic action against strongylata—183
- influence on plasma levels—3151
- inhibition of mammalian brain microtubule assembly in vitro by benzimidazole carbamates—1400
- MEBENVET, anthelmintic action against strongylata—1838
- MECHERI LAMBS, physical measurements and cold dressed carcass weights and grades—156
- MECLOFENAMIC ACID, use in studying influence of rumen on absorption of drugs—1870
- MECONIUM, fetal lamb lung lavage and its effect on lung phosphatidyl choline—2701
- proteínase inhibitor of lamb meconium and feces—1506
- relationship with postnatal pH and blood gas tension—823
- MEDICAGO TRUNCATULA (BARREL MEDIC), digestion by sheep—748
- MEDITERRANEAN, climate, factors influence grazing behaviour—821
- MEDROXYPROGESTERONE, changes in estrogen concentration in sheep—1220
- estrus synchronization over 12 year period using oral map treatment for 10 days—3123
- MEFLUIDIDE, treatment of fescue, effect on nutrient utilization—2527
- MEIOSIS, oocyte, hormonal control—557
- MELATONIN, annual variations—138
- circulating patterns, radioimmunoassayable—137
- MEMBRANE, integrity, sperm, regulation of calcium—409
- permeability during low potassium depolarization in cardiac purkinje fibers—1714
- plasma, luminal, urothelia, isolation—530
- resting potentials, and potassium equilibrium potentials in sheep purkinje fibers—2710
- sperm, changes during epididymal transit—1231
- MENICHLIPHOLAN, anthelmintic, Guinea—2662
- MEPERIDINE, relief of stress in pregnant sheep—2044
- urinary excretion by fetal lamb—2918
- MERCURY, and lead and cadmium levels in meat and organ samples—1599
- MERCURY TOXICITY, transformation of mercuric chloride and methyl mercury by rumen microflora—1630
- MERINO, adaptability to climate in India—3125a
- Australian, objectives and selection criteria for breeding—2372
- breeding of longwool sheep, recent results—1299
- comparative productivity—2884
- comparison with Dorset, Border Leicester,

- Corriedale and Polwarth for staple strength and depilation force after cyclophosphamide treatment—1121
- contemporary comparisons between progeny by Finnish Landrace and Romanov rams out of mutton Merino and Awassi ewes—1119
- crossbreeding for production of fat lambs—971
- crossbred with Leicester, effect of lupin grain and recently cut lucerne on intake and digestibility of mature weathered herbage by ewes—2531
- crossbreds, carcass characteristics, composition and partitioning of fat—2969
- crossbreds, distribution of subcutaneous fat, intermuscular fat, muscle and bone in carcass—2970
- effect of intravenously infused dexamethasone on collagen metabolism in skin of—1729
- effect of lupinosis on liver copper, selenium and zinc—70
- effect of merinolandschaf × Comisana crosses on lamb production, production of suckling lambs fed natural milk—1692
- ewe, estrus, ovulation and ovum transport—355
- ewe, stimulation of seasonally anovular, time from introduction of ram to preovulatory LH surge and ovulation—2208
- ewes, discrimination of colours—57
- ewes, effect of active immunization against androsterone or estrone on estrus, ovulation and lambing in—1880
- ewes, effect of genotype on wool growth in response to methionine feeding—3235
- ewes, ram-induced ovulation in seasonally anovular ewes, effect of estradiol on frequency of ovulation, estrus and short cycles—1878
- fermentation and nitrogen dynamics in merino sheep given a low-quality-roughage diet—2172
- fleece measurement in breeding programs—1924
- genetic and environmental factors causing variation in wool fibre diameter and other traits—1928
- genetic and environmental variation in lutropin response of ovariectomized, to luliberin—1675
- genetic parameters, response to partial selection on clean fleece weight in South Australian strong-wool sheep—1234
- growth and carcass of crossbreds with Dorset horn, Border Leicester and Suffolk—2010
- influence of shape of paddock, type of fence and stocking rate on grazing behaviour and social facilitation—1808
- lambs, effect of feeding creep mixture on growth rate and mortality—323
- lambs, hypospadias—749
- lambs, relationship between glutathione and selenium-responsive thriftiness—2306
- occurrence of estrus in pregnant ewes—3319
- ram, Australian, crossbreeding with Krasnoyarsk ewes—1803
- ram, brucellosis in western Australia—1775
- ram, seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin levels—251
- ram, varicocele—755
- response to *Haemonchus contortus*—66
- review of Russian breed—1405
- selection for resistance to fleecerot and body strike—173
- sex differences in heritabilities of economic traits—1301
- sheep, utilization of lupin stubbles—649
- Soviet, effect of ewes weight at service on lamb production—2477
- Soviet, performance in arid areas—2110
- stimulation of seasonally anovular ewes by rams, premature regression of corpora lutea—2207
- Stavropoi, birth weight—2452
- survival feeding, pregnant and lactating ewes with wheat and lucerne hay—595
- wether weaners, 4 schemes of control of nematodes, effect—1463
- wethers, synergistic effects of thiocyanate with flumethasone in inhibiting wool growth—2274
- MESENTERIC ARTERY, constriction, modification by prostaglandins A₁, E₁ and F₂ alpha of epinephrine induced fetal—3296
- MESONEPHROS, role in development of fetal ovary—3329
- MESSENGER RNA, translational activity of ribonucleic acid from ruminant abomasum—1472
- METABOLIC DISORDERS, prevention and origin of ketosis—1607
- use of vitamin B₁₂ in treatment—2917
- sheep—3284
- sheep, textbook—282
- occurrence of outbreaks of acute disease—216
- uses, meaning and limitations of biochemical profiles—3285
- METABOLIC RATE, thermoregulation in a fat-tailed sheep (Awassi) and in German mutton Merino—725
- METABOLISM, adaptive strategies of selective fatty acid deposition in bone marrow of desert bighorn sheep—3048
- Al, Fe and P interrelationships in lambs—2560
- alanine and propionate in liver—2515
- alpha-melanocyte stimulating hormone and adrenocorticotropin in regulation of glucocorticoid secretion during perinatal period—1772
- amino acid catabolism and gluconeogenesis in sheep—857
- amino acid requirement for microbial protein synthesis—1726
- ammonia and pH in rumen contents of wethers on diets with different nitrogen sources—359
- ammonia, therapeutic efficacy of intravenous administration of titrated l-glutamic acid in urea poisoning—2896
- anthelmintics clixonide and resorantel and related compounds in vitro by *Moniezia expansa*, *Ascaris suum* and mouse- and sheep-liver enzymes—804
- arachidonic acid dependent metabolism of 7,8-

- dehydroxy-7,8-dihydrobenzoapyrene by ram seminal vesicles—1869
- bacterial residues nitrogen, estimation from 47 digestibility trials—1891
- basal levels and plasma profiles of luteinizing hormone and prolactin in Romney rams—3271
- Bermudagrass protein, influence of formaldehyde treatment and energy—87
- betaine—2008
- bile flow and electrolyte composition of bile associated with maximum bilirubin excretion—247
- blood glucose in cold exposed sheep—3035
- blood pressure and metabolic effects of 9-alpha hydrocortisone—601
- body composition in lactating ewes estimated by serial slaughter and deuterium dilution—638
- body-water, turnover, game and livestock in Kenya—1566
- branched chain amino acids by muscle—639
- cadmium retention by sheep fed silicic acid—445
- calcium and phosphorus—412
- calcium, phosphorus and magnesium metabolism in lambs injected with cholecalciferols—2959
- carbohydrate, latest findings, review—1608
- carbohydrates, glucose placental transfer after insulin infusion to mother—89
- cell proliferation and cortical cell production in relation to wool growth—3270
- central excitatory serotonergic or serotonergic-like synapse on pathway to heat production—350
- changes in lactate-producing and lactate-utilizing bacteria in relation to pH in rumen during stepwise adaptation to high-concentrate diet—1816
- changes in plasma inorganic phosphorus levels in induced hypocalcaemia—691
- changes in total estrogen concentration in blood of sheep given medroxyprogesterone acetate and PMS—1220
- characteristics of a lipolytic and fatty acid requiring butyrvibrio species isolated from rumen—1275
- characteristics of threonine, valine and methionine absorption in the jejunum and ileum—2350
- characterization of breakdown products in blood and tissues after injection of labeled immunoglobulin G in duodenum—413
- 2-chloro-N-isopropylacetanilide (propachlor) in milk—213
- cholesterol biosynthesis and progesterone production by chorionic cells of early sheep conceptus in vitro—1854
- cholinergic control of pituitary gonadotrophin secretion in ewe—2106
- citrate synthesis by reduction carboxylation of alpha ketoglutarate in rumen tissue of cattle and sheep—2711
- comparative studies of several ruminant species—890
- comparison of control of estrus and ovulation by ear implant (SC-21009) or intravaginal sponge (cronolone or MOP)—374
- comparison of forage value of buckwheat and sorghum stubbles grown on Southern Tablelands of New South Wales—2075
- comparison of glucose, camel and sheep—554
- comparison of urinary specific gravity and osmolality—893
- concentration of free 17-beta estradiol in blood plasma of ewes after treatment with chlormadinone acetate in two synchronized cycles—1222
- concentrations of free amino acids in maternal and fetal plasma, during last 5 weeks—2778
- contribution of protozoa to the protein entering duodenum of sheep—1254
- copper, young lambs grazing improved pastures—3238
- coronary dynamics and myocardial metabolism in diabetic newborn—1716
- crossbred lamb growth—629
- crossbreds of Muzaffarnagri and Dorset—1495
- crufomate (4-*tert*-butyl-2-chlorophenylmethyl methylphosphoramidate) administered topically—214
- degradation of amino acids and peptides by mixed rumen microflora—2409
- dehydrogenase activity in fatty tissue of lambs given diets of different physical structure with fatty acid supplements—64
- depletion and repletion effects on Mg, Ca and K in bone, muscle, cerebrospinal fluid and plasma—278
- development of pituitary function in fetus—1112
- 2,6-diaminopimelic acid by rumen organisms—1680
- diet and stage of growth upon energy utilization by lambs—951
- dietary concentrate level affects absorption rates and metabolism of lactate and glucose in sheep—1376
- dietary energy utilization with diets differing in sugar:starch ratios—3092
- dietary imbalance of magnesium, calcium and potassium effect on plasma insulin—2457
- digestive utilization of dietary amino acids, effect of endogenous nitrogen and intestinal microflora—2356
- differences in net energy values of 1st and 3rd cut dried grasses—2504
- digestibility of dry masses and nitrogen in single gastrointestinal sections—423
- digestion of silage treated with formaldehyde-formic acid mixture—1081
- diminishing rumen butyrogenesis in bulls and sheep fed sugar beets—1739
- disappearance from blood and urinary excretion of sulfur-35 labeled thiamine—1326
- disappearance from blood and urinary excretion of ³⁵S-thiamin—1335
- disorders in microbial digestion in rumen, etiology, pathogeny, clinical examination and therapeutic deductions—448
- distribution of ⁷⁵Se in tissues and rumen con-

- tent and its excretion in bile, urine and feces—729
- diurnal changes in blood ketone bodies, glucose and lipids related to energy intake of adult sheep—786
- duodenal nitrogen flow in response to increasing dietary crude protein—1699
- early response of lambs to small doses of triiodothyronine—97
- effect of abomasal added oils on glucose tolerance in lambs—647
- effect of amino acid pattern and level in intravenously and intraruminally infused sheep—3282
- effect of ammonia and adrenaline infusions—1035
- effect of ammonia on gluconeogenesis by isolated sheep liver cells—3212a
- effect of anterior and posterior hypothalamic deafferentation on gonadotrophin and prolactin secretion in ovariectomized ewes under hormonally induced estrous cycles—2954
- effect of antibody against GnRH on preovulatory LH and FSH—2108
- effect of calcium, phosphorus and magnesium administration on mineral concentration in rumen fluid—3304
- effect of cycloheximide on corpus luteum—1053
- effect of daylength on growth of lambs, blood levels of GH, prolactin, insulin and thyroxine, and effect of feeding—992
- effect of decreased cerebral blood flow on brain tissue oxygenation of newborns—2600
- effect of defaunation of rumen on growth of lambs on low-protein-high energy diets—335
- effect of defaunation on metabolism of rumen microorganisms—743
- effect of dietary concentrate levels on N balance, urine Ca excretion and blood composition of sheep—1375
- effect of dietary intake of calcium and phosphorus on absorption and retention by mature Ca-replete sheep—441
- effect of dietary protein levels on blood free amino-acidemia in lambs—550
- effect of duodenal infusion of methionine on erythrocyte reduced glutathione—2775
- effect of duodenal infusion of methionine on erythrocyte reduced glutathione—2883
- effect of endogenous insulin and glucagon on free fatty acids in circulating blood plasma—906
- effect of energy and protein levels on nutrient digestibility and wool production—2757
- effect of energy intake during late pregnancy on plasma insulin and blood free amino acids in ewes and their lambs—1160
- effect of energy supply for ewes during pregnancy, and on birthweight and growth of lambs—2995
- effect of energy supply on hormone and metabolite concentrations in blood—357
- effect of ethanol on circulation and acid base balance of pregnant sheep—191
- effect of exogenous oxytocin on estrous cycle length and corpus luteum lysis in ewes—1264
- effect of feeding *Calotropis procera*—1829
- effect of feeding creep mixture on growth rate and mortality of Merino lambs—323
- effect of feeding formaldehyde-treated concentrate mixture on growth, wool yield and utilization of nutrients in growing lambs—322
- effect of feeding frequency on diurnal changes in microbial protein, volatile fatty acids and ammonia content of rumen—1978
- effect of four corn silage and corn grain ratios and nitrogen source on rumen parameters and plasma urea nitrogen—2974
- effect of glucose, insulin and FFA in food intake in sheep—1315
- effect of growth promoter zeranol on reproduction in ewes—622
- effect of hyperammonemia on blood glucose and plasma insulin—238
- effect of implanting jugular catheters on plasma glucose in wethers fed two extremes of diet—3273
- effect of increased level of urea in diet on rumen protozoa—2177
- effect of infusion of sorbite electrolyte (Urzolyt-153S) and of sorbite solution on sorbite, fructose, glucose, insulin, free fatty acids in blood plasma—1624
- effect of intraruminal selenium pellets on tissue glutathione peroxidase activities—2305
- effect of intravenous administration of d-penicillamine on liver copper stores of housed sheep—1856
- effect of intravenous glycine infusions on plasma amino acid levels in sheep—1033
- effect of intravenous infusion of mannite solution—1625
- effect of intravenously infused dexamethasone on collagen metabolism in skin of merinos—1729
- effect of leucine infusion on various nitrogen parameters—1452
- effect of manganese deficient feeding to ewes of certain amino acids and sugars in cartilage of their newborn lambs—1313
- effect of modifying olfactory and pineal gland function on seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin levels in rams—252
- effect of monensin on growth, feed efficiency and energy metabolism of lambs—1477
- effect of nitrogen and energy supplementation on voluntary intake and digestion of heathers—2002
- effect of nitrilotriacetic acid on apparent absorption and duodenal flow of manganese, iron, zinc and copper—1412
- effect of non-protein nitrogen additives on lipid and carbohydrate metabolisms—367
- effect of portal versus jugular methionine infusion on circulating amino acids and nitrogen metabolism—3283
- effect of potassium chloride, glucose and epinephrine administration on magnesium and potassium metabolism—3305

- effect of prolonged salt intake on reproduction of ewes and weight of lambs born to Marwari sheep—2756
- effect of reducing plasma calcium levels on plasma enzyme levels—690
- effect of residual grain on utilization of sweet lupin stubbles and concurrent changes associated with lupinosis, in particular with liver copper and zinc in weaner sheep—648
- effect of single dose of selenium salts on whole blood levels of selenium in ewes on selenium-deficient diet—1942
- effect of somatostatin suppression of glucagon secretion on glucose production—435
- effect of somatostatin suppression of glucagon secretion on glucose production—437
- effect of supplemental calcium carbonate on metabolism of iron, copper, zinc and manganese—3308
- effect of supplementary cystine and energy on utilization and distribution of cystine in Merinos—3258
- effect of tetrathiomolybdate on sheep caeruloplasmin amine oxidase activity in vitro, influence of substrate on apparent sensitivity to inhibition—1529
- effect of thiopeptin and sodium bicarbonate on prevention of lactic acidosis induced in sheep—1548
- effect of timing of ram introduction on fertility in progestagen-PMSG treated effect of *Trichostrongylus colubriformis* on energy and nitrogen metabolism of lambs—1821
- effect on plasma electrolytes of transfer to sheep of bovine rumen-reticulum micropopulations—936
- effect of prostaglandin E-2 infusion in the fetal lamb on fetal plasma ACTH, effect of infusion of prostaglandin E-2 on fetal plasma levels—2466
- effect of sulphur intake on molybdenum metabolism—1130
- efficacy and mechanism of action of anabolic agents as growth promoters—1287
- efficiency of utilization of volatile fatty acids for maintenance and energy retention—2190
- efficiency of utilization of volatile fatty acids for maintenance and energy retention—2229
- electrolyte metabolism in different water intake—1479
- electron microscopic study of cellulose degradation by rumen ciliates—735
- element and polychlorinated biphenyl deposition and effects in sheep fed cabbage grown on municipal sewage sludge—1260
- endocrine cells in alimentary tract—465
- energy—54
- energy and nitrogen utilization by weaned lambs before, during and after weight loss—1132
- energy and protein requirements during hand feeding—1364
- energy, during experimental underfeedings and refeedings—1086
- energy, management of sheep, review—3212
- energy retention in growing lambs fed diets with different proportions of sodium hydroxide treated straw—2340
- energy utilization of maize silage fodder rations by growing sheep—467
- enzymes in forestomach of lambs—716
- enzymes of glycolysis, citrate cycle, fatty acid oxidation and respiratory chain in diaphragm of lambs, relation to vitality, fattening performance and carcass quality—3279
- enzymic processing of pre-lactoproteins by mammary microsomal membranes—104
- estimates of repeatability in temporal patterns of secretion of growth hormone, prolactin and thyrotropin—713
- estrone sulfate in pregnant ewe—3032
- excretion and retention of dietary and supplemented sulfur, and production responses to intraruminal infusions of DL-methionine—812
- factors affecting allantoin excretion in urine—128
- factors affecting pre-weaning body weights in Malpura sheep—365
- factors associated with difference in nutritive value of artificially dried red clover and ryegrass—2055
- failure of prolactin to initiate lacto-genesis—1346
- fascioliasis, nitrogen balance and disposition of excessive proline in rats—572
- fate of amino acids in isolated perfused livers of developing sheep—2638
- fate of corpus luteum granule membrane and granule secretion—1054
- feed efficiency and carcass characteristics of ram lambs slaughtered at four weights—279
- feed intake, digestibility, body weight and nitrogen balance of sheep fed hay and a pelleted diet—697
- fertility of ewes on low doses of estradiol during synchronized estrus—1394
- fetal, effect of removal of endometrial caruncles—2546
- fermentation and nitrogen dynamics in Merino sheep given a low-quality-roughage diet—2172
- follicular populations in ewe under different gonadotrophin levels—486
- forage diets—2503
- free amino acids in blood of ruminants—physiological and nutritional regulation—298
- gastrointestinal passage and balance of thiamin—424
- glucagon responses to exercise—433
- gluconeogenesis from isobutyric acid—2840
- gluconeogenesis from lactate by fetus in vivo—2410
- gluconeogenesis in isolated hepatocytes—2514
- glucose, effect of trienbolone acetate in normal and ketotic sheep pregnant with twins—994
- glucose, in exercising pregnant ewe—553
- glucose levels in lamb's blood after administration of various carbohydrates—3056
- glucose levels in lamb's blood during course of several hours after feeding—3055
- glucose, urea, amino acids in blood of ewes

- during pregnancy and lactation, effect of nutritional state during late pregnancy—1158
- glutamate dehydrogenase in the digestive tract—1736
- growth and endocrine responses to zeranol implants, effects of preimplant growth rate and breed of sire—3248
- haptoglobin during development—284
- hemoglobin oxidation in whole blood in relation to glutathione peroxidase activity—3251
- hemoglobin switching in erythroid precursors in vitro—240
- hepatic copper—2648
- hepatocellular extraction and retention of fructose in conscious sheep—1348
- hormone ontogeny in fetus, circulating prolactin in mid and late gestation and in newborn—2072-A
- host, effect of parasitism—2913
- hydrolytic activities of rumen ciliates—733
- immunoglobulin synthesis in lungs and caudal mediastinal lymph nodes—1122
- in rumen and blood of sheep fed loose or pelleted feed mixtures with different levels of urea—2265
- in vitro, mixture of atrazine and simazine by soluble fraction of liver homogenate—1555
- in vitro rate of protein synthesis, influence of additional pre-incubation with rumen fluid of animals deprived of food, nutritional value of straw—1262
- in vitro, tetrachlorvinphos, by soluble fraction of liver homogenates—51
- in vitro, tritiated cortisol and tritiated estradiol by skin and wool roots—3193
- in vitro variation of glycogen in three sheep nematodes—2401
- incorporation of ⁷⁵Se into ovine semen, plasma and erythrocytes—3028
- incorporation of ¹⁴C-valine into plasma proteins of young and old ewes fed two levels of dietary protein—911
- indices in rumen and blood, fed granulated and pelleted feed mixtures with different urea levels—2263
- indices of stress in housed experimental sheep—2487
- influence of abomasal infusions of glucose and methionine on nitrogen balance in wethers—2031
- influence of birthweight on digestibility of milk-replacer in newborns—1358
- influence of feeding hay from area with heavy pollution of atmosphere with nitrogen compounds on some biochemical parameters of blood and rumen contents—1488
- influence of glucose addition and formaldehyde treatment of forage diets on nitrogen metabolism and fiber digestion in wethers—86
- influence of kanamycin on rumen bacteria and ammonia production in supplemented sheep rumen liquor in vitro—1110
- influence of nitrogen and time on feed on tissue serine levels and enzymes of serine synthesis and degradation—2411
- influence of protein intake on albumin metabolism of *Fasciola*-infected and pair-fed control sheep—696
- influence of silage contamination by soil upon trace elements availability—1670
- influence of theoretical and experimental factors on efficiency of rumen microbial growth—1298
- inhibitory effect of adrenaline on oxytocin release in ewe during milk-ejection reflex—248
- interaction of benzimidazolecarbamates with microtubule protein—1399
- interconversion of glutamate and glutamine in placenta during development of fetal lamb—2315
- intracellular distribution of copper in liver of normal and copper loaded sheep—1118
- intramuscular iron-dextran and hemogram of lambs—390
- iodine supplementation of pregnant and lactating ewes and growth and maturation of their offspring—1598
- is glucose ketogenic in rumen epithelium—2838
- isolation and partial characterization of proteoglycans from lung parenchyma—2619
- ketone body, comparison between camel and sheep—555
- kinetic behaviour of radiolabelled IgG derived from different sources in adult sheep and neonatal lambs—646
- labelled isobutylidene diurea—305
- lactic acid, rumen, energy levels—480
- lipid, mammary gland—2035
- lipogenesis of ovine adipose tissue in tissue culture—3134
- lipolysis and biohydrogenation of monogalactosyldiglyceride by whole rumen contents and its fractions—2759
- liver mitochondria of fasted sheep—362
- local steroid concentrating mechanism in reproductive vasculature of ewe—3186
- localization of prostaglandin-F in the ovine uterus during early pregnancy—540
- magnesium and calcium at time of change from low magnesium and calcium diet to a low magnesium diet with calcium carbonate—2715
- magnesium and calcium, young and old ewes—2714
- measurement of transplacental magnesium fluxes—513
- mechanisms and quantitative aspects of antagonistic effect of molybdenum on copper metabolism—1998
- methionine in silage-fed sheep—1080
- method for determining and factors affecting rumen microbial protein synthesis—2857
- methods for studying—1056
- mineral balance and digestibility in lambs consuming NaOH-treated crop residues—145
- mineral, by sheep on magnesium fertilized spring pasture—2968
- mineral, copper, transfer from ewes to lambs—2631
- mineral, effect of cold stress—2713

- mineral, effect of dietary potassium level—2165
- mineral, review—953
- minimal nitrogen metabolism of lambs—2228
- model for calculation of energy requirements of pregnant ewe—1049
- monensin effects on diet, digestibility, ruminal protein bypass and microbial protein synthesis—2374
- monnosylation of lipidic and protein acceptor of lung microsomes—1746
- net utilization of inorganic sulfur by rumen microbes—924
- nitrate, influence of concentrates, microorganisms in rumen—2103
- nitrogen, bacterial residue, partition of nitrogen in feces with detergents, and application to estimation of true digestibility of dietary nitrogen and excretion of non-dietary fecal nitrogen—1892
- nitrogen, growing Barbados Blackbelly lambs—2243
- nitrogen in rumen—221
- nitrogen intake, digestion and retention by grazing lambs—625
- nitrogen retention of early weaned lambs—1329
- nitrogen, rumen microbial flora, effect of ammonia concentration on composition, hydrolytic activity and nitrogen metabolism of microbial flora—3183
- nitrogen supplementation to maize silage for early weaned lambs—388
- nitrophenolic and 5-arylazorhodanine anthelmintics by *Ascaris suum*, *Moniezia expansa* and by mouse- and sheep-liver enzymes—805
- occurrence and disappearance of ruminal histamine and tyramine—1402
- origin and development of glycosidases in fetal membranes—2390
- orotic acid and non-protein nitrogen overload—459
- oxytetracycline absorption and excretion in wethers—407
- palmitate, by isolated hepatocytes from fed and fasted sheep—1787
- passage of thiamin through rumen wall—1336
- PDI system for estimating quantity of amino nitrogen absorbed in small intestine—3133
- pharmacokinetics and amounts of 25-hydroxycholecalciferol in sheep affected by osteodystrophy—1310
- ¹⁴C-phenol in sheep, pig and rat—1502
- phospholipid, during renal compensatory growth in fetus—2032
- phosphorus, sulphur, cobalt and zinc in feeding—856
- placental drug transfer—92
- plasma levels of various enzymes and metabolites of cattle and sheep in Syria—2158
- plasma insulin concentrations during infusion of potassium and sodium chloride solutions into conscious splenectomized sheep—273
- plasma steroids, prolactin and placental lactogen in intact or hypophysectomized pregnant ewes with an hypophysectomized fetus, fetal perfusion of dexamethasone—387
- post-surgical changes in blood of fetus in utero—1582
- pregnancy feeding levels and perinatal lamb mortality—1551
- proceedings of conference in Clermont-Ferrand, France in 1979—2578
- progesterone and LH concentrations in ewes after ICI 80996, an analogue of PGF-2 alpha at 2 different stages of breeding season—12
- progesterone by chorionic cells of early conceptus in vitro—1855
- progesterone, pregnant sheep near term, identification of 3 beta hydroxy 5-alpha pregnan-2-one-3 sulfate as a major metabolite—3031
- propionate, comparative in different ruminants—3172
- protein, a review—1819
- protein, body composition, weaned lambs before, during and after period of weight loss—2678
- protein degradability in rumen from incubation measurements weighted according to rate of passage—2232
- protein degradation in forestomachs of ruminants—2925
- protein fractionation, nucleic acids and enzymatic activity of cytoplasmic extracts from intestinal mucosa—1558
- protein requirements for maintenance of Churra breed—1105
- protein turnover in digestive tissues of lamb throughout development—614
- pyruvate, skin—1181
- quantitative estimates of sulfur metabolism in sheep stomach—811
- quantitative importance of bacterial residues in non-dietary fecal nitrogen—1890
- quantitative measurement of gluconeogenesis from isobutyrate—2839
- radioimmunoassayable melatonin-circulating patterns—137
- radiomanganese and radiozinc, effect of intraruminal dosing with nitriolotriacetic acid—1411
- rate of labeled choline given intraruminally to pregnant ewes fed manganese-deficient or supplemented rations—1312
- red cell in phosphorus deficient sheep—1822
- relation between voluntary food intake during pregnancy and forage intake during lactation and after weaning—989
- relationship between glutathione and selenium-responsive unthriftiness in Merino lambs—2306
- relationship between meconium in newborns and postnatal pH and blood gas tension—923
- relationship between plasma progesterone in late gestation to incidence of dystocia in Romney ewes—1596
- response of fetal and newborn lamb to glucose and tolbutamide infusions—2348
- response of newborn to iron-dextran injection—2922

- response to infusion of graded levels of histidine—937
- retention by sheep of magnesium, phosphorus and fluorine from magnesium and calcium phosphates—1269
- review, mineral, copper in sheep—3246
- robust and inexpensive, laboratory cages—1979
- role of rumen protozoa in digestion of food cellulosic materials—1476
- rumen ciliate *Epidinium* in primary degradation of plant tissues—266
- rumen, effect of epithelial development—1073
- rumen, effect of amprolium and monensin during coccidiosis—1357
- rumen, effect of industrial mixture B—1645
- rumen lactate, effect of dietary lactic acid, in lambs switched from low to high concentrate diets—1374
- ruminal and post-ruminal digestion of pasture herbage by grazing lambs—626
- ruminal nitrogen, and passage of amino acids to duodenum in sheep receiving diets of hay and concentrates—549
- seasonal variation in plasma protein and urea nitrogen concentrations in hill sheep—2915
- seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin in Romney, Merino and Polled Dorset rams—251
- secondary fermentation in rumen given diet of molasses—2574
- secretion and absorption of phosphorus in rumen—2385
- secretion and biological half-life of the surfactant disaturated phosphatidyl choline—1384
- sensitivity analysis of a simulation model of post-ruminal non-protein nitrogen dynamics—747
- separation of sheep liver cytoplasmic and mitochondrial aldehyde dehydrogenases by isoelectric focusing and observations on purity of preparations of the enzyme and sensitivity towards inhibition by disulfiram—766
- sex behaviour and hormone responses in ewes given testosterone—1858
- short term response to cholecalciferol injection in ovine liver and serum phosphorus, calcium and magnesium—2965
- silage intakes in relation to energy requirements of ewes in late pregnancy—2700
- source of progesterone in prepuberal ewe—296
- sulfur and methionine in rumen—810
- suppression of gluconeogenesis and endogenous glucose production by exogenous insulin in newborns—2888
- sustenance of growing and fattening ruminants by intragastric infusion of volatile fatty acid and protein—2192
- synthesis of microbial nitrogen compounds in rumen and subsequent digestion—2800
- thermoregulatory effects of intracerebroventricular injections of taurine, glycine, GABA and muscimol—351
- thyroxine uptake by fetus after intraamniotic injection—2518
- transformation by rumen microorganisms of 19-norgestagens to oestrogens—1323
- Trichostrongylus colubriformis* infections—3084
- tryptophan loading on serotonin in central nervous system—194
- uptake, distribution and effect on testosterone of zinc and manganese—1309
- urea content of bile and gastric juice in sheep in relation to blood urea—3110
- urea feeding and ketogenesis—353
- urea synthesis in liver and kidney of developing sheep—2465
- urea turnover and endogenous urea secretion—3112
- urinary and milk excretion of prostaglandin F₂-alpha—775
- urinary methylmalonic acid as indicator of vitamin B₁₂ status of grazing sheep—1985
- use of lactating ewes in evaluating protein sources for ruminants—1109
- uterine prostaglandins production and content during second half of estrous cycle—83A
- uterine uptake of amino acids and placental glutamine-glutamate balance in pregnant ewe—1340
- uterine uptake of amino acids throughout gestation in unstressed ewe—2047
- utilization of chopped and pelleted lucerne—2978
- utilization of fecal phosphorus and calcium for estimation of intake—3137
- utilization of nitrogen in five herbage—858
- utilization of lupin stubbles by Merino sheep—649
- variation in response of sheep to experimental magnesium deficiency—212
- variants of transferrin—1090
- viability and glucagon responsiveness of isolated hepatocytes from adult sheep—795
- X-ray diffraction of crystals of half synthetic sheep insulin—667
- zinc accumulation in tissue cytosolic proteins—3232
- METABOLITES**, effect of energy supply on blood concentrations—357
- plasma levels, cattle and sheep in Syria—2158
- METACERCARIAE**, amphistome, viability after irradiation—1217
- METALLOTHIONEIN**, effect of age and dietary levels of copper and zinc—2648
- renal hepatic comparison in fetus—290
- METHANOGENESIS**, in anaerobic sewage sludge in rumen liquid—3326
- METHEMOGLOBINEMIA**, methylene blue or tolonium chloride antagonism of sodium nitrite—471
- METHIONINE**, absorption by fetal and neonatal lamb colon—2794
- absorption in jejunum and ileum—2350
- effect of duodenal infusion on erythrocyte reduced glutathione—2775
- effect of duodenal infusion on erythrocyte reduced glutathione—2883
- effect of portal versus jugular infusion, circulating amino acids and nitrogen metabolism—3283

- effect on digestion of treatment of silage with formaldehyde formic-acid mixture—1081
- effect on productivity and wool quality—836
- esters and polymer encapsulated form, response of grazing sheep, wool production—3235
- influence of abomasal infusions on nitrogen balance in wethers—2031
- metabolism in silage-fed sheep—1080
- metabolism, production responses to intraruminal infusions—812
- metabolism, rumen—810
- supplementation with encapsulated, diets varying in energy and protein—492
- METHYLENE BLUE**, antagonist of sodium nitrite in production of methemoglobinemia—471
- METHYLMALONIC ACID**, urinary, as indicator of status of Vitamin B₁₂ of grazing sheep—1985
- MEXICO**, pneumonic lesions in lambs at slaughter—2453
- MICROBES**, rumen, growth, influence of some theoretical and experimental factors—1298
- MICROCEPHALY**, associated with kyphoscoliosis and cleft palate in Yankassa lamb—1210
- MICROCOCCUS**, and Indian yellow wool—1440
- MICROFLORA**, intestinal, effect on digestive enzymes—1203
- intestinal, effect on digestive utilization of dietary amino acids—2356
- rumen, transformation of mercuric chloride and methyl mercury—1630
- MICROORGANISMS**, attachment to pork skin and surfaces of beef and lamb carcasses—476
- rumen, degradation of amino acids and peptides by mixed rumen species—2409
- rumen, transformation of 19-norgestagens to oestrogens—1323
- MICROPTHALMIA**, textbook—282
- MICROSCOPY**, electron, anatomy of luteal cells—2235
- electron, glomerular cultures—2121
- scanning electron, mucosa of rumen—2924
- scanning electron, topography of skin surface—1448
- MICROSOMES**, mammary, membranes, lactoproteins, enzymic processing—1041
- lung, lipidic and protein acceptor—1746
- MICROSPORUM**, epidemiology—567
- MICROSPORUM DISTORTUM**, isolated from domestic animals—516
- MICROSURGERY**, thyroidectomy, fetus—576
- MICROVASCULAR PRESSURE**, lung, pore models using new data on protein tracers—1937
- MIDGES**, method of feeding on sheep—2077
- MILK**, aflatoxins—2897
- chemical-physical survey of sheep bred in Poland—575
- clearance of tritium-labeled fluorogestone in lactating ewe treated for synchronization of estrus—1848
- composition, among crossbred ewes—3014
- composition, comparative, cow, goat, ewe, buffalo, review—1656
- purebred and crossbred sheep under different feeding-management systems—673
- composition, Romney, Corriedale, Dorset, Romney × Dorset and Dorset × Romney—1044
- DNAases—1169
- economic aspects in Greece—111
- economic losses due to fascioliasis—2502
- effect of clipping and diet on intake and performance of housed pregnant and lactating ewes—3145
- effect of ewe's milk on quality of cheese—813
- effect of intake on intake of cut and grazed herbage by lambs—2317
- effect of yield of lowland ewes on growth of their lambs—1496
- ejection, dynamics of secretion of oxytocin and catecholamines during—2903
- enzymes—1169
- evaporated, content of orotic acid—1695
- ewe, packaging in polyethylene—2316
- fat, Chios ewes—675
- fat, comparative, review—1656
- fat, Spanish ewe, composition of unsaponifiable materials, sterol and hydrocarbon fractions—1029
- gross composition, ewes given protected lipids during late pregnancy—2851
- heat stability and voluminosity and hydration of casein micelles—2820
- improvement of production in Tsigai and Valachian breeds—508
- influence of oxytocin and acetylcholine on secretion of principal components—1644
- intake, accuracy of tritiated water turnover rate as estimate of—806
- Italian exports—1410
- lactation curve among crossbred ewes—3014
- legislation in Spain—2824
- levels of ampicillin and amoxycillin—3347
- marketing, legislation in Spain—2824
- mastitis, bacterial carrier state, USSR—2602
- mineral content, comparative, review—1171
- primary structure of beta caseins—2511
- production, alfalfa haylage treated with propionic acid—2836
- production and milk fat, Awassi ewes in Macedonia—2999
- production, Chios ewes—675
- production, Churra sheep, effect of energy concentration and protein content of diet—2037
- production, Churra sheep, effect of energy and protein ingestion during last third of gestation on production of milk in subsequent lactation—1107
- production, costs—2495
- production, crossbred ewes, during three different seasons—2873
- production, crossbred Sardinian and East Friesian sheep in Sardinia—400

- production, duration of lactation in Piva ewes—35
- production, effect of early weaning—782
- production, effect of duration of suckling, and growth of lambs of Serrai breed—3338
- production, effect of feeding and housing—706
- production, effect of source and level of dietary protein—1108
- production, effect of 3 milking methods on Chios ewes—674
- production, effectiveness of hormonal stimulation of estrus, effect of nutrition—1652
- production, evaluation of Romanov purebred vs. crossbreds—972
- production, factor in hill land production in Great Britain—659
- production, FAO data—987
- production, forecast for 2000 A. D.—2443
- production, Greece—109
- production, Greece, application of Cobb Douglas production function—1062
- production, Greyface ewes at pasture—1905
- production, importance of prolactin and growth hormone in initiation of lactation—955
- production, in Scottish Blackface and East Friesland × Scottish Blackface crossbreds—2309
- production, integrated use of land, management—1693
- production, lamb performance, in United Kingdom—797
- production, New Zealand—1045
- production, part vs. partial lactation records—671
- production, purebred and crossbred sheep under different feeding-management systems—673
- production, relationship to pre-weaning lamb weight gain—3013
- production, sheep dairying—1046
- progesterone, use for determining pregnancy and ovarian activity—189
- production, world, FAO statistics—986
- replacer, digestion of partially hydrolyzed starch—2957
- replacer, influence of birthweight on digestibility in newborns—1358
- replacer, preruminant lambs, limiting amino acids in two soybean protein isolates determined with a change-over design—2314
- replacer, utilization of partially hydrolyzed starch—2813
- review of yield—2528
- sheep, export potential—1043
- structure of production, processing and consumption in Spain—737
- substitutes, feeding, influence of length, on early weaned lamb growth—2817
- substitutes, in artificial rearing of lambs—3310
- substitutes in rearing—3057
- yield, crossbred Tsigai × East Friesians—3349
- yield, crosses of Awassi and Daglic sheep—2819
- yield, effect of protein content of diet on feed intake, early lactation—637
- yield, ewe, effect of milk intake and growth of dorset lambs—3278
- yield, Merinos, survival feeding of pregnant and lactating ewes with combinations of wheat and lucerne hay—595
- yield, mountain farming, Czechoslovakia—1983
- yield, silage, effect of date of cut—2960
- yield, utilization of feed energy in Sardinian sheep—705
- MILKING, machine, blood levels of catecholamine—249
- machine, characteristics for ewes—1205
- machine, ewes, technical parameters—1984
- machine, for ewes—1204
- machine, liquid flow meter, ewes—2904
- machine, milkability as related to dairy yield and its fractions in dairy ewes—1441
- machine, subclinical mastitis in ewes—3148
- method, Chios ewes, environmental factors affecting udder conformation—675
- method, effect on yield of Chios ewes—674
- MILK VETCH, emory, poisoning—3263
- MILKWEED, whorled, poisoning—589
- MINERAL DEFICIENCIES, a review—721
- MINERALS, balance and digestibility in lambs consuming NaOH-treated crop residues—145
- balance, effect of dietary cadmium chloride—444
- blood, in trichostrongylid infections—2259
- blood serum of lambs in intensive fattening—3159
- macro, effects of dietary calcium levels on concentration and solubility in digestive tract—3306
- metabolism, review—953
- metabolism, effect of cold stress—2713
- metabolism, effect of dietary potassium level—2165
- metabolism, sheep on magnesium fertilized spring pasture—2968
- supplementation, sheep grazing wheat stubble, quality of diet, intake of supplement and response—2076
- tracheitis in sheep after oral administration of a supplement—2412
- MITES, control—613
- feral sheep on Campbell Island, New Zealand—1279
- MITROCHONDRIA, histogenesis of adrenal cortex—2547
- liver, fasted sheep—362
- MITOGEN, induced transformation of lymphocytes, whole blood method for measuring—1694
- MODELS, animal, for human disease—2849
- animal, for study of human disease, South-down sheep—661
- animal, for study of craniofacial growth—2672
- congenital goiter in sheep, spontaneous animal model of human disease—2439
- herbage intake by hill sheep—2725

- mathematical, raising Romanovskii sheep—318
 sheep as model for study of slow virus diseases—2640
- MOHAIR**, bulletin on—1788
 characteristics—3287
- MOJAVE**, Desert, effect of grazing on vegetation and soils—3211
- MOLASSES**, neurotoxicity and higher volatile fatty acids—826
 rumen, secondary fermentation—2574
 supplementation, sheep grazing wheat stubble, quality of diet, intake of supplement and response—2076
 urea mixture, utilization in lamb rations with paddy straw and tapioca residue—2478
 use in diets of dried sugar beet pulp for fattening lambs—2629
 wood, nutrition—3336
- MOLLUSCICIDES**, schistosomiasis, toxicity of *Phytolacca dodecandra* to Ethiopian highland sheep—896
- MOLYBDENUM**, antagonistic effect on copper metabolism—1998
 influence on sheep of high levels of copper and broiler litter—3101
 interrelationship in copper poisoning—2500
 metabolism, effect of sulphur intake—1130
- MONENSIN**, coccidiosis, comparison of effects with aureomycin—2618
 effect on diet, digestibility, ruminal protein bypass and microbial protein synthesis—2374
 effect on digestion—68
 effect on growth, feed efficiency and energy metabolism of lambs—1477
 effect on oocyst discharge, feed utilization and ruminal metabolism of lambs with coccidiosis—1357
 effect on ovine coccidial oocyst numbers—493
 effect on rumen fermentation—3098
 effects of lasalocid and monensin against experimentally induced coccidiosis in confinement-reared lambs from weaning to market weight—997
 for early weaned feedlot lambs with naturally occurring coccidiosis—1356
- MONGOLIA**, gene pool—2617
- MONGOLIAN PEOPLES' REPUBLIC**, problems of control of ectoparasites—2501
- MONIEZIA**, cambendazole efficiency against, and gastrointestinal lamb strongyles—983
 control using fenbendazole—2555
 efficacy of fenbendazole—623
 epidemiological peculiarities in Morocco—2244
- MONIEZIA BENEDENI**, morphology, India—1191
- MONIEZIA EXPANSA**, effect of extracts on blood values—510
 metabolism of nitrophenolic and 5-arylazorhodanine anthelmintics—805
 morphology, India—1191
 treatment with albendazole—1712
- MONOGRAPHS**, monorchidism—2931
 zoonoses of sheep—796
- MONORCHIDISM**, book, a review—2931
- MORANTEL**, efficacy in growing lambs under semi-arid conditions—3141
 residues in meat and internal organs of sheep—2258
 value and limitation in treatment of gastrointestinal trichostrongylids—801
- MORANTEL TARTRATE**, effectiveness against levamisole resistant *Ostertagia*—1732
 larval paralysis as in vitro assay for resistance in *Ostertagia*—1882
 resistance of *Trichostrongylus colubriformis* and *Ostertagia ostertagi*—2627
- MORAXELLA**, isolation in visceral caseous lymphadenitis—2491
- MORAXELLA BOVIS**, identification from eyes of cattle and sheep—1011
- MORBILLIVIRUS**, peste-des-petits ruminants virus as fourth member—1072
- MOROCCO**, epidemiological peculiarities of monieziosis—2244
Haemonchus contortus populations in two areas of country—482
 prevalence and distribution of ringworm by *Trichophyton verrucosum* in high altitudes—2275
- MORPHINE**, no effect on plasma concentration of prolactin and GH in fetus or adult—1936
- MORPHOGENESIS**, regularity of thymus, lymphoid organs and lymph—2594
- MORPHOLOGY**, alteration associated with toxic principles of lupinosis—2338
 arterial segmentation in spleen—1197
 comparative, cervix—1302
 cricopharyngeus muscle—2614
 cyclic changes in surface of cervix revealed by scanning electron microscopy—3221
 esophageal groove—2297
 ewe reproductive organs, vascular system—2440
 features of some body systems in adaptation to industrial-type management in Altai Mountains—2595
 nuclear reorganization of ram spermatids—1785
 rumen epithelium, relation to fermentation in sheep given pelleted diets—232
 skin, and wool quality of sheep fed urea and urea preparation supplemented ration—790
 small intestine, rotavirus infections—2807
 stomach arteries—3295
 vagus nerve in thorax, prenatal period—2388
- MORTALITY**, Cheviot, effect of level of nutrition before and after mating on ovulation rate and early embryo mortality in South Country Cheviot ewes in moderate condition at mating—1186
 comparative study of Merino and Leicester ewes—2884
 crossbreds of Teeswater, Dales and Dorsets—2146

- early embryo, in Galway ewes treated with progestagen-PMSG—2423
- effect of feeding creep mixture on growth rate of Merino lambs—323
- embryo, effect of nutritional level before and after mating on ovulation rate and early embryo death in cheviot ewes in moderate condition at mating—1186
- embryo, effect of pre-mating nutritional level—1185
- fetal, a review—3203
- incidence, perinatal, lambs—1638
- lamb, effect of season—602
- lamb, Galway and Fingalways—2427
- lamb, in commercial lowland flock with reference to influence of climate and economics—2419
- lamb, methods of reducing in upland and lowground flocks—3074
- lamb, perinatal, and pregnancy feeding levels—1551
- lamb, perinatal, late pregnancy feeding and lamb performance in early life—1552
- pathological and microbiological observations—2268
- perinatal, late pregnancy ewe feeding—337
- pre-weaning and post-weaning survivability in Corriedale and Coimbatore sheep and their crossbreds—2005
- relation of reproductive function to external environmental factors—1524
- MOTH, hay (dewgram), nutritional value—2300
- MOTILITY, cecal, and diet—959
- rumen, on silage diet—2067
- MOULD, in milk and milk products—2897
- MOUNTAIN, sheep, improved type, performance of first generation of progeny sired by Romney Marsh rams during formation of—677
- MOUNTAINS, Czechoslovakia, sheep farming, milk production, cheese—1983
- MOVEMENT, effect of variation in light intensity on through narrow and wide races—1321
- kinetic, influence of light—1377
- kinetic, relation of vaginal temperature to eating, drinking, standing and walking activity rhythms of four anestrus Finnish Landrace ewes—1371
- on inclines—1322
- MUCINS, hydrophobic interaction of fluorescent probes—2597
- MUCO SUBSTANCES, histological study—531
- MUCOPOLYSACCHARIDES, effect of Mn-deficient feeding to ewes, in cartilage of their newborn lambs—1313
- MUCOR, aflatoxins, in milk and milk products—2897
- MUCOSA, gastrointestinal, structural potentialities in weaned lambs to absorb non-protein nitrogen—789
- genitalia, electrical conductance—18
- intestinal, protein fractionation of nucleic acids and enzymatic activity of cytoplasmic extracts from—1558
- rumen, scanning electron microscopic observation of epithelium connective tissue interface—2924
- MUCOUS MEMBRANE, proventricular, papillary body, light and electron microscopic observations—3229
- MUCUS, cervix, changes in response to estrogen—25
- cervical, surgical technic for collection—2681
- histochemistry, cervix—1302
- velocity, trachea, effect of local radioactivity—42
- MUELLERIUS, sp. in India—762
- MUELLERIUS CAPILLARIS, a review—1064
- experimental intermediate host (*Cepaea nemoralis*)—2636
- MULE DEER, serological studies on sympatric Barbary sheep and mule deer in Palo Duro Canyon, Texas—419
- sympatric with Barbary sheep in Palo Duro Canyon, Texas, serological studies—1232
- MUSCIMOL, thermoregulatory effect when injected intracerebroventricularly—351
- MUSCLE, catabolism of branched chain amino acids—639
- characteristics, and meat quality of lambs grown on different nutritional planes—162
- chemical and biochemical effects on, lambs on different nutritional planes—163
- functional morphology, cricopharyngeus muscle—2614
- growth rate effects on chemical composition—2087
- in carcasses of several crossbreds—2970
- magnesium depletion and repletion effects on levels of Mg, Ca and K—278
- omasum, spontaneous in vitro motility and contractile response to periarterial and transmural electrical stimuli—223
- post mortem electrical stimulation, effect on sarcoplasmic reticulum—3044
- prediction of body weight from body measurements—320
- role of cricopharyngeus in sucking—2144
- skeletal, effect of growth potential, sex and age on growth and development of—299
- skeletal, effect of growth rate, sex and age—2061
- skeletal, gamma butyrobetaine hydroxylase activity in human and ovine—539
- smooth arterial, of uterus, influence of ovarian steroids on response of, to norepinephrine—2377
- smooth, vascular, experimental aortic stenosis in fetal lamb—1745
- ultrastructure, lambs on different levels of nutrition—164
- uterus, parturition, action of steroid hormones—665
- MUSCULAR DISEASES, differential diagnosis, New South Wales—3176

- MUSCULAR DYSTROPHY**, comparison of treatment, lambs—521
 congenital progressive ovine, in western Australia—752
 differential diagnosis—3176
 electron microscopical findings—304
 erythrocyte glutathione peroxidase in sheep with selenium-dependent myopathy—803
 in sheep—3284
 prevention of selenium deficiency—1647
 selenium deficiency in western Australia—1020
 textbook—282
 white muscle disease, lambs born of ewes on zero grazing system in Natal—455
- MUSHROOMS**, poisoning—2248
- MUTATION**, ram, facilitate dihydrostreptomycin binding to ribosomes—364
- MUTTON**, production, effect of energy levels—61
- MUZAFFARNAGARI BREED**, body composition in native and crossbreds—1495
- MUZAFFARNAGARI LAMBS**, dry-matter intake and digestibility of diets with varying concentrate-roughage rations—60
 effect of energy levels on mutton production and carcass quality—61
- MYCELIA STERILIA**, aflatoxins, in milk and milk products—2897
- MYCOBACTERIUM BOVIS**, mass outbreak of tuberculosis—3348
- MYCOBACTERIUM JOHNEI**, prevalence of antibodies in colostrum deprived lambs—2071-B
- MYCOBACTERIUM PARATUBERCULOSIS**, a review—1397
 analysis of antigens—1189
 comparison of sheep and goat forms—2983
 epidemiologic survey in 3 mixed sheep and goat flocks after vaccination—96
 isolation from sheep and cattle in Iceland—1188
- MYCOPLASMA**, agents isolated with chlamydial organisms in cases of ketatoconjunctivitis—2887
 caprine-ovine species—630
 isolation from pneumonic lesions in India—227
 lymphocyte interactions—604
 non-parasitic respiratory diseases in Britain—1877
 respiratory infections in housed sheep—1468
 sheep infections—2194
 ureaplasmas in sheep—1469
- MYCOPLASMA ARGINI**, sheep vagina—1469
- MYCOPLASMA ARGININI**, isolated from synchronizing sponges from ewes—1910
- MYCOPLASMA MYCOIDES MYCOIDES**, outbreak of contagious caprine pleuropneumonia—266
 pathogenicity for cattle, sheep and goats—631
- MYCOPLASMA OVIPNEUMONIAE**, enzootic, proliferative, interstitial pneumonia—2155
 in vitro study of replication—1831
 pneumonia in sheep, experimental study—1083
- MYCOPLASMATALES**, species isolated from synchronizing sponges from ewes—1910
- MYCOPLASMOSIS**, experimental studies—1083
- MYCOSES**, abortion, difficulty in confirming a diagnosis—1007
 epidemiological surveys, New Zealand, sheep and goats—2135
 epidemiology—567
 pneumonia, pathology—2445
- MYCOTOXICOSIS**, cases reported by veterinary investigation centres in United Kingdom—1673
 clinical studies on tremorgenic—2318
- MYCOTOXIN**, biological effects—1806
 current studies at the Edinburgh Veterinary Investigation Centre—1992
 genetic resistance to facial eczema—112
 hepatic encephalopathy associated with chronic facial eczema—2972
 muscular disease, differential diagnosis—3176
 outbreak of stachybotryotoxicosis in South Africa—2665
 tremorgenic, and animal diseases, review—2721
 zinc sulphate orally for prevention of lupinosis—69
- MYELECTRICAL ACTIVITY**, uterus, peripartal ewe—1639
- MYIASIS**, control of flystrike by chemicals—1365
 cutaneous, caused by species of *Lucilia* and *Calliphora*, or *Chrysomya* and *Wohlfahrtia*—582
 dipping and spraying—38
 identification of sheep—463
 minimum cost for flystrike control—2325
- MYOCARDIAL DYNAMICS**, diabetes mellitus, fetus—1716
- MYOCARDIAL INFARCTION**, increased lung lymph transport without heart failure after coronary ligation—611
 radioimmunoassay of cardiac contractile proteins in diagnosis—658
- MYOCARDIUM**, besnoitiosis, India—1557
 fetal, identification of beta adrenergic binding sites—1575
 pathology, acidosis, reduction in glycogen—1415
 response of newborn to rapid massive hemorrhage—2812
 vascular response to insulin in diabetic lamb—807
- MYOELECTRICAL ACTIVITY**, perinatal development—462
- MYOGLOBIN**, immunochemical detection of ovine, porcine and equine flesh in beef products with antisera to species—1270
- MYOMETRIUM**, dihydroergocryptine and dihydroalprenolol binding during estrus—2496
 hormonal control of GAP function formation—1030
- MYORHEOLOGY**, qualitative characteristics of Gentile di Puglia lambs born from synchronized ewes—1893

MYOSITIS, differential diagnosis—3176
 MYXOMA, pulmonary, in sheep—2267

N

- N-AB (clenbuterol), use in controlling parturition in ewes—731
- NAIROBI SHEEP DISEASE VIRUS, isolation from midges in Kenya—709
- NAJDI, effects of prostaglandin F₂-alpha on blood constituents and certain hormones—4
- NALI, bone marrow karyotypes—3143, 3314
 ewes crossbred to Rambouillet and Russian Merino rams, preweaning, survivability and growth—150
 genetic variability in body weight and measurements—3002
 note on sweat glands of Nali sheep in relation to canary colouration of Indian wool—1439
 performance of crosses with Corriedale—1038
 zinc supplementation on canary colouration—1068A
- NALOXONE, initiation of fetal breathing—2058
 no effect on plasma concentration of prolactin and GH in fetus or adult—1936
- NAPHTHALOPHOS, comparative study against gastrointestinal worms—3113
 effectiveness against levamisole resistant *Ostertagia*—1732
 efficacy against inhibited larvae of *Haemonchus contortus*—1731
- NATAL, white muscle disease in lambs from ewes on zero grazing system—455
- NATRIURESIS, dose response in vasopressin in fetus—603
- NEAR EAST, ancient, use of wool—28
- NECROSIS, cerebrocortical, comparative light and electron microscopic pathology—315
- NEI'S INDEX, use in comparing genetic variability in crossbreeding—1094
- NEISSERIA OVIS, identification from eyes of cattle and sheep—1011
 isolation from sheep with infectious keratoconjunctivitis—458
- NEMATODA, avermectins, new anthelmintic—860
 effect of dexamethasone on ability of sheep to resist reinfection with—1897
 efficacy against naturally acquired infections with *Dictyocaulus* of oxfendazole—547
 efficacy of thiabendazole and levamisole against sheep nematodes in western Victoria, Australia—497
 epidemiology, abomasal parasites of young sheep during winter and spring—2966
 epidemiology of infections in farm animals—2473
 epidemiology of infections in farm animals—2474
 evidence of spring and post-parturient fecal egg count rises in Arkansas—3311
 gastrointestinal and pulmonary, control using fenbendazole—2555
 gastrointestinal, effect of fenbendazole—1196
 gastrointestinal, efficacy of helatac, nilverm, thiabendole and banmirth-II under semi-arid conditions—3141
 gastrointestinal, efficacy of oxfendazole in experimental infections—548
 gastrointestinal, experimental transmission between sheep and Thomson's gazelle—2405
 gastrointestinal, in Bialystok Province, Poland—3244
 immune response of sheep to gastrointestinal—1255
 in wild sheep from Iran—903
 incidence and larval stages on pastures near Bangalore, India—2684
 method for detection of C₃ on larvae—2842
 natural infections, efficacy of oxfendazole—1974
 protostrongyles, experimental infection of various *Helicidæ* (snails)—2048
 protostrongylids, pattern of elimination under natural conditions—2480
 protostrongylids, snails—1842
 ryegrass toxicity, *Anguina funesta*—962
 sheep, control, effect on production of Merino wether weaners in two environments—1463
 sheep, use in experimental work in rabbits for study of resistance to anthelmintics—1350
 use of oxfendazole—2494
- NEMATODIROSIS, in lambs following an exceptionally cold spring—115
 pathology—2162
- NEMATODIRUS, clinical and paraclinical study of experimental infections—3353
 disease in lambs—1392
 lambs, following exceptionally cold spring in Holland—1067
- NEMATODIRUS BATTUS, effect of sheep immune response—1881
 established in Netherlands—384
- NEMATODIRUS SPATHIGER, pathology—2162
 survival of larvae in experimentally infected lambs—3352
- NEONATAL LAMB, absorption of methionine by colon—2794
- NEONATE, ontogeny of serotonergic regulation of growth hormone and prolactin—1876
- NEOPLASMS, a review—721
 a review—3107
 adenomatosis, pathology—1193
 clinico-immunological studies on squamous cell carcinoma—1481
 comparative study of pathomorphology—1646
 effect of cyclophosphamide on growth—1482
 effect of removal of ovine squamous cell carcinoma on peripheral lymphocyte stimulation by tumour extracts and phytohaemagglutinin—1483
 in vitro response of lymphocytes—1485
 muscle, differential diagnosis—3176
 prevalence in domestic animals—1641
 T-cell lymphoblastoma—2127
- NEOSTIGMINE, influence on gonadotropins—2106
- NEPAL, ixodid ticks—689

- NEPHRECTOMY**, biochemical changes—2738
 effect on fetal plasma levels of progesterone—793
 somatomedin-like activity, plasma, fetus—929
- NEPHRITIS**, leptospirosis—1708
- NEPHROPATHY**, associated with feeding of semipurified diet of low copper content—2513
- NERVOUS SYSTEM DISEASES**, hepatic encephalopathy associated with chronic facial eczema—2972
 Krabbe's disease in sheep—2746
- NERVOUS SYSTEM**, localization of centers in mammary gland—978
 neural control of abomasal secretion—2064
 symptoms in ewes fed fescue silage—1952
- NETHERLANDS**, *Anaplasma mesaeterum* n. sp.—3053
 blood parasites—3053
 diseases of sheep—2131
 establishment of *Nematodirus battus*—384
 sheep breeding—415
 sheep diseases, 1978—2133
- NEUROBIOLOGY**, development and plasticity of neuronal connections in lamb visual system—593
- NEUROHYPOPHYSIS HORMONES**, failure to demonstrate vasotocin—783
- NEUROLEPTICS**, use in surgery in field—1403
- NEUROMUSCULAR BLOCKING AGENTS**, effect in lambs—760
- NEURONS**, development and plasticity of connections in lamb visual system—593
- NEUROPATHY**, delayed, by phosphonothioate insecticide cyanofenphos—886
- NECROSIS**, cerebrocortical, effect of thiaminase type 1-producing *Clostridium sporogenes* in lambs—666
- NEUROTRANSMITTERS**, prolactin and GH following injection—818
- NEVADA**, desert bighorn sheep of the River Mountains—1740
- NEW GUINEA**, endemic goat in highlands of Papua—3189
 iodine status of ewes—3188
- NEW MEXICO**, psoroptic scabies in bighorn sheep—1682
- NEW SOUTH WALES**, blowfly strike problem—3206
 comparison of four pasture types for wheat belt—965
 differential diagnosis of muscular diseases—3176
 wool production—36
- NEW SPECIES**, coccidia, *Eimeria ovinoidalis*, sheep—1919
 parasites, *Anaplasma mesaeterum*, in Netherlands—3053
- NEW ZEALAND**, annual review of sheep and beef industry, 1978/79—2138
 beef and sheep supply relationships—2506
 Campbell Island, ectoparasites on feral sheep—1279
 downslope movement of nutrients in hill pastures, effect of season, grazing and fertilizers—1912
 farmers ripped off for lamb—190
 fast foods for Otago sheep—1345
 flock recording scheme—498
 genetic and phenotypic parameters in Romneys—211
 grass wintering of ewes in coastal Southland—3201
 grazing behaviour on high country summer range—1253
 hydatid incidence—2143
 importance of rotational grazing for intensive animal production—1268
 intensive system of pasturing—1252
 lamb may be under pressure—1274
 market comment on wool clip sellout likely—1273
 new species of *Sarcocystis* in sheep (*S. medusiformis*)—610
 performance of lambs fed cereal grains and lucerne hay for finishing—1428
 production and financial analysis—2139
 research reports—2136
Sarcocystis and *Toxoplasma*, epizootiology and serodiagnosis—2141
 sheep diseases—2134
 sheepmilk's export potential—1043
 sheep production and financial data—2137
 white liver disease resembles chronic hepatitis of lambs in Norway—3059
- NEWBORN**, laryngeal chemo reflex, respiratory and swallowing response to salts, acids and sugars—1628a
 myocardial performance—309
 myocardial performance—310
- NEWSPRINT**, toxicologic studies with sheep fed—1285
- NICLOSAMIDE**, anthelmintic, Guinea—2662
- NIGER**, prevalence of *Dicrocoelium hospes*—2920
- NIGERIA**, abortion in sheep near Kano—2206
 bovine malignant catarrhal fever—2417
 fascioliasis on farm of the Ahmadu Bello University—2718
 historical review of rabies—3060
 infectious keratoconjunctivitis in goats and sheep—2242
 inhibited development of trichostrongylids of sheep in northern—2201
 isolation of Peste-des-Petits Ruminants virus—2936
 Kaduna State, sarcoptic mange—574
 outbreaks of *Fasciola gigantica*—3119
 pasture infectivity with trichostrongylid larvae in northern Guinea savanna—2200
 prevalence and significance of tick-borne diseases in northern—1717
 role of animals in human staphylococcosis—31
 Sokoto State, cysticercosis and hydatid disease in sheep—678
 termination of arrested development of the trichostrongyles of sheep in northern—2199

- NIGERIAN DWARF SHEEP**, osmotic fragility of erythrocytes—2216
- NILAGIRI**, sheep, hemoglobin and blood potassium polymorphism—1498
- NILVERM**, efficacy against gastrointestinal nematodes in growing lambs under semi-arid conditions—3141
- NILZAN**, anthelmintic for sheep—687
- NITRATE**, metabolism, rumen microorganisms, influence of concentrates—2103
- NITRILOTRIACETIC ACID**, effect on absorption and duodenal flow of manganese, iron, zinc and copper—1412
intraruminal dosing—1411
solubilities of zinc, copper, manganese and iron in stomach—1414
- NITRODAN**, metabolism—805
- NITROFURAZOLIDONE**, prevention of coccidiosis in lambs—3149
- NITROGEN**, bacterial residue, partition in feces with detergent solutions and application to estimation of true digestibility of dietary nitrogen and excretion of non-dietary fecal nitrogen—1892
balance, sheep with fascioliasis—697
balance, wethers, influence of abomasal infusions of glucose and methionine—2031
compounds, synthesis in rumen by microbial action, and subsequent digestion—2800
digestibility, in chronic *Trichostrongylus vitrinus* infections—2914
digestibility in single gastrointestinal sections after experimental feedings of fodder containing urea—423
digestion in sheep given poor-quality indigenous hill herbage—1820
duodenal nitrogen flow in response to increasing dietary crude protein in sheep—1699
effect of, and energy supplementation on the voluntary intake and digestion of heather—2002
effect of fertilization on chemical content of sheep diets—808
effect of leucine infusion on various parameters—1452
effect on digestion of supplementing a low protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1540
estimates of bacterial nitrogen in fecal material from 47 digestibility trials—1891
factors associated with difference in nutritive value of artificially dried red clover and perennial ryegrass—2055
fermentation and nitrogen dynamics in Merino sheep given a low-quality-roughage diet—2172
influence of feeding hay from area with heavy pollution of atmosphere with nitrogen compounds on some biochemical parameters of blood and rumen contents—1488
influence of supplemental source and time on feed on tissue serine concentrations and enzymes of serine synthesis and degradation—2411
intake, digestion and retention by grazing lambs—625
metabolism in rumen—221
metabolites, and mineral components in serum of lambs in intensive fattening—3159
minimal, metabolism of lambs—2228
non-protein, absorption, structure of gastrointestinal mucosa—789
non-protein, dynamics—747
non-protein, effect on metabolism of lipids and carbohydrates—367
non-protein, overload metabolically—459
non-protein, use of rations with high content, in various breeds—939
participation of bile and pancreas juice in secretion into digestive tract—2929
quantitative importance of bacterial residues in non-dietary fecal nitrogen—1890
rate of passage of digesta in sheep and goats fed from different sources—2830
retention by early weaned lambs—1329
retention, effect of dietary concentrate level—1375
retention, effect of four corn silage and corn grain ratios and nitrogen source—1385
ruminal, metabolism, passage of amino acids to duodenum in sheep on diets of hay and concentrates—549
secretion into digestive tract—3111
supplementation to maize silage for early weaned lambs—388
urea, seasonal variation in blood plasma of hill sheep—2915
utilization by growing-finishing Barbados Blackbelly lambs—2243
utilization by weaned lambs before, during and after weight loss—1132
utilization in five herbage—858
waste gasses, effect on cardio-pulmonary function—2599
- NITROGLYCERIN**, and uterine vasculature in gravid ewes—3233
effect on hypertensive pregnant ewe—640
plasma levels, effects on pregnant ewes—754
- NITROXYNIL**, fascioliasis treatment—2333
metabolism—805
retention in tissues and body fluids—205
- NOCARDIA**, pneumonia, pathology—2445
- NOMENCLATURE**, classification of peste-des-petits ruminants virus as a fourth member of genus *Morbillivirus*—1072
- NONPROTEIN NITROGEN**, effect on utilization in alkali-treated wheat straw in pelleted rations—59
- NORADRENALINE**, cardiovascular and renal functional changes—274
hormones, feeding and body temperature following injection—818
response to by carotid arteries—3016
- NOREPINEPHRINE**, cardiovascular and renal functional changes—274
changes during stress in pregnant ewe—2720

- effect on uterine arteries—2378
 hormones, feeding and body temperature following injection—818
 influence of ovarian steroids on response of ovine uterine arterial smooth muscle to—2377
 levels in response to hypoxia in neonatal lambs—874
 levels in response to hypoxia in neonatal lambs—875
 regional concentration in brain—193
 responses to parturition in premature and full-term fetal sheep—873
- NORFOLK HORNED BREED**, at National Agricultural Centre, Stoneleigh, United Kingdom—840
- NORGESTAGENS**, transformation to estrogens by rumen microorganisms—1323
- NORGFSTOMET**, synchronized breeding of cycling ewes to produce fetuses of known gestational age—2827
- NORMANDY**, epidemic of food and mouth disease—763
- NORMOXIA**, pulmonary and systemic vascular responses to 6-keto prostaglandin E₁—1781
- NORTH AMERICAN MOUNTAIN SHEEP**, recent records of twinning—848
- NORTH DAKOTA (USA)**, incidence of ovine progressive pneumonia—2022
- NORTH GERMAN MOORLAND SHEEP**, experimental feedings with fodder with urea, digestibility of dry masses and nitrogen in single gastrointestinal sections—423
- NORWAY**, chronic hepatitis, resembling white liver disease in New Zealand—3059
 gangrenous ergotism in sheep—1782
 occurrence and importance of environmental poisons in domestic and wild animals—1339
- NOSE**, mucosa, electrical potential—208
- NUCLEIC ACIDS**, enzymatic activity of cytoplasmic extract of intestinal mucosa—1558
 hemoglobin, genetics—295
- NUCLEOLUS**, organizer, regions, conservation of during evolution in sheep, goat, cattle and aoudad—1292
- NUCLEOPROTEIN**, cytophotometric study, sperm, influence of storage time in utero—156
- NUCLEOSIDES**, free, effect during thermal processing of sheepmeat—158
- NUCLEOTIDE**, cyclic, response of sheep to injection of *Clostridium welchii* type D epsilon toxin—3292
- 5-NUCLEOTIDASE**, plasma levels in fascioliasis—2575
- NUCLEOTIDASES**, plasma, significance—838
- NUCLEOTIDES**, free, effect during thermal processing of sheepmeat—158
- NULLIPAROUS FEMALES**, regulation—2428
- NUTRIENTS**, downslope movement, hill pasture, effect of season, grazing and fertilizer—1912
- NUTRITION**, a review—1367
 alkali treatment of paddy straw, effect of energy and nonprotein nitrogen supplementation on digestibility and intake—1445
 amino acid and glycosaminoglycan composition of epiphyseal cartilage of neonatal and osteroporotic lambs—1311
 and production in sheep, a review—1846
 and reproduction function in ewes—799
 availability of nutrients on pastures—2257
 brown midrib vs. normal corn plants harvested as whole plant or stover and preserved as silage or frozen fresh—354
 cadmium retention by sheep fed silicic acid—445
 changes in glucocorticoid hormones—1170
 chemical composition and nutritive value of wheat bhusa—2463c
 chemical composition, digestibility and nutritive value to lambs of nonextracted unkernelled olive cakes—8
 cobalt deficiency, emergence and treatment—3026
 cobalt supplementation in Yankassa sheep in northern Nigeria—1211
 coffee extraction residues as feed—3220
 compensatory growth—2987
 compensatory growth and productivity of highland Corriedale sheep—3340
 copper deficiency, Northland, New Zealand—108
 copper, iron and zinc in carcasses and relationship to trace element requirements for growth—2898
 corn silage, urea and zeranol implants for fattening lambs—1386
 deficiency in phosphorus, sulphur, cobalt and zinc in diet—856
 deficiency, myopathy, electron microscopical findings—304
 deficiency, white muscle disease, lambs born of ewes on zero grazing system in Natal—455
 different levels, lambs, muscle ultrastructure—164
 dietary energy levels for lactating ewes—888
 different planes, carcass quality of lambs on—163
 different planes, carcass quality and muscle characteristics of lambs on—162
 digestible protein/digestible energy ratios for finishing lambs—1095
 digestive processes of rumen on diets of different physical form—2768
 diminishing rumen butyrogenesis in bulls and sheep fed sugar beets—1739
 dry-matter intake and nutrient digestibility in Muzaffar-nagari lambs fed diets of varying concentrate-roughage rations—60
 during late pregnancy in West African Dwarf sheep—34
 effect, before mating season, on breeding activity—2123
 effect of acid preserved high moisture barley and pelleting on the utilization of all-concentrate diets by early weaned lambs—2921

- effect of ammoniation on intake and nutritive value of straw—1704
- effect of barley supplements on voluntary intake and digestion of low quality roughages—1671
- effect of denutrition on rumen juice and blood—1478
- effect of diet and blood-plasma magnesium concentration on endogenous fecal loss of magnesium—79
- effect of dietary cadmium chloride on digestive functions and short-term mineral balance in sheep—444
- effect of duodenal infusion of methionine on erythrocyte reduced glutathione—2883
- effect of ewe nutrition and colostrum deprivation on young lambs—1553
- effect of feeding barley shole, ground or pelleted on performance and carcass fat characteristics in fattened lambs—1741
- effect of feeding cull domestic onions—1569
- effect of feeding large amounts of concentrates on health of lambs—2742
- effect of feeding rumen contents on glutamate dehydrogenase activity in organs of broilers—1338
- effect of fertilization with magnesium on mineral utilization and quality of alfalfa—2485
- effect of including hydrolyzed feather meal in liquid supplements when fed with low quality roughages—1143
- effect of level, before and after mating on ovulation rate and early embryo mortality in South Country Cheviot ewes in moderate condition at mating—1186
- effect of manganese deficient feeding to ewes on certain amino acids and sugars in cartilage of their newborn lambs—1313
- effect of maternal on prenatal growth—2542
- effect of, on meat production from male crossbred lambs, meat quality, Suffolk, Border Leicester and Romney crosses—2418
- effect of pasture allowance during autumn on ewe performance—2468
- effect of plane of, and number of motile spermatozoa per insemination on fertility and lamb crop of Ossimi ewes—3
- effect of pre-mating level, ovulation rate and early embryo mortality, in North and South Country ewes in moderately-good condition at mating—1185
- effect of roughage or concentrate feeding and rumen retention time on total degradation of protein in rumen—1026
- effect of sulphur on ⁷⁵Se absorption and retention—2375
- effect of undernutrition during late pregnancy on gluconeogenesis and ketogenesis in twin pregnant ewes—2490
- effect of urea in diet on blood serum lipids—2359
- effect of urea-N level on utilization in alkali-treated wheat straw—59
- effect on effectiveness of hormonal stimulation of estrus—1652
- effect on hematological values of crossbred Merino × Sarplaninas—276
- effect on nitrogen digestion of supplementing a low protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1540
- energy supply, effect on ewes during pregnancy, and on birthweight and growth of lambs—2995
- evaluation of feed energy of green forage silages—2661
- evaluation of waste wood pulp in diets for finishing lambs—1735
- factors affecting concentrations of free amino acids in blood and their effect on the calculation of amino acid requirements in pre-ruminant lambs—2301
- factors affecting digestion of grain supplemented straw—1077
- factors affecting pre-weaning body weights in Malpura sheep—365
- factors associated with difference in nutritive value of artificially dried red clover and perennial ryegrass—2055
- fate of labeled choline administered intraruminally to pregnant ewes given manganese-deficient or supplemented rations—1312
- feed intake, rate of passage and digestibility of brown midrib-3 corn silage, lambs—1528
- feeding of poultry droppings—3139
- feeding value of ensiled mixtures containing rumen residues—2150
- food intake and rumen osmolality—1516
- formaldehyde treatment and energy on metabolism of coastal Bermuda-grass protein in wethers—87
- grazing Pawera red clover at mating, effect on reproductive performance—1536
- fetal growth, effect of maternal—1955
- fibrous hay, intake and digestibility by sheep fed sewage solids in supplemental feed—2219
- growth and productivity of different constitutional-productive types of sheep in relation to nutrition—2871
- growth and rumen function, supplementation of a low-protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1539
- hydrolytic activities of rumen ciliates—734
- improving reproductive efficiency, a review—1065
- increasing reproductive ability, review—3125
- influence of moisture content and addition of lactobacillus culture on fermentation of alfalfa and digestion—2505
- influence of physical structure, cutting date and feeding level on digestibility of lucerne hay—2269
- influence of technological processes on lucerne digestion by sheep, sites of digestion of dry matter, organic matter and energy—11
- intake, digestibility and nutrient utilization by

- sheep of sodium hydroxide-treated tropical grass supplemented with soybean or urea—1075
- interaction with genotypes, liver copper—3323
- lactating ewe, review—3024
- lactosyl urea—1967
- lambs, effect of feeding formaldehyde-treated concentrate mixture on growth, wool yield and utilization of nutrients—322
- level of state, late pregnancy, blood levels of glucose, urea, and amino acids during pregnancy and lactation—1158
- liver mitochondria of fasted sheep—362
- long term effect of quantity of superphosphate applied on nutritive value of diet selected by sheep grazing pasture originally sown to *Phalaris aquatica* and *Trifolium repens*—684
- low availability of dietary choline—2124
- low lambing rate in Australia—2568
- maize replacement value of fermented cassava—32
- malnutrition effect on pregnancy, single or twin feti—2671
- Merino sheep—67
- metabolism of erythrocytes in phosphorus-deficient sheep—1822
- model for effect of energy nutrition on pregnant ewe—1050
- Muzaffarnagari lambs, energy levels, effect on mutton production and carcass quality—61
- nitrogen digestion in sheep given poor-quality indigenous hill herbage—1820
- non-extracted unkernelled olive-cake investigation on the chemical composition, the digestibility and nutritive value with heavy lambs—8
- nutrient loss across the fetal intestinal circulation—564
- nutritional value of cowpea, moth (dewgram) and cluster-bean fodders fed as hay—2300
- palmitate, by isolated hepatocytes from fed and fasted sheep—1787
- performance of Watish lambs when fed different levels of energy and protein supplement and on berseem grazing—40
- possibilities of forecasting digestibility of crude nutritive substances by fully-grown and growing sheep from rations' content of crude nutritive substances, rations with low content of crude fiber—969
- possible nutritional deficiency as etiologic factor in dental abnormalities—446
- potatoes and grain sorghum in production of prime lambs—34
- pregnancy feeding levels and perinatal lamb mortality—1551
- pregnant ewe, review—2587
- prolific ewes, accretion of nutrients in fetus and adnexa—1918
- prepartum, effect of rearing type on performance of Greyface ewes at pasture—1905
- prophylaxis of cobalt deficiency—3239
- protein requirements of gestating Churra sheep—106
- protein requirements of gestating Churra sheep, effect of energy and protein ingestion during last third of gestation on production of milk in subsequent lactation—1107
- quality of meat of lambs fed on different nutritional levels—165
- quantitative digestion of fresh herbage, utilization of nitrogen in five herbage—858
- relationship of reproductive function to external environmental factors—1524
- reproductive performance of ewes flushed on lucerne—2650
- response to feeding methionine esters and polymerencapsulated methionine on wool growth—3235
- responses of dairy ewes before and after parturition to different regimes—2856
- review of wool eating—261
- role of rumen protozoa in digestion of food cellulosic materials—1476
- roughage requirements of lambs fed concentrate diets based on wheat—3224
- rumen digestion in lambs fed pelleted diets—2334
- selenium addition to rations—3247
- silage diet, rumen contractions—2067
- silage in summer diets of ewes—1618
- sodium hydroxide treatment of rice straw to improve nutritive value—1444
- soft coal fly ash as source of selenium in un-pelleted sheep rations—1332
- state, blood metabolites of gestating ewes as indicators—1807
- state during late pregnancy, plasma insulin levels during pregnancy and lactation—1159
- status of selenium in sheep in Pennsylvania and West Virginia—2832
- sugar beet leaves both fresh and ensiled—2391
- Trichostrongylus colubriformis* infections—3084
- urea feeding and ketogenesis—353
- ureas as partial substitutes for protein—2750
- use of condensed beet molasses slop (distillery effluent) in feeding lambs—1840, 1841
- use of grape waste in feeding lambs—2358
- utilization of cereals and implications of processing—2188
- utilization of chopped and pelleted lucerne—2978
- utilization of chopped and pelleted lucerne by growing lambs—2958
- utilization of partially hydrolyzed starch in milk replacers—2813
- value of *Cenchrus* and *cenchrus*-legume mixed pastures for crossbred lambs—326
- value of green fodder and hay of *Dactylis glomerata* and *Phleum pratense*—511
- value of hay silages—3252
- value of lucerne—2977
- value of maize cobs, effect of level of sodium hydroxide treatment and volume of solution—1513
- value of pressure-steamed aspen for mature sheep—2691
- value of sorghum treated by dry heat—3052
- value of termoammoniated and steam-treated

- maize stover, intake, digestibility and nitrogen retention—2246
- value of termoammoniated and steam-treated maize stover, rumen metabolites and rate of passage—2247
- value of vegetable wastes as silages in feeding—258
- value of "weathered" sorghum grain—1751
- various liquid byproducts as protein supplement in diet—3171
- voluntary intake of feed and equilibrium body weight—347
- Welsh mountain ewes, winter—78
- whey from different origins of variable composition, a review—952
- whey-grown yeast as protein source for lambs—47
- wood molasses—3336
- NUTRITIONAL DEFICIENCY, a review of hypomagnesaemia—1535
- cobalt, treatment—1089
- copper, blackface lambs, on improved hill pasture—3237
- relationships to internal diseases—2070
- selenium, field aspects in New South Wales—588
- selenium, western Australia—1020
- textbook—282
- thiamine, induction of polioencephalomalacia—2985
- use of selenium pellets in Australia—1971
- NUTRITIONAL DISORDERS, acidosis—1546
- sheep—3284
- NUTRITIONAL REQUIREMENTS, prediction of protein requirements and implications for diet formulation—1989
- NUTRITIVE VALUES, lamb meat—537

O

- OATS, digestibility after treatment with sodium hydroxide—2231
- OESOPHAGOSTOMUM COLUMBIANUM*, immunization—2694
- in vitro variation in glycogen content—2401
- pasture infectivity in Nigeria—2200
- population kinetics of primary infections—2693
- transfer to sheep from impala—1355
- OESTRUS OVIS*, assessing infestations—463
- identification of sheep—463
- infections in sheep in south of France—2949
- OIL, effect of abomasal added, on glucose tolerance in lambs—647
- OLFACTORY FUNCTION, effect of modification on seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin levels in rams—252
- OLFACTORY ORGAN, anatomy of mucosa—1606
- OLFACTORY SYSTEM, function after olfactory bulbectomy—289
- OLIVE CAKES, non-extracted, unkernelled, chemical composition, and digestibility and nutritive value—8
- OLKUSZ, crossbreeding with Polish mountain sheep—584
- OMASUM, spontaneous in vitro motility and contractile response to periarterial and transmural electrical stimuli in preparations of longitudinal muscular layer—223
- OMENTUM, bursa, development, and its significance for topography of abdominal cavity—1284
- ONCOVIRUS, bovine, immunity in lambs experimentally infected—1635
- ONION, effect of feeding cull domestic—1569
- ONTOGENY, social, consequence for bighorn sheep inhabiting desert and mountain environments—300
- spatial associations, weaning and social environments, bighorn sheep—301
- ORCHARD GRASS, changes in digestibility during growth, application of neutral detergent cellulase system to analysis—6
- effect of intake on rumen activity—1259
- ORCHITIS, a review—3107
- OREGON, epididymitis in rams—741
- transplacental transmission of protostrongylids in California bighorn sheep—1577
- ORGANOCHLORINE, pesticides, placental movement in desert bighorn sheep—3046a
- OROTIC ACID, and non-protein nitrogen overload—459
- milk and commercial dairy products—1695
- ORTHOPEDICS, intramedullary osteosynthesis, polymer pins, effect on blood cells and blood chemistry—957
- OSMOLALITY, rumen, and food intake—1516
- urine, comparison with urinary specific gravity—893
- OSSIMI EWES, effect of plane of nutrition and number of motile sperm per insemination—3
- OSSIMI SHEEP, ingestive behaviour under summer condition in Egypt—1613
- OSTEOBLASTIC ACTIVITY, in chronic infections with *Trichostrongylus vitrinus*—2914
- OSTEOSYNTHESIS, intramedullary, with polymer pins, effect on blood cells and blood chemistry—957
- OSTERODYSTROPHY, pharmacokinetics and amounts of 25-hydroxycholecalciferol affected by—1310
- OSTEROPOROSIS, amino acid and glycosaminoglycan composition of epiphyseal cartilage of neonate and osteroporotic lambs—1311
- radiograph, morphometric method for quantifying trabecular bone in vertebrae—46
- OSTERTAGIA, in wild sheep from Iran—903
- levamisole-resistant, effectiveness of anthelmintics—1730
- role of seasonal inhibition of development in epidemiology—703
- OSTERTAGIA *CIRCUMCINCTA*, benzimidazole resistant, effect of esophageal groove reflex on oxfendazole pharmacokinetics and efficacy—2408
- egg output in low level infections—1424
- immunity, transfer factor—2565

- pathophysiology and production of lambs infected with—2916
 performance and skeletal growth of lambs—616
 resistance to levamisole—2632
 resistance to thiabendazole—1223
 tissue and serum gastrin—2498
- OSTERTAGIA OSTERTAGI*, resistance to levamisole, morantel tartrate and thiabendazole—2627
 effectiveness of norantel tartrate and naphthalophos against levamisole-resistant forms—1732
 intracellular crystal-like inclusions—3185
- OTOBIUS MEGNINI*, Barbary sheep, Texas—1137
- OUDAH, ewe, sexual behaviour—1023
 sexual behaviour of ram—1024
- OUTCROSSING, as breeding policy—2706
- OVARIECTOMIZATION, postpartum reproductive performance of Finn crossbred ewes—995
- OVARIECTOMY, adult ewes, effect of progesterone on steroid-induced male and female sexual behaviour—→17
 genetic and environmental variation in lutropin response to luliberin—1675
 regional brain content of luteinizing hormone releasing hormone—3231
 short and long term effects on follicular populations—822
- OVARY, activity, use of milk progesterone determination—189
 antiluteolytic activity of prostaglandin-containing fractions from uteri—2397
 ever-changing, endoscopic view—402
 follicle, gonadotropin receptors during follicular growth and atresia—526
 follicle, gonadotropin receptors during follicular growth and atresia—527
 follicular activity, effect of chronic LHRH treatment—88
 follicular cells, fine structure of cumulus oophorus during follicular development in sheep—643
 in vitro estradiol production and human chorionic gonadotrophin binding to theca and granulosa cells in individual ovine follicles—3207
 management of function, a review—720
 mechanisms governing cyclicity at puberty—999
 morphological study for assessing seasonal influence on reproduction, Iranian Kusistans—2652
 morphology, seasonal and cyclical changes, Libyan ewes—196
 patterns of blood flow to uterus and in ewes during period of luteal regression—996
 response to exogenous hormones in 6 week old lambs—3291
 role of mesonephros in development—3329
 short and long term effects of hypophysectomy and unilateral ovariectomy on follicular populations—822
- steroids, influence on response of uterine arterial smooth muscle to norepinephrine—2377
³H-thymidine labelling of preleptotene chromosome condensation stages in fetal—1798
 ultrastructure of corpus luteum—1054
- OVCE POLJE, ewes, fertility of those graded to Merino, embryo mortality—1824
- OVIDUCT, cannulae in ampulla, effect on reproduction—222
 isthmus, does progesterone act as an antiestrogen—2868
 maturation of secretory granules in endosalpinx 1 to 4 days post coitum—2580
 qualitative and quantitative histological changes after exposure to X-rays—2841
- OVINE MALIGNANT LYMPHOMAS, persistent lymphocytosis and virus-like particles in lymphocytes of sheep inoculated with cell-free extracts—1460
- OVIS AMMON OPHION* (CYPRUS WILD SHEEP), taxonomy—2170a
- OVIS CANADENSIS*, consequences of social ontogeny and behavioural diversity, desert and mountain environments—300
- OVIS CANADENSIS* (BIGHORN SHEEP), weaning and social environments and the ontogeny of spatial associations—301
- OVIS CANADENSIS CALIFORNIA* (CALIFORNIA BIGHORN SHEEP), transplacental transmission of protostrongylids—1577
- OVIS CANADENSIS MEXICANA*, scabies in bighorn sheep in New Mexico—1682
- OVIS CANADENSIS MEXICANA*, (DESERT BIGHORN SHEEP), social structure and reproductive strategy—1737
- OVIS ORIENTALIS*, wild sheep, Iran, gastrointestinal nematodes—903
- OVULATION, antibodies to, in ewe—2651
 application of hormones—391
 Booroola Merino crosses—77
 control, a review—1266
 control by ear implant or vaginal sponge (cronolone)—374
 coumestans in lucerne—2791
 effect of exogenous gonadotrophin on antral follicle populations—802
 effect of GnRH analogues—2434
 effect of immunization against androstenedione and estrone—1880
 effect of pasture allowance during autumn—2468
 effect of prostaglandin or progestagen—373
 effect of suppression of plasma prolactin in LH-RH-treated anestrus ewes—1938
 ewes flushed on lucerne—2650
 following treatment with clomiphene citrate—1677
 heritability and repeatability of rate in Finnish Landrace—1242
 hormonal control—557
 in Galway ewe lambs treated with progestagen-PMSG—2423

- interval to next, after removal of preovulatory follicle and ovary—606
- Merino ewes—355
- ram-induced, in seasonally anovular Merino ewes, effect of estradiol on frequency of ovulation, estrus and short cycles—1878
- rate, a review—3345
- rate, Cheviots, effect of body condition—1184
- rate, coumestrol levels in lucerne—2792
- rate, effect of growth promoter zeranol in ewe lambs—622
- rate, effect of nutritional level at pre-mating time, on ovulation rate and early embryo mortality in ewes in moderately-good condition at mating—1185
- rate, effect of nutritional level before and after mating, Cheviots—1186
- rate, effect of PMSG treatment in ewes fed coumestrol—2142
- rate, effect of time of mating, and potential lambing rate of Greyface ewes—1187
- rate, factor in production on hill land in Great Britain—659
- rate, genetic and environmental variation in lutropin response of ovariectomized sheep to luteal phase—1675
- rate, half sisters to Romanov rams, phenotypic and genetic relationships between endocrine criteria and testicular measurements—2517
- rate, in progestagen-treated ewes given GNRH, GNRH analogues and gonadotrophins—2435
- reproductive performance of ewes grazing Pawaera red clover at mating—1536
- resumption after parturition, similar to onset of puberty or onset of adult breeding season—1000
- Romney ewes, effect of diet and live weight—1592
- stimulation of seasonally anovular Merino ewes by rams, premature regression of corpora lutea—2207
- stimulation, sources of ram pheromones—1593
- super, a review—2679
- superovulation and egg transfers—376
- super, performance of donor ewes in egg transfers—1244
- time from introduction of ram to preovulatory LH surge and—2208
- time, in progestagen-treated ewes given GNRH and GNRH analogues and gonadotrophins—2435
- OVUM, international exchange—3256
- survival of fertilized, in lactating and dry ewes—2431
- transfer, effect of lactation on reproduction—2433
- transplants—1149
- transport, Merino ewes—355
- OXFENDAZOLE, comparative study of different doses, gastrointestinal nematodes—1104
- dose titration study, against naturally acquired helminths in sheep—1578
- effect of esophageal groove reflex on pharmacokinetics and efficacy against benzimidazole resistant nematodes—2408
- effectiveness, against levamisole-resistant *Ostertagia*—1730
- efficacy—223
- efficacy against arrested *Haemonchus contortus* larvae—2198
- efficacy against experimental gastrointestinal nematode infections—548
- efficacy against natural infections of nemas and tapeworms—1974
- efficacy against naturally acquired *Dictyocaulus viviparus*—547
- efficiency against four field populations of benzimidazole resistant *Haemonchus contortus*—3209
- Haemonchus contortus* resistance—3208
- influence of esophageal groove reflex on pharmacokinetic behaviour and efficacy of, against benzimidazole resistant nematodes—1294
- reproductive safety studies—2354
- (synanthropic), use under natural conditions, gastrointestinal nematode and tapeworm infections—2494
- OXIDASE, caeruloplasmic amine, effect of tetrahydrobiopterin, influence of substrate on apparent sensitivity to inhibition—1529
- OXYCLOZANIDE, and levamisole, against paramphistomids—1059
- effect on transferases—3153
- efficacy and economic advantage in use with tetrahydrobiopterin—2463a
- OXYCLOZANIDE DIBROMOSALAN, effect on transferases—3153
- OXYGEN, age dependent changes in response of ductus arteriosus—600
- blood flow to fetal organs as function of arterial oxygen content—2311
- changes associated with feeding—2012
- comparison of continuous transcutaneous and intermittent intravascular measure in fetus—1438
- consumption across intestinal circulation in fetus—565
- consumption, fetal heart, diabetes mellitus—1716
- consumption, newborns, limiting factors—738
- delivery in hypoxic fetus—2702
- delivery to pregnant uterus and relation to oxygen consumption—536
- developmental response of ductus arteriosus—596
- dietary modification of increased pulmonary microvascular permeability in lambs exposed to—1935
- prolonged breathing increases lung microvascular permeability to protein in lambs—422
- severe fetal asphyxia produced by slow partial umbilical cord compression, regional cerebral blood flow changes—1459
- uptake, effect of epinephrine infusion on ma-

- ternal and uterine uptakes in pregnant ewe—585
 uptake, importance of surface area to volume ratio—1467
- OXYGENASE**, cyclo, uterine prostaglandin forming relationship to luteolysis and sub-cellular localization—2802
- OXYTETRACYCLINE**, absorption and excretion in wethers—407
- OXYTOCIN**, a review—998
 delayed luteal regression in ewes immunized against—980
 dynamics of secretion during inhibition of milk ejection—2903
 effect of adrenaline on release during milk-ejection reflex—248
 effect of exogenous, on estrous cycle length and corpus luteum lysis in ewes—1264
 effect on passage of sperm through genital organs, synchronization with Agelin—2674
 influence on secretion of principal components of milk—1644
 maternal and fetal during parturition—1091
 receptor control of prostaglandin F-2 alpha secretion of uterus—1914
 relation to milk production—1046
- OXYTOCINASE**, activity in pregnancy—2118
- OZONE**, sensitivity of broncho provocation and tracheal mucous velocity in detecting airway irritation after exposure—7
- P**
- PACKAGING**, polyethylene, ewe's milk and Kachkaval cheese—2316
- PADDOCK**, shape, influence on grazing behaviour and social facilitation in Merinos—1808
- PALATABILITY**, ensiled swine waste and corn grain—302
 lamb, facial eczema—1572
 note on morphological characters of native forages in relation to—3126
 viscoelastic properties of meat related to, and tenderness—3200
- PALATE**, cleft, microcephaly associated with, in Yankassa lamb—1210
- PALMITATE**, metabolism, by isolated hepatocytes from fed and fasted sheep—1787
- PALMITIC ACID**, transplacenta transfer fetal to maternal—2171
- PALYAM GROUP VIRUSES**, isolation from midges in Kenya—709
- PAMIR ARGALIA** behaviour of males during rut—946
- PANACUR (FENBENDAZOLE)**, ovicidal and larvicidal activity—834
 ovicidal and larvicidal action—835
 testing in Australia—1434
 trials in Australia—1435
 value for controlling nematodes of family Probststrongylidae—2455
- PANAMA**, cross bred with Suffolks. performance and carcass—682
- PANCREAS**, analysis of trace elements in sheep infected with gastrointestinal helminths—2736
 changes in trypsin and chymotrypsin occurring during storage—246
 comparative study of effect of colipase on lipase activity of sheep—1480
 exocrine pancreatic secretion in conscious sheep—2062
 fine structure of endocrine cells—1304
 hormonal secretion of autotransplanted gland—135
 influence of some gastrointestinal hormones on pancreatic secretion—3327
 juice, participation in secretion of endogenous nitrogen into digestive tract—2929
 juice, effect of intraduodenal infusion of HCl and Na_2CO_3 on volume, bicarbonate output and pH—2874
 juice, neutralizing functions, effect of secretin and chemical stimulation of duodenum—2875
 methods of pancreatic juice collection—2355
- PAPILLARY BODY**, proventricular mucous membrane, ultrastructure—3229
- PARAINFLUENZA VIRUS**, differentiation of 3 isolated on basis of hemagglutination—2765
 effect of chick interferon on growth in lamb kidney cell culture—2099
 experimental inoculation of lambs—2764
 in sheep and goats in Punjab—226
 non-parasitic respiratory diseases in Britain—1877
 pneumonia, pathology—2445
 type 3, pathology of experimental infection—2585
- PARAINFLUENZA-3 VIRUS**, growth curve—2762
 in Somalia goats, cattle, sheep and dromedaries—1015
 prevalence of antibodies—2763
 serological studies on occurrence—3227
 thermostability—2761
- PARALYSIS**, overdosing with parbendazole—2413
- PARAMPHISTOMIASIS**, prognosis and prophylaxis—1964
- PARAMPHISTOMUM**, efficacy of fenbendazole—623
- PARAMPHISTOMUM CERVI**, pathology of naturally occurring—2755
- PARAMPHISTOMUM MICROBOTHRIUM**, in Guinea—2662
- PARAMYXOVIRUS**, etiology of pneumonia—215
 growth curve—2762
- PARAPOX VIRUS**, cellular responses in efferent lymph during infection—2307
- PARASITES**, artificial transmission of nematodes from blesbok and impala to sheep, goats and cattle—1355
 blood, incidence in southern Ghana—167
 effect of parasite control in the periparturient

- period on lamb birthweight and liveweight gain—1462
immunization—113
internal, genetic and environmental effects on, and foot soundness and attrition in crossbred ewes—2173
intestinal, and diet, influence on hemogram, lambs—2112
recent advances in epidemiology—143
skin, low angle X-ray diffraction—532
- PARASITIC DISEASES**, results and prospects for research, high-intensity livestock production—1314
- PARASITISM**, effect on host metabolism—2913
study by coproscopy in Nièvre district—382
- PARATHYROID HORMONE**, calcium homeostasis in fetus—514
- PARATUBERCULOSIS**, a review—1397
- PARATUBERCULOSIS (JOHNE'S DISEASE)**, in oighorn sheep and Rocky Mountain goat in Colorado—3259
- PARATHYROID GLAND**, ultrastructural localization of adenylcyclase—3034
- PARBENDAZOLE**, comparative study against gastrointestinal worms—3113
efficacy in growing lambs under semi-arid conditions—3141
inhibition of mammalian brain microtubule assembly in vitro by benzimidazole carbamates—1400
overdosing as cause of paralysis—2413
- PARESIS**, parturient, case report of 2 relapses—2739
- PAROTID GLAND**, effect of angiotensin II on saliva secretion—1929
novel carbonic anhydrase—950
salivary flow, during infusion of acetylcholine and atropine into carotid artery of conscious sodium replete sheep—272
saliva secretion, sympathetic and beta adrenergic stimulation—2300a
- PARS INTERMEDIA**, cytology in adult sheep—2326
- PARTURITION**, a review—3339
action of steroid hormones on myometrical contractile function—665
arginine vasopressin during gestation and parturition—2845
arginine vasopressin during gestation—2911
blood picture—124
control of placental steroid synthesis—979
control of placental steroid synthesis—981
controlling, a review—960
effect of induced, on subsequent fertility of karakul ewes—2073
endocrine control, a review—2981
ethological manifestations of ewes and lambs after delivery—1354
fetal maturation related to parturition—1756
fetus at—2532
fetus at—2544, 2545
hormonal control of GAP function formation in sheep myometrium during parturition—1030
inducing activity of N-AB 365—731
induction, effect on sensitive period for establishment of maternal behaviour—2367
induction, with corticosteroids—2174
is mechanism for resumption of ovulation after parturition similar to that for onset of puberty or onset of adult breeding season—1000
lack of association with, in antepartum surge of triiodothyronine in fetal lamb—2180
maternal and fetal oxytocin—1091
maturation of fetus—1758
maturation changes of pituitary-adrenal axis in fetal lamb—3168
norepinephrine, epinephrine and dopamine responses in premature and full-term fetal sheep—873
physiology and control, a symposium—877
practical significance of progesterone estimation and use of a prostaglandin F-2 alpha analogue (cloprostenol)—328
prostaglandins and cervical ripening—882
serum somatotropin after hypophysectomy—429
spontaneous and induced, plasma levels of 6-oxo-prostaglandin F-1 alpha—2013
the cervix during—967
the cervix during—968
time of—3001
- PASTEURELLA**, characterization and antibiotic sensitivity—2692
etiology of pneumonia—215
strains, characterization and antibiotic sensitivity—2692
- PASTEURELLA HAEMOLYTICA**, characterization and antibiotic sensitivity—2692
infections in sheep—1083
mouse model for testing vaccines—910
non-parasitic respiratory diseases in Britain—1877
pathology of experimental infections—2585
quantitation of antibody in sheep sera using micro-enzyme-linked immunoabsorbent assay (ELISHA)—470
serological comparison of vaccines using different adjuvants—3218
two new serotypes from Ethiopia—2312
two new serotypes from sheep in Ethiopia—2400
- PASTEURELLA MULTOCIDA**, characterization and antibiotic sensitivity—2692
- PASTEURELLOSIS**, development of vaccines—1085
immunization, simultaneous with anthrax and clostridial infections—1490
inability of passively acquired antibody to protect—3217
probable example of aflatoxin stress-induced disease—1227
- PASTURE**, availability of nutrients—2257
Cenchrus and cenchrus-legume mixed, for crossbred lambs—326
chemical elements in urine patches herbage—1455

- comparative animal production from cocksfoot and perennial ryegrass varieties—913
- comparative productivity of Merino and Border Leicester ewes—2884
- comparison of different weaning policies for ewes suckling triplets at pasture—2224
- comparison of four types for wheat belt of southern New South Wales—965
- contaminated with *Escherichia coli*, prevalence of contamination in carcasses—1538
- Czechoslovakia, biocoenological problems—3266
- downslope movement of nutrients on hills, effect of season, grazing—1912
- effect of allowance during autumn on ewe performance—2468
- effect of allowance over February-March on ewe live-weight change and reproductive performance—2783
- effect of grazing on establishment of sown *Ulex europaeus*—1420
- effect of pasture allowance on performance of different breeds—2469
- effect of reserves and stocking rate on ewe and lamb performance from mid-pregnancy to weaning—587
- effect of stocking rate on emergence, dispersal and behaviour of soldier fly adults—780
- effect of treading and grazing and soil characteristics of irrigated annual pastures—3277
- efficiency, relation to grazing systems—1658
- epidemiological study on both irrigated and non-irrigated areas, *Fasciola hepatica*, Australia—1946
- epidemiology of strongylosis in sheep flock on permanent, in 1977—1363
- estrogenic activity—814
- estrogenic, effect on reproductive performance, Kangaroo Island, S. Australia—3179
- estrogenic, hemoglobin type and reproductive performance—3180
- estrogenic, influence of hemoglobin type and selenium status on peripheral plasma progesterone and corticosteroid levels in ewes—3178
- evaluation of mixed kikuyu and ryegrass grazed by sheep—317
- food interrelationships of deer and sheep in Mendocino and Lake Counties, California—1790
- grass wintering in coastal Southland, New Zealand—3201
- grazing behaviour—676
- grazing irrigated pasture with sheep, effect of winter management on pasture regrowth—1272
- hill, performance under rotational and continuous grazing—2697
- importance of rotational grazing for intensive animal production in New Zealand—1268
- influence of stocking rate on production from sheep of different genotypes—2467
- intensive systems, for sheep in Southland, New Zealand—1252
- management, control of ryegrass staggers—481
- management, influence of pasturing methods on growth of grass mass and productiveness of ewes—1659
- native, feed intake of non-pregnant, pregnant and lactating ewes—892
- nematode larval stages, India—2684
- semi-arid, effect of carotene and vitamin A on fertility of rams—2525
- sheep production from hill land in Great Britain—659
- substitution value of birdsfoot trefoil for alfalfa—1874
- supplementary feeding of range sheep—1977
- 25 years work at Hill Farming Research Organisation—3066
- utilization by sheep and cattle—1917
- vs. drylot, early-weaned lamb performance to two slaughter weights—889
- winter grazing—336
- PATANWADI, crosses with Deccani, comparative studies on wool production and quality traits—681
- PATENTS, liquid flow meter, milking ewes—2904
- PATHOGENESIS, astrovirus in lambs—2806
- caseous lymphadenitis—2509
- congenital encephalopathy, in sheep experimentally infected with Akabane virus—2111
- diarrhea, *Escherichia coli*—2030
- dicrocoeliasis—1859
- ergot—1792
- metabolic acidosis—1666
- pulmonary protostrongylosis in bighorn lambs—2829
- Rift Valley fever—3008
- sheep model for study of slow virus diseases—2640
- Visna-Maedi disease, spinal fluid studies—2117
- PATHOGENICITY, babesiosis and piroplasmiasis—566
- Eperythrozoon ovis*, anemia and reduced exercise tolerance—679
- Fasciola gigantica* in West African Dwarf ewes—2197
- JOE virus, Nigeria—919
- Mycoplasma mycoides mycoides*, for cattle, sheep and goats—631
- strains of *Listeria monocytogenes*—1857
- ureaplasmoses, a review—2937
- PATHOLOGY, abomasum in *Besnoitia gilruthii* infections—1809
- acute fluorine poisoning—2997
- amino acid and glycosaminoglycan composition of epiphyseal cartilage of neonate and osteroporotic lambs—1311
- anemia in sheep—224
- cerebrocortical necrosis—3089
- cerebrocortical necrosis in ruminants, effect of thiaminase type I-producing *Clostridium sporogenes* in lambs—666
- changes in cervical histology following prolonged grazing on estrogenic clover—1760
- cholecysto-duodenostomy in ram with ob-

- struction of ductus choledochus communis—1331
- chronic changes in wall of experimentally produced aneurysms—2852
- chronic infection with *Trichostrongylus vitrinus*—618
- chronic infection with *Trichostrongylus vitrinus*—2914
- comparative, cerebrocortical necrosis, light and electron microscopic study—315
- comparative, glomerulonephritis—2779
- comparison of effects of experimental *Fasciola hepatica* infections in rabbits, sheep and cattle—254
- congenital arthrogryposis-hydranencephaly syndrome in cattle, sheep and goats produced by Akabane virus—1393
- congenital encephalopathy in sheep experimentally infected with Akabane virus—2111
- contagious ecthyma—3091
- copper poisoning—843
- cystic jaw lesion—845
- cysticercosis in skeletal muscle, brain, meninges, cerebral cortex and eye (*Taenia ovis*)—1810
- delayed neuropathy in sheep by phosphorothioate insecticide cyanofenphos—886
- dental abnormalities—2222
- microcoeliasis—1859
- disease syndrome in naturally infected sheep and goats with *Trypanosoma congolense*—1152
- ectopic calcification in lambs from feeding the plant *Cestrum diurnum*—2743
- effect of bovine viral diarrhoea-mucosal disease virus on fetus—2293
- effect of *Moniezia expansa* extracts on blood values—510
- endemic ethmoid tumors—2113
- endotoxin absorption in hay-fed and lactic acidotic sheep—1362
- Eperythrozoon ovis*, anemia—679
- Eperythrozoon ovis* infections—2901
- evaluation of histological and histochemical changes in liver in experimental occlusion of jejunum—2249
- experimental acidosis—1415
- experimental infection of pathogen-free lambs with parainfluenza virus type 3 and *Pasteurella haemolytica*—2585
- experimental infections of lambs with invasive and enteropathogenic strains of *Escherichia coli*—2790
- experimental infections with *Corynebacterium pseudotuberculosis*—30
- experimental staphylococcus infections—3202
- experimental thiazole^s poisoning—2332
- experimental tuberculosis—3298
- foot and mouth disease—2278a
- genital lesions in experimental chronic *Trypanosoma brucei* infection in rams—1383
- histological changes in organs of sheep in chronic simazine poisoning—819
- hydatid—2492
- hypospadias in Merino lambs—749
- influence of diet and intestinal parasites on hemogram of lambs—2112
- inherited goitre—714
- intestinal polyps associated with coccidiosis—2562
- lambs, with *Trichostrongylus colubriformis* and *Ostertagia circumcincta*—2916
- lesions in lambs experimentally infected with bovine respiratory syncytial virus—670
- lesions of ovine progressive pneumonia, interstitial pneumonitis and encephalitis—669
- lymph node, *Trypanosoma brucei*—253
- nematodiriasis—2162
- ostertagiasis—2498
- ovine ostertagiasis—2498
- ovine fascioliasis—697
- ovine pulmonary cytomegalovirus—1349
- Paramphistomum cervi*—2755
- parturient paresis with 2 relapses—2739
- pathogenesis of experimental sheep pox by fluorescent antibody technic and histopathology—1202
- pharmacokinetics and amounts of 25-hydroxycholecalciferol affected by osteodystrophy—1310
- physiological repercussions of experimental infection of *Fasciola hepatica* in sheep—1711
- pneumonia—2445
- polyarteritis nodosa associated with sarcocystosis in lamb—1679
- progressive pneumonia—2212
- pulmonary adenomatosis—1193
- pulmonary adenomatosis—3009
- pulmonary adenomatosis, course of infection—1616
- respiratory diseases—2445
- spongy transformation of brain in lupinosis—72
- spontaneous aortic atherosclerosis—1194
- stachybotryotoxicosis in South Africa—2665
- suppression of blastogenic response of peripheral lymphocytes by serum from ovine squamous cell carcinoma bearing sheep—1484
- Taenia ovis* cysticercus in heart—1810
- trichostronglyid infections—746
- Trichostrongylus vitrinus*, location of nematodes during clinical disease—2935
- Trichostrongylus vitrinus*, small intestine—2934
- trypanosomes in lymph nodes of cattle and sheep infected with *Trypanosoma congolense*—1799
- verminous pneumonia—2601
- PATHOPHYSIOLOGY, and production of lambs infected concurrently with *Trichostrongylus colubriformis* and *Ostertagia circumcincta*—2916
- ovine fascioliasis—697
- PATULIN, biological effects—1806
- PEGALS, performance in arid areas—2110
- PELIBUEY, ewes, estrus synchronization—1886
- PELLETING, effect of size and density of dried

- forage packages on intake and performance—2950
- PELLETS, an effective method of preparing feeds—3334
- PELT, broadtail, selection and breeding of Karakuls—1021
 comparison of Karakuls in a grading-up program with white Karakul rams—2666
 development of lambs from multiple births—160
 evaluation of Volgograd sheep—2392
- PELVIMETRY, radiographic, ewe—1941
- PELVIS, measurements, dystocia and eutocia—1940
- D-PENICILLAMINE, effects of intravenous administration on liver copper stores of housed sheep—1856
- PENCILLIUM, in milk and milk products—2897
- PENCILLIUM JANTHINELLUM, production of tremorgenic toxins, possible etiology of rye grass staggers—1686
- PENIS, hypospadias in Merino lambs—749
- PENNSYLVANIA, status of selenium in sheep—2832
- PENTAGASTRIN, effect on smooth muscle strips from stomach—3114
 induced inhibition of reticulum, site of action—558
- PEPSIN, neural and chemical control of abomasal secretion—2064
 proteolytic specificity—2079
- PEPSINOGEN, plasma levels as diagnostic aid in stomach worm infection—1543
- PEPTIC DIGESTION, technic for isolation of sarcocystis in sheep—1200
- PEPTIDES, degradation by mixed rumen microflora—2409
- PERCUSSION, non-penetrative stunning—339
- PERENDALE, efficiency of wool—2882
 genetic and phenotypic parameters for immature body weights and yearling fleece characteristics—881
 phenotypic relationships of hogget characteristics to lifetime performance—381
- PERFORMANCE, Awassi, Iraq, effect of anthelmintic treatment—82
 Awassi sheep—325
 comparative, crossbred Romanov and Limousin—1887
 comparative, of indigenous and exotic sheep in the Indian arid zone—2018
 crossbred Sardinian and East Friesian sheep in Sardinia—400
 dairy, sheep, Kenya—954
 effect of breed and castration, Iraqi lambs—80
 effect of clipping and diet on intake and performance of housed pregnant and lactating ewes—3145
 effect of litter size on intake and performance of ewes offered concentrates and grass silage in late pregnancy—2223
 effect of pasture allowance on different breeds—2469
 ewe and lamb, effect of pasture reserves and stocking rate—587
 ewe, effect of range of intensive winter stocking densities—336
 ewes with twin lambs at pasture in early lactation, effect of level of concentrate feeding and amount of herbage—2003
 fattening, and meat production of progeny of Romanov ewes mated at different ages—1778
 fattening, relation to age at first mating of dams—1768
 genetic selection, Icelandic sheep—17
 hemoglobin polymorphism in relation—2476
 in Rajasthan desert under arid condition—2754
 lamb, factors associated with perinatal lamb mortality—1552
 lamb, in early life, pregnancy feeding levels and perinatal lamb mortality—1551
 lambing, crossbred ewes of Finnsheep, Dorset and Rambouillet stocks when mated in January to purebred or crossbred rams—846
 lambing, influence of flock size in flock-mating of progestagen-synchronized ewes—453
 lambs, comparison and carcass characteristics, 9 sire breeds—652
 lifetime, Perendales—881
 of grazing twin lambs at 6, 8, 10 or 14 weeks of age—1070
 post-weaning, factors influencing, purebred and crossbreds—1901
 production, effect of early breeding—2853
 recording, for improvement of sheep and goats—1267
 recording, for improvement in sheep and goat breeding—1432
 recording, for sheep improvement—172
 recording, modern developments—863
 recording, survey in Europe—651
 relation of protein polymorphism—765
 reproductive, comparison of fresh and frozen semen—1683
 reproductive, crossbreeding—1209
 reproductive, genetic and physiological variation, review—1674
 reproductive, management of ewe—1183
 reproductive, natural factors affecting, ewes—841
 reproductive, relation to artificial insemination versus natural mating—1214
 reproductive, ways of attaining a good and stable, in ewe flocks—2872
 sheep having AA, BB and AB hemoglobin types—2214
 Suffolk sired lambs from Panama and Finn × Panama dams—682
 testing, Denmark—1453
 testing, estimation of genetic change—2703
- PERITONEAL CAVITY, development of omental bursa and its significance for topography of abdominal cavity—1284
- PERMEABILITY, acute inflammatory response—3121
 capillary, urea and sodium as indicators in lungs of anesthetized sheep—2331

- diffusion, NA^+ and Cl^- , placenta—2986
 effect of uneven pulmonary artery obstruction on lung fluid balance—2848
 increased microvascular, pulmonary oxygen toxicity—421
 lung microvascular, prolonged oxygen bathing increases—422
 lung vascular, caused by *Escherichia coli* endotoxins—428
 lung vascular, effect of heparin or fibrinogen, after emboli—333
 lung water and vascular in newborns—2885
 lung vascular, diphenhydramine reduces endotoxin induced—2254-A
 lung vascular, indomethacin augments endotoxin induced—2196
 membrane, during low potassium depolarization in cardiac purkinje fibers—1714
 pleural membranes, transport of water and solutes—1564
 pulmonary microvascular, dietary modification in lambs exposed to oxygen—1935
 pulmonary microvascular, to protein in unanesthetized fetal and newborns—346
 vascular, equilibration of albumin and lung lymph—3116
 vascular, increased lung lymph transport without heart failure after coronary ligation—611
 visceral pleura—644
- PEROXIDASE**, activity in breeds of sheep and relation to age—1631
 changes in activity of uterine endometrium and isthmic oviduct—2868
 glutathione, in sheep with selenium dependent myopathy—803
 horseradish, use in retrograd transport study of thalamocortical connections—1503
- PERPHENAZINE**, biphasic prolactin release by haloperidol and perphenazine in lactating cows and ewes—2689
- PERU**, resource allocation, Andean herding system—1939
- PESTE-DES-PETITS RUMINANTS VIRUS**, as fourth member of genus *Morbillivirus*—1072
 isolation from Nigerian sheep and goats—2936
- PESTIVIRUS**, diagnosis of Border Disease—243
 transfer of copper from lambs to dams—2631
- PESTICIDES**, organochlorine, residues in desert bighorn sheep, transplacental movement—3046a
- PFIZONA**, treatment of sarcoptic mange—574
- PHAGOCYTOSIS**, fusion of erythrolysosomes in epithelial cells of placenta—2093
- PHALARIS AQUATICA**, long-term effect of quantity of superphosphate applied on nutritive value of diet selected by sheep grazing pasture originally sown to—1684
- PHARMACODYNAMICS**, ovine lutropin—2607
 progesterone and LH concentrations in ewes after ICI 80996 an analogue of PGF-2 alpha at 2 different stages of breeding season—12
- PHARMACOKINETICS**, sulfadiazine—1804
 sulfamethazine, comparative, normal and anemic sheep—1789
 sulphadimidine—2120
 urinary excretion of meperidine by fetal lamb—2918
- ^{14}C -PHENOL**, metabolism—1502
- PHENOTHIAZINE**, control by self-medication—1520
- PHENOTYPES**, parameters, New Zealand Romney sheep—211
- PHENTOLAMINE**, influence on blood glucose levels after feeding in sheep with alloxan diabetes—2240
- PHENYLEPHRINE**, infusion, effect on fetal oxygenation, pregnant ewe—3099
- PEROMONES**, ram, sources, stimulation of ovulation—1593
- PHLEUM PRATENSE (TIMOTHY)**, nutritive value of green fodder and hay—511
- PHOSPHATASE**, acid and alkaline, in stomachs of lambs—716
 acid and alkaline, protein transmission in intestine of newborn—1276
 acid, lysosomal breakdown of erythrocytes in placenta—2094
 alkaline, activity and characteristics in organs of cattle and sheep—129
 alkaline, changes in uterine endometrium and isthmic oviduct—2868
 alkaline, inheritability of differences in sensitivity to copper—3323
 alkaline, kidney, pathology, acidosis—1415
 alkaline, placenta, evolution—1103
 alkaline, plasma levels in fascioliasis—2575
 alkaline, protein fractionation, nucleic acids and enzymatic activity of cytoplasmic extracts from intestinal mucosa—1558
 alkaline, zinc plasma levels as indicators of zinc status in pregnancy and lactation—131
- PHOSPHATES**, alkyl, treatment of poisoning—294
- PHOSPHATIDATE**, in tracheal and amniotic fluids during gestation—2561
- PHOSPHATIDYL CHOLINE**, disaturated, secretion and biological half-life—1384
 lung, effect of fetal lamb lung lavage—2701
 marker of duodenal flow of rumen protozoa in sheep—1456
 secretion and biological half-life of surfactant phosphatidyl choline in lambs—1454
- PHOSPHOHYDROLASE**, in tracheal and amniotic fluids during gestation—2561
- PHOSPHOKINASE**, creatine, plasma levels in fascioliasis—2575
- PHOSPHOLIPIDS**, metabolism, during renal compensatory growth in fetus—2032
 tracheal and amniotic fluids during gestation—2561
- PHOSPHOONOTHIONATES**, delayed neuropathy in sheep by insecticide cyanofenphos—886
- PHOSPHORIBOSYLPYROPHOSPHATE**, concentration, synthesis and utilization by lymphocytes—2329
- PHOSPHORIC ACID**, ester, phoxim, treatment of psoroptic mange—1753

- PHOSPHORUS**, changes in uterine endometrium and isthmic oviduct, progesterone—2868
 chronic infections with *Trichostrongylus vitrinus*—2914
 deficiency state, metabolism of erythrocytes—1822
 dietary deficiency—856
 effect of administration on rumen fluid mineral concentration—3304
 effect of dietary calcium levels on concentration and solubility in digestive tract—3306
 effect of dietary intake on absorption and retention by mature Ca-replete sheep—411
 effect of fertilization on chemical content of sheep diets—808
 interrelationships of aluminum and iron—2560
 metabolism—412
 metabolism in lambs injected with cholecalciferols—2959
 organic, poisoning, treatment—294
 plasma inorganic, changes resulting from induced hypocalcaemia—691
 retention from magnesium and calcium phosphates—1289
 secretion and absorption of, in gastrointestinal tract of sheep fed four diets—2385
 serum levels, relation to infertility—887
 serum levels, short term response to injection of cholecalciferols—2965
 use, from three different supplements—148
 utilization of fecal, for estimation of intake—3137
- PHOTOPERIOD**, effects on food intake, sexual condition and hormone levels—442
- PHOTOSENSITIZATION**, by *Pithomyces charotarum*—2211
- PHOXIM**, a phosphoric acid ester, used in treating psoroptic mange—1753
- PHYLOGENETIC RELATIONSHIPS**, between indigenous sheep breeds—2748
- PHYSIOLOGY**, absorption in vivo of magnesium from rumen—1866
 absorption of amino acids from small intestine, formaldehyde treatment of concentrated diets—923
 absorption of immunoglobulin from colostrum by bottle-fed lambs—1226
 absorption of methionine by foetal and neonatal lamb colon—2794
 acetylcholine induced calcium movements in hypotonically washed sperm—2862
 acid-base equilibrium in blood of sheep—1037
 acid-base equilibria, lambs from 7 days to adulthood—2772
- ACTH** receptor levels of adrenals at late gestation and early neonatal stages—829
 adrenocortical steroid hormones in production of hypertension—475
 age-dependent changes in response of ductus arteriosus to oxygen and ibuprofen—600
 age-dependent pattern of autonomic heart rate control during hypoxia in fetal and newborns—3175
- age related changes in coronary blood flow and resistance in chronically instrumented sheep—2539
 age related changes in coronary blood flow and resistance in chronically instrumented sheep—2549
 alanine stimulation of insulin secretion in fetus—2347
 alpha adrenergic control of gonadotrophin secretion in ewe—2107
 analysis of electroencephalogram—2572
 antigen induced bronchospasm in conscious sheep—3190
 appearance of new electrical properties in plasma membrane of spermatids—634
 arginine vasopressin during gestation and parturition in sheep fetus—2845
 arginine vasopressin during gestation and parturition in sheep fetus—2911
 arterio-venous extracorporeal membrane oxygenation for neonatal respiratory support, perigestational lambs—1156
 artificial induction of lactation in ewes, importance of prolactin and growth hormone for initiation of lactation induced with prostaglandin F-2 alpha—955
 assay and characterization of uterine progesterone receptor—699
 automatic analysis of feeding and ruminating behaviour—1743
 beta endorphin stimulates growth hormone secretion in ovine fetus in vivo—1097
 biphasic prolactin release by haloperidol and perphenazine in lactating and pregnant cows and ewes—2689
 bile acid clearance with hereditary hyperbilirubinemia—891
 bile excretion—2125
 bile flow and electrolyte composition in bile associated with maximum bilirubin excretion—247
 blockade of episodic secretion of LH in ram by administration of antibodies to LH releasing hormone—1763
 blood flow to fetal organs as function of arterial oxygen content—2311
 blood gas changes associated with feeding—2012
 blood plasma levels of free 17-beta estradiol in ewes after treatment with chlormadinone acetate in two synchronized cycles—1222
 blood pressure and metabolic effects of 9-alpha fluorohydrocortisone—601
 body fluid changes with cold exposure—726
 body temperature, respiration and pulse rate in Corriedale, Marwari and Magra sheep in the Rajasthan desert—2019
 body-water turnover of game and livestock in Kenya—1566
 book of normal values in book by Richter, Werner and Bahr—2516
 caffeine and tetracaine abolish the slow inward calcium current in sheep cardiac purkinje fibers—868
 calcium homeostasis in fetus—514

- cardiac and uterine hemodynamic responses to ritodrine hydrochloride administration in pregnant sheep—2734
- cardiovascular responses to hypoxemia following autonomic blockade in fetal lambs—1748
- central gamma amino butyric acid and thermoregulation—352
- changes in binding of insulin and glucagon to hepatocyte receptors in lactating and nonlactating ewes—1082
- changes in cervical mucus in response to estrogen treatment—25
- changes in somatomedin-like activity and concentrations of growth hormone and prolactin in plasma of castrated growing lambs—930
- characteristics of electromagnetic flow meter specially built to measure intestinal flow in sheep—1744
- characterization of a cytoplasmic androgen receptor in ram testis—2025
- characterization of a gonadal factor involving control of FSH secretion—2709
- choice of models relating tritiated water absorption to subepithelial blood flow in rumen—781
- cholecystokinin octapeptide continuous picomole injections into cerebral ventricles suppresses feeding—740
- circulatory effects of blockade of angiotensin II in fetal lambs—1421
- circulatory effects of endotoxin on unanesthetized sheep and response to dopamine—3350
- clearance in milk of tritium-labeled fluorogestone in lactating ewe treated for synchronization of estrus—1848
- comparison between intravaginal sponges and subcutaneous implants for synchronising estrus in Karakul ewes—940
- comparison of continuous transcutaneous and intermittent intravascular PO₂ measurement in fetus—1438
- comparison of effects of glucocorticoid and mineralocorticoid infusions on blood pressure—3242
- comparison of LH and prolactin levels in cycling and anestrus ewes—1425
- concentrations of 6-oxo-prostaglandin F-1 alpha in the maternal and fetal plasma during spontaneous and induced parturition—2013
- consumption of carbohydrates, amino acids and oxygen across intestinal circulation in fetus—565
- continuous variability of fetal blood oxygen tension in chronically catheterized fetal sheep—1437
- contraction force of reticulum surfaces—3033
- contribution of left to right ductus arteriosus shunting duct shunt to pulmonary blood flow in premature lambs during the first hours of life—2863
- contribution of Protozoa to rumen cellulolytic activity—736
- control of insulin secretion—1826
- control of the preovulatory endocrine events in ewe, interrelationship of estradiol, progesterone and LH—1508
- coumestans in lucerne and ovulation in ewes—2791
- coumestan in lucerne and ovulation rates—2792
- covalent binding of prostaglandin G-2 and H-2 to components of ram seminal vesicle microsomal fraction—653
- cutaneous water loss and respiration rates of various breeds at high ambient temperatures—2448
- cycloheximide effect on corpus luteum—1053
- depaminergic regulation of prolactin secretion—1098
- depressed responsiveness to vasoconstrictor and vasodilator agents and baro reflex sensitivity in conscious newborns—1839
- detection of an endogenous digoxin-like substance, endoxan in plasma of dog, sheep and man—1168
- development of blood coagulation in fetus—1574
- development of brain barrier systems to lipid insoluble molecules in fetal sheep—847
- development of fever in newborn—1510
- development of prolactin response to thyrotropin releasing factor in fetus and neonate—2975
- developmental aspects of renal tubular reabsorption of water in fetus—2535
- diet and caecal motility in sheep—959
- diet-plasma amino acid relationship in ewes fed nitrogen fertilized orchard grass—1493
- dietary lipid and absorption of Mg and Ca, effect of corn oil infused into rumen—1129
- dietary modification of increased pulmonary microvascular permeability in lambs exposed to oxygen—1935
- diffusion permeability and ultrafiltration-reflection-coefficients of NA⁺ and Cl⁻ in the near-term placenta of sheep—2986
- digestion and absorption of carbohydrates by fetus in utero—561
- dihydroergocryptine and dihydroalprenolol binding in myometrium during estrous cycle—2496d
- diphenhydramine reduces endotoxin induced increased lung vascular permeability in unanesthetized sheep—2254a
- direct and indirect pulmonary vascular effects of tolazoline in newborns—1780
- direct relationship between pulmonary vascular resistance and lung fluid filtration in hypoxic lambs given intravenous tolazoline—429
- dopamine treatment of spinal hypotension decreases uterine blood flow in pregnancy—2554
- dose response to vasopressin in fetal lamb—693
- down regulation of receptors for LH in corpus luteum and effect on progesterone secretion—2890

- dynamic response of fasting heat production in sheep exposed to varying environmental conditions—3127
- dynamics of acid-base indices in blood of lamb from 7th day of post-natal life to adult—2770
- dynamics of secretion of oxytocin and catecholamines during inhibition of milk ejection—2903
- dynamics of vasopressin release and blood volume regulation during fetal hemorrhage in fetus—2538
- early cardiopulmonary and renal function in thermally injured sheep—3018
- early insulin release following suckling in neonatal lambs and rabbits—2386
- early metabolic response of lambs to small doses of triiodothyronine—97
- effect of absence of rumen ciliate protozoa on rumen fluid volume—2221
- effect of ACTH on the aldosterone response to potassium in sheep with adrenal transplants—1801
- effect of ACTH on lung maturation in fetal lambs—2886
- effect of active immunization against androstenedione or estrone on estrus, ovulation and lambing in merino ewes—1880
- effect of acute hypoxia on pituitary thyroid axis in lambs—1584
- effect of acute maternal hemorrhage on release of catecholamines in pregnant ewe and fetus—153
- effect of adrenal arterial infusion of P-113 on aldosterone secretion in Na-deficient sheep—342
- effect of age on aortic pressure-diameter and elastic stiffness-stress relationships in unanesthetized sheep—2254-B
- effect of alpha and beta sympathetic antagonists on decreased uterine blood flow in pregnant ewe during heat stress—440
- effect of ammonia and adrenaline infusions—1035
- effect of angiotensin II and saralasin on renin in fetus—2733
- effect of angiotensin, blockade and nephrectomy on renin angiotensin aldosterone system in newborn—2729
- effect of angiotensin II on blood pressure, plasma renin activity and aldosterone in fetus—731
- effect of angiotensin II A₂ blockade on response of fetal lamb to acute hypoxia and hypovolemia—1899
- effect of angiotensin II on parotid saliva secretion—1929
- effect of 17-beta estradiol on estrogen and progesterone receptors in mammary gland—1527
- effect of cannulation on intestinal motility—3219
- effect of changes in maternal fetal pH on the transplacental equilibrium of bupivacaine—1541
- effect of continuous intrauterine administration of prostaglandin E-2 on life span of corpora lutea of non-pregnant ewes—2396
- effect of decreased cerebral blood flow on brain tissue oxygenation of newborns—2600
- effect of dietary structure on absorption of amino acids and polypeptidase activity of digesta—2737
- effect of duodenal infusion of methionine on erythrocyte reduced glutathione—2883
- effect of environmental heat exposure on physiological response, blood constituents and parameters of blood glucose metabolism in sheep—2630
- effect of *Eperythrozoon ovis* infection on reductive potential of erythrocytes—2900
- effect of epidural anesthesia and surgery on serum thyroid hormone and cortisol levels in pregnant ewe—898
- effect of epinephrine infusion on maternal and uterine oxygen uptake in pregnant ewe—585
- effect of estradiol 17-beta on gonadotropin releasing hormone mediated release of LH during the estrous and anestrous season—2057
- effect of estrogen priming and GnRH on LH release and luteal function during early lactation in spring—1230
- effect of exogenous estradiol and progesterone on estradiol receptors in uterus—849
- effect of exogenous gonadotrophin (PMSG) on the antral follicle population—802
- effect of exogenous oxytocin on estrous cycle length and corpus luteum lysis in ewes—1264
- effect of feeding on blood flow in mesenteric blood vessels—2769
- effect of fetal hypoxemia on vasopressin and renal water excretion—2537
- effect of fleece length, water load and ambient temperature on heat production of fasting sheep—3128
- effect of glucose infusion upon hypoxic human and sheep fetuses—2596
- effect of GNRH analogues on aspects of reproduction in sheep—2434
- effect of heat stress on plasma levels of prolactin and LH in ewes—1347
- effect of heparin or fibrinogen depletion on lung fluid balance after emboli—333
- effect of high temperatures on spermatogenesis of Brazilian white woolless sheep—628
- effect of increasing potassium intake on absorption of magnesium—1813
- effect of infusing histamine into pulmonary or bronchial artery on sheep pulmonary fluid balance—2102
- effect of inhibitor of prostaglandin synthesis on uterine motility of the castrated ewe treated with estrogens—2414
- effect of insulin infusion to mother on placental transfer of glucose and its turnover—89
- effect of insulin on eating and rumination—2150

- effect of intraduodenal infusion of hydrochloric acid and sodium bicarbonate on the volume of secretion, bicarbonate output and pH of pancreatic juice and bile in sheep—2874
- effect of intraventricular injection of transmitter substances and temperature on autonomic functions of conscious sheep—274
- effect of ketamine on regional cerebral blood flow in asphyxiated fetus—2352
- effect of lactic acid administration on rumen myoelectrical activity and pressure changes—2789
- effect of lambing induction on sensitive period for establishment of maternal behaviour—2367
- effect of level of pre-mating nutrition on ovulation rate and early embryo mortality in North and South Country Cheviot ewes in moderately good condition at mating—1185
- effect of local radioactivity on tracheal mucous velocity—42
- effect of long-term bromocriptine infusion on plasma prolactin and ovine chronic somatomammotropic in pregnant ewe and fetal sheep—1795
- effect of mating, artificial insemination and fright on uterine motility—1725
- effect of neuromuscular blocking agents in lambs—760
- effect of nitrilotriacetic acid on solubility of zinc, copper, manganese and iron in stomach—1414
- effect of ovine conceptus on in vitro responses of uterine arteries to prostaglandin E-2 and norepinephrine—2378
- effect of oxytocin on passage of sperm through genital organs, synchronized with Agelin—7574
- effect of pentagastrin on smooth muscle strips from stomach of sheep and guinea pig—3114
- effect of photoperiod on food intake, sexual condition and hormone levels—442
- effect of plasma oncotic pressure on pulmonary microcirculation after hemorrhagic shock—744
- effect of progesterone on estrogen-stimulated uterus, a comparative study of mouse, guinea pig, rabbit and sheep—1987
- effect of progesterone on steroid-induced male and female sexual behaviour in adult ovariectomized ewes—917
- effect of prostaglandin on maternal and fetal adrenal blood flows—2345
- effect of prostaglandin F-2 alpha on blood constituents and certain hormones in Najdi sheep—4
- effect of prostaglandin I-2 on placental vasculature—2460
- effect of protein on abomasal emptying—3095
- effect of rainfall on water and heat dynamics in fleece—3126a
- effect of rapid bicarbonate infusion on blood and cerebrospinal acid base in the acidotic newborn lamb—692
- effect of reserpine on physiological responses of cold exposed sheep—2236
- effect of rete testis and epididymal fluid on metabolism and motility of testicular and post-testicular spermatozoa—3156
- effect of roughage or concentrate feeding and rumen retention time on total degradation of protein in rumen—1026
- effect of rumen insufflation on ruminal contraction rate—1794
- effect of season of birth on testis diameter and response to luteinizing hormone releasing hormone in the lamb—524
- effect of secretin and chemical stimulation of duodenum on neutralizing functions of pancreatic juice and bile—2875
- effect of shearing on certain physiological responses of Corriedale rams under arid conditions during summer—2016
- effect of single dose of exogenous progesterone on levels in peripheral blood in ewes—1587
- effect of sodium loading and ACTH on blood pressure of sheep with reduced renal mass—3241
- effect of somatostatin on plasma glucagon and insulin and glucose turnover in exercising sheep—436
- effect of somatostatin suppression on glucose production—437
- effect of sulphur on ⁷⁵Se absorption and retention—2375
- effect of suppression of plasma prolactin on ovulation, plasma gonadotrophins and corpus luteum function in LH-RH-treated anestrus ewes—1938
- effect of sympathetic nerve stimulation on lung fluid and protein exchange—1219
- effect of synthetic prostaglandin F-2 alpha on volume, acidity and proteolytic activity of the abomasum juice—728
- effect of thyrotrophin releasing hormone on pituitary and thyroid function in pre and postnatal lambs—3182
- effect of thyroxine on lung maturation in hypothyroid fetus—899
- effect of tolazoline on blood flow and pressures in hypoxic lambs—1147
- effect of uneven pulmonary artery obstruction on lung fluid balance—2848
- effect on fetal oxygenation of sodium salicylate and phenylephrine infusion in the pregnant ewe—3099
- electrical activity of gallbladder and biliary tract and relationship with antral and duodenal motility—460
- electrical potential across the ovine nasal mucosa—208
- electrocardiographic changes in fetal lamb during asphyxia in relation to beta adrenoceptor stimulation and blockade—1333
- endocrine cells in alimentary tract—465
- endocrine control of spermatogenesis—633
- endocrine mechanisms governing transition into adulthood, a marked decrease in inhib-

- itory feedback action of estradiol on tonic secretion of LH during puberty—1001
- endocrinology of spermatogenesis in the hypophysectomised ram—632
- endogenous erythroid colony-forming cells in fetal and newborns—2559
- endogenous insulin secretion and metabolic clearance rates in neonatal lamb—2889
- epinephrine and pace-making mechanism at plateau potentials in purkinje fibers—2281
- equilibration of intravascular albumin with lung lymph in unanesthetized sheep—3116
- esophageal (reticular) groove and reticulo-omasal orifice—2297
- esophageal reactions during eructation—523
- estrus induction in Lacha ewes out of season—2353
- estrus, ovulation time and rate and conception rate in progestagen-treated ewes given GNRH, GNRH analogues and gonadotrophins—2435
- estrus synchronization of ewes with prostaglandin injections during estrus and anestrus—3150
- evaluation of pregnancy diagnosis in ewe based on pituitary responsiveness to LHRH—1003
- evidence for androgen and estrogen receptors in castrated ram pituitary cytosol, time after castration—2955
- exocrine pancreatic secretion in conscious sheep—2062
- factors affecting feed utilization—905
- factors affecting insulin release in sheep fetus—1006
- factors affecting voluntary intake of food, role of distension and tactile input from stomach compartments—1167
- factors influencing heart rate in free-ranging bighorn sheep—1811
- failure to demonstrate vasotocin—783
- feeding and depression of abomasal secretion elicited by elfazepam and 9 azacannabinol—3096
- fetal and maternal hormonal response to starvation in the ewe—2670
- fetal breathing during asphyxia related to outcome of pregnancy—2938
- fetal breathing movements, a natural history—718
- fetal breathing movements monitored by real time, B mode ultrasound, basal appearance and response to challenges—1055
- fetal hematopoietic cells produce adult hemoglobin when transplanted to the adult—3333
- fetal to maternal transfer of palmitic and linoleic acids across placenta—2171
- fever and ruminal stasis, role of humoral mediators—3120
- gastric intrinsic factor in sheep—1927
- general performance of flocks in Rajasthan Desert under arid conditions—2110
- generation and regulation of breathing in utero fetal carbon dioxide response test—2058
- glucocorticoid hormones in blood of normally and early weaned lambs—1170
- GNRH interaction with anterior pituitary, II. Cyclic AMP as an intracellular mediator in the GNRH activated gonadotroph—27
- GNRH interaction with anterior pituitary, determination of the affinity and number of receptors—3137
- gonadotropin receptors of ovine ovarian follicle during follicular growth and atresia—526
- gonadotropin receptors of ovine ovarian follicle during follicular growth and atresia—527
- hemodynamic responses of sheep fetus to vasopressin infusion—1422
- hemodynamics of ACTH induced hypertension—267
- histamine induced shifts in circulatory and tissue homeostasis of proteins and their causes—43
- histophysiological characteristics of pineal gland of ewes during pregnancy—2129
- hormonal control of GAP function formation in sheep myometrium during parturition—1030
- hormonal control of oocyte meiosis, ovulation and luteinization—557
- hormonal factors in lung maturation in fetal lambs—1581
- hormonal induction of maternal behaviour in non-pregnant ewes—1738
- hormone receptor, control of prostaglandin F-2 alpha secretion by uterus—1914
- hormones, feeding and body temperature following cerebroventricular injections of neurotransmitters and carbachol—818
- hydrolytic activities of rumen ciliates—733
- hydrophobicity of erythrocytes—3335
- hypercapnic stimulation of respiratory activity in unanesthetized fetal sheep in utero—398
- hypernatraemia in pregnancy—833
- hypothalamic uptake of tritium labeled testosterone in sheep following intracerebroventricular infusion—220
- identification and characterization of a biosynthetic precursor (proprolactin) of ovine pituitary prolactin—178
- immunocytochemical localization of prolactin and growth hormone in sheep pituitary—2293
- impedometric properties of genitalia tissue in ewes—18
- importance of platelets for isolated lamb heart perfused at 13° C—2876
- importance of surface area to volume ratio to rate of oxygen uptake by erythrocytes—1467
- importance of variations in behavioral and feedback actions of estradiol to control of seasonal breeding in ewe—1115
- in vitro estradiol production and human chorionic gonadotropin binding to theca and granulosa cells in individual ovine follicles—3207

- increase in plasma cortisol levels in ewes fed estrogenic subterranean clover—2927
- increased lung lymph transport without heart failure after coronary ligation—611
- increased pulmonary vascular permeability follows intracranial hypertension—397
- indomethacin augments endotoxin induced increased lung vascular permeability—2196
- induction of inward going rectification of cardiac purkinje fibers—518
- influence of age and rumen development on intestinal absorption of galactose—2658
- influence of blood sampling stress on blood values—1101
- influence of ciliates implanted in rumen and type of diet—1133
- influence of fasting upon volatile fatty acid and ammonia levels in rumen—1034
- influence of interruption of enterohepatic circulation of bile acids on their content in bile of sheep—358
- influence of ovarian steroids on response of ovine uterine arterial smooth muscle to norepinephrine—2377
- influence of oxytocin and acetylcholine on secretion of principal components of ewe's milk—1644
- influence of phentolamine on blood glucose levels after feeding in sheep with alloxan diabetes—2240
- influence of some gastrointestinal hormones on pancreatic secretion—3327
- inhibin activity in ram rete testis fluid, depression of plasma FSH and LH in the castrate and cryptorchid ram—489
- inhibin in ram rete testis fluid—711
- inhibition by angiotensin II of some vasopressin effects on renal function—3313
- inhibition of erythropoiesis by plasma components from sheep, goats and rabbits—2122
- inhibition of hypercalcemia inducing effect of 1, 25-dihydroxy cholecalciferol by calcitonin—241
- inhibition of prostaglandin F release following administration of progesterone around luteolysis—925
- inhibition of rumen motility by ammonium ion—2068
- inhibitors of prostaglandin synthetase stimulate breathing movements in fetal lambs—1757
- inhibitory effect of adrenaline on oxytocin release in ewe during milk-ejection reflex—248
- injection of cholecystokinin octapeptide causes satiety—739
- interaction of GNRH with anterior pituitary, role of divalent cations, microtubules, microfilaments—26
- interhemispheric connections between primary visual areas in adult sheep and newborns—2462
- interrelationship between eliminating function of liver and mammary gland activity in ruminants during lactation—2928
- interval to next estrus or ovulation after removal of preovulatory follicle and ovary—606
- intracellular sodium ion activity of sheep purkinje fibers—1713
- intracerebroventricular injections of cholecystokinin octapeptide and feeding—948
- intraruminal injection of urea and changes in secretion of parotid saliva—2184
- intravenous injection of bupivacaine in pregnant ewe—641
- is mechanism for resumption of ovulation following parturition in sheep similar to that for onset of puberty or onset of adult breeding season—1000
- kinetic model of electrophysiological effects of tetrodotoxin on purkinje fibers—10
- lack of association of parturition with antepartum surge of triiodothyronine in fetus—2180
- lack of effect of morphine and naloxone on plasma concentrations of prolactin and growth hormones in fetal and adult sheep—1936
- laryngeal chemoreflex in newborn lambs, respiratory and swallowing response to salts, acids and sugars—1628a
- LH receptors in corpus luteum during estrous cycle and early pregnancy—2167
- light-induced rhythms of prolactin in ram and effect of cranial sympathectomy—1761
- limiting factors of oxygen consumption in newborn anemic lambs—738
- lung fluid balance in awake newborn lambs with pulmonary edema from rapid intravenous infusion of isotonic saline—345
- lung vascular responses to endotoxin are accompanied by increased blood and lung lymph cyclic AMP and cyclic GMP—1286
- lung water and vascular permeability in newborns—2885
- lysophosphatidyl choline on excitability of cardiac purkinje fibers—147
- main principles of regulation of temperature homeostasis—1417
- maintenance of corpus luteum of early pregnancy, luteotropic properties of embryonic homogenates—879
- maternal and fetal oxytocin in parturition—1091
- maternal recognition of pregnancy in ewe and rabbit—878
- maturation of early phase insulin release in neonatal lamb—2346
- maturation of hypoxic ventilatory response of newborn lamb—287
- maturational changes of pituitary-adrenal axis in fetal lamb—3168
- maturational changes of the pituitary-adrenal axis in fetus—3169
- measurement of digesta flows in grazing sheep—624

- measurement of estradiol induced changes in vagina of ovariectomized ewes—385
- mechanism of passage of endogenous urea through rumen wall and role of ureolytic epithelial bacteria in urea flux—571
- membrane integrity and regulation of calcium in sperm—409
- membrane permeability during low potassium depolarization in cardiac purkinje fibers—1714
- method for re-entrant cannulation—1413
- modification by prostaglandins A₁, E₁ and F₂ alpha of epinephrine induced fetal mesenteric artery constriction—3296
- modification of hypoxic pulmonary vasoconstriction by antigen challenge in sensitive sheep—1651
- morphological changes due to PMS and sexual steroids in parts of cerebro-gonadal axis—2803
- movement of thiamine through rumen wall—457
- multivariate analysis of rumen overload syndrome and a preliminary model of acid-base balance in sheep blood—852
- myocardial and coronary vascular responses to insulin in diabetic lamb—807
- myocardial performance in the newborn lamb—309, 310
- nasal heat exchange in the giraffe and other large animals—1685
- nature and role of pregnancy associated antigens and endocrinology of early pregnancy—958
- neural and chemical control of abomasal secretion—2064
- nitroglycerin and the uterine vasculature in gravid ewes—3233
- nitroglycerin effect in hypertensive pregnant ewe—640
- nitroglycerin plasma levels and effects in pregnant ewes—754
- nonpassive chloride distribution in heart muscle, microelectrode measurement of intracellular chloride activity—3117
- norepinephrine, epinephrine and dopamine levels in responses to hypoxia in neonatal lambs—874
- norepinephrine, epinephrine and dopamine levels in response to hypoxia in neonatal lambs—875
- norepinephrine, epinephrine and dopamine responses to parturition in premature and full-term fetal sheep—873
- normal fluctuations in plasma levels of corticosteroids and adrenocorticotrophins in fetal and pregnant sheep—1466
- olfaction and gustatory senses in sheep after olfactory bulbectomy—289
- ontogeny of beta endorphin mediated growth hormone secretion in ovine fetus—1099
- ontogeny of intrarenal solute gradients in fetal and postnatal life—2034
- ontogeny of serotonergic regulation of growth hormone and prolactin in fetus and neonate—1876
- osmotic fragility of desert bighorn sheep red blood cells—3047
- ovarian effects of bovine follicular fluid—1993
- ovine chorionic somatomammotropin in mid and late gestation in the fetal and maternal circulations—1096
- ovine placental lactogen—552
- oxygen delivery to the pregnant uterus, relationship to oxygen consumption—536
- parotid salivary flow and composition during infusion of acetylcholine and atropine into carotid artery of conscious sodium replete sheep—272
- participation of bile and pancreas juice in secretion of endogenous nitrogen into digestive tract—2929
- passage of thiamine through wall of rumen in vivo—1327
- patho, and production of lambs infected with *Trichostrongylus colubriformis* and *Ostertagia circumcincta*—2916
- patho, thyroglobulin structure—1769
- patterns of blood flow to uterus and ovaries of ewes during period of luteal regression—996
- patterns of fetal lamb regional cerebral blood flow during and after prolonged hypoxia—166
- perinatal activity of the hypothalamic pituitary gonadal axis in lamb, circulating levels of LH follicle stimulating hormone, prolactin and testosterone and in vivo response to human chorionic gonadotrophins in the first 2 months of life—2642
- perinatal development of intestinal myoelectrical activity—462
- peripartal endocrine system in sheep—546
- permissive effect of ACTH on aldosterone response to potassium stimulation in sheep with adrenal transplants—904
- phosphatidate, phosphohydrolase and phospholipids in tracheal and amniotic fluids during gestation—2561
- phosphatidyl choline as marker of duodenal flow of rumen protozoa in sheep—1456
- pituitary and testicular function in rams following inhibition of prolactin secretion during nonbreeding season—2625
- pituitary response of prepuberal lambs to estradiol—579
- pituitary response of prepuberal lambs to estradiol 17-beta—3021
- placental transfer of dexamethasone in near term sheep—93
- plasma concentrations of LH follicle stimulating hormone and progesterone during the breeding season in ewes immunized against androstenedione or testosterone—1867
- plasma levels of LH and FSH during anestrus in ewes immunized against estradiol, estrone or testosterone—1875
- plasma triiodothyronines in fetal sheep, effects of illness and thyroidectomy—2182

- plasma vasopressin levels during hemorrhage in mature and immature fetal sheep—2584
- pore models of lung microvascular barrier using new data on protein tracers—1937
- posturally related tonic activity recorded from peripheral diaphragm in awake and sleeping lambs—1249
- potassium:aldosterone relationships in pregnant ewes and chronically cannulated fetuses—3275
- potassium chloride stimulation of aldosterone in newborn—2728
- pre-ejection period of cardiac cycles in fetal lamb—2085
- preferential streaming of ductus venosus blood to brain and heart of fetal lambs—850
- pregnancy, a review—1954
- premature regression of ram-induced corpora lutea—2207
- prepuberal plasma LH levels and progesterone concentrations during estrous cycle and early pregnancy in Galway and Fingalway lambs—2429
- presence of large molecular weight follicle stimulating hormone and luteinizing hormone fraction and free alpha subunit in pituitary—308
- pressure passive cerebral blood flow in non-asphyxiated fetus—2295
- progesterone and LH concentrations in ewes after ICI 80996, an analogue of PGF-2 alpha at two different stages of breeding season—13
- prolonged oxygen breathing increases lung microvascular permeability to protein in lambs—422
- propranolol disposition and biliary excretion in pregnant sheep and fetus—1871
- prostaglandin control of renal circulation in response to hypoxemia in fetal lamb in utero—1986
- prostaglandin E-2 and F-2-alpha in follicles before and during estrus—2086
- prostaglandin F-2 alpha and progesterone release in vitro by ovine luteal tissue during induced luteolysis—2497
- prostaglandin for estrus synchronization—1802
- prostaglandin forming cyclooxygenase of ovine uterus, relationship to luteal function—1379
- prostaglandin secretion by endometrium in vitro and in vivo—880
- prostaglandins and cervical ripening during parturition—882
- protein transmission in intestine of newborn, involvement of acid and alkaline phosphatase activity—1276
- puberty and sexual maturity in native and crossbred sheep reared under confinement—2766
- pulmonary and systemic circulatory responses of neonatal lambs to tolazoline—3195
- pulmonary and systemic vascular responses to 6-keto prostaglandin E₁—1781
- pulmonary microvascular permeability to protein in unanesthetized fetal and newborns—346
- pulmonary oxygen toxicity, increased microvascular permeability to protein in unanesthetized lambs—421
- pulmonary vascular response to prostacyclin in fetus—1144
- pulmonary transvascular fluid dynamics during hemorrhage—1833
- pulmonary vascular responses to prostaglandins in conscious newborn—1779
- quantitative digestion of fresh herbage, prediction of sites of digestion—3058
- ram-induced ovulation in seasonally anovular Merino ewes, effect of estradiol on frequency of ovulation, estrus and short cycles—1878
- rate of passage of digesta in intestines—2953
- rate of passage of digesta in sheep and goats fed on nitrogen from different sources—2830
- reciprocal relationship between rumen development and intestinal sugar transport capacity—2659
- redistribution of cardiac output and oxygen delivery in hypoxemic fetal lamb—2702
- reduced insulin response in sheep exposed to cold—2635
- reduction by human chorionic gonadotropin of the luteolytic effect of prostaglandin F-2 alpha in ewes—380
- regional alveolar gas composition and lung function—2548
- regional brain content of luteinizing hormone releasing hormone in sheep during estrus, seasonal anestrus and after ovariectomy—3231
- regional cerebral blood flow changes during severe fetal asphyxia produced by slow partial umbilical cord compression—1459
- regional differences in respiratory airway function—916
- regional extravascular lung water in normal sheep—977
- regression of corpus luteum following stimulation by ram—1597
- regulation of chloride in quiescent sheep purkinje fibers—3118
- regulation of FSH secretion in rams—2654
- regulation of placental blood flows—2459
- relation between intracellular sodium ion activity and positive inotropic action of sheep cardiac purkinje fibers—1715
- relation of vaginal temperature to eating, drinking, standing and walking activity rhythms of four anestrus Finnish Landrace ewes—1371
- relationship between fetal and maternal plasma vitamin D—2566
- relationship of fetal bradycardia to maternal administration of lidocaine in sheep—2043
- renal calcium and magnesium excretion during vasopressin administration into sheep with acid or alkaline urine—271

- renal clearance of magnesium in sheep receiving oral KCL and/or citric acid—727
- renal components of feed dependent potassium excretion—1141
- renal hepatic comparison of metallothionein in fetus—290
- renal response of the lamb fetus to hypoxemia and following recovery—2534
- renal sodium and potassium excretion in sheep given amiloride—2438
- renin, antidiuretic hormone and the kidney in water restriction and rehydration—341
- reproduction, reviews—1251
- reproductive, prostaglandin-containing fractions from uteri—2397
- respiratory regulation in pregnant ewes and in fetal lambs in utero—2059
- response of carotid arteries to noradrenaline and increased pressure—3016
- response of fetal cardiovascular system to acute elevation of intracranial pressure—3346
- response of plasma growth hormone to short-term fasting and spontaneous meals—817
- response of testes and accessory sex organs to exogenous gonadotrophin in prepuberal rams—1784
- responses of newborn lamb's breathing room air and 4.5 percent carbon dioxide during massive hemorrhage—2811
- responses of newborn to rapid massive hemorrhage—2812
- resting membrane and potassium equilibrium potentials in sheep purkinje fibers—2710
- reticulo-rumen motility in chronically vagotomized sheep—1148
- reversible induction of surfactant production in fetal lambs treated with glucocorticoid—441
- reversible lung vascular permeability increase by air emboli, effect of left atrial pressure—2847
- review of behavioral and physiological responses to elfazepam, a chemical feed intake stimulant—202
- rise in intramammary pressure after injection of water into inguinal artery—1664
- role of aldosterone on renal sodium and potassium excretion during fetal life and newborn period—2536
- role of blood factors in lung microvascular injury after emboli—2846
- role of function in formation of skull—2673
- role of maternal triglycerides to supply of lipids to fetus—2687a
- role of microfilaments in luteal steroidogenesis—2735
- role of rumen protozoa in digestion—1476
- role of spleen in blood storage and circulation after sedation with rompun—379
- role of testicular fluid on blood plasma levels of FSH and LH in rams—343
- role of vagal afferences, development of a deaf-ferentation technic—695
- role of vasopressin in suppression of fever—620
- rumen flow dynamics and voluntary intake—1950
- ruminant, proceedings of conference in Clermont-Ferrand, France in 1979—2578
- seasonal and cyclical changes in ovaries of Libyan ewes—196
- seasonal variation in nature of cervical mucus response to estradiol benzoate in normal and clover-affected ovariectomized ewes—24
- secretion of LH in Finnish Landrace ewes during estrus—2421
- secretion of nitrogen into digestive tract—3111
- sensitivity of broncho provocation and tracheal mucous velocity in detecting airway irritation after ozone exposure in conscious sheep—7
- sequential hormonal changes and activation of the hypothalamic-pituitary-gonadal axis—820
- serum gonadotrophin levels in prepubertally castrated males treated for long periods with propionated testosterone, dihydrotestosterone, and 19-hydroxytestosterone or estradiol—2288
- serum prolactin levels in castrated rams at various times of year and during treatment with androgens or estrogen—2289
- sex differences in kidney weight of fetal lambs—792
- sheep fetus at parturition—2532
- site of action of pentagastrin induced inhibition of reticulum—558
- size of lipoproteins in intestinal lymph of sheep and suckling lambs—1114
- somatomedin-like activity in plasma after fetal hypophysectomy or nephrectomy and in experimental intrauterine growth retardation—929
- species differences in isolated cardiac sarco-plasmic reticulum function—348
- spontaneous decrease in tracheal fluid in fetal lambs prior to birth—1579
- spontaneous in vitro motility and contractile response to periarterial and transmural electrical stimuli in preparations of the longitudinal muscular layer of omasum—223
- steroid secretion by the ovarian transplant of sheep and gonadotrophins during prostaglandin induced luteolysis—1353
- stimulation of fetal breathing movements in lambs by inhibitors of prostaglandin synthesis—1580
- structure of pulmonary epithelial tight junctions during lung liquid absorption in newborns—2664
- supranuclear pathways of swallowing—1325
- surface changes and secretory processes in oncospheres of *Taenia ovis* undergoing activation—2287
- sweat glands of Nali sheep in relation to canary colouration of Indian wool—1439
- sweating of sheep and goats in India—2446
- sympathetic and beta adrenergic stimulation of parotid salivary secretion—2300a

- temperature dependence of active K transport in cation dimorphic erythrocytes—1465
- testing and introduction of synthetic gonadotropin releasing hormones for control of reproduction—1615
- thermal sweating in different body regions—2447
- thermoregulation in a fat-tailed sheep (Awassi) and in a mesic German mutton Merino—725
- thermoregulatory responses in newborns for first 36 hours—1962
- thyroid function in perinatal period—2116
- thyroid gland sensitivity to thyrotropin in fetal and newborns—1583
- time from introduction of rams to the preovulatory LH surge and ovulation—2208
- transfer of fatty acids across placenta—885
- transplacental calcium gradient—512
- transplacental movement of metabolites of vitamin D—2567
- transport of water and solutes across visceral pleura—1564
- transport properties of sheep visceral pleura—644
- trophoblastin an antiluteolytic protein in early pregnancy—1865
- urea and sodium as indicators of capillary permeability in lungs of anesthetized sheep—2331
- urea content of bile and gastric juice in relation to blood urea—3110
- uterine blood flow and plasma norepinephrine changes during maternal stress in pregnant ewe—2720
- uterine endometrium and isthmic oviduct, does progesterone act as an antiestrogen—2868
- uterine prostaglandin forming cyclo oxygenase relationship to luteolysis and subcellular localization—2802
- uterus myoelectrical activity in the peripartal ewe—1639
- vagal digestive deafferentiation in sheep—931
- variations in plasma thyroxine during year in penned sheep on uniform feed intake—3181
- vascular compliance of fetal sheep liver—1057
- vascular insensitivity to angiotensin II in newborn—2732
- vascular insensitivity responsible for hyperreninemia and hyperaldosteronemia in newborn—2730
- visual thalamocortical connections studied by means of retrograde transport of horseradish peroxidase—1503
- voltage dependent block of inward going rectification in cardiac purkinje fibers—517
- water and electrolyte excretion during estrus—1980
- water and electrolyte excretion during estrus cycle—2009
- water, effect of long-term intermittent watering on blood and urine of pregnant sheep under semi-arid conditions—2039
- PHYTOBEZOAR, abomasal, specific form—264
- PHYTOESTROGENS, importance in breeding and fattening—2379
- PHYTOLACCA DODECANDRA*, toxicity to Ethiopian highland sheep—896
- PHYTOMITOGENS, in vitro response of lymphocytes in normal and ovine squamous cell carcinoma-bearing sheep—1485
- PIG, manure, replacing corn with—2217
- metabolism of ¹⁴C-phenols—1502
- PIGMENTATION, pink bones in carcass—2571
- PINE, radiata, seedlings, a repellent to protect from browsing—1600
- PINEAL, seasonal changes in, preparation and testing of tissue fractions—1589
- PINEAL BODY, failure to demonstrate vasotocin—783
- PINEAL GLAND histophysiological characteristics in ewer during pregnancy—2129
- melatonin-circulating patterns—137
- PINEAL GLAND FUNCTION, effect of modification on seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin levels in rams—252
- PINEALECTOMY, effect on semen production in Romney rams—250
- PIROPLASMA*, infection rates in ixodid ticks in Turkey—3196
- PIROPLASMOSIS, variability in virulence of etiologic agent—566
- vectors in Yugoslavia—2337
- PITHOMYCES SPORIDESMIN*, hepatic encephalopathy associated with chronic facial eczema—2972
- PITUITARY, adrenal axis, maturational changes in fetal lamb—3168
- adrenal axis, maturational changes—3169
- adrenal system, behaviour of thin fleeced sheep—1689
- anterior, interaction with GNRH, role of divalent cations, microtubules, microfilaments—26
- cholinergic control—2106
- cytosol, receptors for androgens and estrogens—2955
- development of function in fetus in late gestation—1112
- effect of acute hypoxia on thyroid axis in lambs—1584
- effect of heat stress on plasma levels of prolactin and LH in ewes—1347
- fetal, failure to demonstrate vasotocin—783
- PITUITARY, GNRH interactions, determination of affinity and number of receptors for GNRH—3167
- PITUITARY GLAND, effect of thyrotrophin releasing hormone on function—3182
- evidence for renotropic activity—2151
- fetus at parturition—2532
- function in fetus—3169
- function, in rams following inhibition of prolactin secretion during nonbreeding season—2625
- hormones, failure of prolactin to initiate lactogenesis—1346
- hypothalamic, axis with gonads, LH follicle

- stimulating hormone, prolactin and testosterone in first 2 months of life—2642
- identification and characterization of a biosynthetic precursor (preprolactin) of prolactin—178
- immunocytochemical localization of prolactin—2290
- LH, effect of chronic LHRH treatment—88
- maturational changes in fetus—3169
- presence of large molecular weight FSH and LH fraction and free alpha subunit—308
- response of prepuberal lambs to estradiol—579
- response of prepuberal lambs to estradiol 17-beta—3021
- weights, response in zeranol implant—3248
- PIVA, ewes, milk production and duration of lactation—35
- PIZZLE DROPPING, prevents pizzle strike by blowflies—825
- PLACENTA, bidirectional transfer of glucose and turnover in fetal and maternal sheep—90
- biochemical and histochemical changes in attachments during different stages of gestation—704
- calcium gradient—512
- control of steroid synthesis at parturition—979
- delta-9 and delta-6 desaturase activities of, their role in supply of fatty acids to fetus—2773
- delta-9 desaturase and delta-6 desaturase activities and role in supply of fatty acids to fetus—2688
- diffusion permeability and ultrafiltration, sodium and chloride ions—2986
- drug transfer—92
- effect of removal of endometrial caruncles on size and metabolism of fetus—2546
- evolution of alkaline phosphatases—1103
- fetal maturation related to parturition—1758
- fetal to maternal transfer of malmitic and linoleic acids—2171
- fluids, levels of estrogens during pregnancy—1221
- fusion of erythrolysosomes in epithelial cells of placenta—2093
- inflammatory response in attachments following experimental infections with *Brucella melitensis*—2101
- interconversion of glutamate and glutamine during development of fetus—2315
- lactogen—552
- lactogen, endocrinology of early pregnancy—958
- lysosomal breakdown of erythrocytes—2094
- measurement of transplacental magnesium fluxes—513
- no direct transfer of intact triglycerides to fetus—2687a
- proteins and lipids in fetus—3401
- regulation of blood flows—2459
- transmission of protostrongylids in California bighorn sheep—1577
- transfer of dexamethasone in near term sheep—93
- transfer of fatty acids—885
- transfer of glucose and turnover, effect of insulin infusion to mother—89
- transplacental movement of metabolites of vitamin D—2567
- transplacental movement, organochlorine pesticide residues in desert bighorn sheep—3046a
- transplacental transmission of bluetongue virus, overwintering mechanism—1071
- ultrastructural changes after long-term intravascular infusion of 2-bromo-alpha-ergocryptine (CB 154)—1796
- urinary excretion of meperidine by fetal lamb—2918
- vasculature, effect of prostaglandin 1-2—2460
- PLACENTOME, microfluorometric study of glycolytic enzymes in histologically defined areas of uterus and placentomes during pregnancy—3331
- PLANT GROWTH REGULATOR (MIFLUIDIDE), treatment of fescue, effect on nutrient utilization—2527
- PLANT, meadow, influence of passage through sheep of seeds—2250
- poisonous, textbook—282
- PLASMA, amino acid levels, relationship to diet in ewes fed nitrogen fertilized orchard-grass—1493
- blood, free fatty acids, effect of insulin and glucagon—906
- cells, ultrastructure of cytoplasmic and intranuclear structure, hemal lymph nodes—53
- enzyme, total protein, albumin, glucose, urea, cholesterol, triglycerides, in fascioliasis—2575
- glucose content, effect of jugular catheters—3273
- incorporation of ⁷⁵Se—3028
- inhibition of erythropoiesis by components, from sheep, goats and rabbits—2122
- levels of various enzymes and metabolites of cattle and sheep in Syria—2158
- lipids, lambs from ewes given protected lipids during late pregnancy and early lactation—2851
- lymph, ratio to plasma concentration—1937
- magnesium depletion and repletion effects on levels of Mg, Ca and K—278
- membrane, lumenal, urothelia, isolation—530
- membrane, modifications, spermatozoa during maturation and incubation in utero—635
- membrane, new electrical properties in spermatids—634
- protein, effect of stimulation of stellate ganglion—1219
- PLASTICS, packaging, polyethylene, ewe's milk and Kachkaval cheese—2316

- PLATELET, comparative nephelometric aggregation studies—3017
importance for isolated lamb heart perfused at 13°C—2876
- PLEURAL FLUID, transport—644
transport of water and solutes across visceral pleura—1564
- PLEUROPNEUMONIA, caprine, outbreak caused by *Mycoplasma mycoides mycoides*—244
- PMS (PREGNANT MARE SERUM), changes in estrogen concentration in sheep—1220
control of reproduction in adult ewes and ewe lambs with estimation of reproductive wastage following treatment—2426
effectiveness of stimulation of estrus, effect of nutrition—1652
induction of estrus and fertility in anestrus ewe—1943
morphokinetic action and sexual steroids, cerebrohypophyseal gonadal axis in anestrus sheep—2803
estrus, ovulation, fertilization and early embryo mortality in progestagen-PMSG treated Salway ewe lambs—2423
practical significance of progesterone estimation and use of prostaglandin F-2 alpha analogue (cloprostenol)—328
response of 6 week old lambs—3291
- PMSG, effect on ovarian activity and estrus behaviour—2758
- PNEUMO-ENTERITIS, adenoviral, protective effect of vaccination, fattening lambs—2260
adenovirus, protective effect of monovalent and bivalent vaccines in fattening lambs—2261
- PNEUMONIA, annotated bibliography—3064
characterization and antibiotic sensitivity of pasteurellas—2692
Chlamydia, transmitted to deer—1934
comparative mortality between Merino and Border Leicester ewes on semi-improved pasture—2884
development of vaccines for pasteurellosis—1085
enzootic, proliferative, interstitial, caused by *Mycoplasma ovipneumoniae*—2155
etiology—215
experimental, in lambs inoculated with parainfluenza-3 virus—2764
experimental studies—1083
lambs, small anterior lobe lesions—2339
lesions among lambs slaughtered in Mexico—2453
lungworm, pathology—2445
mouse model of *Pasteurella haemolytica* infection for testing vaccines—910
mycotic, pathology—2445
nocardial, pathology—2445
non-progressive, chronic, experimental transmission—75
parainfluenzaviral, pathology—2445
pathology—2445
progressive, incidence in North Dakota State University flocks, determined by agar-gel immunodiffusion—2022
progressive, incidence of natural infection and establishment of clean flocks—1759
progressive, pathological and viral studies—2212
pulmonary adenomatosis—3009
relation to metabolic disorders—2070
schistosomal, pathology—2445
ureaplasmas, pathogenicity, a review—2937
verminous, incidence and pathology—2601
viral, in sheep and goats in Punjab—226
viral, pathology—2445
- PO₂, comparison of continuous transcutaneous and intermittent intravascular measurement in fetus—1438
- POISON, urea, protective effect of acetic and propionic acids—2895
- POISONING, acute fluorine, pathology—2997
by mushroom, *Continarius speciosissimus*—2248
chronic, copper, biochemical, kinetic, morphologic and comparative studies—2808
Claviceps purpurea in sheep—1782
clinical and experimental study of chronic herbacin-50 poisoning—2163
copper, autophagy and apoptosis in liver during prehaemolytic phase of chronic—1567
copper, chronic, clinical picture—1382
copper, chronic, immunohematological study—3250
copper, intracellular distribution in liver of normal and copper loaded sheep—1117
copper, intracellular distribution of copper in liver of normal and copper loaded sheep—1118
element and polychlorinated biphenyl deposition and effects in sheep fed cabbage grown on municipal sewage sludge—1260
enzootic interus, a form of chronic copper—263
ergot, contamination of feedstuffs—3318
feeding of day blooming jessamine (*Cestrum diurnum*), ectopic calcification in lambs—2743
ingestion of blister beetles—2470
organic and inorganic compounds, textbook—282
ryegrass, treatment with chlordiazepoxide—2510
with alkyl phosphates, treatment—294
with grain fumigant, dibromoethane—197
- POISONOUS PLANTS, acorns—3294
Geigeria aspera, inhibition of oxidative phosphorylation by sesquiterpene lactones—127
muscular disease, differential diagnosis—3176
review of nutritive value and toxic aspects of *Leucaena leucocephala*—1970
textbook—282
whole milkweed—589
- POISONS, chronic copper—578
emery milkvetch—3163
environmental, occurrence and importance in domestic and wild animals in Norway—1339

- POLAND**, Bialystok Province, gastrointestinal nematodes—3244
helminths in—1423
use of fenbendazole—319
- POLESINE**, chemical-physical survey on milk from sheep—575
- POLIOENCEPHALOMALACIA (CEREBRO-CORTICAL NECROSIS)**, induced by experimental thiamine deficiency—2985
- POLISH**, Merino, breeding value—1586
Merino, ewes, production and quality of wool of fattened lamb of different commercial crossbred types, mutton-type rams—2237
- POLISH MOUNTAIN SHEEP**, crossbreeding on Polish longwool sheep of Olkusz type—584
- POLLUTION**, environmental, feeding hay from areas of, biochemical parameters of blood and rumen contents—1488
environmental, lead levels in wool as indicators of exposure to automotive emissions—3194
environmental poisons, occurrence and importance in domestic and wild animals in Norway—1339
environmental, transplacental movement of organochlorine pesticide residues in desert big-horn sheep—3046a
- POLYARTERITIS NODOSA**, associated with sarcocystosis in lamb—1679
- POLYCARBACIN (FUNGICIDE)**, effect on sheep meat—2613
- POLYCHLORINATED BIPHENYL**, deposition, effect in sheep fed cabbage grown on municipal sewage sludge—1260
selective accumulation and depletion—1247
- POLYMORPHISM**, biochemical, analysis of production characteristics in early stages of breed formation—1093
biochemical, erythrocyte and hemoglobin types, a review—3011
biochemical, phenotypic and genetic associations—175
blood potassium, and hemoglobin, Nilagiri sheep—1498
chromosomes, Nali sheep—3143
genetic, hemoglobin and transferrin in F₁ cross of Corriedale × Criollo—2007
hemoglobin type and reproductive performance of sheep grazing estrogenic pasture—3180
- POLYOLEFIN FABRICS**, rugging, benefits and economics—2
- POLYPEPTIDASE**, activity, effect of dietary structure—2737
- POLYSACCHARIDE**, content of rumen ciliates—3173
- POLWARTH**, comparison of Dorset, Border Leicester, Merino and Corriedale for staple strength and depilation force after cyclophosphamide treatment—1211
- POLYPLASTRON**, rumen, effect of increased urea in diet—2177
- POLYPYPS**, intestinal, associated with coccidiosis—2562
- POLYRIBOSOMES**, translational activity of ribonucleic acid from ruminant abomasum—1472
- POLYVINYLPIRROLIDONE**, as protective agents of cryopreserved erythrocytes—2096
- POPULATION**, research, in Snowdonian environment—684
sheep, United Kingdom—3063
sheep, United Kingdom—3070
- PORCUPINE GRASS (STIPA SPARTEA)**, lamb trauma caused by—1570
- PORPHYRIA**, pink bones in carcass—2571
- PORTLAND BREED**, at National Agricultural Centre, Stoneleigh, United Kingdom—840
- POST MORTEM**, electrical stimulation of muscle, effect on sarcoplasmic reticulum—3044
- POST-PARTURIENT FEVER**, induction of parturition with corticosteroids—2174
- POTASSIUM**, aldosterone relationships in pregnant ewes and chronically cannulated fetuses—3275
biochemical characters, effect on production traits—2752
blood electrolytes and hemoglobin variants in Karakuls—2751
blood, polymorphism in Nilagiri sheep—1498
changes in blood, trichostrongylid infections—2259
chloride, effect of administration on magnesium and potassium metabolism—3305
chloride, renal clearance of magnesium in sheep receiving oral—727
chloride, stimulation of aldosterone in newborn—2728
effect of dietary level on mineral metabolism—2165
effect of fertilization on chemical content of sheep diets—808
effect of imbalance on insulin plasma levels—2457
effect of increasing intake on absorption of magnesium—1813
equilibrium potentials, and resting membrane potentials in purkinje fibers—2710
excretion, renal components of feed dependent—1141
excretion, role of aldosterone during fetal and newborn period—2536
levels in bone, muscle, cerebrospinal fluid and plasma affected by magnesium depletion and repletion—278
membrane permeability during low potassium depolarization in cardiac purkinje fibers—1714
metabolism, effect of administration of potassium chloride, glucose and epinephrine—3305
plasma insulin levels during infusion of in conscious splenectomized sheep—273

- response of aldosterone affected by ACTH—1801
- transport, temperature dependence, erythrocytes—1465
- types, phenotypic and genetic associations—175
- types, phylogenetic relationships among sheep breeds—2748
- POTATOES, with grain sorghum, in production of prime lamb—134
- POTENTIALS, electric, visceral pleura—644
- resting membrane and potassium equilibrium in purkinje fibers—2710
- POULTRY, dung, increase in protein of sheep rations—1632
- excreta, in feeds, growth response and feed intake—2628
- feeding of droppings—3139
- POVERTY, Asia, food supply—928
- POX, sheep, in Sudan—2092
- sheep, new freeze-dried living virus vaccine—2399
- sheep, vaccine, immunity, use of freeze-dried—900
- POXVIRUS, ovine, pathology—1202
- sheep, cross neutralization tests with goat poxvirus and contagious pustular dermatitis virus—2877
- PRAZIQUANTEL, efficiency against lancet fluke—3281
- PREDATION, Komondor guard dogs reduce sheep losses to coyotes—1765
- sheep, southwestern Utah (USA), economics—2933
- PREDATOR, cause of low lamb marking percentages in New South Wales—2362
- losses, constraints of production—3286
- PREGNANCY, accuracy of diagnosis on basis of plasma progesterone levels—2430
- alkali treated straw and urea for pregnant ewes—1990
- amino acid concentrations in maternal and fetal plasma, ewes, last 5 weeks of pregnancy—2778
- antiluteolytic activity of prostaglandin-containing fractions from uteri—2397
- apple pomace in diet—2582
- biochemical and histochemical changes in placental attachments during stages of gestation—704
- biphasic prolactin release by haloperidol and perphenazine—2689
- blood metabolites of gestating ewes as indicators of nutritional status—1807
- Churra sheep, protein requirements—1106
- complicated, reduction in fetal urine and amount of amniotic fluid—3165
- concentrations of estrone, estradiol and estriol in blood and amniotic fluid from 50th to 90th day of—1221
- congenital abnormalities in newborn lambs following Akabane virus infection—1261
- detection, bighorn sheep, by progesterin determination—2456
- detection by rosette inhibition test—2053
- detection of induced death of embryos by rosette inhibition test—2104
- diagnosis—401, 3081
- diagnosis by ultrasonic devices—2854
- diagnosis, damage following by rectal-abdominal palpation—3051
- diagnosis evaluation based on pituitary responsiveness to LHRH—1003
- diagnosis, need for—1958
- diagnosis, ultrasonics—2175
- diagnosis, use of scanopreg—3293
- digestion during—3225
- duration in Karakul sheep of broadtail type—871
- duration, in relation to size of lamb at birth in indigenous and crossbreds—2280
- early diagnosis using milk progesterone levels—2704
- early, Galway and Fingalway, pre-puberal plasma LH and progesterone—2429
- early, LH receptors during estrous cycle and—2167
- effect of alpha and beta sympathetic antagonists on decreased uterine blood flow, during heat stress—440
- effect of energy supply—2995
- effect of ethanol on circulation and acid base balance—191
- effect on fetal oxygenation of sodium salicylate, effect on fetal oxygenation in pregnant ewe—3099
- effect of iodine supplementation of pregnant ewe on growth and maturation of their offspring—2220
- effect of litter size on intake and performance of ewes offered concentrates and grass silage late—2223
- effect of long-term infusion of bromocriptine on plasma prolactin and ovine chronic somatomammotropic—1795
- effect of long-term intermittent watering on blood and urine, semi-arid conditions—2039
- effect of low dietary zinc levels—132
- effect of maternal malnutrition on single or twin pregnancy—2671
- effect of prostaglandin on ovine maternal and fetal adrenal blood flows—2345
- effect of prostaglandins on placental vasculature—2460
- effect of radiant heat during early—2643
- effect of undernutrition on gluconeogenesis and ketogenesis—2490
- endogenous antipyretic of late—1512
- endogenous pyrogen release by fetal sheep and pregnant sheep blood leukocytes—1511
- estrone sulfate metabolism—3032
- fate of labeled choline given intraruminally to pregnant ewes fed manganese-deficient or supplemented rations—1312

- feed intake on native pasture and lucerne hay—892
 feeding levels and perinatal lamb mortality—1551
 fetal and maternal hormonal response to starvation in the ewe—2670
 fetal breathing during moderate asphyxia related to outcome—2938
 fetal growth, mathematical description and effect of maternal nutrition—2542
 histophysiological characteristics of pineal gland during—2129
 hypernatraemia—833
 intravenous injection of bupivacaine in ewe—641
 iodine supplementation, effect on growth and maturation of offspring—1598
 late, ewe feeding, and perinatal mortality—337
 late pregnancy ewe feeding and lamb performance, factors associated with perinatal lamb mortality—1552
 local steroid concentrating mechanism in reproductive vasculature of ewe—3186
 maintenance of corpus luteum, luteotropic properties of embryonic homogenates—879
 maternal recognition in ewe and rabbit—878
 measurement of transplacental magnesium fluxes—513
 metabolites in blood during—2856
 microfluorometric study of glycolytic enzymes in histologically defined areas of uterus and placentomes during—3331
 mineral levels in blood in relation to infertility—887
 model for calculation of energy requirements—1049
 model for effects of energy nutrition—50
 nature and role of pregnancy associated antigens and endocrinology of early pregnancy in ewe—958
 near term, metabolism of progesterone, identification of 3 beta hydroxy 5-alpha pregnan-2-one 3 sulfate as major metabolite—3031
 new freeze-dried living virus vaccine against sheep pox—2399
 nitroglycerin and uterine vasculature—3233
 nitroglycerin effect in hypertensive ewe—640
 nitroglycerin plasma levels and effect in ewes—754
 normal fluctuations in concentration of corticosteroid and adrenocorticotrophin in plasma of fetal and pregnant sheep—1466
 nutrition of ewe—2587
 nutrition, West African Dwarf sheep—34
 occurrence of estrus in Barki and Merino ewes—3319
 oxygen delivery to uterus and relation to consumption—536
 oxytocinase activity—2118
 patterns of sulfo transferase and sulfatase activities in endometrium—839
 performance of lambs from ewes given protected lipids during late pregnancy and early lactation—2851
 physiology, review—1954
 placenta and perinate kidneys in renal insufficient sheep and goats—3164
 phosphatidate, phosphohydrolase and phospholipids in tracheal and amniotic fluid during—2561
 plasma insulin levels, late pregnancy, effect of nutritional state—1159
 potassium-aldosterone relationships—3275
 propranolol disposition and biliary excretion in pregnant sheep and fetus—1871
 regulation of respiration—2059
 relationship between voluntary food intake during pregnancy and forage intake during lactation and after weaning—989
 relief of stress with meperidine—2044
 reproductive performance during mating and early pregnancy in young female sheep—1233
 ritodrine hydrochloride, cardiac and uterine hemodynamic responses—2734
 silage intakes in relation to energy requirements in late—2700
 synchronized breeding of cycling ewes to produce fetuses of known gestational age—2827
 test for early—2052
 therapeutic measures in pregnancy toxemia—1800
 toxicity of zinc—501
 trophoblastin, an antiluteolytic protein present in early pregnancy—1865
 use of milk progesterone measurements for determination—189
 vasodilation, effect of conceptus on in vitro responses of uterine arteries to prostaglandin E-2 and norepinephrine—2378
 West African Dwarf ewes, pathogenicity of *Fasciola gigantica*—2197
 zinc and alkaline phosphatase levels as indicators of zinc status—131
- PREGNANCY TOXEMIA**, biochemical and pathobiochemical aspects of origin and prevention—1607
- PREHISTORY**, sheep in settlements around Verona, Italy—2519
- PRENATAL SURVIVAL**, a review—3345
- PRESERVABILITY**, lamb meat and nutritive values—537
- PRESSURE**, blood, effect of tolazoline on blood flow and pressures in hypoxic lambs—1147
 blood, response to, carotid arteries—3016
 intracranial, cardiovascular response in fetus to elevation—3346
 plasma oncotic, effect on pulmonary microcirculation after hemorrhagic shock—744
- PREVALENCE**, natural infections of progressive pneumonia—1759
 sarcocystis in sheep in Hissar area, India—1200
- PREVENTION**, disease, applications to flock health—2046
 efficacy of anti-epizootic measures against clostridial infections—2930
 foot rot—1515
 hypomagnesaemia—118

- ketosis—1607
 listeriosis, USSR—1206
 problems with *Escherichia coli*—1860
- PREVENTIVE MEDICINE**, in sheep and goat medicine—203
- PRIME LAMB**, production, potatoes with grain sorghum—134
- PRODUCTION**, analysis of characters, and possibilities of using biochemical blood markers—2835
- animal, cytogenetics—1250
 animal, feed additives—1602
 commercial, effect of artificial lighting on feeder lamb performance—1216
 constraints, predator losses—3286
 financial analysis, New Zealand—2139
 goat and sheep, in ASEAN region—758
 in crofting counties of Scotland, and marketing with reference to problems of part and spare time holdings—1373
 intensive mid-season lamb—973
 lamb, extra-seasonal—1396
 lamb, model from autumn catch crop—1051
 lambs for slaughter on alpine pasture—779
 livestock, future in Great Britain—915
 loss, helminth infections—617
 mature Corriedale ewes first mated at 7 to 11 or 18 months of age—2373
 New Zealand—2137
 nutrition in sheep, a review—1846
 performance, role of science in estimation—2912
 phenotypic and genetic association with traits of, and blood biochemical polymorphic characters—175
 purpose, a review—794
 relationship to hemoglobin type in crossbred ewes—685
 sheep, China—556
 sheep, highlands of north Thailand—932
 sheep, Kenya—954
 sheep, United States—1976
 sheep, USSR—1653
 technical development from hill land in Great Britain—659
 traits, and hemoglobin types, Finnish crosses in Israel—1120
- PRODUCTIVITY**, breed substitution and crossbreeding as means to increase—3245
 compensatory, highland Corriedale sheep—3340
 effect of live weight and body condition in Icelandic ewes—16
 effect of methionine and sulphur-containing amino acids on productivity and wool quality—836
 Gallego sheep—3094
 grazing intensity in grassland ecosystem—416
 lambs reared on milk substitutes with protein and vitamin concentrates—464
 transferrin polymorphism in various breeds—2475
- PROGENY**, test evaluation of meat yielding qualities of rams employed in flock of Wheat and Sunflower Institute near General Tosh-evo, Bulgaria in 1976—3007
- PROGENY TESTING**, comparative evaluation of inheritance in 9 month old and adult rams—562
 performance of first generation of progeny sired by Romney Marsh rams during formation of an improved type of mountain sheep—677
 performance tested Welsh mountain rams—1568
 sire evaluations—1430
- PROGESTAGEN**, effect of timing of ram introduction on fertility of progestagen-PMSG-treated ewes—370
 effect of treatment of anestrus ewes on ram mating system—372
 effect on lambing—375
 effect on ovulation and fertilization—373
 impregnated sponges, in control of reproduction—2426
 in Galway ewe lambs also treated with PMSG—2423
 pretreatment, dosage and time of prostaglandin administration—1151
 synchronized ewes, flock-mating, influence of flock size on mating behaviour and lambing performance—453
- PROGESTATIONAL HORMONES**, changes in estrogen concentration in sheep given medroxyprogesterone and PMS—1220
- PROGESTERONE**, a review—1266, 1278
 as antiestrogen, uterine endometrium and isthmus oviduct—2868
 assay and characterization of uterine receptor—699
 concentration: in early embryo death—2104
 concentrations in ewes after ICI 80996, an analogue of PGF-2 alpha, at two different stages of breeding season—12
 early onset of breeding season—3214
 effect of cycloheximide on corpus luteum—1053
 effect of exogenous, on estradiol receptors in uterus—849
 effect of single dose on plasma levels in ewes—1587
 effect on estrogen-stimulated uterus—1987
 effect on ovarian activity and estrus behaviour—2758
 effect on response of uterine arterial smooth muscle to norepinephrine—2377
 effect on secretion of down regulation of receptors for LH—2890
 effect on steroid-induced male and female sexual behaviour in adult ovariectomized ewes—917
 estrus, pre-puberal plasma concentrations—2429
 estrus synchronization and economic efficiency—1100
 failure of prolactin to initiate lactogenesis—1346
 in milk reflecting reproductive changes, a review—991

- inhibition of prostaglandin F release following administration, around luteolysis—925
- induction of estrus and fertility in anestrus ewe with hormones and controlled lighting—1943
- induction of maternal behaviour in non-pregnant ewe—1738
- levels, influence of hemoglobin type and selenium status in ewes grazing estrogenic pastures—3178
- LH levels in ewes after ICI 80996, an analogue of PGF-2 alpha at 2 different stages of breeding season—13
- local steroid concentrating mechanism in reproductive vasculature of ewe—3186
- luteotropic properties of embryonic homogenates—879
- maternal recognition of pregnancy in ewe and rabbit—878
- metabolism, by early conceptus in vitro—1855
- metabolism, pregnant sheep near term, identification of 3 beta hydroxy 5-alpha pregnan-20-one 3 sulfate as a major metabolite—3031
- milk levels as test of pregnancy—2704
- milk, measurement for determining pregnancy and ovarian activity—189
- plasma concentrations during breeding season in ewes immunized against androstenedione or testosterone—1867
- plasma, effect of high temperatures—2645
- plasma levels as basis for diagnosis of pregnancy—2430
- production by chorionic cells of early sheep conceptus in vitro—1854
- receptor control of prostaglandin F-2 alpha secretion of uterus—1914
- receptors, mammary gland, effect of 17-beta estradiol—1527
- relation with estradiol and LH in control of preovulatory endocrine events—1508
- release in vitro by ovine luteal tissue during induced luteolysis—2497
- practical significance of estimation in sheep reproduction—328
- relation of plasma levels in Romney ewes to incidence of dystocia—1596
- source in prepuberal ewe—296
- ultrastructural autoradiographic analysis of secretion in corpus luteum—1911
- uterine receptors, a review—2870
- PROGESTIN**, detection of pregnancy in bighorn sheep—2456
- PROGESTOGENS**, effect of time of year—3083
- effectiveness of stimulation of estrus, effect of nutrition—1652
- increased lamb production with rams exposed to short day lengths during nonbreeding season—2655
- lambling in Galway ewes—2795
- metabolites in fetal plasma, effect of nephrectomy—793
- PROGRESSIVE OVINE MUSCULAR DYSTROPHY**, congenital, in western Australia—752
- PROGRESSIVE PNEUMONIA**, elevated concentrations in serum immunoglobulins due to infection—2021
- evaluation of agar-gel immunodiffusion test for detection of precipitating antibodies against progressive pneumonia virus—2023
- incidence in North Dakota State University flocks, determined by agar-gel immunodiffusion—2022
- incidence of natural infection and establishment of clean flocks—1759
- microimmunodiffusion test for diagnosis—3276
- ovine, interstitial pneumonitis and encephalitis—669
- PROGRESSIVE PNEUMONIA VIRUS**, evaluation of agar-gel immunodiffusion for diagnosis—2023
- PROLACTIN**, artificial induction of lactation—955
- basal levels and plasma profiles, Romney rams—3271
- biphasic release by haloperidol and perphenazine in lactating and pregnant ewes and cows—2689
- calcium homeostasis in fetus—514
- comparison of LH levels in cycling and anestrus ewes—1425
- development of response to thyrotropin releasing factor in fetus and neonate—2975
- dopaminergic regulation of secretion—1098
- effect of daylength on lamb growth, blood levels of GH, prolactin, insulin and thyroxine and effect of feeding—992
- effect of heat stress on plasma concentrations—1347
- effect of infusion of prostaglandin E-2 on fetal plasma levels—2466
- estimate of repeatability in temporal patterns of secretion—713
- failure to initiate lactogenesis—1346
- hormone ontogeny, mid and late gestation and in newborn—2072-A
- identification and characterization of a biosynthetic precursor (preprolactin) of ovine pituitary—178
- immunocytochemical localization in perinatal sheep pituitary—2290
- in milk reflecting reproductive changes, a review—991
- in plasma of castrated growing lambs—930
- intact or hypophysectomized pregnant ewes with hypophysectomized fetus—387
- levels during first 2 months of life—2642
- light-induced rhythms, ram, effect of cranial sympathectomy—1761
- light regulation of spermatogenesis—2656
- luteotropic properties—879
- morphine and naloxone has no effect—1936
- neural mechanism for control—818
- pituitary and testicular function in rams following inhibition of, during non-breeding season—2625
- plasma, effect of suppression on ovulation, gonadotrophins and corpus luteum function in LH-RH-treated anestrus ewes—1938

- plasma levels, effect of long-term bromocriptine infusion, in pregnant ewe and fetus—1795
- ontogeny of serotonergic regulation in fetus and neonate—1876
- receptor binding conformational properties after chemical modification of tryptophan residues—1603
- receptor control of prostaglandin F-2 alpha secretion by uterus—1914
- seasonality of production in rams with modified olfactory and pineal gland function—252
- secretion in ovariectomized ewes under hormonally induced estrous cycles—2954
- selective reduction of disulfide bonds—798
- serum levels in castrated rams at various times and during treatment with androgens or estrogen—2289
- some molecular parameters—3115
- suppression, effect of time of year—3083
- PROLAPSE**, rectal, method for nonsurgical correction, lambs—2286
- vagina—2157
- vaginal, modified form of Dalton's curette in treatment—2298
- PRONGHORN**, comparison of fecal, rumen and utilization methods for determining diet—2786
- PROPACHLOR** (2-chloro-N-isopropylacetanilide) in milk—213
- PROPHYLAXIS**, anthelmintic, natural pasture whether irrigated—909
- chemical, diamfenetic, against experimental infections of *Fasciola hepatica*—895
- cobalt deficiency—3239
- fascioliasis and paramphistomiasis in USSR—1964
- helminthiasis in young animals—1296
- specific, enzootic chlamydial ovine abortion—2821
- values of hyperimmune serum in *Fusobacterium necrophorum* infections—1514
- PROPIONIC ACID**, feeding responses to intraportal, following denervation of liver—103
- protective effect on urea poisoning—2895
- PROPIONYLPROMAZINE**, use in surgery in field—1403
- PROPRANOLOL**, disposition and biliary excretion in pregnant sheep and fetus—1871
- PROPRIONATE**, liver metabolism—2515
- PRORENIN**, effect of angiotensin II and saralasin on, in fetus—2733
- PROSTACYCLIN**, pulmonary vascular response in fetus—1144
- PROSTAGLANDIN**, A₁, E₁ and F₂ alpha, modification by, of epinephrine induced fetal mesenteric artery constriction—3296
- a review—545
- antiluteolytic activity of fractions from ovine uteri—2397
- cervical ripening during parturition—882
- control of renal circulation in response to hypoxemia in fetus in utero—1986
- cyclooxygenase of ovine uterus, relationship to luteal function—1379
- delayed luteal regression in ewes immunized against oxytocin—980
- developmental response of ductus arteriosus—596
- dosage and time of administration following progestagen pretreatment—1151
- 6-keto PROSTAGLANDIN E₁**, pulmonary and systemic vascular responses in conscious lamb—1781
- PROSTAGLANDIN, E-2**, effect of continuous intrauterine administration, on life span of corpora lutea of non-pregnant ewes—2396
- effect of infusion in fetus on plasma ACTH, prolactin and cortisol—2466
- effect on uterine arteries—2378
- implication in patency of fetal ductus arteriosus rather than prostacyclin—598
- in follicles before and during estrus—2086
- effect of additives in diluted ram semen on fertilization and lambing outcome in AI sheep—377
- effect of inhibitor of synthesis, on uterine motility of castrated ewe treated with estrogens—2414
- effect of time of year—3083
- effect on lambing in cyclic ewes bred by natural service after synchronization—375
- effect on ovarian activity and estrus behaviour—2758
- effect on ovine maternal and fetal adrenal blood flows—2345
- effect on ovulation and fertilization—373
- estrus synchronization—1590
- F**, localization in ovine uterus during early pregnancy—540
- F-2**, and progesterone release in vitro by ovine luteal tissue during induced luteolysis—2497
- F-2-alpha**, effect on volume, acidity and proteolytic activity of abomasal juice—728
- F-2 alpha**, follicular fluid effect on ovaries—1993
- F-2 alpha**, hormone receptor control of secretion by ovine uterus—1914
- F-2 alpha**, ICI 80996, an analogue, use in two different stages of breeding season, progesterone and LH levels in ewes—13
- F-2 alpha**, importance of prolactin and growth hormone for initiation of lactation—955
- F-2 alpha**, in follicles before and during estrus—2086
- F-2 alpha**, effect on blood and certain hormones—4
- F-2 alpha**, reduction by human chorionic gonadotropin of luteolytic effects in ewes—380
- F-2 alpha**, urinary and milk excretion of labeled metabolites—775
- fertilization capacity of frozen ram semen treated with—776
- fertilizing ability of ram semen, correlation between 9 keto prostaglandins concentration and conception rate—1060
- fetal maturation related to parturition—1758

- for estrus synchronization—1802
- G-2 and H-2, covalent binding to components of ram seminal vesicle microsomal fraction—653
- I-2, effect on ovine placental vasculature—2460
- ibuprofen as blocker—600
- inhibition of release following administration of progesterone around luteolysis—925
- maternal recognition of pregnancy in ewe and rabbit—878
- need for and possible methods of application of hormone assay technics for improving reproductive efficiency—1958
- 6-oxo-, F-1 alpha, levels in maternal and fetal plasma during spontaneous and induced parturition—2013
- production by uterus during second half of estrous cycle—83A
- pulmonary vascular responses in conscious newborn—1779
- review of control of estrus—2956
- review of role in ductus arteriosus—599
- secretion by endometrium in vitro and in vivo—880
- steroid secretion by ovarian transplant and gonadotrophins—1353
- synchronization of estrus—3150
- synchronisation of estrus, dose effect in double injection regime—1150
- synthesis, stimulation of fetal breathing movements in lambs by inhibitors of—1580
- synthetic, application to small ruminants—391
- synthetic, progesterone and LH concentration in ewes after ICI 80996, an analogue of PGF-2 alpha, at 2 different stages of breeding season—12
- synthetic, synchronization of estrus by cloprostenol—1650
- use of F-2 alpha analogue cloprostenol—328
- use to control and synchronize estrus—2558
- uterine, forming cyclo oxygenase relationship to luteolysis and subcellular localization—2802
- PROTEASE**, protein fractionation, nucleic acids and enzymatic activity of cytoplasmic extracts from intestinal mucosa—1558
- PROTEIN BINDING**, trimethoprim, influence on mammary and renal excretion—169
- PROTEINASE**, inhibitor in lamb meconium and feces—1506
- PROTEINASE TEST**, degrading, to distinguish benign and virulent ovine isolates of *Bacterioides rodosus*—753
- PROTEINS**, acceptor for lung microsomes—1746
- concentrate in fattening of lambs—1140
- concentrate, rearing of lambs on milk substitutes, productivity—464
- contribution of protozoa to protein entering duodenum of sheep—1254
- cytoplasmic, fractionation of nucleic acids and enzymatic activity of cytoplasmic extracts from intestinal mucosa—1558
- degradability in rumen from incubation measurements weighted according to rate of passage—2232
- dietary, effect on blood free amino-acidemia in lambs—550
- dietary, further studies on response of lactating ewes—2543
- dietary, incorporation of ¹⁴C-valine into plasma proteins of young and old ewes fed two levels—911
- different sources in rations of lambs weaned early—1643
- digestion, ensiled brewers grains—538
- duodenal nitrogen flow in response to increasing dietary crude protein—1699
- dynamics in unanesthetized sheep, effect of untreated hemorrhagic shock—742
- effect of content in diet on feed intake and milk yield of ewes in early lactation—637
- effect of feeding frequency on diurnal changes in microbial, in rumen—1978
- effect of level on nutrient digestibility and wool production—2757
- effect of source and level, milk production effect on activity of digestive enzymes—1203
- effect on nitrogen digestion of supplementing low protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1540
- estimation of microbial, in duodenal digesta—2726
- exchange, effects of sympathetic nerve stimulation—1219
- fattening lambs, growth of store lambs on cereal-based diets with protein or urea—2189
- groundnut, sequence of limiting amino acids, preruminant lamb—2349
- growth and rumen function, supplementation of low-protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1539
- growth of store lambs on cereal-based diets with protein or urea—2227
- histamine induced shifts in circulatory and tissue homeostasis of proteins and their causes—43
- hydrolysates, fish, as substitute for milk in feeding lambs—2814
- immune, B-1, in cattle and sheep—722
- in chronic infection with *Trichostrongylus vitrinus*—2914
- in diet, effect of, on milk production in Churra sheep—2037
- in fetus—3041
- in vitro rate of synthesis, influence of additional pre-incubation with rumen fluid of animals deprived of food, value of straw—1262
- influence of intake on albumin metabolism of *Fasciola*-infected and pair-fed control sheep—696
- insolubility, feeds—3174
- lipoproteins of blood serum—2302a
- lymph-to-plasma concentration ratios, effect of histamine—2102
- metabolism, body composition, weaned lambs

- before, during and after period of weight loss—2678
- metabolism, forestomach—2925
- metabolism, review—1819
- metabolism, rumen, industrial mixture B—1645
- microbial, synthesis, effect of monensin—2374
- milk, polymorphism, Comiso ewes—2589
- new system for feeding of ruminants—3133
- ovine blastocyst origin—1749
- plasma, seasonal variation and urea nitrogen concentrations in nill sheep—2915
- polymorphism—765
- prediction of requirements and implications for diet formulation—1989
- pulmonary microvascular permeability in unanesthetized fetal and newborns—346
- ratio with digestible energy, for finishing lambs—1095
- relative value of single-cell proteins and groundnut-cake as protein supplement in ration of lambs—2115
- requirements for maintenance, Churra breed—1105
- requirements, hand feeding and rearing—1364
- serum, changes in lambs with *Dictyocaulus filaria* vaccine—32
- serum, comparative studies on determination in domestic animals—1972
- serum, increased lung lymph transport without heart failure after coronary ligation—611
- serum, phenotypic and genetic associations—175
- serum, response to trichostrongylid infection—746
- serum, total, in experimental *Bunostomum trigonocephalum* infections—1497
- skin surface, antigenic composition and source of soluble proteins on skin surface—1449
- surface, maturation changes, sperm—3155
- sustenance of growing and fattening sheep by intragastric infusion of—2192
- synthesis, effect of monensin—2374
- synthesis, microbial, amino acid requirements—1726
- synthesis, rumen microbial, method for determining and factors affecting—2857
- tissue cytosolic, accumulation of zinc—3232
- total, serum, changes in blood serum during development—2943
- transmission in intestine of newborn, involvement of acid and alkaline phosphatase—1276
- transport, increased microvascular permeability, pulmonary oxygen toxicity—421
- turnover in digestive tissues of lamb throughout development—614
- urea as partial substitute—2750
- use of single cell proteins (*Candida lipolytica*) in lamb feeding—927
- use of lactating ewes in evaluating protein sources for ruminants—1109
- varying levels in feed, effect on fattening of lambs—2164
- whey, genetic aspects concerning composition and their biological value—1681
- whey-grown yeast as source for lambs—47
- wool, skin, keratin, use of biuret reaction, quantitative determination of insoluble proteins—1125
- PROTEOGLYCANS, isolation and partial purification from lung parenchyma—2619
- PROTOSTRONGYLES, natural infections, efficacy of febantel—1207
- ovine, experimental infection of various Helicidae snails—2048
- rhythms of elimination under natural conditions—2480
- PROTOSTRONGYLOSIS, pathogenesis of mulmonary, bighorn lambs—2829
- PROTOSTRONGYLUS, comparative efficacy of fendendazole and tetramisole in Moroccan sheep—683
- evaluation of fenbendazole and cambendazole as anthelmintics—2663
- transplacental transmission in California big-horns—1577
- PROTOZOA, ciliate, decomposition of rumen bacteria—2719
- ciliate, effect of zinc on populations in rumen—381
- ciliate, electron microscopic study of cellulose degradation—735
- ciliate, hydrolytic activities in rumen—733
- ciliate, implantation into rumen—1133
- ciliate, rumen, effect of absence on rumen fluid volume—2221
- contribution, to protein entering the duodenum of sheep—1254
- contribution to rumen cellulolytic activity—736
- pattern of rumen ciliate populations and interactions—1390
- role of rumen forms in digestion of food cellulosic materials—1476
- rumen, effect of defaunation—335
- rumen, effect of increased levels of urea in diet—2177
- rumen, engulflment and digestion of bacteria—607
- rumen, metabolism of 2,6-diaminopimelic acid—1680
- rumen, phosphatidyl choline as marker of duodenal flow of—1456
- PROTOZOAL INFECTIONS, sheep, textbook—282
- PROVENTRICULUS, effect of pelletized feeds on morphological changes in epithelium, in rams—2777
- mucous membrane, ultrastructure—3229
- PSEUDOMONAS AERUGINOSA, sepsis in thermally injured sheep—15
- PSEUDORUMINATION, behaviour, radiography of food intake—756
- PSOROPTES, alopecia in sheep—2063
- dipping and spraying—38

- dipping for control—1571
 mange, epidemiology—3343
PSOROPTES COMMUNIS OVIS, combination of chlordimeform with an acaricide to control in single dip—195
PSOROPTES OVIS, sheep scab in Denmark—1295
PSOROPTIC MANGE, treatment in cattle and sheep with phosphoric acid ester phoxim—1753
 treatment with mineral oil emulsion of lindane—3154
PSYCHOMETRY, chambers, telemetry for interactive maintenance of hyperthermia, ewes—1591
PUBERTY, factors affecting—1718
 influence on performance—3131
 natural factors affecting ewes—841
 occurrence, and sexual maturity in native and crossbred sheep reared in confinement—2766
 regulation in female lambs—2428
PULMONARY ADENOMATOSIS, etiology in sheep, herpesviruses—3135
 histopathology—84
 non-parasitic respiratory diseases in Britain—1877
PULMONARY ARTERIAL PRESSURE, increased lung lymph transport without heart failure after coronary ligation—611
PULMONARY DISEASES, caused by grain fumigant dibromoethane—197
PULMONARY EDEMA, increased lung lymph transport without heart failure after ligation—611
 regional extravascular lung water—977
PULMONARY FUNCTION, effect of sodium nitrate aerosols—2599
 in thermally injured sheep—3018
PULMONARY HEMODYNAMICS, effect of histamine—2102
PULMONARY MYXOMA, in sheep—2267
PULMONARY VASCULAR RESPONSE, endotoxin in normal and lymphocyte depleted sheep—366
PULSE RATE, of Corriedale, Marwari and Magra sheep in Rajasthan desert, India—2019
PURKINJE FIBERS, cardiac, caffeine and tetracaine abolish slow inward calcium current—868
 cardiac, effects of lysophosphatidyl choline on excitability—147
 cardiac, induction of inward going rectification—518
 cardiac, membrane permeability during low potassium depolarization—1714
 cardiac, relation between intracellular sodium ion activity and positive inotropic action—1715
 cardiac, voltage dependent block of inward going rectification—517
 epinephrine and the pace-making mechanism at plateau potentials—2281
 resting membrane and potassium equilibrium potentials—2710
 skeleton immuno reactivity—901
 Sodium ion activity—1713
PVOME-CAPRINE SEROGROUP-8, *Mycoplasma mycoides mycoides*, outbreak of contagious caprine pleuropneumonia—244
PYELONEPHRITIS, unilateral, with abscess in brain of ram—2831
PYRETHRUM, tick resistance in Africa—209
PYRETIC, anti, endogenous, produced in late pregnancy—1512
PYRIMIDINES, in milk and commercial dairy products—1695
PYROGEN, development of fever in newborn—1510
 endogenous, release by fetus and pregnant sheep blood leukocytes—1511
PYRROLIZIDINE, liver damage, bromosulphophthalein clearance rates—1687
PYRUVATE, metabolism, skin—1181
- ## Q
- Q FEVER**, ecology and distribution of rickettsiae in Europe with special reference to Germany—1752
 incidence in sheep and goats around Jaipur (Rajasthan), India—1894
QUEENSLAND, Australia, problems of sheep industry—1995
QUIXALIN, clinical trials in treatment of non-specific diarrhea—3140
- ## R
- RABBITS**, inhibition of erythropoiesis by plasma components from sheep, goats and rabbits—2122
RABIES, historical review in Nigeria—3060
 sheep in German Democratic Republic—3054
 symptoms, South Africa—245
RADIATION, comparison of irradiated larvae of *Haemonchus contortus* and transfer factor treatment—2563
RADIOACTIVITY, local, effect on tracheal mucus velocity—42
RADIOGRAPHY, lacrimal drainage system—1076
RADIOIMMUNOASSAY, cortisol, fetus—1828
 cortisol, validation of specific—1827
 double antibody, use in estimation on half-life and metabolic clearance rate of thyrotropin-releasing hormone—1588
 GH, described and validated—818
 new, homologous, for FSH—344
RADIOLOGY, dental abnormalities—2222
RADIOTELEMETRIC RECORDINGS, control of respiration and behaviour during development in ewe reared lambs—1931
RAFOXANIDE, efficacy against inhibited larvae of *Haemonchus contortus*—1731
 in control of nematodes, effect on production

- of Merino wether weaners in two environments—1463
- RAILLIETIA AURIS*, occurrence in Brazil—2210
- RAJASTHAN DESERT (INDIA), body temperature, respiration and pulse rate in Corriedale, Marwari and Magra sheep—2019
- performance of sheep flock under arid conditions—2754
- RALGRO, effect of implants on growth of lambs—1473
- RAM, abnormalities, a review—3107
- ancient petrified tracks in ancient desert in USSR—85
- androgen binding protein in reproductive tract—1446
- androgen binding protein in reproductive tract—1447
- appearance of new electrical properties in plasma membrane of spermatids—634
- behaviour and endocrine function—1389
- bilateral cryptorchid, histological testicular parameters—1324
- blockade of episodic secretion of LH by antibodies to LHRH—1763
- buyers value measurement information—2530
- castrated, serum prolactin levels at various times of year and during treatment with androgens or estrogen—2289
- changes in physical condition and ejaculate in paddock-mated—2744
- changes in sperm membranes during epididymal transit—1231
- characteristics of semen from crossbreeds—730
- characterization of a cytoplasmic androgen receptor in testis—2025
- cholecysto-duodenostomie with obstruction of the ductus choledochus communis—1331
- circles, modern developments and selection schemes—863
- comparative semen characteristics of Corriedale, Marwari and Jaisalmeri rams maintained under hot arid conditions—2017
- Corriedale, effect of shearing on certain physiological responses, under arid conditions during summer—2016
- Corriedale, physico-chemical studies on semen and interrelationship during different seasons—543
- crossbreeds, fattening performance—1620
- distribution, uptake and effect on testosterone of zinc and manganese—1309
- effect of modifying olfactory and pineal gland function on seasonality of semen, plasma LH, testosterone and prolactin—252
- effect of photoperiod on food intake, sexual condition and hormone levels—442
- effect of quality on fecundity of ewes—2685
- effect of season, Slovak-Merino breed—1025
- effect of sexual preparation procedures on semen characteristics—1922
- effect of timing introduction on fertility in progestagen-PMSG treated anoestrous ewes—370
- enzymes in semen—1032
- epididymal sperm, motility, fertilizing ability and embryonic survival after uterine AI—1005
- epididymis—283
- ewe ratios, effects of, on lambing performance—1594
- examination for fertility—447
- factors affecting libido and fertility—764
- feed intake and carcass composition of lambs sired by Texel, Suffolk, Lleyen and Galway—1239
- fertility in progestagen-PMSG treated anoestrous ewes—372
- fighting in Tunisia—327
- fine structure of principal cells in initial segment of epididymal duct—2147
- factors influencing vitality of ram semen during its freezing and thawing—1342
- fertility, frozen semen—1341
- genetic selection, maternal effects—2169
- genital lesions in experimental chronic *Trypanosoma brucei* infection—1383
- importance on flock fertility—1560
- increased lamb production with rams exposed to short day lengths during the nonbreeding season—2655
- induced ovulation in seasonally anovular Merino ewes, effect of estradiol on frequency of ovulation, estrus and short cycles—1878
- influence on performance of Merino meat yearling—2989
- intraperitoneal vaccination—2422
- light-induced rhythms of prolactin secretion, effect of cranial sympathectomy—1761
- management and behaviour—851
- Merino, *Brucella ovis*, western Australia—1352
- Merino, varicocele—755
- method of evaluating—551
- modifications of plasma membranes of sperm during maturation and incubation in utero—635
- mutations facilitate dihydrostreptomycin binding to ribosomes—364
- number at birth and their feed utilization—1556
- progeny testing—562
- regression of corpus luteum following stimulation by—1597
- premature regression of ram-induced corpora lutea—2207
- regulation of FSH secretion—2654
- reproductive behaviour and semen quality under tropical conditions—2767
- response of testes and accessory sex organs to exogenous gonadotrophin in prepuberal—1784
- role of testicular fluid on blood plasma levels of FSH and LH—343
- Romanov, phenotypic and genetic relationships between endocrine criteria and testic-

- ular measurements, and ovulation rates at 8 months of their half sisters—2517
- Romney, basal levels and plasma profiles of lutropin testosterone and prolactin—3721
- Romney, lutropin and testosterone secretion following single or repeated doses of gonadotrophin releasing hormones—3272
- Romney, record price—119
- Romney, semen production, effect of various lighting regimens and pinealectomy—250
- semen quality in Suffolk, Texel and Dorset during non-breeding season—2796
- seminal characteristics and fecundating power, Ile-de-France and Berrichon-du-Cher breeds—984
- serologic methods for detection of brucellosis—1409
- sexual behaviour of Oudah breed—1024
- sources of pheromones stimulating ovulation—1593
- spermatozoa, immunodiffusion data on antigenic relationship with bull, boar and human cells—417
- sterilization, use of formaldehyde—2363
- stimulation of seasonally anovular Merino ewes by, time from introduction of ram to preovulatory LH surge and ovulation—2208
- taking fiber diameter into account in ram selection—392
- Texel, sperm morphology—2798
- ultrastructural study of nuclear reorganization of spermatids—1785
- ultrastructure of modified endoplasmic reticulum of epididymal epithelium—2148
- ultrastructure of modified sertoli cells of terminal segment of seminiferous tubules—2239
- unilateral pyelonephritis with abscess in brain—2831
- use of estrous teaser ewes on output—1921
- vastomized, identification of barren ewes—1595
- Welsh, progeny testing of performance tested—1568
- RAMBOUILLET**, carcass evaluation of crosses—3344
- comparative performance of breed crosses, lamb production traits—1442
- crossbreeding with Chokla and Nali ewes, preweaning, survivability and growth—150
- crossbred, resistance to nematodes—3312
- crosses for development of new breeds—9
- genetic variations in conception rates under sub-temperate conditions—3003
- Montana, length of breeding season—1706
- substitution of Finnsheep and Dorset breeding, productivity of spring-lambing ewes—2961
- substitution of Finnsheep and Dorset breeding, productivity of fall-lambing ewes—2962
- Texas, length of breeding season—1706
- RANGE**, winter, evaluation of fall burning, big-horn sheep—2310
- RANGELANDS**, Oklahoma, response to fire, fertilization and grazing by sheep—2394
- RAPESEED**, role of sheep in spread of black-leg—1818
- RAT**, metabolism of ^{14}C -phenols—1502
- RATION**, comparison of forage value of buckwheat and sorghum stubbles grown on Southern Tablelands of New South Wales—2075
- different protein sources, in early weaning—1643
- effect of dietary lactic acid on rumen lactate metabolism and blood acid-base-status of lambs switched from low to high concentrate diets—1374
- effect of feeding cull domestic onion—1569
- effect of feeding rumen contents on glutamate dehydrogenase activity in some organs of broilers—1338
- effect of nitrogen digestion of supplementing a low protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1540
- fast food, silage—1345
- increased protein content—1632
- influence of birthweight on digestibility of milk-replacer in newborns—1358
- possibilities of forecasting digestibility of crude nutritive substances by fully-grown and growing sheep from content of crude nutritive substances with low content of crude fiber—969
- relative value of single-cell proteins and groundnut-cake as protein supplement, lambs—2115
- replacement of corn with sun-dried manure of several species—2217
- selenium, soft coal fly ash as source for—1332
- utilization by yearling Gaddi ewes of mixed *Zea mays* and *Sorghum vulgare* greens supplemented with three levels of linseed-cake—2253
- varying levels of concentrates, Sudan Desert sheep—872
- waste wood pulp in diet for finishing lambs—1735
- with high straw and NPN content in various breeds of sheep—939
- REARING**, artificial, on special experimental farms—3310
- effectiveness of artificial—3057
- hand, energy and protein requirements—1364
- productivity of lambs reared on milk substitutes with protein and vitamin concentrates—464
- RECALL PHENOMENON**, induced with adenoviruses—2262
- RECORDING PROGRAMS**, centralized, for breeders of dual-purpose sheep—592
- RECTUM**, damage following pregnancy diagnosis; by rectal-abdominal palpation—3051
- prolapse, method for nonsurgical correction in lambs—2286
- temperature, fat-tailed sheep and in German mutton Merino—725
- REDUCTASE**, mercuric, action in transformation of mercury compounds—1630
- REGURGITATION**, diaphragmatic and esophago-

- geal activity, electromyographic study—2996
- RENAL CIRCULATION**, prostaglandin control in response to hypoxemia in fetus—1986
- RENAL DISEASE**, placenta and perinate kidneys—3164
- RENAL FUNCTION**, calcium and magnesium excretion during vasopressin administration into sheep with acid or alkaline urine—271
- changes upon injection of transmitter substances and variation in temperature—274
- inhibition by angiotensin II of some vasopressin effects—3313
- ontogeny of intrarenal solute gradients in fetal and postnatal life—2034
- RENAL HYPERTROPHY**, in fetus, compensatory—2033
- RENIN**, antidiuretic hormone and the kidney in water restriction and rehydration—341
- blockade and nephrectomy, effect on renin-angiotensin aldosterone system in newborn—2729
- circulatory effects of blockade of angiotensin II in fetal lambs—1421
- plasma activity, effect of angiotensin II, fetus—2731
- plasma, hypoxemia—2534
- RENNET**, improvement of manufacture—1614
- REPELLENTS**, to protect radiata pine seedlings from browsing by sheep—1600
- REPLACERS**, milk, peruminant lambs, limiting amino acids in two soybean protein isolates determined with a change-over design—2314
- REPRODUCTION**, a review—1266
- Awassi sheep, Iraq—2948
- behaviour and semen quality under tropical conditions—2767
- Booroola and Merino crosses—77
- reproduction, in Caucasian breed—2160
- characteristics of Oudah ewe—1023
- control in adult ewes and lambs with estimation of reproductive wastage in ewe lambs following treatment with progestagen impregnated sponges and PMSG—2426
- crossbreeding, review—1027
- effect of cannulae in ampulla of oviduct and in tubo-uterine junction—222
- effect of growth promoter zeranol in ewe lambs—622
- effect of high temperatures—2644
- effect of intrauterine threads on fertilization rate in ewes—1012
- effect of lactation—2433
- effect of severe growth restriction in Merinos—67
- effect of sexual preparation procedures on semen characteristics—1922
- effect of time of mating on ovulation rate and potential lambing rate of Greyface ewes—1187
- efficiency of Bannur ewes—2109
- ewes, several breeds—657
- histophysiological characteristics of subcommissural organ of ewes—2130
- improvement, genetic possibilities—784
- improvement in Rasa Aragonesa crossed with Romanov—58
- improvement, review—3125
- induction of male behaviour in ovariectomized ewes and ovariectomized-androgenized ewes chronically implanted with oestradiol-17 B or testosterone—590
- influence of stocking rate, sheep of different genotypes—2467
- lambs for slaughter on alpine pasture—779
- litter size, effect of quality of ram—2685
- Lleyn × Galway lambs—1246
- Marwari ewes, effect of prolonged salt intake on, and on weight of lambs born—2756
- phenotypic and genetic association with traits of, and blood biochemical polymorphic characters—175
- physiology, reviews—1251
- practical significance of progesterone estimation and use of prostaglandin F-2 alpha analogue (cloprostenol)—328
- problems due to antagonism of characteristics for breeding—280
- prolific ewes, accretion of nutrients in fetus and adnexa—1918
- prolific ewes increase cash income—974
- prospects for controlling based on recent findings—431
- regulation in female lambs—2428
- relation of nutrition, ewes—799
- review of genetic selection for reproductive traits—1406
- Romanov, experiments to increase prolificacy—3130
- seasonal, Iran Kusistans, morphological study of ovaries—2652
- sheep, a review—707
- some parameters, of Moroccan sheep breed—1092
- strategy of desert bighorn sheep—1737
- testing and introduction of synthetic gonadotropin in releasing hormones for control—1615
- REPRODUCTIVE CHARACTERISTICS**, selection, a review—3345
- REPRODUCTIVE DISORDERS**, technics for sheep infertility investigations by field veterinarians—2361
- REPRODUCTIVE EFFICIENCY**, improving, a review—1367
- REPRODUCTIVE ORGANS**, ewes, arterial vascularization—2440
- REPRODUCTIVE PERFORMANCE**, comparison of Galway and Suffolk-cross ewe lambs—2425
- during mating and early pregnancy in young female sheep—1233
- effect of light, a review—3129
- effect of pasture allowance over February-March on ewe—2783
- ewes flushed on lucerne—2650
- ewes grazing Pawera red clover at mating—1536

- Finnsheep, postpartum—995
 genetic and physiological variation, review—1674
 grazing estrogenic pastures on Kangaroo Island, South Australia—3179
 Mandya breed—1843
 natural factors affecting, ewes—841
 of Chokla and Magra ewes—321
 on, role of science in estimation—2912
RESEARCH, application to flock health—2046
RESEARCH REPORTS, New Zealand—2136
RESERPINE, effect on physiological responses of cold exposed sheep—2236
RESIDUES, meat organic chlorine compounds—268
RESISTANCE, acquired, effect of route of infection with *Fasciola hepatica*—1533
 anthelmintic, thiabendazole by *Ostertagia circumcincta*—1223
 disease, genetic selection for—902
 disease, response of lambs to intensive husbandry—2089
 drug, among salmonella isolated in Tanzania—1370
 drug, use of sheep nematodes in rabbits for study—1350
 effect of dexamethasone on ability of sheep to resist reinfection with nematodes—1897
 effect of prior infection with *Fasciola hepatica* on—1945
 in crossbred to parasites—3312
 lambs, under intense husbandry—2090
 predicting, *Haemonchus contortus*—2521
 to 4th stage larvae of *Nematodirus*—1898
RESORANTEL, metabolism, in vitro, by *Moniezia* and *Ascaris*—804
RESPIRATION, arterio-venous extracorporeal membrane oxygenation for neonatal respiratory support, perigestational lambs—1156
 breathing responses to increasing fetal arterial carbon dioxide pressure—2058
 changes associated with feeding—2012
 control during development in ewe reared lambs—1931
 enzymes, in diaphragm of lambs, relation to fattening and carcass quality—3279
 respiration, hypercapnic stimulation in unanesthetized fetus in utero—398
 in Corrideale, Marwari and Magra sheep in Rajasthan desert, India—2019
 inhibitors of prostaglandin synthetase stimulate breathing movements in fetus—1757
 nasal heat exchange—1685
 rates, and cutaneous water loss of various breeds at high ambient temperatures—2448
 regional alveolar gas composition and lung function—2548
 regulation in pregnant ewes and in fetal lambs in utero—2059
 responses of new born lambs breathing room air and 4.5 percent carbon dioxide during massive hemorrhage—2811
 stimulation of breathing movements in fetal lambs by inhibitors of prostaglandin synthesis—1580
RESPIRATORY, response to salts, acids and sugars in newborn—1628a
RESPIRATORY CENTER, responsivity quantified in fetus—2058
RESPIRATORY DISEASES, and *Anaplasma ovis* among sheep in large farm—1522
 detection of *Chlamydia* antibodies in Egypt—1218
 experimental *Mycoplasma ovipneumoniae* infections—1083
 in Britain—1877
 in housed sheep—1468
 mouse model of *Pasteurella haemolytica* infections for testing vaccines—910
 non parasitic, a review—1883
 pathology—2445
 pulmonary adenomatosis, pathology and case report—1193
 research on, sheep and goats in Chad—542
 serological comparison of *Pasteurella haemolytica* vaccines with different adjuvants—3218
 sheep, a review—2357
 small lesions in anterior lobes of lungs—2339
 tracheitis, after administration of mineral supplement—2412
RESPIRATORY FUNCTION, changes, recumbency and sedation—2011
 frequency after injection of transmitter substances—274
RESPIRATORY SYNCYTIAL VIRUS, experimental infections in feeder lambs—1723
 experimental infection in lambs—1722
RESPIRATORY SYSTEM, distress, hemodynamic effects of indomethanin in preterm lambs—403
 histochemical identification of chloride secreting cells in fetus—2322
 regional differences in airway function—916
RETICULUM, contraction force of surfaces—3033
 enzymes—716
 motility in chronically vagotomized sheep—1148
 site of action of pentagastrin induced inhibition—558
REVIEWS, abortion and male infertility—3203
 allergens, immunoglobulin E and the Australian livestock industry—2186
 animal welfare—3086
 annotated bibliography of pneumonia—3064
 anthelmintic resistance in nematodes—1534
 application of hormones during the reproductive period in small ruminants—391
 applications of embryo preservation and transfer—2679
 Australian advances in veterinary science—621
 behavioral and physiological responses to el-fazepam, a chemical feed intake stimulant—202

- Beltsville symposia in agricultural research, volume 3—1266
 bibliography of sheep anthelmintics—615
 bibliography on bluetongue—3085
 biochemical polymorphism—3011
 biological effects of mycotoxins on ruminants—1806
 biology and speciation of *Echinococcus granulosus*—2973
 book by Tomes, Robertson and Lightfoot on sheep breeding—3005
 Border Disease or congenital cerebrospinal hypomyelination—1068
 breeding season for Iceland sheep—842
 brucellosis—2041
 carbohydrate metabolism and its regulation—1608
 carcass and eating quality—668
 caseous lymphadenitis—3061
 composition and nutritive value of whey—952
 control of placental steroid synthesis at parturition—979
 control of placental steroid synthesis at parturition—981
 controlling parturition—960
 crossbreeding—1027
 current methods for diagnosis and control of slow virus infections in sheep—3029
 current status of toxoplasmosis research in India—1039
 cytogenetics of sheep—2088
 desert bighorn sheep in Nevada—1740
 determinants of drug disposition and effect in fetus—1145
 development of new methods of immunization—1906
 development of sheep breeds in Azerbaijan, USSR—1408
 diagnosis of pregnancy—401
 diseases of ewe—3339
 disease of lambs—3205
 echinococcosis in Great Britain—2860
 economic losses of ovine and caprine diseases in Nigeria—48
 economics of improving reproductive efficiency—1065
 effects of fluorides—2724a
 effects of wilting on fermentation in silo and nutritive value of silage—1864
 embryo transfer—2680
 embryo transplantation—3255
 endocrine control of parturition—2981
 energy metabolism—3212
 enteric colibacillosis in lambs, passive protection against experimental infection by colostrum transfer of antibodies from ewes vaccinated with K99—2809
 enzootic icterus, a form of chronic copper poisoning—263
 epidemiology of sheep parasites—143
 ergot on cereal grains—1792
 feeding—432
 feeds and feeding—655
 fescue foot—1791
 fluid environment of maturing sperm—1359
 foot rot—236
 genetic aspects of mineral metabolism with particular reference to copper in sheep—3246
 genetic improvement of wool production and reproduction rate—3046
 genetic possibilities of improving reproductive performance—784
 genetic selection for reproductive traits—1406
 growth and development of lambs—2402
 hexachlorophene—2393
 histochemical, enzyme histochemical and electron microscopic studies of blood leukocytes from clinically healthy and leukaemic sheep—2579
 historical, rabies in Nigeria—3060
 hormonal control of estrus—2956
 hormone receptor control of prostaglandin F-2 alpha secretion by uterus—1914
 hormones in milk reflecting reproductive changes—991
 hydatid disease in Australia—157
 hydatid disease, past, present and future—2176
 hypomagnesaemia—1535
 immune response in sheep—3216
 immunity and aging—1907
 improving reproductive efficiency—1367
 increasing reproductive ability of sheep—3125
 infectious causes of fetal mortality—3203
 infectious diseases—3204
 intensive sheep management—947
 intrinsic bacteria in meat—1078
 Kazakh Arkhar Merinos—1405
 ketosis—434
 light on reproductive performance—3129
 livestock health and housing—2605
 male abnormalities—3107
 management and diseases of sheep, British Council course—3062
 management of ovarian function—720
 mechanisms governing onset of ovarian cyclicity at puberty in lambs—999
 method for determining and factors affecting rumen microbial protein synthesis—2857
 milk fat, comparative—1656
 milk yield—2528
 mineral content of milk, comparative—1171
 mineral metabolism—953
 monorchidism—2331
Muellerius capillaris, a lungworm of sheep—1064
 natural factors affecting puberty and reproductive performance in ewes—841
 neurohypophyseal hormones—998
 noninfectious abnormalities of sheep—721
 non-parasitic respiratory diseases—1883
 normal breeding animals—2170
 normal fertility and incidence of infertility—1669
 nutrition and production in sheep—1846
 nutrition and reproductive function in female sheep—799
 nutrition of lactating ewe—3024

- nutrition of pregnant ewe—2587
 nutritive value and toxic aspects of *Leucaena leucocephala*—1970
 operative surgery—1825
 ovine salmonellosis, New Zealand—117
 paratuberculosis in sheep—1397
 parturition, actions of steroid hormones on myometrical contractile function—665
 parturition, maturational changes of pituitary-adrenal axis in fetal lamb—3168
 pathogenicity of ureaplasmas—2937
 peripartal endocrine system in sheep—546
 physiology of pregnancy—1954
 physiology of reproduction—1251
 present position of bluetongue virus in Australia—988
 pre-slaughter stunning, conference held in Sweden 1979—2909
 production in north Thailand—932
 progesterone—1278
 propagation of *Theileria*—439
 prospects for controlling reproductive processes in sheep from recent findings—431
 prostaglandins—545
 protein metabolism in management—1819
 purpose of production—794
 recent advances in cestode infections—3261
 recent findings on scrapie—2384
 recent information on processing of grains—2226
 receptors for gonadotrophins in ovine follicle during growth and atresia—527
 regulation of puberty and reproduction in female lambs—2428
 reproduction in sheep—707
 research on specialty carpet wools—3243
 resistance to ixodid ticks by ticks in Africa south of the equator with thoughts on tick control—209
 respiratory diseases of sheep—2357
 role of prostaglandins in ductus arteriosus—599
 salmonellas and abortion—2284
 sarcocystis, recent advances—120
 sarcosporida—2187
 scrapie—2837
 scrapie, a literature review—1724
 selection for reproductive characteristics—3345
 sheep scab—1295
 sheep management and production—1116
 significance of centric fusions or Robertsonian translocations in sheep—443
 small ruminant production in humid tropics—1395
 Spanish breeds of sheep—2621
 spermatozoa, semen and artificial insemination—2060
 strongylosis in ruminants, latest findings—1542
 textbook of sheep diseases—282
 toxic and essential elements in bone—809
 toxoplasmosis, epizootiology, symptoms, diagnosis, prevention—3203
 trace element deficiencies and fertility—1308
 termostogenic mycotoxins and animal diseases—2721
 use of glucocorticoids in veterinary medicine—56
 use of tall fescue in forage animal production systems—3097
 uterine estrogen and progesterone receptors—2870
 virus diseases—1363a
 ways of attaining a good and stable reproductive performance in ewe flocks—2872
 wool eating in sheep by Mallophaga—261
 wool production in semi-arid areas with special reference to African conditions—1623
 zoonoses of sheep—796
RHINOTRACHEITIS, infectious bovine, in Barbary sheep and mule deer in Palo Duro Canyon, Texas—1232
RHIPICEPHALUS, biological and ecological studies—1754
 prevention and control of haemosporidial infections during grazing season—2891
RIBOSOMES, ribosomal ambiguity ram mutations facilitate dihydrostreptomycin binding to ribosomes—364
RICE, straw, alkali treatment, effect of energy and nonprotein nitrogen supplementation on digestibility and intake—1445
 straw, sodium hydroxide treatment to improve nutritional values—1444
RIFT VALLEY FEVER, epizootic in Egypt in 1947—1944
 isolation of virus—1391
 Nile Delta, described with respect to properties of virus, pathogenesis, clinical picture and diagnosis—3008
 virus, clinical virological and serological response of West African Dwarf sheep in experimental infections—3006
 virus, sheep as amplifying hosts—1344
RINDERPEST, in Nigeria—2417
 in sheep and cattle, India—2634
 usefulness of measles hemagglutination inhibition test in detecting rinderpest antibodies in cattle and sheep after inoculation of tissue culture rinderpest vaccine—1443
RINDERPEST VIRUS, outbreak in India—2634
RINGWORM, epidemiology—567
 in high altitudes of Morocco—2275
RITODRINE HYDROCHLORIDE, cardiac and uterine hemodynamic responses, pregnancy—2734
RNA, changes in uterine endometrium and isthmus oviduct, DNA ratio—2868
 translational activity—1472
RNASE, destabilizing action on DNA—1018
ROBERTSONIAN TRANSLOCATIONS, cytogenetics—443
ROMANIA, growth and fattening of young male Turcana sheep—188

- prevention and control of haemosporidial infections during grazing season—2891
- ROMANOV**, comparative performance of Limousin crossbred ewes managed relatively intensively—1887
- contemporary comparisons between progeny by Finnish Landrace and Romanov rams out of mutton Merino and Awassi ewes—1119
- crossbreeding for production of fat lambs—971
- crossed with Rasa Aragonesa for improvement of reproduction—58
- evaluation of milking abilities of purebred vs. crossbreds—972
- ewes, mated at different ages, fattening performance and meat production—1778
- experiments to increase prolificacy—3130
- rams, phenotypic and genetic relationships between endocrine criteria and testicular measurements, and ovulation rates at 8 months of their half sisters—2517
- rams, use in crossbreeding—130
- ROMNELET**, weaning weights, post-weaning gain and final market weights of breed plus crosses—3136
- ROMNEY**, Border Leicester cross with suffolk cross, effect of nutrition and castration on meat production from male lambs, meat quality—2418
- carcass growth and development—1047
- crossbred to Dorset, Cheviot and Finn, genetic and environmental effects on milk production, milk composition and mastitis incidence—3014
- × Dorset, milk production, milk composition and live weights of ewes in relation to growth of their lambs—1044
- efficiency of wool—2882
- ewes, effect of diet and live weight on ovulation—1592
- ewes, effect of ram to ewe ratios and joining date on lambing performance—1594
- ewes, relation between plasma progesterone in late gestation and incidence of dystocia—1596
- genetic and phenotypic parameters—210
- Marsh, crossbreeding, biochemical marker, analysis of production characteristics—1093
- Marsh, crossbreeding, fat content—619
- Marsh, ewes, effect of early shearing, Chile—1419
- Marsh, genetic variability, crossbreeding—1094
- Marsh, rams, performance of first generation of progeny sired by, during formation of improved type of mountain sheep—677
- milk production, milk composition and live weights of ewes in relation to growth of their lambs—1044
- New Zealand, genetic and phenotypic parameters—211
- performance under rotational and continuous grazing of hill pastures—2697
- rams, basal levels and plasma profiles of lutropin testosterone and prolactin—3271
- rams, lutropin and testosterone secretion following single or repeated doses of gonadotrophin releasing hormone—3272
- rams, record price—119
- rams, seasonality of semen production and plasma luteinizing hormone, testosterone and prolactin levels—251
- rams, semen production, effect of various lighting regimens and pinealectomy—250
- ROMANOVSKII**, effect of some technological parameters on efficiency of raising—318
- ROMPUN**, role of spleen in blood circulation after sedation—379
- ROSA ARAGONESA**, improvement of reproductive characters crossed with Romanov—58
- transferrines and weight gain in breed—1696
- ROSETTE INHIBITION TEST**, detection of early pregnancy—2053
- detection of induced death of embryos—2104
- ROSEWOOD SHRUB (*HETERODENDRUM OLEIFOLIUM*)**, woodland of mixed belah (*Casuarina cristata*), sheep grazing, western New South Wales—1727
- ROTAVIRUS**, antibodies in animals in Kenya—2091
- antibodies in various species—2923
- associated with diarrhoea—831
- small intestinal morphology and epithelial cell kinetics in lambs—2807
- ROUGHAGE**, effect of readily available source, on performance of lambs and steers fed liquid supplement—1994
- fermentation and nitrogen dynamics in Merino sheep given a low-quality-roughage diet—2172
- low quality, effect of including hydrolyzed feather meal in liquid supplements when fed with—1143
- utilization—1146
- ROUNDWORMS**, gastrointestinal, efficacy of albendazole—2653
- RUGGING**, benefits and economics, polyolefin fabrics—2
- With polyolefin fabrics, benefits and economics—1
- RUMEN**, absorption in vivo of magnesium—1866
- absorption of iodine labeled immunoglobulin G—414
- amino acid requirements for microbial protein synthesis—1726
- ammonia and hydrogen ion concentration in wethers given diets with different nitrogen sources—359
- anaerobic fungi—265
- anaerobic fungi colonizers of plant fibers—267
- automatic analysis of behaviour—1743
- bacteria, effect of pH on specific growth rates—1576
- behaviour and digestive physiological significance of rumination—2205
- bypass with benzimidazole anthelmintics—1862

- cannulation with specially designed cannulae and a cannula insertion instrument—1610
- catheter, technic of establishment—922
- certain metabolic indices in rumen and blood of sheep fed granulated and pelleted feed mixtures with different urea levels—2263
- changes during onset and recovery of induced lactic acidosis—1547
- changes in fermentation, influence of feeding formaldehyde-treated protein—2449
- changes in lactate-producing and lactate-utilizing bacteria in relation to pH in rumen during stepwise adaptation to high-concentrate diet—1816
- characteristics of a lipolytic and fatty acid requiring butyriovibrio species isolated from rumen—1275
- choice of models relating tritiated water absorption to subepithelial blood flow in rumen—781
- ciliate implantation, influence of diet and type of ciliate—1133
- citrate synthesis by reduction carboxylation of alpha ketoglutarate, cattle and sheep—2711
- ciliates, electron microscopic study of cellulose degradation—735
- clearance rate of liquid and fermentation pattern, forage diets—2964
- contractions, silage diet—2067
- contribution of Protozoa to cellulolytic activity—736
- decomposition of bacteria by ciliate protozoa in vitro—2719
- defaunation—1475a
- defaunation, effect on growth of lambs fed low-protein-high energy-diets—335
- degradation of amino acids and peptides by mixed rumen microorganisms—2409
- development, influence on intestinal absorption of galactose in lambs—2658
- development, relationship with intestinal sugar transport—2659
- digestion, in lambs fed pelleted diets—2334
- digestion of industrial mixtures—1645
- digestion of pasture herbage by grazing lambs—626
- digestion of protein in ensiled brewers grains—538
- digestion parameters in lambs fed with pelleted diet—2313
- diminishing rumen butyrogenesis in bulls and sheep fed sugar beets—1739
- distribution of ^{75}Se —729
- DNA, microphotometry on epithelial cells—2202
- effect of absence of rumen ciliate protozoa on rumen fluid volume—2221
- effect of amino acid pattern and level in intravenously and intraruminally infused sheep—3282
- effect of ammonia concentration on composition, hydrolytic activity and nitrogen metabolism of microbial flora—3183
- effect of calcium, phosphorus and magnesium administration on mineral concentration in fluid—3304
- effect of chopped and ground hay on rumen function and behaviour—2203
- effect of defaunation on metabolism of microorganisms—743
- effect of denutrition on some parameters of rumen juice and blood of sheep—1478
- effect of dietary lactic acid on lactate metabolism and blood acid-base-status of lambs switched from low to high concentrate diets—1374
- effect of different amounts of hay intake on ruminating behaviour—1259
- effect of energy level on lactic acid metabolism—480
- effect of epithelial development on metabolic activities and ketogenesis by tissue in vitro—1073
- effect of feeding frequency on diurnal changes in microbial protein, volatile fatty acids and ammonia content—1978
- effect of feeding rumen contents on glutamate dehydrogenase activity in some organs of broilers—1338
- effect of fermentation on toxicity of tansy ragwort—2910
- effect of insufflation on ruminal contraction rate—1794
- effect of intraruminal selenium pellets on tissue glutathione peroxidase activities—2305
- effect of monensin on fermentation—3098
- effect of particle size of corn silage on digestibility and fermentation—2880
- effect of roughage or concentrate feeding and rumen retention time on total degradation of protein—1026
- effect of sodium hydroxide on efficiency of digestion—303
- effect of zinc on ciliary micro-populations—381
- efficiency of microbial growth, influence of some theoretical and experimental factors—1298
- engulfment and digestion of mixed bacteria and individual bacterial species by protozoa—607
- enumeration and isolation of lactate-utilizing bacteria from—1817
- enzymes—716
- Epidinium* in primary degradation of plant tissues—266
- estimation of protein degradability from incubation measurements weighted according to rate of passage—2232
- exocellular carbohydrase formation by holotrich ciliates—3257
- experimental acidosis, biochemical and pathological studies—1415
- extracellular carbohydrase complex from contents—1040
- factors associated with difference in nutritive value of artificially dried red clover and perennial ryegrass—2055

- feed value of straw, influence of additional pre-incubation with rumen fluid of animals deprived of food on the *in vitro* rate of protein synthesis—1262
- feeding value of ensiled mixtures of rumen residues—2149
- fermentation, effect of physical form of diet—2758
- fermentation, forage diets—2403
- fistula technique and utility—2020
- flora, transfer to sheep of bovine populations—936
- flow dynamics and voluntary intake—1950
- fluid, validity of *in vitro* technic using, for prediction of changes in dry matter digestibility of grasses caused by fertilizer calcium, sulfur, phosphorus and nitrogen—2482
- freeze dried fluid, growth of fattening lambs—231
- function after feeding pelleted rations—233
- function, effect of four corn silage and corn grain ratios, and nitrogen source—2974
- function, effect of insulin—2150
- function, supplementation of a low-protein-cellulosic diet with either urea, casein or formaldehyde treated casein—1539
- gas formation, *in vitro* as measure of digestibility and of convertible energy content in feeds—2437
- gastric motility and fever—3120
- hydrogenase activity and methanogenesis in anaerobic sewage sludge in rumen liquid and in freshwater sediments—3326
- hydrolytic activities of ciliates—733
- hydrolytic activities of ciliates—734
- in vitro* lipolysis and biohydrogenation of monogalactosyldiglyceride by whole rumen contents and its fractions—2759
- independent microbial flora of epithelium and role in eco-microbiology—3184
- influence of concentrates on nitrate metabolism of microorganisms—2103
- influence of fasting upon volatile fatty acid and ammonia level—1034
- influence of feeding hay from area with heavy pollution of atmosphere with nitrogen compounds on some biochemical parameters of blood and rumen contents—1488
- influence of kanamycin on rumen bacteria and ammonia production in supplemented sheep rumen liquor *in vitro*—1110
- influence on absorption of drugs—1870
- infusion of corn oil, effect on absorption of Mg and Ca—1129
- intraruminal injection of urea and changes in secretion of parotid saliva—2184
- is glucose ketogenic in epithelium—2838
- liquor, use for estimation of digestibility and metabolizable energy content of feeds—1961
- measuring consistency of contents as measure of load—1306
- mechanism of passage of endogenous urea through wall and role of ureolytic epithelial bacteria in urea flux—571
- metabolism, during amprolium and monensin administration in coccidiosis—1357
- metabolism, in sheep fed different levels of urea—2265
- metabolism of betaine—2008
- metabolism of 2,6-diaminopimelic acid by microorganisms—1680
- metabolites, nutritive value of thermo-ammoniated and steam-treated maize stover—2247
- method for determining and factors affecting microbial protein synthesis—2857
- method for repeated or prolonged rumen infusion without open fistula—2213
- microbial disorders in digestion, etiology, pathogeny, clinical examination and therapeutic deductions—448
- microflora, transformation of mercuric chloride and methyl mercury—1630
- monensin effect on protein bypass—2374
- motility in chronically vagotomized sheep—1148
- motility, inhibition by ammonium ion—2068
- movement of thiamine through wall—457
- mucosa, scanning electron microscopic observations—2924
- myoelectrical activity affected by lactic acid—2789
- net utilization of inorganic sulfur by microbes—924
- nitrogen metabolism—221
- nitrogen metabolism and passage of amino acids to duodenum in sheep on diets of hay and concentrates—549
- occurrence and disappearance of histamine and tyramine—1402
- overload syndrome, multivariate analysis—852
- passage of thiamin through—1327
- passage of thiamin through wall—1336
- pattern of ciliate populations—1390
- phosphatidyl choline as marker of duodenal flow of rumen protozoa in sheep—1456
- polysaccharide content of ciliates—3173
- protozoa, effect of increased levels of urea in diet—2177
- protozoa in digestion of cellulosic materials—1476
- rapid characterization of mixed microbial populations in ruminal contents, cecal contents and in feces by semi-quantitative assay of hydrolytic enzymes—1688
- relationship between feeding behaviour and rumen contents—1307
- relationship between glutathione and selenium-responsive unthriftiness in Merino lambs—2306
- relationship between hay intake and rumen function and behaviour—2204
- secondary fermentation, diet of molasses—2574
- secretion and absorption of phosphorus—2385
- structure of epithelium in relation to fermentation in sheep given pelleted feeds—232
- symbiotes, nutrition—3084

- synthesis of microbial nitrogen compounds and subsequent digestion—2800
 technic for sampling total contents—2054
 transformation by rumen microorganisms of 19-norgestagens to oestrogens—1323
 utilization of rumen bacteria—2869
 water intake, pH and ammonia levels after use of pelleted feeds—234
- RUMENITIS**, grain processing—2226
- RUMINATION**, diaphragmatic and esophageal activity in regurgitation, electromyography—2996
 forage intake—198
- RUSSIA**, efficiency of sheep rearing in central Karakum desert—2128
- RUSSIAN MERINO**, rams crossbred to Chokla and Nali ewes, preweaning, survivability and growth—150
- RYE**, perennial, grass sward, effect of grazing by lambs in autumn—1668
- RYEGRASS**, evaluation of mixed kikuyu pastures grazed by sheep—317
 perennial, comparative pasture and animal production under grazing—913
 staggers, etiology, control—481
 staggers, possible etiology in tremorgenic toxins produced by penicillium—1686
 staggers, review, tremorgenic mycotoxins and animal diseases—2721
 fungal tremorgens associated, South Australia—1074
 summer fescue toxicosis in lactating dairy cows and sheep fed experimental strains of ryegrass-tall fescue hybrids—1290
 toxicity, distribution in South Australia of *Anguina funesta*—962
- S**
- SAFFLOWER OIL**, effect on ewes during pregnancy and early lactation—2851
- SALES**, effect of sale weight on lamb performance and profit—1474
- SALINOMYCIN**, finishing of lambs—369
- SALIVA**, effect of angiotensin II—1929
 parotid, changes in secretion after intraruminal injection of urea—2184
- SALIVATION**, rate of flow, and composition of saliva during infusion of acetylcholine and atropine into carotid artery of conscious sodium replete sheep—272
- SALMONELLA**, a review of abortion—2284
 abortion, inactivated saponin vaccine—1088
 antibiotic resistance among strains isolated in Tanzania—1370
 carriers among cattle, sheep, goats and dromedaries in Somali Democratic Republic—95
 detection of nasal carriers—1031
 in lambs, ascorbic acid changes—663
 isolation and antibiogram, prevalence—2760
 prevalence at slaughter—1499
 serotypes isolated in Venetian region, Italy, 1974 and 75—312
 statistics on incidence—3068
- SALMONELLA ABORTUS OVIS**, duration and intensity of vaginal excretion, after abortion—2283
 evolution of antibodies in immunized ewes by killed vaccines—2919
 oral vaccination—2154
 reduction of plasma free amino acids during infection with—1418
 vaccination—2153
 vitamin C in lamb infections—663
- SALMONELLA TYPHIMURIUM**, ascorbic acid in infected lambs—663
 prevalence in clinically healthy flock—2947
- SALMONELLOSIS**, allergic diagnosis—141
 as cause of abortion—2252
 immunosuppressive effect of immune serum, in relation to time of administration and classes of immunoglobulin present—945
 1978 annual survey report, UK—3069
 oral vaccination—2154
 preparation and testing of chemically treated vaccine—142
 surveillance in United Kingdom—710
 review, New Zealand—117
- SALT**, prolonged intake, effect on reproduction of ewes and weight of lambs born to Marwari sheep—2756
- SANITARY**, standards, international, for abattoirs—1663
- SARAJA** breed, inheritance of content of pigmented fibers in wool—154
 history of fat-rumped sheep—2056
- SARALASIN**, effect on prorenin in fetus—2733
- SARALASIN ACETATE**, blockade and nephrectomy, effect on renin angiotensin aldosterone system in newborn—2729
- SARCOCYSTIS** and cats—2081
 diagnosis—383
 epizootiology, serodiagnosis, New Zealand—2141
 in Bavaria—361
 in dogs, foxes and sheep—1721
 in Queensland sheep—2593
 light and electron microscopic study of gamogony and sporogony in vivo and in tissue cultures—277
 macrocystic species in sheep—610
 muscular disease, differential diagnosis—3176
 note on prevalence in sheep from Hissar area as studied by peptic-digestion technic—1200
 parasite-free lambs for research—605
 research sheds new light on old problem in sheep industry—133
 review, recent advances—120
 serological response of sheep to—2185
 transmission by blood transfusion—942
- SARCOCYSTIS MEDUSIFORMIS** n. sp., in sheep from New Zealand—610
- SARCOCYSTIS OVICANIS**, effect on growth rate and haematocrit in lambs—2082
- SARCOCYSTIS TENELLA**, new data on life cycle—1968
- SARCOCYSTOSIS**, associated with polyarteritis nodosa—1679

- SARCOMA VIRUS**, tumors, role of regional and distant lymph nodes in rejection—2952
- SARCOPLASMIC RETICULUM**, heart, species differences in function—348
membrane changes, hypertrophy—349
- SARCOPTES SCABIEI OVIS**, in Kaduna State, Nigeria—574
- SARCOPTIC MANGE**, comparative efficacy of tetmosol—3142
- SARCOSPORIDIA**, a review—2187
new data on life cycle—1968
- SARCOSPORIDIOSIS**, diagnosis—383
- SARDINIA**, sheep breed, utilization of feed energy for milk production—705
- SARDINIAN**, crossbreeding for production of fat lambs—971
crossbred with East Friesian sheep in Sardinia, performance—400
- SARPLANINA**, ewes, effect of various altitudes and diets on blood values in progeny—276
- SAUSAGE**, technical, organoleptic and bacteriological properties and histological characteristics, natural casings (sheep small intestine) and in synthetic casings—256, 257
- SCAB**, sheep, clinical evaluation of benzyl benzoate as acaricide—2006
sheep, in Denmark—1295
sheep, in Netherlands during 1979—2132
sheep, treatment with mineral oil emulsion of lindane—3154
- SCABIES**, psoroptic, bighorn sheep in New Mexico—1682
trials with eight acaricides—1953
- SCANOPREG**, diagnosis of pregnancy—3293
- SCHISTOSOMA BOVIS**, immunization using schistosomular vaccine—2932
- SCHISTOSOMES**, pathology of pneumonia—2445
- SCHISTOSOMIASIS**, toxicity of *Phytolacca dodecandra* to Ethiopian highland sheep—896
- SCIATIC NERVE**, stimulation, carbon dioxide threshold—2058
- SCOTLAND**, changing distribution of sheep breeds from 1795 to 1965—515
field studies on enzootic abortion—1767
home range and movements of Scottish Blackface—1300
store sheep in crofting counties, a study of production and marketing with special reference to problems of part and spare time holdings—1371
- SCOTTISH BLACKFACE**, lactation—2309
- SCOTTISH BLACKFACE FINN**, cross with Dorset, immunity, *Ostertagia* and *Trichostrongylus* infections—2565
- SCRAPIE**, a literature review—1924
and Creutzfeldt-Jakob disease—534
assessment of genetical methods of control—1565
cause of Creutzfeldt-Jakob disease in man?—535
clinical and morphological aspects of transmissible Creutzfeldt-Jakob disease—1847
disease in sheep, a review—2837
elimination of natural scrapie in sheep by sire genotype selection—2291
natural infections, immunoglobulin G in sera of Hardwick sheep—612
recent findings—2384
suitability of sheep as model for study of slow virus diseases—2640
- SCRAPIE VIRUS**, current methods for diagnosis and control—3029
- SCREW-WORM**, treat—122
- SEASON**, birth, effect on response to LHRH in lamb—524
birth, effect on testis diameter and response to LHRH in lamb—524
breeding, 8 breed groups in Wisconsin—1706
changes in ovaries of Libyan ewes—196
changes in pineal gland, preparation and testing of tissue fractions—1589
comparative semen characteristics of Corriedale, Marwari and Jaisalmeri rams maintained under hot arid conditions—2017
dynamics of gastrointestinal strongylata infections in sheep in Bulgaria—1058
effect, downslope movement of nutrients in hill pasture—1912
effect of, and level of grazing on utilization of heather, diet selection and intake—2001
effect of grazing by lambs in autumn on a red clover-perennial rye grass sward—1668
effect of shearing on certain physiological responses of Corriedale rams under arid conditions during summer—2016
effect of time of mating on ovulation rate and potential lambing rate of Greyface ewes—1187
effect of time of year on breeding activity and suppression of prolactin, prostaglandins and progesterones—3083
effect of two different lambing seasons on survival and development of lambs and ewe wool production—602
effect of winter management on pasture regrowth—1272
effect on semen of Slovak Merinos—1025
effect on wool and body growth in pen fed Romney, Coopworth, Perendale and Corriedales—2882
estrus induction in Lacha ewes out of—2353
evaluation of fall burning on bighorn sheep winter range—2310
extra, estrus synchronization and economics—1100
extraseasonal lambing—1396
increased lamb production with rams exposed to short day lengths during nonbreeding season—2655
increasing reproductive ability, review—3125
influence on feeding behaviour of sheep receiving green forage in a wet tropical zone—1975
lipid changes during epididymal maturation of ram sperm—912
milk production of crossbred ewes—2873

- model of lamb production from autumn catch crop—1051
- nematode gastroenteritis, Zaire—2669
- nematode larvae in pastures in India—2684
- nematodirois in lambs following an exceptionally cold spring—115
- nematodirois in lambs following exceptionally cold spring in Holland—1067
- non-breeding, semen quality in Suffolk, Texel and Dorset Horn—2796
- protein content of blood serum during different seasons—2942
- reducing the partum-to-mating period in autumn lactating ewes though exogenous hormones—1229
- relationship of genotype to survivability of crossbred offspring—2005
- role of seasonal inhibition of development of *Haemonchus* and *Ostertagia* on epidemiology—703
- season of birth and response to hemicastration in lambs—1676
- sperm morphology—2798
- stimulation of seasonally anovular Merino ewes by rams, premature regression of ram-induced corpora lutea—2207
- stimulation of seasonally anovular Merino ewes by rams, time from introduction of ram to preovulatory LH surge and ovulation—2208
- variation in appetite—1521
- variation in nature of cervical mucus response to estradiol benzoate in normal and clover-affected ovariectomized ewes—24
- variation in plasma proteins and urea nitrogen concentrations in hill sheep—2915
- variation in strongylids, Bulgaria—772
- variations in plasma concentrations of testosterone and dihydrotestosterone in Algeria—694
- winter cold damage to bitterbrush related to spring sheep grazing—1451
- SEAWEED, meal, feeding of lambs—2464
- SEABACEOUS LAYER, skin, effect of disruption on incidence of fleece rot—1433
- SECRETIN, effect on neutralizing functions of pancreatic juice and bile—2875
- SEEDS, effect of meadow plant, passage through sheep—2250
- SELECTION, for fibre diameter—1427
- genetic, comparison of single trait and index selection—1705
- genetic, improvement of methods—2159
- genetic, maternal effects and ram evaluation—2169
- genetic, role of maternal effects—2168
- response of sheep to cold exposure in relation to selection for survival ability—2780
- taking fiber diameter of wool into account in ram selection—392
- SELENIUM, content of feed in Germany—3247
- deficiency, farm animals—3247
- deficiency in western Australia—1020
- deficiency, muscular disease, differential diagnosis—3176
- deficiency, prevention—1647
- distribution in tissues and rumen content and excretion in bile, urine and feces—729
- dynamics in serum from birth to weaning—3158
- effect of addition to rations—3247
- effect of intraruminal pellets on tissue glutathione peroxidase activities—2305
- effect of single doses of selenium salts on whole blood levels of selenium in ewes on a selenium-deficient diet—1942
- effect of sulphur on ⁷⁵Se absorption and retention—2375
- effect of supplementation on survival, live-weight and wool weight of young sheep on Kangaroo Island, South Australia—3177
- field aspects of deficiency in New South Wales—588
- Hb oxidation in whole blood as alternative assessment of selenium status—3251
- in diets of cement kiln dust—3192
- incorporation into ovine semen, plasma and erythrocytes—3028
- influence of status on peripheral plasma progesterone and corticosteroid levels in ewes grazing estrogenic pastures—3178
- liver, effect of lupinosis—70
- relationship between glutathione and selenium-responsive unthriftiness in merino lambs—2306
- residues in meat—2855
- soft coal fly ash as source of, in unpelleted sheep rations—1332
- spot test for glutathione peroxidase—311
- status in Britain indicated by erythrocyte glutathione peroxidase activity—94
- status in sheep in Pennsylvania and West Virginia—2832
- treatment of muscular dystrophy—521
- use of pellets in Australia—1971
- white muscle disease, lambs born of ewes on zero grazing system in Natal—455
- wool response to feeding methionine—3235
- SEMEN, a review—2060
- activity of carnitine acyl transferase—438
- addition of sperm agglutinating factor antisera to diluents for frozen semen—3342
- characteristics, in paddock-mated rams—2744
- characteristics of crossbred rams—730
- characteristics, rams of Ile-de-France and Berichon-du-Cher breeds—984
- collected by electro-ejaculation and use in insemination—2993
- collection from Suffolk, Texel and Dorset—2797
- comparative characteristics of Corriedale, Marwari and Jaisalmeri rams maintained under hot arid conditions—2017
- comparison of fresh and frozen, confined sheep—1683
- deep freezing—2441

- diluent additives—377
 effect of early mating on subsequent value—2119
 effect of season, Slovak Merino—1025
 effect of sexual preparation procedures on characteristics—1922
 effect of various lighting regimens and pinealectomy, Romney rams—250
 enzymes—1032
 epididymis—283
 factors influencing vitality during its freezing and thawing—1342
 fertility after storage at 5°C—2615
 freezing in pellets in liquid nitrogen—869
 frozen, fertility—1341
 frozen, fertilization capacity, after treatment with prostaglandins—776
 incorporation of ⁷⁵Se—3028
 influence of photoperiod on quality—603
 new extenders for freezing—961
 output, effect of estrous teasers—1921
 physico-chemical studies and interrelationship during different seasons in Corriedale rams—543
 production, Suffolk, during breeding and non-breeding seasons—664
 prostaglandins and fertilizing ability, correlation between 9 keto prostaglandins concentration and conception rate—1060
 quality after freezing—3328
 quality in Suffolk, Texel and Dorset Horn rams during non-breeding season—2796
 quality, of rams reared under tropical conditions—2767
 seasonality of production with plasma luteinizing hormone, testosterone and prolactin levels in Romney, Merino and Polled Dorset rams—251
 study of freezing in China—573
- SEMINAL VESICLE, arachidonic acid dependent metabolism of 7,8-dihydrobenzoapyrene—1869
 microsomal fraction, covalent binding of prostaglandins G-2 and H-2—653
- SEMIFEROUS TUBULES, anatomy—451
 ultrastructure of modified sertoli cells, bull, ram and goat—2239
- SENSE ORGANS, ultrastructure of tapetum lucidum fibrosum—386
- SEPTICEMIA, extravasation of albumin—1334
- SERINE, effect of supplemental nitrogen on tissue levels and on enzymes of synthesis and degradation—2411
- SERODIAGNOSIS, toxoplasmosis—1198
 use of indirect haemagglutination reaction for diagnosis of *Sarcocystis* and *Toxoplasma*—1721
- SEROLOGY, complement titrations with frozen sensitized erythrocytes—2096
 methods to detect brucellosis in ewes and rams—1409
- responses of sheep and cattle exposed to natural toxoplasma infection—2083
 serologic response of sheep to *Sarcocystis*—2185
 sympatric barbary sheep and mule deer from Palo Duro Canyon, Texas—419
 survey for viral diseases in Kenya—2266
 tests on extracts from musculature of bovines, sheep, goats and deer—1851
 toxoplasmosis, outbreak in Colombia—2324
- SEROTONERGIC SYNAPSE, pathway to heat production—350
- SEROTONIN, metabolism in central nervous system affected by loading of tryptophan—194
 ontogeny of serotonergic regulation of GH and prolactin in fetus and neonate—1876
 regional concentration in brain—193
- SEROTYPES, *Pasteurella haemolytica*, sheep in Ethiopia—2400
 two new, *Pasteurella haemolytica*, in Ethiopia—2312
- SERRAI, crossbreeding for production of fat lambs—971
 effect of duration of suckling on milk production of ewes and the growth of lambs (Greece)—3338
- SERRATIA, detection of nasal carriers—1331
- SERTOLI CELLS, in terminal segment of seminiferous tubules, ultrastructure—2239
- SERUM, A₂ antigen, immunogenetics—1381
 hyperimmune, value in prophylaxis and therapeutic treatment of *Fusobacterium necrophorum* infections—1514
 lamb, immunoglobulin levels—2724
 normal sheep, contains inhibiting factor for Visna virus—2984
 trace elements in sheep infected with gastrointestinal helminths—2736
- SERUM PROTEINS, changes during development—2943
 comparative studies on determination in domestic animals—1972
 polymorphism and performance—765
 total protein and their electrophoretic pattern in experimental Mandya lamb infections with *Haemonchus contortus*—3087
 transferrin, polymorphism, various breeds, relationship with productivity—2475
 transferrin variant—1090
- SEWAGE, municipal sludge, element and polychlorinated biphenyl deposition and effects in sheep fed cabbage grown on—1260
 solids, fed to sheep, intake of fibrous hay and digestibility—2219
- SEX, accessory organs, response to exogenous gonadotrophin in prepuberal rams—1784
 behaviour, and hormone responses in ewes given testosterone—1858
 differences in heritabilities of economic traits in South Africa Merino sheep—1301
 differences in kidney weight of fetus—792

- effect, lamb, on milk intake and growth of Dorset lambs—3278
- effect of daylength on lamb growth, comparisons of sex, level of feeding, and sharing and breed of sire—993
- effect on adipose tissue cellularity and lipogenic activity—1966
- effect on energy utilization by lambs—951
- effect on fattening performance of Merinos—3132
- effect on skeletal muscle and adipose tissue growth and development—2061
- effect on skeletal muscle growth and development—299
- hormones, influence on response of uterine arterial smooth muscle to nonepinephrine—2377
- hormones, need for and methods of assay for improving reproductive efficiency—1958
- influence of carcass weight, sex and breed on consumer acceptance of lamb—1959
- influence on growth and carcass—83
- influence, Watish lambs, on weight-for-age—2369
- multiple births—2774
- ratio, causes and sex combination in multiple births—2774
- sexual preparation procedures, effect on semen characteristics—1922
- SEXUAL BEHAVIOUR**, effect of progesterone on, in adult ovariectomized ewes—917
- photoperiodic control, cranial sympathetic nervous system—1762
- SEXUAL CONDITION**, effect of photoperiod—442
- SEXUAL MATURITY**, and puberty, in native and crossbred sheep reared in confinement—2766
- ewes—657
- induction, females—2428
- mechanisms governing ovarian cyclicity at puberty—999
- SEXUAL REPRODUCTION**, crossbreds—2788
- SHEARING**, chemical defleecing of wool—2569
- Corriedale rams, effect on certain physiological responses—2016
- effect, before mating season, on breeding activity—2123
- effect of early, on young and adult Romney Marsh ewes, southern Chile—1419
- effect of time and location on quality of wool, Australia—3197
- effect on lambing pattern, during mating season—3125
- motorized cradle for easier—3267
- prevention of wounds—2241
- should we be breeding for easier shearing—1923
- wool, synergistic effect of thiocyanate with flumethasone in inhibiting growth in Merino wethers—2274
- SHEEP**, a short communication—1823
- serological test for muscle tissue—1851
- SHEEP-ON-ITS-BACK SYNDROME**, part played by ectoparasite—2304
- SHEEP POX**, vaccine, immunity, use of freeze-dried—900
- SHEEPLAN**, the New Zealand flock recording scheme—498
- SHEEPMEAT**, and the European Economic Councils—1996
- SHEEPSKINS**, control of flies and weevils while drying—3105
- SHIPPING MOISTURE**, effect of breed and feed level on dressing percentage body parts and fill—473
- SHOCK**, hemorrhagic, effect of untreated on lung fluid and protein dynamics in unanesthetized sheep—742
- SHROPSHIRE**, comparative performance of breed crosses, lamb production traits—1442
- SHROPSHIRE EWES**, effect of feeding Irish moss on condition and fertility—426
- SHUMAVA SHEEP**, breeding standard of reproduction—656
- SICKLING**, erythrocyte, nature—474
- SILAGE**, corn, effect of particle size on digestibility and rumen fermentation—2880
- effect of date of cut, digestibility—2960
- effect of litter size on intake, ewes fed concentrates—2223
- effect of treatment with formaldehyde-formic acid mixture on digestion—1081
- evaluation of feed energy—2661
- fast food for sheep—1345
- feeding lambs—2179
- fescue, nervous symptoms in ewes—1952
- grass and grass/clover, value for store lambs—2479
- grass, mediocre quality, for ewes at end of gestation and beginning of lactation—2994
- hay, nutritive value—3252
- influence of contamination by soil upon trace elements availability in sheep—1670
- intake and digestibility of maize—1528
- intakes in relation to energy requirements of ewes in late pregnancy—2700
- maize, effect of four corn silages and corn grain ratios and nitrogen source on digestibility and nitrogen retention in lambs—1385
- maize, for fattening lambs—1386
- maize, nitrogen supplementation for early weaned lambs—388
- metabolism of methionine in silage-fed sheep—1080
- mycotoxins, biological effects—1806
- review of effect of wilting on fermentation in silo and nutritive value—1864
- rumen contractions—2067
- soybean residues, with various additives—1988
- summer diet for ewes—1618
- wilted grass, effect of pre-ensiling treatment with formaldehyde—2727
- SILICIC ACID**, fed to sheep, cadmium retention—445

- SIMAZINE**, histological changes in organs of sheep in chronic poisoning—819
mixture with atrazine, in vitro metabolism, by soluble fraction of liver homogenate—1555
- SIRE**, contribution to emotionality in crossbred ewes—3015
effect of daylength on lamb growth, comparisons of sex, level of feeding, sharing and breed of sire—993
effect on lamb grades—715
evaluation, according to progeny—1430
genotype selection, elimination of natural scrapie—229i
- SJENICA**, crossbreeding, main characteristics of R₁ generation—2161
- SKELETIN**, immuno reactivity in heart purkinje fibers—901
- SKIN**, and hides in Karakul farming in USSR—2992
antigenic composition and source of soluble proteins on surface of skin of sheep—1449
autografts, changes in epidermal and wool pigmentation—2592
biuret reaction, quantitative determination of insoluble proteins—1125
collagen, metabolism, effect of intravenously infused dexamethasone—1729
diseases, alopecia—2063
diseases, immunosuppression of squamous cell carcinoma—1481
epidermis, structure—1773
folds affect Merino production—800A
folds can affect lambing percentage—204
follicles, wool, cell kinetics—3160
histology, and some wool characters in crossbreds—2991
in vitro metabolism of tritiated cortisol and tritiated estradiol—3193
lamb, low angle x-ray diffraction—532
location of immunoglobulins—1774
myiasis, caused by fly species—582
pyruvate metabolism—1181
rate of division of germinative cells in hair bulb in relation to rate of growth of wool fibers—2415
sebaceous layer, effect of disruption on incidence of fleece rot—1433
test, cytokine production by bluetongue virus-infected detal sheep cells—894
topography of surface revealed by scanning electron microscopy—1448
- SKRJABINEMA**, in wild sheep from Iran—903
- SKULL**, growth, animal model for study—2672
role of function in formation—2673
- SLAUGHTER**, effects of electrical and captive-bolt stunning on incidence of blood-splash in lambs—2826
electrical stunning of Karakul lambs—1648
hexachlorbenzene in blood and tissues—268
humane, electrical stunning—340
humane handling, New Zealand—1561
importance of transport and pre-slaughter treatment—3157
influence of waiting period before, quality of meat—2998
isolation of bacteria from organs—2071-A
non-penetrative percussion stunning—339
petechial hemorrhage in carcass fat—2988
physiological effect of stunning in relation to meat quality—1709
prevalence of salmonellas at—1499
recent findings of efficacy of technics—338
review of hearing on stunning held at Kavlinge, Sweden on 19th May 1979—2909
sheep, according to Islamic ritual, animal welfare secondary to religious practice, protected by statute—816
stress and its control in meat animals—1770
toxoplasma antibodies among sheep in Jordan at—2049
use of CO₂—1297
weights, early-weaned lamb performance, dry-lot vs. pasture—889
- SLEEP**, posturally related tonic activity recorded from peripheral diaphragm in lambs—1249
- SLOVAK**, Merino, effect of season on values of semen—1025
- SLOVAKIA**, western, toxoplasmosis in lowland regions—259
- SLOW VIRUS**, and chronic disease of the central nervous system—2902
recent findings of scrapie—2384
- SLOW VIRUS DISEASE**, sheep as model for study—2640
some common features with cancer—1165
- SLOW VIRUS INFECTIONS**, current methods for diagnosing and controlling—3029
- SNAIL**, as experimental host of *Muellerius capillaris*—2636
Cernuella and *Helicella* spp., intermediates for protostrongylids—1842
experimental infection of various Helicidae with ovine protostrongyles—2048
- SNOWDONIAN ENVIRONMENT**, sheep population studies—684
- SOCIAL BEHAVIOUR**, social ranking—456
- SOCIAL DOMINANCE**, relation of, to intake of supplements by grazing sheep—1777
- SOCIAL STRUCTURE**, desert bighorn sheep—1737
- SODA**, caustic, use in treating straw for digestibility—1014
- SODIUM**, blood electrolytes and hemoglobin variants in Karakuls—2751
changes in blood, trichostrongylid infections—2259
deficiency, effect of adrenal arterial infusion of P-113 on aldosterone secretion in Na-deficient sheep—342
effect of dietary calcium levels on concentration and solubility in digestive tract—3306
excretion, role of aldosterone during fetal and newborn period—2536
indicator of capillary permeability in lungs of anesthetized sheep—2331

- ion, activity in purkinje fibers—1713
 ion, diffusion permeability in placenta—2986
 ion, relation between intracellular activity and positive inotropic action of sheep cardiac purkinje fibers—1715
- SODIUM BENTONITE**, effect of addition to high grain diets—609
 in high concentrate diets for lambs—827
- SODIUM BICARBONATE**, effect of intraduodenal infusion on volume of secretion, bicarbonate output and pH of pancreatic juice and bile—2874
 in high concentrate diets for lambs—827
 intracranial hemorrhage following intravenous administration to newborn asphyxiated in utero—3234
- SODIUM CARBONATE**, effect on prevention of lactic acidosis—1548
- SODIUM CHLORIDE**, effect of loading and ACTH on blood pressure of sheep with reduced renal mass—3241
 plasma insulin levels during infusion of in conscious splenectomized sheep—273
 solution, intracranial hemorrhage following intravenous administration to newborn asphyxiated in utero—3234
- SODIUM CYANIDE**, effect in coyotes, application as predacide in livestock toxic collars—2858
- SODIUM HYDROXIDE**, effect of treatment on digestibility of oats, barley, wheat and maize—2193
 effect on efficiency of rumen digestion—303
 energy retention in growing lambs fed diets having different proportions of sodium hydroxide treated straw—2340
 intake, digestibility and nutrient utilization by sheep of treated tropical grass supplemented with soybean or urea—1075
 treated wheat straw, effect of level of urea nitrogen on utilization—59
 treatment of maize cobs, nutritive values—1513
 treatment of oats, barley, wheat and maize, digestibility—2231
 treatment of paddy straw, effect of energy and nonprotein supplementation on digestibility and intake—1445
 treatment of rice straw to improve nutritive value—1444
- SODIUM NITRATE**, aerosol, effect on cardiopulmonary function—2599
 efficacy in cyanide intoxication—472
 induced methemoglobinemia, antagonism of methylene blue or tonium chloride—471
- SODIUM THIOSULFATE**, efficacy in cyanide intoxication—472
- SOFT PALATE**, development of taste buds—410
- SOIL**, effect of grazing, Mojave Desert—3211
 influence of silage contamination by, on trace elements availability in sheep—1670
 silage-amended, performance of lactating goats and lambs fed corn silage grown on—2272
 type, lambing rate in New South Wales—2568
- SOMALI**, sheep, effect of levamisole on gastrointestinal strongyles—507
 antibodies to parainfluenza-3 virus in cattle, sheep, goats and dromedaries—1015
- SOMALI DEMOCRATIC REPUBLIC**, salmonella carriers among cattle, sheep, goats and dromedaries—95
- SOMATOMAMMOTROPIC**, chronic, effect of long-term bromocriptine infusion—1795
- SOMATOMEDIN-LIKE ACTIVITY**, plasma, after fetal hypophysectomy or nephrectomy and in experimental intrauterine growth retardation—929
- SOMATOMEDIN-LIKE SUBSTANCE**, plasma of growing lambs—930
- SOMATOSTATIN**, effect on plasma glucagon and insulin and glucose turnover in exercising sheep—436
 suppression of glucagon secretion, effect on glucose production—435
 suppression of glucagon secretion on glucose production—437
- SOMATOTROPIN**, serum, after hypophysectomy and during parturition—429
- SORBITE**, plasma levels, effect of infusion of sorbite electrolyte and sorbite solution—1624
- SORE MOUTH**, in sheep and goats—724
- SORGHUM**, grain, with potatoes, in production of prime lamb—134
 nutrient value, treated with dry heat—3052
 stubbles, forage value, grown on Southern Tablelands of New South Wales—2075
 weathered grain, nutritive value—1751
- SORGHUM VULGARE**, utilization by Gaddi ewes supplemented with three levels of linseed-cake—2253
- SLOUDANO-SAHELIAN**, viral diseases of sheep—395
- SOUTH AFRICA**, helminths in sheep—2822
 incidence of infection and geographical distribution of *Actinobacillus seminis* infections in sheep—3103
 outbreak of stachybotryotoxicosis—2665
 parasites of domestic and wild animals, transmission of nematodes from blesbok and impala to sheep, goats and cattle—1355
 sheep infection with *Actinobacillus seminis*—3102
 symptoms of rabies—245
- SOUTHDOWN**, animal-model for study of human disease—661
 bile acid clearance in hereditary hyperbilirubinemia—891
 comparative performance of breed crosses, lamb production traits—1442
 crossbred Suffolk, long term effects of feeding protected sunflower seed supplement on composition of body fat—2000
 crossbreeding, fat content—619

- nephron obstruction in mutants—662
- SOYBEAN, intake, digestibility and nutrient utilization of sodium hydroxide-treated tropical grass supplemented with—1075
- performance of steers and lambs fed corn stover ensiled with—1113
- residues, ensiled with various additives, in vitro and in vivo evaluations—1988
- SPAIN, dimensional characteristics and components of numerical productivity of Galician Gallego sheep—3094
- epidemiology, toxoplasmosis, sheep and goats—2551
- epizootiology of coccidiosis—1305
- helminths, survey—1885
- legislation, milk—2824
- most frequent parasites of sheep in Estremadura area—520
- structure of production, processing consumption of milk and milk products—737
- SPANISH, ewe, milk fat and composition of unsaponifiable materials, sterol and hydrocarbon fractions—1029
- SPECIFIC GRAVITY, urine, comparison with osmolality—893
- SPECTINOMYCIN, efficacy against diarrhoeal disease in neonatal lambs—1036
- SPERM, a review—2060
- abnormalities—2798
- acrosomal abnormality, a review—3107
- acrosomal glycoproteins—975
- acrosome, localization of proteinase—2611
- acetyl choline induced calcium movements in hypotonically washed cells—2862
- activity of carnitine acyl transferase—438
- agglutinating factor, antisera, effect on addition to diluents for frozen semen—3342
- agglutinins, method of evaluating rams—551
- collection from Suffolk, Texel and Dorset—797
- cytophotometric study of DNA and nucleoproteins, influence of storage time in utero—2156
- effect of different diluents, thawing temperatures and materials of thawing containers on survival of, frozen by pellet method—1017
- effect of ethylenedibromide on differentiation of acrosome nucleus and transient nuclear appendage to spermatids—1361
- effect of number of motile, per insemination, on fertility and lamb crop of Ossimi ewes—3
- effect of oxytocin on passage through genital organs, synchronization with Agelin—2674
- effect of rete testis and epididymal fluid on metabolism and motility—3156
- effect on fertility of vaccinating female sheep with biochemically defined fractions—2050
- epididymal, motility, fertilizing ability and embryonic survival after uterine AI—1005
- evaluation after paddock-mating—2744
- fluid environment during maturation—1359
- immunodiffusion data on antigenic relationships of bull, boar, ram and human cells—417
- interpretations of pattern of tail movements—3288
- level of anti-acrosin antibodies in vaccinated ewes, correlation with fertility—3198
- lipid changes during epididymal maturation seasonally—912
- maturation changes in surface proteins—3155
- membrane integrity and regulation of calcium—409
- modifications in plasma membranes during maturation and incubation in utero—635
- morphology, season—2798
- motility after freezing in liquid nitrogen—869
- motility, deep freezing—2441
- motility, objective evaluation under various physiological and pharmacological conditions—255
- quantitative analysis of dimension in relation to fertility of Soviet Merino rams—149
- surface glycoproteins and free acidic groups—976
- terato, pattern and dynamics of as induced by ethylenedibromide—876
- use of technetium-99M label for monitoring transport in female reproductive tract—1793
- zymogen form of acrosin in testicular, epididymal and ejaculated sperm—1256
- SPERMATIDS, appearance of new electrical properties in plasma membrane—634
- nuclear reorganization—1785
- SPERMATOCELE, a review—3107
- SPERMATOGENESIS, Brazilian white woolless sheep, effect of high temperatures—628
- course of—1960
- endocrine control—633
- endocrinology in hypophysectomised ram—632
- photoperiodic regulation, relationship to serum hormones—2656
- response to exogenous gonadotrophin in prepuberal rams—1784
- SPHINGOLIPIDOSIS, sheep—2746
- SPLEEN, arterial segmentation—1197
- role in blood circulation after sedation with rompun—379
- SPLENECTOMY, hematological observations in *Theileria* carrier sheep—2395
- technic, hematological changes in anaplasmosis and babesiosis—123
- SPONGES, intravaginal, compared with subcutaneous implants for synchronising estrus, Karakul ewes—940
- SPORIDESMIN, poisoning, facial eczema and palatability of meat from lambs—1572
- SQUAMOUS-CELL CARCINOMA, effect of cyclophosphamide on growth—1482
- effect of removal on lymphocyte stimulation by tumour extracts and phytochaemagglutinin—1483
- in vitro response of lymphocytes—1485
- STACHYBOTRYOTOXICOSIS, economic losses—217
- field outbreak—2665

- STAGGERS**, ryegrass, etiology and control—481
rye grass, tremorgenic toxins produced by *Penicillium jantheinellum*—1686
- STAPHYLOCOCCOSIS**, experimental, pathology, vaccination—3202
role of animals in human cases in Nigeria—31
- STAPHYLOCOCCUS**
and Indian yellow wool—1440
bacterial carrier state and mastitis—2602
infections in Sudan—33
isolation in visceral caseous lymphadenitis—2491
- STAPHYLOCOCCUS AUREUS**, subclinical mastitis in machine-milked ewes—3148
- STAPHYLOCOCCUS EPIDERMIDIS**, subclinical mastitis in machine-milked ewes—3148
- STAPLE**, length, fibre diameter profile—1427
- STAPLE STRENGTH**, potential for harvesting weakened wool, comparison of breeds for staple strength and depilation force after cyclophosphamide treatment—1121
- STARCH**, hydrolyzed, as protective agent for cryopreserved erythrocytes—2096
utilization of partially hydrolyzed, in milk replacers—2813
- STARVATION**, effect on growth and reproduction of Merino sheep—67
effect on rumen juice and blood—1478
endocrine, enzyme and fetal weight parameters in undernourished ewe—2683
fetal and maternal hormonal response—2670
- STATISTICAL**, design, utilization of concomitant variables—1028
- STATISTICS**, Canadian Agricultural Yearbook for 1978—2004
disease, United Kingdom—3072
- STAVROPOL**, birth weight of Merinos, India—2452
crossbreeding, USSR—1507
- STELLATE GANGLION**, stimulation, effect on lung fluid and protein exchange—1219
- STENOSIS**, aortic, experimental in fetal lambs—1745
- STERIGMATOCYSTIN**, biological effects of mycotoxins in ruminants—1806
- STERILIZATION**, ram, use of formaldehyde—2363
- STEROID**, anabolic, use in fattening hoggets—1776
induced male and female sexual behaviour, effect of progesterone, adult ovariectomized ewe—917
ovarian, influence on response of uterine arterial smooth muscle to norepinephrine—2377
parturition, action on myometrical contractile function—665
placental, control of synthesis at parturition—979
plasma, in intact or hypophysectomized pregnant ewes—387
plasma levels, after administration of two forms of dexamethasone—2273
secretion by ovarian transplant and gonadotrophins during prostaglandin induced luteolysis—1353
- STEROIDOGENESIS**, role of microfilaments, corpus luteum—2735
- STILESIA GLOBIPUNCTATA**, morphology—1192
- STILESIA VITTATA**, morphology—1192
- STIPA SPARTEA** (PORCUPINE GRASS), lamb trauma caused by seeds—1570
- STOCKING**, erosion risks with high rates, Western Australia—39
- STOCKING RATE**, clean grazing for sheep—2825
effect of grazing intensity on annual vegetation—2360
effect on emergence, dispersal and behaviour of soldier fly adults in pasture—780
effect on ewe and lamb performance from mid-pregnancy to weaning—587
influence on grazing behaviour and social facilitation in Merinos—1808
influence on production from sheep of different genotypes—2467
intensive systems on lowland grass—2145
performance of ewe on range of intensive winter stocking densities—336
- STOMACH**, distension, factors affecting voluntary intake of food—1167
distribution of vagus, prenatal period—2387
effect of pentagastrin on smooth muscle strips from—3114
fore, function—2297
motility, contraction force—3033
motility, effect of rumen insufflation on contraction rate—1794
motility, measurement of flow of digesta—624
motility, vagus nerve, development of selective deafferentation technic—695
positioning of tube into, lambs—2481
- STOMATITIS**, vesicular, in Barbary sheep and mule deer in Palo Duro Canyon, Texas—1232
- STOVER**, corn, performance of steers and lambs fed ensiled broiler litter or soybean meal—1113
- STRAW**, alkali treated, and urea for pregnant ewes—1990
alkali treatment, effect of energy and nonprotein nitrogen supplementation on digestibility and intake—1445
digestibility of protein and fibre of fermented, enriched with protein—3321
digestibility, treated with ammonia or caustic soda—1014
effect of ammoniation on intake and nutritive value—1704
determination of nutrient digestibilities—1531
feed value, influence of additional pre-incubation with rumen fluid of animals deprived of food on in vitro rate of protein synthesis—1262
grain supplemented, factors affecting digestion—1077

- paddy, enriched with urea-molasses, utilization in lamb rations—2478
 predicting digestibility by adult and growing sheep—970
 rice, sodium hydroxide treatment to improve nutritional values—1444
 role of enzyme preparations during feeding—2698
 sodium hydroxide treated, energy retention in growing lambs fed—2340
 use of food rations with high content of straw and NPN in various breeds—939
 wheat, utilization of alkali-treated, effect of level of urea nitrogen—59
- STREPTOCOCCUS**, bacterial carrier state and mastitis—2602
- STRESS**, age related changes in coronary blood flow and resistance in chronically instrumented sheep—2539
 analysis of differences in behaviour in thin fleeced sheep—1690
 blood glucose in cold exposed sheep—3035
 blood sampling, influence on blood values—1101
 body fluid changes with cold exposure—726
 chronically instrumented sheep, age related changes in coronary blood flow and resistance—2549
 cold, effect on mineral metabolism—2713
 cold, effect on physiological responses of serpine—2236
 cold, reduced response to insulin production—2635
 cold, response in relation to selection for survival ability—2780
 control in meat animals—1770
 environmental, osmotic fragility of erythrocytes—3047
 heat, effect of alpha and beta sympathetic antagonists in pregnant ewe during—440
 heat, effect on plasma concentrations of prolactin and luteinizing hormone in ewes—1347
 heat exposure, effect on physiological responses, blood constituents and blood glucose metabolism—2630
 indices in housed experimental sheep—2487
 influence on immunization for clostridial infections—1491
 is alleviation of maternal, beneficial to fetus—2045
 relation to mycoplasmas (Ureaplasmas) isolated from synchronizing sponges from ewes—1910
 relief with meperidine in pregnant sheep—2044
 sheep transported by sea—577
 sweating in different body regions—2447
 thermal, tolerance of different genetic groups of sheep exposed to elevated temperatures—2753
 thin fleeced sheep, pituitary adrenal system—1689
 uterine blood flow and plasma norepinephrine changes during maternal stress in pregnant ewe—2720
 uterine uptake of amino acids throughout gestation in unstressed ewe—2047
- STRINACIN**, clinical trial in treatment of non-specific diarrhea—3140
- STRONGYLATA**, anthelmintic action of tetramisole and mebendazole—1838
- STRONGYLES**, gastrointestinal, effect of levamisole—507
 gastrointestinal, efficiency of cambendazole—983
 seasonal and age dynamics of infections in Bulgaria—1058
 subclinical infections—1655
- STRONGYLIDS**, seasonal variation, Bulgaria—772
- STRONGYLOIDES PAPILLOSUS**, pasture infectivity in Nigeria—2200
- STRONGYLOSIS**, latest findings—1542
 parasitism during 1977 in a sheep flock on permanent pasture—1363
- STRUCTURE**, fine, endocrine cells of pancreas—1304
 fine, principal cells of initial segment of epididymal duct—2147
- STUNNING**, electrical, Karakul lambs—1658
 electrical, associated with subcutaneous hemorrhagic speckling—2330
 for slaughter, review of hearing on at Kavlinge, Sweden, 19th May 1979—2909
 non-penetrative percussion—339
- SUBCOMMISSURAL ORGAN**, failure to demonstrate vasotocin—783
- SUBMAXILLARY**, mucin, hydrophobic interaction of fluorescent probes—2597
- SUCKING**, role of cricopharyngeus muscle—2144
- SUCROSE**, effect of diet and feeding level on taste responses of sheep and calves—580
 intestinal transport capacity, reciprocal relationship with rumen development—2659
 starch ratios, effect on dietary energy utilization—3092
- SUDAN**, desert type Watish lambs, sex difference in growth—2368
 hydatidosis in slaughter sheep—870
 incidence of bluetongue virus precipitating antibodies in sera of domestic animals—867
 isolation of *Listeria monocytogenes*—2717
 sheep pox—2092
 Staphylococcus infections—33
- SUDAN DESERT SHEEP**, varying levels of concentrates in rations—872
- SUFFOLK**, body composition in native and crossbreds—1495
 carcass evaluation of crosses—3344
 comparative performance of breed crosses, lamb production traits—1442
 comparison of crossbreds with Galways on reproductive performance—2425
 crossbreeding with Finns, lambing traits and lamb and wool production—1518
 crossbred Southdown, long term effects of

- feeding protected sunflower seed supplement on composition of body fat—2000
- crossbred with Border Leicester and Romney, effect of nutrition and castration on meat production and quality from male lambs—2418
- crossbreds with Teeswater, Dales and Dorset, performance—2146
- Galway cross, comparison of reproductive performance—2424
- growth and carcass of crossbreds with Dorset horn, Border Leicester and Merinos—2010
- Finn crosses, growth and endocrine responses to zeranol implants—3248
- length of breeding season—1706
- performance and carcass of sired lambs from Panama and Finn × Panama dams—682
- rams, feed intake and carcass composition of lambs sired by—1239
- rams, potential semen production during breeding and nonbreeding seasons—664
- semen collection—2797
- semen quality during non-breeding season—2796
- sired lambs, comparison of lambs out of Finnish Landrace × Dorset Horn ewes under grazing conditions—1697
- weaning weights, post-weaning gain and final market weights of breed plus crosses—3136
- SUGAR BEET**, diminishing rumen butyrogenesis in sheep fed—1739
- leaves, feeding of fresh and ensiled—2391
- plus molasses as concentrate feed for feedlot Karakul lambs—1126
- pulp, in diets with molasses for fattening lambs—2629
- SUGARS**, effect of Mn-deficient feeding to ewes on certain amino acids and, in cartilage of their newborn lambs—1313
- SULFADIAZINE**, pharmacokinetics—1804
- SULFAMERAZINE**, pharmacokinetics in ewe lambs—1269
- comparative plasma kinetics—2522
- comparative plasma kinetics, normal and anemic sheep—1789
- SULFADIMETHOXINE**, efficacy against diarrhea in neonatal lambs—1036
- SULFATASE**, pattern of activity in endometrium during pregnancy—839
- SULFONAMIDE**, disposition in food-producing animals, pharmacokinetics of sulfamerazine in ewe lambs—1269
- efficacy against diarrhea in neonatal lambs—1036
- levels in blood of sheep and calves—297
- pharmacokinetics of sulfadiazine—1804
- serum levels after oral and parenteral administration—1805
- SULPHADIMIDINE**, pharmacokinetics and urinary excretion—2120
- SULPHADOXINE**, half-life and distribution in sheep in relation to age and weight—170
- ³⁵S-SULPHENE, pharmacokinetics and residues in meat—3147
- SULPHUR**, dietary deficiency—856
- effect on ⁷⁵Se absorption and retention—2375
- excretion and retention of dietary and supplemented sulfur—812
- influence on sheep on high levels of copper and broiler litter—3103
- inorganic, net utilization by rumen microbes—924
- intake, effect on molybdenum metabolism—1130
- metabolism, pools in and flows from reticulo-rumen—810
- organic, compounds, toxicity—2332
- quantitative estimates of metabolism in sheep's stomach—811
- SUNFLOWER**, oilmeal, urea substitution for mixed feeds in fattening lambs—1387
- seed, long-term effect of feeding, on composition of body fat in growing sheep—2000
- SUPER SICKLES**, kemp succession in adult fleece of two coarse-wool breeds in relation to birthcoat—1178
- SUPERPHOSPHATE**, long-term effects of quantity of as applied, on nutritive value of diet selected by sheep grazing a pasture originally sown to *Phalaris aquatica* and *Trifolium repens*—1684
- SURFACTANT**, pulmonary, correlation of fluid cortisol (trachea) and production of pulmonary surfactant in chronically catheterized fetus—3010
- SURGERY**, amnion, past and present—3025
- blood supply and bone remodeling following medullary nailing of long bones—2343
- cosmetic, British Veterinary Medical Association policy—30
- effect with epidural anesthesia on serum thyroid hormone and cortisol levels in pregnant ewe—898
- everted intestinal anastomosis using continuous lock-stitch sutures—2747
- experimental, effects of cannulation on intestinal motility—3219
- experimental, method for re-entrant cannulation—1413
- experimental, regional alveolar gas composition and lung function—2548
- in treatment of tetanus—152
- post-surgical changes in blood of fetus in utero—1582
- trabeculae, treatment with electromagnetic stimulation—918
- use of neuroleptics in field—1403
- SWALLOWING**, response of newborn to salts, acids and sugars—1628a
- supranuclear pathways—1325
- SWEAT GLANDS**, Nali sheep, relation to canary coloration of Indian wool—1439
- ultrastructure, after exposure to controlled warm environments—1450
- SWEATING**, in different body regions—2447
- in sheep and goats in India—2446
- SWEDEN**, review of hearing on pre-slaughter stunning—2909

- sheep breeds on Gotland—2990
- SWINE, ensiled waste, as feed for gestating sows and fattening lambs—1879
- SWINE WASTE, digestibility and palatability of ensiled—985
- ensiled, as feed for fattening lambs—1863
- ensiled, digestibility and palatability—302
- SWISS BREEDS, hematological and clinical chemistry studies—389
- SWITZERLAND, Berne, enzootic occurrence of pulmonary adenomatosis—3009
- helminths, epidemiological studies—2341
- SYMBIOTES, rumen, nutrition—3084
- SYMPATHETIC STIMULATION, parotid salivary secretion—2300a
- SYMPOSIUM, hydatidosis, May 1978—186
- physiology and control of parturition—877
- SYMPTOMATOLOGY, rabies in South Africa—245
- SYNAPSE, serotonergic, on pathway to heat production—350
- SYNCHRONIZATION, estrus, concentration of free 17-beta estradiol in blood plasma of ewes after treatment with chlormadinone acetate—1222
- estrus, over 12 year period using oral map treatment for 10 days—3123
- SYNCYTIAL VIRUS, respiratory, experimental infection in lambs—1722
- respiratory, experimental infections in feeder lambs—1723
- SYNTHETASE, aminoacyl transfer RNA, agarose gel filtration behaviour of the extensively purified high molecular weight complexes of seven enzymes—425
- aminoacyl transfer (EC 6.1.1.) RNA, purification and characterization of high molecular weight complexes of 7 enzymes—1530
- fatty acid, comparative metabolism—3172
- glutamine (EC 6.3.1.2), in digestive tract—1337
- prostaglandin, inhibitors stimulate breathing movements in fetus—1757
- SYRIA, plasma levels of various enzymes and metabolites of cattle and sheep—2158
- T
- TABASCO, ewes, estrus synchronization—1886
- TACHYPNEA, lung fluid balance in awake newborns with pulmonary edema from rapid intravenous infusion of isotonic saline—345
- TAENIA HYDATIGENA, arc 5 antibodies in sera—3315
- cross-protection between cysts of *Echinococcus granulosus* and *Taenia ovis*—1281
- effect of existing and concurrent infections with *Fasciola hepatica*—502
- epizootiology, Yugoslavia—3162
- role of hunting dogs and foxes as definitive hosts and of sheep as intermediate hosts—853
- TAENIA MULTICEPS, role of hunting dogs and foxes as definitive hosts, and of sheep as intermediate hosts—853
- TAENIA OVIS, arc 5 antibodies in sera—3315
- cross-protection with *Echinococcus granulosus* and *Taenia hydatigena*—1281
- immunizing potential of various stages of eggs injected subcutaneously into neonatal or sixteen-week-old lambs—1282
- passive protection of lambs—1283
- passive transfer of immunity via colostrum—2901a
- pathology of cysticercus in heart—1810
- specific and non-specific reactions to in sheep and dogs—1280
- surface changes and secretory processes in ocospheres undergoing activation—2287
- TAGAVIRUS (JOS), Nigeria, pathogenicity and immunological studies—919
- TAIL, fat, impediment to mating—1318
- TAILLESNESS, inherited—528
- TAJIK, history of fat-rumped sheep—2056
- TAMIL-NADU, reproductive performance of Mandya breed—1843
- survey of tick fauna—1619
- TAN-YANG, sheep, preliminary study of breeding program—1500
- TANSY RAGWORT, effect of rumen fermentation on toxicity—2910
- TANZANIA, antibiotic resistance among salmonellae—1370
- TAPEWORM, efficacy of albendazole—2653, 3108
- Use of oxfendazole—2494
- TAPIOCA, enriched with urea-molasses, feeding, lamb rations—2478
- TARGEE, embryo transfer study of birth weight—1317
- TARGHEE, length of breeding season—1706
- TASMANIA, control of hydatid disease—1913
- TASTE, preference, on basis of behavioural study—1388
- responses, sheep and calves to sucrose, effect of diet and feeding level—580
- TASTE BUDS, development on soft palate—410
- TAURINE, thermoregulatory effect when injected intracerebroventricularly—351
- TAXONOMY, Cyprus wild sheep—2170a
- species affinities in domestic sheep and goats—2407
- TEASING, identification of barren ewes by vasectomized rams—1595
- use of estrous ewes on semen output—1921
- TECHNETIUM-99M, use in labeling sperm for monitoring transport in female reproductive tract—1793
- TECHNICS, absorption spectrophotometry, analysis of trace elements in liver, serum and pancreas of sheep with gastrointestinal helminths—2736
- accuracy of tritiated water turnover rate as estimate of milk intake in lambs—806
- administration of fenbendazole via feed-block carrier—1908
- agar-gel immunodiffusion in diagnosis of ovine progressive pneumonia—2022

- antibody neutralization test for enterotoxemia—331
- automated enzymatic method for determination of ammonia applicable to rumen fluid, gut fluid and plasma—200
- biochemical tests of urine and blood in sheep diseases, appraisal of results—2382
- body composition in lactating sheep and its indirect measurement in live animal using tritiated water—990
- cannulation of rumen and abomasum with specially designed cannulae and a cannula insertion instrument—1610
- capillary tube centrifugation method for diagnosis of natural trypanosome infections—316
- characterization and antibiotic sensitivity of pasteurellas—2692
- comparison of agar gel precipitation and complement fixation test for diagnosis of brucellosis—2080
- comparison of fecal, rumen and utilization methods for ascertaining pronghorn diets—2786
- comparison of 5 serological tests for caseous lymphadenitis—2716
- comparison of methods for estrus synchronization—3322
- comparison of solutions of different density for coprological diagnosis of parasitoses—519
- comparison of two rapid cortisol radio-immunoassays for fetal sheep—1828
- comparison of ways of detecting blocking antibodies with *Brucella melitensis*—1559
- defaunation of rumen—1475a
- degrading proteinase test to distinguish benign and virulent ovine isolates of *Bacteroides rodosus*—753
- detection of bovine leucosis virus infection in cattle and sheep by enzyme-linked immunosorbent assay (ELISA)—949
- detection of complement (C₃) on nematode larvae—2842
- detection of pregnancy by rosette inhibition test—2053
- determination of acid-insoluble ash as index to digestion—2166
- development of new methods of immunization—1906
- diagnosis of *Babesia ovis* infection by fluorescent antibody technic—2251
- diagnosis of *Chlamydia* immunofluorescence—837
- differentiation of 3 isolates of parainfluenza virus on basis of hemagglutination—2765
- double antibody radioimmunoassay, for estimation of half-life and metabolic clearance rate of thyrotropin-releasing hormone—1588
- double replica applied to choroid plexus from early fetus—2024
- duodenal and ileal cannulation with "T" shaped cannula designed to replace the re-entrant cannula—1611
- economic, for assessment of sheep farming systems—1904
- electrical and captive-bolt stunning—2826
- electromagnetic flow meter to measure intestinal flow—1744
- epidemiological methods for detection of teratogens—1868
- establishment of self-retaining rumen catheter suitable for long-term infusions—922
- estimation of digestibility of feeds by indicator method with ash insoluble in HCl—2776
- estimation of milk yield by suckled sheep and comparison of estimates obtained by two methods in relation to effect of breed, level of production and stage of lactation—800
- estimation of protein degradability in rumen—2232
- estimation of rumen load through measuring consistency of rumen contents—1306
- estimation of serum ions in diagnosis of hydatid—2492
- evaluation of complement fixation methods for detection of Maedi-Visna antibodies in Canadian flocks—1087
- evaluation of agar-gel immunodiffusion test for detection of precipitating antibodies against progressive pneumonia virus—2023
- evaluation for studying arterial system of brain—1172
- fecal egg counts, relation to parasite load in microcoeliasis—2553
- field test method for estimation of gamma hexachlorocyclohexane in sheep dips—938
- for infertility investigations by field veterinarians—2361
- for studying biological and physiological processes of digestion and metabolism in farm animals—1056
- gel diffusion technics for differentiation of meats—2707
- genetic selection—863
- genetic selection, Polish Merinos—1586
- glutathione peroxidase activity in erythrocytes as measure of selenium status in livestock—94
- heating, effect on milk cheese lipids—757
- high pressure liquid chromatographic, for cantharidin—2470
- homologous radioimmunoassay for ovine follicle stimulating hormone (FSH)—344
- immunochemical detection of ovine, porcine and equine flesh in beef products with antisera to species myoglobin—1270
- immunodiffusion, immunoglobulins—1627
- improved method for determination of alpha tocopherol in liver—269
- improvement of methods of genetic selection—2159
- isotope dilution for measurement of body composition—1069
- laboratory diagnosis of *Bacteroides*—1320
- laboratory diagnosis of *Clostridium*—1320
- larval paralysis as in vitro assay of levamisole

- and morantel tartrate resistance of *Ostertagia*—1882
- lock-stitch sutures on everted intestinal anastomosis—2747
- measure of gingival sulcus—45
- measurement of blood loss in *Haemonchus* infections—1837
- measurement of free calcium ion concentration in sheep cardiac purkinje fibers with neutral carrier calcium ion selective microelectrodes—2810
- measuring gas production during incubation of feedstuffs for estimation of digestibility and metabolizable energy content—1961
- medium for enumeration of lactate utilizing bacteria in rumen—1817
- method for analysis of material from esophageal fistula—1872
- method for estimation of aflatoxins in tissues—1834
- method for nonsurgical correction of rectal prolapse in lambs—2286
- method for obtaining ovine uterine secretions from unilaterally pregnant ewes—270
- method for re-entrant cannulation—1413
- method of biochemical tests of urine and blood—2380
- method of detection of *Chlamydia ovis*—1982
- method of estimating clear fleece weights—262
- method of feeding biting midges on sheep—2077
- method of pancreatic juice collection—2355
- method of preservation of barley, effect of feed utilization in early-weaned lambs—2191
- method of prevention and preventative diagnosis of mastitis—3023
- method of separation of peripheral blood lymphocytes—3316
- method of studying feeding behaviour among groups of lambs by recording feeder usage—2866
- microfiltration procedure for purification of bovine and ovine subcutaneous tissue lipid extracts—1991
- microimmunodiffusion test for ovine progressive pneumonia—3276
- microphotometry, DNA, epithelial cells of rumen—2202
- milk progesterone levels as test of pregnancy—2704
- model for calculation of energy requirements of pregnant ewe—1049
- model for effect of energy nutrition on pregnant ewe—1050
- model of lamb production from an autumn catch crop—1051
- monitoring bacteriological contamination and assessment of carcass surface growth by using direct and indirect contact examination and various colony counting procedures—1915
- morphometric method for quantifying the trabecular bone in vertebrae—46
- need for and possible methods of application of hormone assay technics for improving reproductive efficiency—1958
- new method for improving carcass hygiene—1131
- new procedure for purification of ovine DNase—3166
- partition of nitrogen in sheep feces with detergents—1892
- pelvic measurements—1940
- peptic-digestion, sarcocystis in sheep—1200
- plasma pepsinogen levels as diagnostic aid in helminthiasis—1543
- preparation of *Babesia ovis* antigens—1662
- procedures for making caciocotta cheese—732
- quantitative estimation of non-dietary fecal nitrogen from bacterial residues—1890
- quantitative estimation of antibody to *Pasteurella haemolytica* in sheep sera using a micro-enzyme-linked immunoabsorbent assay (ELISHA)—470
- radiographic pelvimetry in ewe—1941
- radioimmunoassay for GH—818
- radioimmunoassay of cardiac contractile proteins in diagnosis of myocardial infarction—658
- rapid characterization of mixed microbial populations in ruminal contents, cecal contents and in feces by semiquantitative assay of hydrolytic enzymes—1688
- rapid in vitro method for evaluating pour-on dose forms of levamisole for sheep—2371
- regional alveolar gas composition and lung function—2548
- repeated or prolonged rumen infusion without establishing an open fistula—2213
- rosette inhibition test for embryo death—2104
- rumen fistula technic and utility—2020
- sampling rumen contents—2054
- selective deafferentation, vagus—695
- semiquantitative spot test for glutathione peroxidase in blood for assessment of biological selenium status—311
- separation of immunoglobulins from serum and colostrum—943
- serological methods for detection of brucellosis in ewes and rams—1409
- serological methods to detect *Brucella ovis* infections—1489
- serological test for meats of bovine, sheep, goats and deer—1851
- sheep as pilot animals for feeds—1277
- simple, for decontamination at birth for production of axenic lambs and oligoxeric calves—1127
- slaughter, recent findings—338
- splenectomy in sheep—123
- statistical methods in multivariate analysis of rumen overload syndrome and preliminary model of acid-base balance—852
- surgical, for collection of cervical mucus in ewe—2681

- ward sampling technic for estimating herbage intake by grazing sheep—3187
- synchronizing estrus in commercial sheep flock—1215
- telemetry system for interactive maintenance of hyperthermia in ewes with psychometric chambers—1591
- test for early pregnancy—2052
- transducer probed for measurement of estradiol induced changes in vagina or ovariectomized ewes—385
- use of biochemical tests on urine and blood in disease, analytical study of ketosis, hypocalcemia, enterotoxemia and urolithiasis—2381
- use of biuret reaction for quantitative determination of insoluble proteins—1125
- use of counterimmunoelectrophoresis in serodiagnosis of ram epididymitis using *Brucella ovis* surface R antigen—2095
- use of oestroscope for inspecting nasal cavity of sheep for *Oestrus ovis*—463
- use of pH sensitive microelectrodes in studying regulation of chloride in quiescent sheep purkinje fibers—3118
- use of technetium-99M for labeling sperm for monitoring transport in female reproductive tract—1793
- use of turbulent air flow to apply an insecticide mist to sheep—1999
- usefulness of infrared measurement technic—2552
- utilization of fecal phosphorus and calcium for estimation of intake—3137
- validation of radioimmunoassay to measure plasma cortisol in fetal sheep—1827
- validity of in vitro technics using rumen fluid or cellulase for predicting changes in dry matter digestibility of grasses caused by fertilizer calcium, sulfur, phosphorus and nitrogen—2482
- video, for in vitro measurement of ciliary motility—1900
- whole blood method for measuring mitogen-induced transformation of lymphocytes—1694
- X-ray diffraction of crystals of half synthetic sheep insulin—667
- TECHNOLOGY, rugging with polyolein fabrics—1**
- TEESWATER, crossbred with Dales, performance—2146**
- TEETH, effect of induced prenatal hypothyroidism on mandibular third primary molars—329**
- incisor, mineralization of enamel of permanent central, using microhardness and histological technics—2879
- syndrome of abnormalities, pathology and radiology—2222
- TELEMETRY, system for interactive maintenance of hyperthermia in ewes within psychometric chambers—1591**
- TEMPERATURE, ambient, effect on heat production of fasting sheep—3128**
- body fluid changes with cold exposure—726
- body, following injection of neuro-transmitters and carbachol—818
- body, of Corriedale, Marwari and Magra sheep in Rajasthan desert—2019
- body, regulation, adaptive strategies of selective fatty acid deposition in bone marrow of desert bighorn sheep—3048
- body, regulation, sweating in different parts of body—2447
- cardiovascular and renal functional changes after injection of transmitter substances—274
- duration of estrus, cyclical estrous activity, plasma progesterone, LH levels and fertility of ewes exposed to high temperatures before mating—2645
- effect of heating before and after insemination—2644
- effect of high temperatures on spermatogenesis of Brazilian white woolless sheep under experimental conditions—628
- effect on active transport of potassium in cation dimorphic sheep erythrocytes—1465
- effect on nucleotides, nucleosides and bases during thermal processing—158
- environmental, effect on reproduction—2643
- environmental, influence on *Clostridium perfringens* infections—1491
- environmental, sweating in different body regions—2447
- environmental, transport of animals by air—2078
- high ambient, cutaneous water loss and respiration rates of various breeds—2448
- influence of drying, biologic evaluation of ensiled and dehydrated maize—404
- influence on immunogenesis in clostridial infections—1492
- main principles of regulation of temperature homeostasis—1417
- regulation, effect of reserpine of cold stressed sheep—2236
- stress, effect on plasma levels of prolactin and LH in ewes—1347
- vagina, relation to eating, drinking, standing and walking activity rhythms of four anestrus Finnish Landrace ewes—1371
- TENDERNESS, meat, related to viscoelastic properties—3200**
- TERATOGENIC SUBSTANCES, direction by watching animal populations—1868**
- TERATOGENS, congenital abnormalities—751**
- TERATOLOGY, coniine in cows, ewes and mares—1526**
- TERATOSPERMIA, induced by parenteral treatment with ethylenedibromide—876**
- 4-TERT-BUTYL-2-CHLOROPHENYL-METHYL METHYLPHOSPHORAMIDATE (CRUFOMATE), metabolism after administration topically—214**
- TESTIS, age related effects on androgen binding protein—525**
- anatomy—451

- carnitine in luminal fluid—1319
 castration with chemical sclerosing using formaldehyde and calcium chloride—3012
 changes in physical condition and ejaculate in paddock-mated rams—2744
 characterization of gonadal factor involved in control of FSH secretion—2709
 diameter, effect of season of birth—524
 function, in rams following inhibition of prolactin secretion during nonbreeding season—2625
 histological testicular parameters in bilateral cryptorchid adult rams—1324
 hypoplasia, a review—3107
 immunity, experimental studies—2926
 immunohistochemical demonstration of hyaluronidase—2610
 inhibin activity in fluid, depression of plasma FSH and LF in the castrate and cryptorchid ram—489
 inhibin in ram rete testis fluid—711
 localization of acrosomal proteinase—2611
 measurements, phenotypic and genetic relationships between endocrine criteria and ovulation rates at 8 months of their half sisters—2517
 new electrical properties in plasma membrane of spermatis—634
 response to exogenous gonadotrophin in prepuberal rams—1784
 rete, effect on metabolism and motility of testicular and post-testicular spermatozoa—3156
 role of testicular fluid on blood plasma levels of FSH and LH in ram—343
 vasectomy, lambs, long term effects—2238
 weight, a review—3345
- TESTOSTERONE**, dihydro, increase in breeding season, associated with androgen binding protein—1446
 effect of photoperiod on plasma levels—442
 hypothalamic uptake of tritium labeled, following intracerebroventricular infusion—220
 immunization against, in anestrus ewes, LH and FSH plasma levels—1875
 induction of male behaviour in ovariectomized ewes and ovariectomized-androgenized ewes chronically implanted—590
 levels during first 2 months of life—2642
 light regulation of spermatogenesis—2656
 lutropin, basal levels and plasma profiles, Romney rams—3271
 propionate, sex behaviour and hormone responses in ewes given—1858
 propionated, serum gonadotrophins levels in castrated males—2288
 receptor in castrated ram pituitary cytosol—2955
 reversal of atrophy of accessory genital glands of castrated male sheep—3030
 seasonal variations in plasma concentrations, Algeria—694
 seasonality in Romney, Merino and Polled Dorset rams—251
 seasonality of production in rams with modified olfactory and pineal gland function—252
 secretion following single or repeated doses of gonadotrophin releasing hormone—3272
 spermatogenesis in hypophysectomised ram—632
 stimulation of erythropoietin production and erythropoiesis in anephric fetus—3332
 vasectomy, long term effects—2238
 zinc and manganese in accessory genital glands of males, distribution, uptake and effect on—1309
- TETANUS**, treatment with antitoxin, antibiotics and surgical treatment—152
TETMOSOL, comparative efficacy against sarcoptic mange in sheep—3142
TETRACAINE, abolishes slow inward calcium current in cardiac purkinje fibers—868
TETRACHLORVINPHOS, metabolism by soluble fraction of liver—51
TETRAMISOLE, efficacy against *Protostrongylus* and *Dictyocaulus filaria* in Moroccan sheep—683
 efficacy and economic advantage in use of oxyclozanide with—2463a
 efficacy in growing lambs under semi-arid conditions—3141
 granules, anthelmintic action against strongylata—1838
TETRATHIOMOLYBDATE, effect on caeruloplasmin amine oxidase activity in vitro, influence of substrate on apparent sensitivity to inhibition—1529
TEXAS, ticks and lice on Barbary sheep—1137
TEXEL, comparison of lambs sired by, out of Finnish Landrace × Dorset Horn ewes under grazing conditions—1697
 crossbreeding for production of fat lambs—971
 establishment of selection scheme—2319
 fecundity, crossbreds—1237
 rams, crossbred with Polish Merinos, production and quality of wool of fattened lambs—2237
 rams, feed intake and carcass composition of lambs sired by—1239
 performance of superovulated donor ewes in egg transfers—1244
 semen collection—2797
 semen quality during non-breeding season—2796
 sperm motility—2798
- TEXTBOOKS**, caprine-ovine mycoplasmas—630
 disease of cattle, sheep, pigs and horses—356
 illustrated anatomical nomenclature of heart and arteries of head and neck—2740
 Sainsbury and Sainsbury on livestock health and housing—2605
 sheep diseases—282
- THAILAND**, carcass evaluations—933
 review of sheep in highlands of North—932
- THALAMOCORTICAL CONNECTIONS**, studied by retrograde transport of horseradish peroxidase—1503

- THAWING, semen, factors influencing vitality during—1342
- THEILERIA**, control in USSR—1179
prevalence and significance in northern Nigeria—1717
prevention and control during grazing season—2891
propagation, a review—439
splenectomy effects—2395
- THEILERIA ANNULATA**, prevention and control during grazing season—2891
- THEILERIA HIRCI**, pathological blood picture—2395
- THERAPY**, exophthalmos in a lamb—1703
hyperimmune serum against infections with *Fusobacterium necrophorum*—1514
praziquantel in coenurosis—228
pregnancy toxemia—1800
- THERMAL STRESS**, body fluid changes with cold exposure—726
effect of alpha and beta sympathetic antagonists in pregnant ewe during—440
tolerance of different genetic groups exposed to elevated temperatures—2753
- THERMOREGULATION**, central gamma aminobutyric acid—352
effect of intracerebroventricular injections of taurine, glycine, GABA and muscimol—351
effect of intraventricular injection of transmitter substances—274
in fat-tailed Awassi and in a mesic German mutton Merino—725
- THERMOREGULATORY RESPONSES**, newborns during first 36 hours—1962
- THIABENDAZOLE**, benefits from use—106
efficacy against nematodes in western Victoria, Australia—497
incidence of resistance in field population of *Haemonchus contortus* in northern tablelands of New South Wales—3210
inheritance of resistance in *Haemonchus contortus*—1734
resistance of *Trichostrongylus colubriformis* and *Ostertagia ostertagi*—2627
resistance, sheep, New South Wales—260
use in control of nematodes, effect on production in Merino wether weaners in two environments—1463
- THIABENDOLE**, efficacy against gastrointestinal nematodes in growing lambs under semi-arid conditions—3141
- THIAMINASE**, type 1-producing *Clostridium sporogenes*, effect on cerebrocortical necrosis in lambs—666
- THIAMINE** (vitamin B₁), disappearance from blood and urinary excretion of ³⁵S-labeled—1326
disappearance from blood and urinary excretion of ³⁵S-thiamine—1335
etiology of cerebrocortical necrosis, a comparative light and electron microscopic study—315
experimental deficiency, induction of polioencephalo-malacia—2985
gastrointestinal passage and balance—424
movement through rumen wall—457
passage through rumen wall—1327, 1336
- THIAZOLE**, experimental poisoning, pathology—2332
- THIN EWE SYNDROME**, visceral caseous lymphadenitis, isolation of *Corynebacterium*, *Staphylococcus* and *Moraxella*—2491
- THIOCYANATE**, synergistic effect, with flumethasone in inhibiting wool growth in Merino wethers—2274
- THIOPEPTIN**, effect on prevention of lactic acidosis—1548
- THIOPHANATE**, anthelmintic activity against strongylids—3049
- THOMSON'S GAZELLE**, experimental transmission of gastrointestinal nematodes between sheep and—2405
- THREONINE**, characteristics of absorption in jejunum and ileum—2350
- THYMOSIN**, effect on PHA and Con A responses by fetal lamb lymphocytes—1728
- THYMUS**, corpuscles, histochemical study of muco substances and keratins—531
effect of thymosin on PHA and ConA responses by fetal lamb lymphocytes—1728
extract, effect on immune response—1836
regularity of morphogenesis—2594
- THYROGLOBULIN**, fused rocket immunoelectrophoretic analysis—2299
structure and pathophysiology—1769
- THYROID**, development of function in fetus in late gestation—1112
effect of acute hypoxia on pituitary axis in lambs—1584
effect of thyrotrophin releasing hormone on function—3182
fetal maturation related to parturition—1758
function in perinatal period—2116
hormone levels in serum, effect of epidural anesthesia and surgery—896
sensitivity to thyrotropin in fetal and newborn lambs—1583
thyroidectomy and brain development—1925
trace element deficiencies and fertility, a review—1308
- THYROIDECTOMY**, fetal microsurgical—576
- THYROTROPIN**, estimate of repeatability in temporal pattern of secretion—713
immunological relationships—2608
releasing factor, development of prolactin response, fetus and neonate—2975
releasing hormone, effect on pituitary and thyroid function in pre and postnatal lambs—3182
releasing hormone, estimation of half-life and metabolic clearance rate of, with double antibody radioimmunoassay—1588
sensitivity of thyroid gland in fetus and newborn—1583
- THYROXINE**, blood levels, effect of daylength on lamb growth—992

- effect on lung maturation in hypothyroid fetus—899
 levels in New Guinean ewes—3188
 plasma triiodothyronines, effect of illness and thyroidectomy—2182
 plasma, variations in penned sheep on uniform feed intake—3181
 serum, response to zeranol implants—3248
 stimulation of erythropoietin production and erythropoiesis in anephric fetus—3332
 uptake and metabolism by fetus after intra-amniotic injection—2518
- THYANOSOMA ACTINOIDES**, treatment with albendazole—1712
- THYSANOSOMICIDE**, evaluation of albendazole—306
- TIBIA**, medullary nailing, blood supply and bone remodeling—2343
- TICKBORNE DISEASES**, prevention and control during grazing season—2891
- TICKS**, Barbary sheep, Texas—1137
 biological and ecological studies on *Boophilus*, *Rhipicephalus* and *Hyalomma*—1754
 control in USSR—1179
 ecology and distribution of Q-fever rickettsiae—1752
 ixodid, from Barun glacier region in Nepal—689
 ixodid, survey of infection rate with piroplasm in Turkey—3196
 prevalence and significance of tick-borne diseases in northern Nigeria—1717
 survey of fauna in Tamil Nadu—1619
 transmission of Wad-Medani virus—1621
 United Kingdom—104
- TIMOTHY (PHLEUM PRATENSE)**, nutritive value of green fodder and hay—511
 hay, quality affected by magnesium fertilization or dietary supplementation—2486
- TIN ARSENATE**, poisoning—288
- TINOFEDRIN**, kinetic model of electrophysiological effects on purkinje fibers—10
- TOCOPHEROL**, alpha, improved method for determination, liver—269
- TOGAVIRUS**, etiology of Border disease, post-natal neurochemical recovery—2908
- TOLAZOLINE**, direct and indirect pulmonary vascular effects in newborns—1780
 effect on blood flow and pressures in hypoxic lambs—1147
 intravenous, direct relationship between pulmonary vascular resistance and lung fluid filtration in hypoxemic lambs given—420
 pulmonary and systemic circulatory responses of neonatal lambs—3195
- TOLONIUM CHLORIDE**, antagonism of sodium nitrite in production of methemoglobinemia—471
- TOOTH DISEASES**, clinical aspects on commercial sheep farm in the Wairarapa, New Zealand—446
 jaws of adult culled ewes—2512
- TOTAVIRUS**, etiologic agent of gastroenteritis—3341
- TOXAPHENE**, resistance in Africa—209
- TOXEMIA**, pregnancy, therapeutic measures—1800
- TOXICITY**, bromosulphophthalein clearance rates in sheep with pyrrolizidine liver damage—1687
Calotropis procera latex to sheep and goats—1830
 chronic, copper, immunohematological study—3250
 chronic copper poisoning—578
 chronic poisoning with herbacin—50—2163
 coniine in cows, ewes and mares—1526
 copper, intracellular distribution in liver of normal and copper loaded sheep—1117
 copper, intracellular distribution of copper in liver of normal and copper loaded sheep—1118
 copper poisoning, clinical observation—1382
 cyanide intoxication, enhancement of efficacy of sodium nitrate, sodium thiosulfate and cobaltous chloride—472
 effect of chronic liver damage caused by ingestion of *Heliotropium europaeum*—509
 effect of feeding *Calotropis procera*—1829
 enzootic icterus, a form of chronic copper poisoning—263
 ergot, a review—1792
 febantel, effect on breeding and offspring—2940
 fluorides, review—2724a
 hexachlorophene, a review—2393
 histological changes in organs of sheep in chronic simazine poisoning—819
 ingestion of blister beetles—2470
 interaction of benzimidazolecarbamates with microtubule protein—1399
 interrelationships of aluminium, iron and phosphorus—2560
Jatropha curcas—41
 lead and cadmium in environment, Yugoslavia—2335
 molasses neurotoxicity and higher volatile fatty acids—826
 mushrooms—2248
 organic sulphur compounds—2332
 oxfendazole—2354
 phenols, metabolism—1502
Phytolacca dodecandra, Ethiopia—896
 poisoning by emory milkvetch (*Astragalus emoryanus*)—3263
 poisonous plants, acorns—3294
 ryegrass, distribution in south Australia of *Anguina funesta*—962
 ryegrass, treatment with chlordiazepoxide—2510
 sodium nitrate aerosols—2599
 tansy ragwort, effect of rumen fermentation—2910
 tin arsenate, Russia—288
 zinc, pregnant sheep—501
 zinc sulphate, effect of method of administration—2787

- TOXICOLOGY**, safety of a new anthelmintic, febantel—1351
 sheep fed colored magazines and newsprint—1285
 studies with sheep fed colored magazine and newsprint—2209
- TOXICOSIS**, summer fescue, in lactating dairy cows and sheep fed experimental strains of ryegrass-tall fescue hybrids—1290
- TOXIN**, *Bacillus thuringiensis*, effect on sheep—2526
 collars, evaluation for control of coyotes—2639
 collar, sodium cyanide, for livestock protection—2858
 epsilon, type D, *Clostridium welchii* type D epsilon toxin—3292
 lupinosis, alteration in cell division, morphology and motility—2338
 purification and properties of type C delta toxin of *Clostridium perfringens*—81
 sheep fed colored magazines and newsprint—2209
 tremorgenic, production by *Penicillium janthinellum*, possible etiological factor in rye grass staggers—1686
- TOXOPLASMA**, antibodies among slaughter animals in Jordan—2049
 hygiene and antitoxoplasmic alimentary antibodies, Belgium—934
 in Bavaria—36
 isolation from sheep—1201
 isolation, serodiagnosis and irradiated vaccine—1198
 serological responses of sheep and cattle exposed to natural toxoplasma infection—2083
- TOXOPLASMA GONDII**, in dogs, foxes and sheep—1721
 isolation from sheep—1199
 serodiagnosis—144
- TOXOPLASMOSIS**, among shepherds' families in Ferrara province, Italy—55
 chronic, depressed humoral immune response—2834
 current status of research in India—1039
 diagnosis—144
 epizootiology, serodiagnosis, New Zealand—2141
 epizootiology, symptoms, diagnosis, prevention, review—3203
 food hygiene implications of occurrence of antibodies—935
 in lowland region of western Slovakia—259
 incidence among farm animals in North Coastal zone of Egypt—2520
 is it a problem?—479
 isolation, serodiagnosis and irradiated vaccine—1198
 problem in sheep—121
 sero-epidemiology in sheep and goats in Granada, Spain—2551
 serological and epidemiological study of a field outbreak in Colombia—2324
 transmission by tachyzoites—1013
- TRABECULAE**, scintigraphic and histological findings, after treatment with electromagnetic potentials—918
- TRABECULAR BONE**, vertebra, morphometric method for quantifying—46
- TRACE ELEMENTS**, analysis in serum, liver and pancreas of sheep with gastrointestinal helminths, absorption spectrophotometry—2736
 cadmium content of winter grazings and status in wild sheep—91
 deficiencies and fertility, a review—1308
 influence of silage contamination by soil upon availability to sheep—1670
 local supplies in German Democratic Republic—102
 relation to reproductive function—1524
 requirements for growth—2898
 review of copper metabolism in sheep—3246
- TRACHEA**, composition of glycoproteins—1494
 correlation of fluid cortisol and pulmonary surfactant production in chronically catheterized fetus—3010
 fluids, phosphatidate, phosphohydrolase and phospholipids, during gestation—2561
 mucous velocity, effect of local radioactivity—42
 mucous velocity, sensitivity in detecting airway irritation after ozone exposure in conscious sheep—7
 new video technic for in vitro measurement of ciliary motility—1900
 regional differences in respiratory airway function—916
 spontaneous decrease of tracheal fluid in fetus prior to birth—1579
- TRACHEAL**, mucins, hydrophobic interaction of fluorescent probes—2597
- TRACHEITIS**, in sheep after oral administration of mineral supplement—2412
- TRADE**, in animals—529
 world, sheepmeat, France—396
- TRANSAMINASE**, aspartate, interrelationships of zinc and molybdenum in copper poisoning—2500
 blood—2327
 glutamic oxaloacetic, plasma levels in fascioliasis—2575
 protein fractionation, nucleic acids and enzymatic activity of cytoplasmic extracts from intestinal mucosa—1558
- TRANSFERASE**, carnitine acyl, activity in seminal plasma and spermatozoa—438
 effect of anthelmintics (tribromosalan)—3153
 glutamyl, inheritability of differences in sensitivity to copper—3323
 lymphocytes, concentration, synthesis and utilization of phosphoribosylpyrophosphate—2329
 sulfo, pattern of activity in endometrium during pregnancy—839
- TRANSFERRIN**, and weight gain in Rosa Aragonesa breed—1696

- genetic polymorphism, F₁ cross of Corriedale × Criollo—2007
- polymorphism, various breeds, relationship with productivity—2475
- types—1690
- TRANSFERRIN TYPES, phenotypic and genetic associations—175
- TRANSFORMATION, lymphocytes, whole blood method for measuring mitogen-induced —1694
- TRANSMISSION, cross, between goats and sheep of coccidia—1919
- cross, between sheep and Thomson's gazelle of gastrointestinal nematodes—2405
- nematodes of feral animals to sheep, goats and cattle—1355
- non-progressive chronic pneumonia, experimental—76
- protostrongylids, in California bighorn sheep—1577
- sheep strain of *Eperythrozoon ovis* to goats and development of carrier state in the goat—680
- TRANSPEPTIDASE, gamma-glutamyl, plasma levels in fascioliasis—2575
- TRANSPLANTATION, auto, hormonal secretion of pancreas—135
- TRANSPLANTS, egg, performance of superovulated donor ewes—1244
- egg, survival in mature ewes and ewe lambs—2432
- embryos, regulative capacity—1949
- ova, survival of fertilized, in lactating and dry ewes—2431
- ovum—1149
- TRANSPORT, active, intestinal, uracil—2657
- animals, problem of adequate ventilation during air transport—2078
- animals, see book by Richter, Werner and Bahr—2516
- export of breeding sheep from Australia, need for veterinary involvement—926
- humane handling—1561
- importance in slaughter animals—3157
- macromolecular, lung—1937
- stress syndrome in sheep, sea—577
- TRAUMA, lamb, caused by porcupine grass seeds—1570
- TREATMENT, albendazole in diggy sheep—3138
- anthelmintic efficacy of albendazole against *Fasciola hepatica* and benzimidazole resistant strains of *Haemonchus contortus* and *Trichostrongylus colubriformis*—503
- bivalent emulsified toxoid against ovine infectious enterotoxemia and dysentery—3088
- bromfenofos for fascioliasis—1019
- clinical evaluation of benzyl benzoate as acaricide against sheep scab—2006
- cobalt deficiency in growing lambs—1089
- comparative efficacy of fendendazole and tetranisole in *Protostrongylus* and *Dictyocaulus filaria* infections in sheep in Morocco—683
- cutaneous myiasis—582
- diarrhea, neonatal lambs—1036
- effect of dietary monensin on ovine coccidial oocyst numbers—493
- effectiveness of diamphenethide in ovine dicrocoeliosis—491
- efficacies of thiabendazole and levamisole against nematodes in western Victoria, Australia—497
- efficacy of fenbendazole against ovine digestive tract helminths—483
- efficacy of oxfendazole against experimental gastrointestinal nematodes—548
- efficacy of oxfendazole against naturally acquired *Dictyocaulus*—547
- Escherichia coli* infections—2749
- foot rot by vaccination with specific agent *Bacteroides nodosus*—859
- for poisoning with alkyl phosphates—294
- lasalocid and monensin, experimental coccidiosis, in confinement-reared lambs from weaning and market weight—997
- management of exophthalmos—1703
- muscular dystrophy—521
- nonsurgical, for correction of rectal prolapse in lambs—2286
- modified form of Dalton's curette, vaginal prolapse—2298
- psoroptic mange in cattle and sheep with phosphoric acid ester phoxim—1753
- pregnancy toxemia—1800
- sarcoptic mange with Pfizona—574
- sheep and cattle in tropical Africa using rafoxanide for fascioliasis—1128
- zinc sulphate orally for prevention of lupinosis—69
- TREFOIL, birdsfoot, substitution for alfalfa-grass in pasture system—1874
- TREMORGENESIS, clinical studies on mycotoxicoses —2318
- TREMORGENS, fungal, associated with ryegrass staggers in South Australia—1074
- TRENBOLONE, hazards in meat production—1288
- TRENBOLONE ACETATE, effect on glucose metabolism in normal and ketotic sheep pregnant with twins—994
- response of wether lambs to implantation at two levels of dietary protein—3078
- response of wether lambs to treatment—3077
- TRIACYLGLYCEROLS, subcutaneous adipose tissue, identification of methyl-branched fatty acids—2785
- TRIAMCINOLONE ACETONIDE, effect on plasma glucose and ketones and on total entry rate of glucose in twin pregnant hypoglycaemic ketotic sheep—2458
- TRIAZINES, chronic poisoning with herbazine—2163
- TRIBROMOSALAN, dynamics of, blood plasma, and effects of some fasciolicidal agents on enzymes—3153
- effect on plasma enzymes—3152

- TRICHLORPHON**, treatment of cutaneous myiasis—582
- TRICHOPIHAGIA**, wool eating, a review—261
- TRICHOPHYTON**, alopecia—2063
epidemiology—567
- TRICHOPHYTON VERRUCOSUM**, in Morocco—2275
- TRICHOSTRONGYLES**, activity of albendazole—767
inhibited development in northern Nigeria—2201
termination of arrested development in northern Nigeria—2199
- TRICHOSTRONGYLIASIS**, sheep, Hungary—1601
- TRICHOSTRONGYLIDS**, blood minerals in gastrointestinal infections—2259
pasture infectivity in northern Guinea savanna of Nigeria—2200
pathology of infections—746
value and limitation of anthelmintics—801
- TRICHOSTRONGYLUS AXEI**, infective dose of larvae protects against subsequent exposure to *Haemonchus contortus*—2488
pasture infectivity in Nigeria—2200
transfer factor activity in immunity—2564
- TRICHOSTRONGYLUS COLUBRIFORMIS**, activity of levamisole against benzimidazole resistant—608
benzimidazole resistant, effect of esophageal groove reflex on oxfendazole pharmacokinetics and efficacy—2408
benzimidazole resistant, efficacy of albendazole—503
benzimidazole resistant, efficacy of fenbendazole and albendazole—1182
effects on energy and nitrogen metabolism of lambs—1821
experimental study of relation of nutrition to infection—3084
innocuous effect in young lambs—1509
immunity, transfer factor—2565
local antibody responses and infection—19
pasture infectivity in Nigeria—2200
pathophysiology and production of lambs infected with—2916
resistant to levamisole, morantel tartrate and thiabendazole—2627
transfer to sheep from impala—1355
use of guinea pigs to assay anthelmintic resistance—2626
- TRICHOSTRONGYLUS VITRINUS**, chronic infection and some effects on food utilization, skeletal growth and serum constituents—2914
ecology of free-living stages—495
location of nemas during parasitic development and associated pathological changes in small intestine—2934
location of nematodes and associated pathological changes in small intestine during clinical infection—2935
pathological changes in chronic infections—618
- TRICHURIS OVIS**, in vitro variation of glycogen content—2401
- TRICUSPID ATRESIA**, in foal and lamb—1764
- TRIFOLIUM REPENS**, long-term effect of quantity of superphosphate applied on nutritive value of diet selected by sheep grazing pasture originally sown to—1684
- TRIGLYCERIDES**, role of maternal sources to supply of lipids to fetus—2687a
- TRIIODOTHYRONINE**, early metabolic response of lambs to small doses—97
lack of association of parturition with antepartum surge, in fetus—2180
3,3',5', elevation as possible marker for intrauterine distress—2181
- 3,5,3'-TRIIODOTHYRONINE**, plasma, fetal sheep, effect of illness and thyroidectomy—2182
- 3,3',5'-TRIIODOTHYRONINE**, plasma, fetus, effect of illness and thyroidectomy—2182
- TRIMEDOXIN**, use in alkyl phosphate poisoning—294
- TRIMETHOPRIM**, half-life and distribution in sheep in relation to age and weight—170
pH and protein binding on mammary and renal excretion—169
- TRINAMIDE**, clinical trials in treatment of non-specific diarrhea—3140
- TRIPHOSPHATASE**, adenosine, in stomachs of lambs—716
- TRITON X-100**, binding to human and sheep albumins—2881
- TRODAX**, anthelmintic activity in sheep—1195
- TROPHOBLASTIN**, an antiluteolytic protein present in early pregnancy—1865
- TROPICS**, breeds of sheep, growth rates—2463b
genetic variations of conception rates—3003
influence of season on feeding behaviour of sheep fed green forage in a set tropical zone—1975
nitrogen utilization of growing-finishing Barbados Blackbelly lambs—2243
performance of sheep in arid areas—2110
sexual behaviour of rams—2767
small ruminant production, review—1395
- TRYAMINE**, occurrence and disappearance in rumen—1402
- TRYPANOSOMA**, incidence in southern Ghana—167
- TRYPANOSOMA BRUCEI**, genital lesions in experimental chronic infection in rams—1383
in sheep and goats in Liberia—1947
lymph node pathology—253
- TRYPANOSOMA CONGOLENSE**, binding to blood vessel and erythrocytes—229
disease syndrome in naturally infected sheep and goats—1152
early development and antigenicity—1136
in sheep and goats in Liberia—1947
trypanosomes in lymph nodes—1799
trypanosomiasis in sheep—1814
trypanotolerance in breeds of sheep and goats with experimental infection—1155

- TRYPANOSOMA VIVAX**, in sheep and goats in Liberia—1947
- TRYPANOSOME INFECTIONS**, capillary tube centrifugation method for diagnosis—316
- TRYPANOSOMIASIS**, economic effects in sheep and goats at range research station in Kenya—1154
- epidemiology in Kenya—1153
- in sheep and goats in Liberia—1947
- serum immunoglobulin levels during course of naturally acquired and experimentally induced infections—1815
- TRYPANOTOLERANCE**, livestock in West and Central Africa, country studies—3019
- livestock, West and Central Africa—3020
- sheep and goat breeds to experimental infections with *Trypanosoma congolense*—1155
- TRYPSIN**, inhibitor, colostral, capacity in different animal species—2624
- TRYPTOPHAN**, chemical modification of residues of prolactin—1603
- effects of loading on metabolism of serotonin in central nervous system—194
- regional concentration in brain—193
- TSIGAI**, crossbred with East Friesians, milk yield—3349
- effect of quality of Tsigai rams on fecundity of ewes—2685
- improvement of milk production—508
- live weight at birth and at an age of 120 days of lambs—1640
- TUBERCULIN**, provocation of leukergy—1965
- TUBERCULOSIS**, mass outbreak—3348
- pathology of experimental—3298
- d-TUBOCURARINE**, calcium movements in hypotonically washed sperm—2862
- TUBO-UTERINE JUNCTION**, cannulae, effect on reproduction—222
- TUFT CELL**, ultrastructure, epithelia—3228
- TULIPA GESNERIANA**, individual difference with the sheep blood groups detected by—3317
- TUMOR**, endemic ethmoid, clinical and gross and microscopic lesions—2113
- endemic ethmoturbinate, in sheep—920
- feline sarcoma virus, rejection, role of regional and distant lymph nodes—2952
- prevalence in domestic animals—1641
- TUNISIA**, ram fighting—327
- TURAN**, Biosphere Reserve, Iran, ecology of domesticated animals under traditional management—2183
- TURCANA**, young male, fattening—188
- TURKEY**, infection rate of ixodid ticks with *Piroplasma*—3196
- Istanbul, parasites of lambs and effect on meat production—3163
- sheep breeds—3300
- TWINNING**, biological aspects of development of lambs from multiple births—160
- Karakuls—2668
- recent records in North American Mountain sheep—848
- TWINS**, effect of trenbolone acetate on glucose metabolism in normal and ketotic sheep pregnant with twins—994
- TYMPANITIS**, effect of rumen insufflation on contraction rate—1794

U

- UDDER**, Chiose ewe, environmental factors affecting conformation—675
- conformation, relation to machine milkability—1441
- rise in intramammary pressure after injection of water into inguinal artery—1664
- ULCER**, protein fractionation, nucleic acids and enzymatic activity of cytoplasmic extracts from intestinal mucosa—1558
- ULTRASONICS**, diagnosis of pregnancy—2175
- ULTRASOUND**, diagnosis of pregnancy—2854
- ULTRASTRUCTURE**, *Anaplasma mesaeterum* n. sp.—3053
- changes in placenta after long-term intravascular infusion of 2-bromo- α -ergocryptine (CB 154) into mother or fetus—1796
- corpus luteum—1054
- cumulus oophorus during follicular development—643
- cytoplasmic and intranuclear structures in plasma cells in ovine hemal lymph nodes—53
- globidial parasites of abomasum—1316
- histogenesis of adrenal cortex in fetus—2547
- leukemic cells—1845
- localization of adenylcyclase in parathyroid gland—3034
- lysosomal breakdown of erythrocytes in placenta—2094
- microsomal membranes, precursors of lactoproteins, enzymic processing of prolactoproteins—1041
- modified endoplasmic reticulum in epididymal epithelium—2148
- modified sertoli cells in the terminal segment of seminiferous tubules of the bull, ram and goat—2239
- mucous membrane of proventriculus, papillary body—3229
- nephron obstruction in mutant Southdown sheep—662
- non-ciliated bronchiolar epithelial clara cell—2366
- nuclear reorganization in ram spermatids—1785
- papillary body of mucous membrane of fore-stomach—3230
- principal cells of initial segment of epididymal duct—2147
- radiographic, auto, analysis of progesterone secretion in corpus luteum—1911
- receptor binding and conformational properties of prolactin after chemical modification of two tryptophan residues—1603
- rumen mucosa—2924
- Sarcocystis*, gamogony and sporogony—277
- secretory granules in endosalpinx, maturation 1 to 4 days post coitum—2580

- sweat glands, after exposure to controlled warm environments—1450
- tapezum lucidum fibrosum*—386
- testis—451
- tuft cell in epithelia—3228
- wool—3160
- UMBILICAL CORD**, compression, regional cerebral blood flow changes during severe fetal asphyxia—1459
- UNDECENOVANILLYLAMIDE**, microencapsulation and dissolution parameters—2271
- UNITED KINGDOM**, breeding of orcadian sheep of Lihou—3249
- cases of mycotoxicosis reported by veterinary investigation centres—1673
- future of animal livestock production—915
- meat production, margins and performance in 1978—3067
- sheep diseases—3071
- sheep populations—3063, 3070
- UNITED STATES OF AMERICA**, North Dakota, incidence of ovine progressive pneumonia—2022
- sheep production—1976
- UNITED STATES**, Utah, economics of sheep predation—2933
- URACIL**, active intestinal transport—2657
- UREA**, as partial substitute for protein—2750
- blood levels in ewes during pregnancy and lactation, effect of nutritional state during late pregnancy—1158
- concentration in maternal and fetal plasma, last 5 weeks of pregnancy—2778
- content of bile and gastric juice in relation to blood urea—3110
- criteria for effective use in fattening lambs—2255
- effect of increased levels in diet on ruminal protozoa—2177
- endogenous secretion in gastrointestinal tract—3112
- experimental feedings with fodder, digestibility of dry masses and nitrogen in single gastrointestinal sections—423
- fattening lambs, growth of store lambs on cereal-based diets with protein or urea—2189
- fattening of lambs—1386
- feed mixtures—2264
- feeding, ketogenesis—353, 368
- fermentation and nitrogen dynamics in Merino sheep given a low-quality-roughage diet—2172
- for pregnant ewes—1990
- growth and rumen function, supplementation of a low-protein-cellulosic diet with either urea, casein or formaldehyde-treated casein—1559
- growth of store lambs on cereal-based diets with protein or urea—2227
- important component of pelleted feeds—1519
- in diet, effect on ammonia and pH in rumen—359
- in diets of lactating ewes, effect on blood serum lipids—2359
- indicator of capillary permeability in lungs of anesthetized sheep—2331
- intake, digestibility and nutrient utilization of sodium hydroxide-treated tropical grass supplemented with—1075
- intraruminal infection, changes in secretion of parotid saliva—2184
- lactosyl, in nutrition—1967
- mechanism of passage through rumen wall and role of ureolytic epithelial bacteria in urea flux—571
- metabolic indices in rumen and blood of sheep fed granulated and pelleted feed mixtures with different urea levels—2263
- metabolism in rumen and blood of sheep fed loose or pelleted feed mixtures with varying levels of—2265
- molasses mixture, enriched paddy straw, utilization—2478
- effect of level on its utilization in alkali-treated wheat straw—55
- UREA NITROGEN**, plasma, effect of four corn silage and corn grain ratios and nitrogen source—2974
- UREA**, poisoning, protective effect of acetic acid and propionic acids—2895
- poisoning, therapeutic efficacy of intravenous administration of titrated L-glutamic acid—2896
- seasonal variation in blood plasma, hill sheep—2915
- skin morphology and wool quality of sheep fed—790
- substitution for sunflower oilmeal in mixed feeds for fattening lambs—1387
- UREA SULBENOX**, 4,5,6,7 tetra hydro-7-oxo benzo B thien-4-yl, novel animal growth stimulant—161
- supplementation of low protein-cellulosic diet, effect on nitrogen digestion—1540
- supplementation, sheep grazing wheat stubble, quality of diet, intake of supplement and response—2076
- synthesis in liver and kidney of developing sheep—2465
- with whey or processed fababeen starch as energy source in liquid supplements for finishing lambs—2850
- UREAPLASMA**, in sheep—1469
- pathogenicity, a review—2937
- UREAPLASM** spp., isolated from ewes in Northern Ireland—1909
- UREASE** (EC 3.5.1.5) activity in contents and issues of gastrointestinal tract—1981
- URINE**, biochemical tests, appraisal of results—2382
- biochemical tests in disease—2380, 2381
- comparison of urinary specific gravity and osmolality—893
- effect of long-term intermittent watering on in pregnant sheep under semi-arid conditions—2039

- excreting pathway in sheep and pig fetuses—1124
 excretion of sulphadimidine—2120
 kinetics of disappearance of ³⁵S-thiamine—1335
 osmolarity, dose response to vasopressin in fetus—693
 reduced output, fetus, histologic explanation—3165
URETHRA, lining thickness, response to zeronol implant—3248
UROGENITAL SYSTEM, defects—750
UROLITHIASIS, blood chemistry—2381
URONIC ACID, effect of Mn-deficient feeding to ewes on, in cartilage of their newborn lambs—1313
UROPATHY, intrarenal obstructive, animal model for study—661
UROTHELIA, comparative parameters in isolation of lumenal plasma membranes from—530
USSR, Azerbaijan, development of some sheep breeds, a review—1408
 backcrossing in commercial sheep breeding—1507
 behaviour of sheep (*Pamir argali*) during reproduction—946
 control of blood-parasitic diseases on farms of Apsheron—1179
 Dagestan, prevention of colibacteriosis—1554
 ecology of certain viruses of mammals—291
 efficiency of sheep rearing in central Karakum desert—2128
 epidemiology of *Cysticercus tenuicollis* in lambs—2705
 helminths of sheep in Uzbekistan area—192
 Karakul farming—2992
 Kazakhstan, wool traits of meat-wool sheep—2944
 Kazakhstan, dictyocauliasis in—2416
 Kazakhstan, new breeds—2072B
 petrified ram tracts in ancient desert—85
 prevention of listeriosis—1206
 prophylaxis and control of fascioliasis and paramphistomiasis—1964
 selenium deficiency, prevention—1647
 shepherds and reindeer nomads—1755
 trade prices for animal fibers—3090
UTAH, economics of sheep predation—2933
UTERUS, action of steroid hormones on myometrical contractile function—665
 altered response of cervical and vaginal epithelia to estradiol after prolonged exposure to estrogenic pasture—21
 antiluteolytic activity of prostaglandin-containing fractions from ovine uteri—2397
 arginine vasopressin during gestation and parturition—2845
 assay and characterization of progesterone receptor—699
 blood flow during stress in pregnant ewe—2720
 blood flow, effect of alpha and beta sympathetic antagonists in pregnant ewe during heat stress—440
 characteristics, distribution of fetus in horns—3082
 contractions, blood gas, fetus—1437
 controlling parturition, a review—960
 effect of continuous intrauterine administration of prostaglandin E-2 on life span of corpora lutea of non-pregnant ewes—2396
 effect of exogenous estradiol and progesterone on estradiol receptors—849
 effect of inhibitor of prostaglandin synthesis on motility of castrated ewe treated with estrogens—2414
 effect of intrauterine thread: on fertilization—1012
 effect of progesterone on estrogen-stimulated uterus, comparative study—1987
 effect of removal of endometrial caruncles on size and metabolism of fetus—2546
 elevation of triiodothyronine as possible marker for intrauterine distress—2181
 enzyme histochemistry during estrus—3330
 hemodynamic responses to ritodrine hydrochloride administration in pregnancy—2734
 hormone receptor control of prostaglandin F-2 alpha secretion—1914
 influence of ovarian steroids on response of uterine arterial smooth muscle to norepinephrine—2377
 localization of prostaglandin F in ovine during early pregnancy—540
 maturation of secretory granules in endosalpinx 1 to 4 days post coitum—2580
 method for obtaining uterine secretions from unilaterally pregnant ewes—270
 microfluorometric study of glycolytic enzymes in histologically defined areas—3331
 motility, effect of mating, artificial insemination and fright—1725
 myoelectrical activity in periparturient ewe—1639
 myometrium, dihydroergocryptine and dihydroalprenolol binding during estrus—2496
 patterns of blood flow to, and ovaries of ewes during period of luteal regression—996
 pregnant, oxygen delivery and relationship to consumption—536
 prostaglandin production—83A
 prostaglandin forming cyclooxygenase, relationship to luteal function—1379
 proteins of blastocyst origin—1749
 qualitative and quantitative histological changes after exposure to X-rays—2841
 responses of arteries to prostaglandin E-2 and norepinephrine—2378
 uptake of amino acids during pregnancy—1340
 vacuature, nitroglycerin, gravid ewes—3233
- V**
- VACCINATION**, against *Erysipelothrix rhusiopathiae*—1672a
 experimental staphylococcal infections, pathology—3203
 epidemiological survey of paratuberculosis in 3 mixed sheep and goat flocks after vaccination—96

- intraperitoneal, rams—2422
 lambs, *Trichostrongylus colubriformis* larvae,
 genetics of response—3274
Nematodirus—1898
 oral, salmonellosis—2154
 passive protection against experimental infection with enteric colibacillosis—2809
 protection against artificial challenge with *Leptospira interrogans serovar hardjo*—1873
 protective effect of, against experimental adenoviral pneumo-enteritis in fattening lambs—2260
 protective effect of monovalent and bivalent vaccines against adenoviral pneumo-enteritis in fattening lambs—2261
 rinderpest, India—2634
 salmonellosis—2153
 serum protein changes in *Dictyocaulus filaria* infections—62
 treatment of ovine foot rot, with specific etiologic agent, *Bacteroides nodosus*—859
 with biochemically defined fractions of ram spermatozoa, effect on fertility—2050
- VACCINE**, caseous lymphadenitis—105
 chlamydial, clinical evaluation—2550
 clovax for foot rot—490
 contagious echthyma, efficacy and safety of new cell culture—3324
 development of inactivated bluetongue virus—2234
 development, pneumonic pasteurellosis—1085
 evaluation of, in foot rot—1517
 field studies with multicomponent clostridial vaccines—1544
 foot rot—230
 for *Erysipelothrix insidiosa* infections—2152
 freeze-dried living virus, against sheep pox—2399
 immunogenicity of cell-culture-attenuated sheep pox virus—2818
 inactivated saponin, against salmonella abortion—1088
 intraperitoneal administration of *Brucella ovis* saline-in-oil vaccines—2524
 irradiated, toxoplasmosis—1198
 killed, *Salmonella abortus ovis*, evolution of antibodies—2919
 modification of Aujeszky's virus in cell culture—1175
 mouse model of *Pasteurella haemolytica* infection and use for efficacy—910
 preparation and testing of chemically treated, salmonellosis—142
 schistosomular, immunization against *Schistosoma bovis*—2932
 serological comparison, with different adjuvants—3218
 sheep pox, freeze-dried, immunity in sheep—900
- VAGAL DIGESTIVE DEAFFERENTIATION**—931
- VAGINA**, epithelium, altered response after prolonged exposure to estrogenic pasture—21
 impedometric properties—18
 intensity of excretion of *Salmonella abortus ovis* after abortion—2283
 prolapse—2157
 prolapse, modified form of Dalton's curette in treatment—2298
 rupture in pregnant ewe—569
 temperature, relation to eating, drinking, standing and walking activity rhythms of four anestrus Finnish Landrace ewes—1371
- VAGUS**, afferences, development of a deafferentation technic—695
 distribution, stomach and certain lymph nodes, prenatal period—2387
 gut receptors in conscious sheep—2570
 morphology, thorax, prenatal period—2388
 neural and chemical control of abomasal secretion—2064
 reticulo-rumen motility in chronically vagotomized sheep—1148
- VALACHIAN**, improvement of milk production—508
- VALINE**, absorption in jejunum and ileum—2350
- VARICOULE** in Merino ram—755
- VASCULAR SYSTEM**, arteries, response of carotids to noradrenaline and increased pressure—3016
 cerebrum, effect of ketamine in asphyxiated fetus—2352
 comparison of pig and sheep fetal development—1124
 congenital malposition of arterial trunk in lamb—2277
 effect of age on aortic pressure-diameter and elastic stiffness-stress relationships in unanesthetized sheep—2254
 effect of prostaglandin 1-2—2460
 effect of tolazoline on blood flow and pressures in hypoxic lambs—1147
 ewe, reproductive organs—2440
 hemodynamic responses of heart and uterus to ritodrine hydrochloride administration in pregnancy—2734
 hemodynamic responses to vasopressin infusion in fetus—1422
 insensitivity responsible for hyperreninemia and hyperaldosteronemia—2730
 insensitivity to angiotensin II in newborn—2732
 intestine, nutrient loss—564
 morphology and topography of stomach arteries—3295
 pressure, during hemorrhage—1833
 pulmonary, direct and indirect effects of tolazoline in newborns—1780
 pulmonary transvascular fluid dynamics during hemorrhage—1933
 regional cerebral blood flow during and after prolonged hypoxia, fetus—166
 systemic, response of neonatal lambs to tolazoline—3195
- VASECTOMY**, lambs, long term effects—2238

- VASOCONSTRICTION**, hypoxic pulmonary, modification, by antigen challenge in sensitive sheep—1651
- VASOCONSTRICTORS**, depressed responsiveness to, new borns—1839
- VASODILATION**, pregnancy, effect of conceptus—2378
- VASODILATORS**, depressed responsiveness to, newborns—1839
- VASOPRESSIN**, a review—998
- arginine, during gestation and parturition in fetus—2845
- arginine, during gestation and parturition—2911
- dose response in fetus—693
- dynamics of release and blood volume regulation during fetal hemorrhage in fetus—2538
- effect of fetal hypoxemia—2537
- hemodynamic responses of fetus—1422
- inhibition by angiotensin II, renal function—3313
- plasma levels during hemorrhage in mature and immature fetus—2584
- renal calcium and magnesium excretion during administration into sheep with acid or alkaline urine—271
- response of newborn to rapid massive hemorrhage—2812
- role in natural suppression of fever—620
- VASOTOCIN**, failure to demonstrate in pineal gland, subcommissural organ and pituitary—783
- VECTORS**, piroplasmiasis, Yugoslavia—2337
- VEGETABLE**, waste, nutritive value as silages for feeding—258
- VENTILATION**, of animals during transport by air—2078
- response in newborn lambs—287
- VENTRICLE**, septal defect—3106
- third, scanning electron microscopy and transmission electron microscopy, plasma luteinizing hormone in wethers and testosterone propionate-treated wethers—597
- VERTEBRAE**, trabecular bone, morphometric method for quantifying—46
- VETERINARY PRACTICE**, German Democratic Republic disease control—478
- German Democratic Republic, industrialized lamb fattening—3289
- VETERINARY PROBLEMS**, sheep farming in Czechoslovakia—3045
- VICIA FABA**, crop residues, intake and digestibility—2982
- VIDEO**, technic, for in vitro measurement of ciliary motility—1900
- VIRAL DISEASES**, a review—3339
- in Soudano-Sahelian area—395
- Kenya, serological survey—2266
- VIRUS**, adeno, immune response induced in fetus—3040
- adeno, ovine, growth in cell cultures—14
- adeno, protective effect of monovalent and bivalent vaccines in fattening lambs—2261
- adeno, type 2, infection of tracheal organ in culture—504
- adeno, type 2, interaction with cultured sheep lymphocytes—468
- adeno, vaccination, lambs, recall phenomenon—2262
- Akabane, congenital abnormalities in newborn lambs following infection in pregnant ewes—1261
- Akabane, etiology of congenital arthrogryposis-hydranencephaly syndrome in cattle, sheep and goats—1393
- Akabane, pathogenesis of congenital encephalopathies in sheep experimentally infected—2111
- astrovirus, pathogenesis of diarrhea—2806
- Aujeszky's disease, resistance to gamma irradiation—1398
- Aujeszky's strain modified in cell cultures—1175
- bluetongue, antibody in domestic and game animals of Botswana—2745
- bluetongue, antibodies in sera of domestic animals in Sudan—867
- bluetongue, development of inactivated vaccine—2234
- bluetongue, possible origin of epidemic in Cyprus in August 1977—2682
- bluetongue, SCIRO 19 strain, transmission to sheep of type 20—2606
- bluetongue, temporal appearance and geographic distribution and species of origin in USA—237
- bluetongue, transplacental infection, overwintering mechanism—1071
- Border Disease, properties as studied in sheep cell line—1698
- Borna, follow-up after spontaneous infection with special emphasis on antibody-kinetics in serum and cerebrospinal fluid—1969
- bovine diarrhoea-mucosal, effect on fetus—2293
- bovine leukosis, detection in cattle and sheep by ELISA technic—949
- bovine leukosis, immunological, clinical and haematological investigations in sheep experimentally infected—1636
- bovine respiratory syncytial, experimental infection of lambs—670
- contagious ecthyma—394
- contagious ecthyma, pathology and changing clinical picture—3091
- VIRUS DIARRHEA**, bovine, in Barbary sheep and mule deer in Palo Duro Canyon, Texas—1232
- VIRUS DISEASES**, a review—1363a
- VIRUS**, foot and mouth, immunity in sheep inoculated with various doses of virus—2450
- foot and mouth, seasonal prevalence in Assam, India—544
- foot and mouth disease, viraemia in sheep—2695

- herpes, of sheep pulmonary adenomatosis—1884
- influenza, ecology—291
- influenza, thermolabile inhibitors in blood—2218
- isolation of an adeno associated virus—591
- JOS (togavirus), in Nigeria—919
- louping ill, epidemiology—2484
- louping ill, threshold problems in infection of *Ixodes ricinus*—275
- Maedi, diagnosis—1084
- Maedi-Visna, demonstration in Great Britain—719
- Maedi-Visna, detection of antibodies against glycoprotein released as soluble antigen in cell cultures—450
- Maedi, Visna, diagnosis—2529
- Maedi-Visna, epidemiology—723
- Maedi-Visna, epizootiology—1293
- Maedi-Visna, in Canadian sheep—824
- onco, bovine, immunity in lambs experimentally infected—1635
- ovine pulmonary cytomegalovirus, pathology—1349
- parainfluenza-3, experimental infection—2585
- parainfluenza-3, experimental infection in lambs—2764
- parainfluenza-3, growth curve—2762
- parainfluenza-3, in Somalia—1015
- parainfluenza-3, occurrence in sheep, serological studies—3227
- parainfluenza-3, prevalence of antibodies—2763
- particles in sheep inoculated with cell-free extracts of ovine malignant lymphomas—1460
- Peste-des-Petits Ruminants, as fourth member of genus *Morbillivirus*—1072
- Peste-des-Petits Ruminants, isolation from Nigerian sheep and goats—2936
- Pesti, diagnosis of Border Disease—243
- pneumonia, in sheep and goats in Punjab—226
- pox, sheep and goat forms and contagious pustular dermatitis virus, cross neutralization tests—2877
- progressive pneumonia, elevated levels of serum immunoglobulins—2021
- progressive pneumonia, evaluation of agar-gel immunodiffusion test for detection of antibodies—2023
- respiratory syncytial, experimentally induced infection in lambs—1722
- respiratory syncytial, experimentally induced infection in feeder lambs—1723
- Rift Valley, isolation of virus—1391
- Rift Valley, properties—3008
- rinderpest, in Nigeria—2417
- rinderpest, outbreak in India—2634
- rota, antibodies in animals in Kenya—2091
- rotavirus and coronavirus associated with diarrhoea—831
- sheep pox, immunogenicity of cell culture-attenuated vaccine—2818
- slow, chronic disease of the central nervous system—2902
- slow, current methods for diagnosing and controlling—3029
- slow, immunology—20
- slow, sheep as model for study—2640
- slow, some common features of slow virus diseases and cancer—1165
- slow, Visna and Maedi syndromes—941
- togavirus, etiology of Border Disease, postnatal neurochemical recovery—2908
- totaviruses, etiological agent of gastroenteritis—3341
- Visna, antigenic variation—2677
- Visna, inhibiting factor in sera and cerebrospinal fluids from normal sheep—2984
- Visna, ultrastructural study of cerebrospinal fluid from infected sheep in Iceland—1063
- Wad-Medani, transmission by *Hyalomma anatolicum anatolicum*—1621
- VISCOELASTIC PROPERTIES, meat, related to palatability and tenderness—3200
- VISION, development of binocular depth cells in secondary visual cortex of lamb—594
- discrimination of colours by Merino ewes—57
- interhemispheric connections between primary visual areas in adult sheep and newborns—2462
- lamb, development and plasticity of neuronal connections—593
- VISNA VIRUS, antigenic variation—2677
- evidence for production of the fusion factor during the in vitro infection of choroid plexus cells—2302
- serum and cerebrospinal fluid of normal sheep contains inhibiting factor—2984
- ultrastructural study of cerebrospinal fluid from sheep infected with virus—1063
- VISNA-MAEDI DISEASE, epizootiology in sheep—2945
- pathogenesis—2117
- VISNA-MAEDI SYNDROMES—941
- VISNA-MAEDI VIRUS, current methods for diagnosing and controlling—3029
- detection of antibodies against glycoprotein released as soluble antigen in cell cultures—450
- diagnosis—2529
- immunology—20
- VITAMIN, concentrate in fattening of lambs—1140
- concentrate, rearing of lambs on milk substitutes, productivity—464
- water-soluble, ruminants rendered nonfermentive after infusion—3282
- VITAMIN A, textbook—282
- effect on fertility of rams on semi-arid pasture—2525
- effect of macro-climatic components on plasma levels—2285
- in prevention of coccidiosis in lambs—3149
- VITAMIN B₁ (thiamin), kinetics of disappearance of ³⁵S-thiamine from blood and urine—1335

- movement through rument wall—457
 thiamin, passage through rumen wall—1327
 passage through rumen wall—1336
 see also thiamine
- VITAMIN B₁₂**, cobalt deficiency, emergence and treatment—3026
 deficiency, associated with white liver disease, hepatic dysfunction—2893
 response of hill lambs—2292
 serum levels, estimation and levels in sheep in Victoria—1228
 treatment of deficiency disorders—2917
 urinary methylmalonic acid as indicator of status of grazing sheep—1985
- VITAMIN C**, in lambs infected with *Salmonella* and *Escherichia coli*—663
- VITAMIN D**, relationship between fetal and maternal plasma 25-hydroxy vitamin D—2566
 transplacental movement of metabolites—2567
- VITAMIN E**, deficiency, nutritional myopathy, electron microscopical findings—304
 treatment of experimental chlamydial infections—2854-A
 treatment of muscular dystrophy—521
- VOLGOGRAD**, crossbreeding, USSR—1507
 mutton, fine-wooled, meat production—3039
 mutton, fine-wooled, new breed of sheep—3036
 mutton, fine-wooled, qualitative evaluation of skins—2392
 mutton, fine-wooled, wool production—3038
- VULVITIS**, outbreak, ewes, possible association with *Lyperosia irritans*—686
- W
- WAD-MEDANI VIRUS**, transmission by ticks—1621
- WAIRARAPA**, New Zealand, dental abnormalities in commercial sheep farm—446
- WALKING**, stress and strain on radius—1691
- WASTE ROUGHAGE**, use in fattening early weaned lambs—2364
- WASTE**, swine, ensiled, digestibility and palatability—985
- WATER**, absorption, relation to subepithelial blood flow in rumen—781
 availability, environmental stress, erythrocyte osmotic fragility—3047
 body, dose response to vasopressin in fetus—693
 body, in Muzaffarnagri, Dorest and Suffolk native and crossbreds—1495
 cutaneous loss and respiration rates of various breeds at high ambient temperatures—2448
 deprivation, effect on wool production, semi-arid conditions—2040
 developmental aspects of renal tubular reabsorption in fetus—2535
 dynamics of fleece, effect of rainfall—3126a
 effect of intake on electrolyte metabolism—1479
 effect of long-term intermittent watering on blood and urine of pregnant sheep under semi-arid conditions—2039
 effect of sodium loading and ACTH on blood pressure of sheep with reduced renal mass—3241
 excretion during estrus—1980
 excretion during estrous cycle—2009
 intake and pH and ammonia levels in rumen of sheep fed pelleted foods—234
 intake, arid conditions—2110
 load, effect on heat production of fasting sheep—3128
 metabolism, body-water turnover of game and livestock in Kenya—1566
 permeability, newborns—2885
 regional extravascular, lung—977
 renin, antidiuretic hormone and the kidney in restriction and rehydration—341
 respiratory loss—1685
 rise in intramammary pressure after injection of water into inguinal artery—1664
 transport across visceral pleura—644, 1564
 transport, effect of angiotensin II on parotid saliva secretion—1929
 tritiated, body composition in lactating sheep and its indirect measurement in live animal using—990
 tritiated, turnover rate, as estimate of milk intake in lambs—806
- WATISH**, lambs, performance when fed different levels of energy and protein concentrate supplement to berseem grazing—40
 lambs, preweaning growth and influence of sex, time of birth and management on weight-for-age—2369
 lambs, sex difference in growth—2368
- WEANING**, body weights, adjustment factors—1486, 1487
 comparison of different weaning policies for ewes suckling triplets at pasture—2224
 early, different sources of protein in rations—1643
 early, effect on milk production of ewes—782
 early, growth of lambs—782
 early, lamb performance to two slaughter weights, drylot vs. pasture—889
 early, lambs, effect of dry-matter concentration and preservation method of whole barley on feed utilization—2191
 early, nitrogen retention by lambs—1329
 factors in natural process—146
 relationship between voluntary food intake during pregnancy and forage intake during lactation and after weaning—989
 social environments and the ontogeny of spatial associations in bighorn sheep—301
 weight, adjustment factors, sources of variation—865
 weight, Romnelets, Columbias, Suffolks and North Country Cheviots and their crosses—3136

- WEED CONTROL, grazing and pasture species—1420
- WEEVILS, control, drying sheepskins—3105
- WEIGHT, body, effect on fattening performance of Merinos—3132
- fleece, genetic parameters, response to partial selection on clean fleece weight in South Australian strong-wool merino sheep—1234
- WEIGHT GAIN, Rosa Aragonesa breed—1696
- WEIGHT, live, effect on fecundity of Icelandic ewes—16
- WELFARE, animal—529
- animal, and behaviour—218
- animal, British Veterinary Association policy—430
- animal, electrical stunning and humane slaughter—340
- animal, humane handling for slaughter, New Zealand—1561
- animal, proceedings of a symposium—3086
- WELSH MOUNTAIN EWES, response to flushing and housing during winter—78
- WEST AFRICAN DWARF SHEEP, clinical, virological and serological response to experimental infection with different strains of Rift Valley Fever virus—3006
- ewes, pathogenicity of *Fasciola gigantica*—2197
- nutrition during late pregnancy—34
- WEST VIRGINIA, status of selenium in sheep—2832
- WEST VIRGINIA UNIVERSITY, Allegheny Highlands project, delivery system for forage livestock production—206
- Allegheny Highlands project, effects of technological adaptation on beef and sheep farms—207
- WETHER, Merino, synergistic effects of thiocyanate with flumethasone in inhibiting wool growth—2274
- WHEAT, bhusa, chemical composition and nutritive value—2463c
- digestibility after treatment with sodium hydroxide—2231
- roughage requirements of ruminant lambs fed concentrate diet based on wheat—3224
- WHEY, accuracy of immunoglobulin estimation: in colostrum—2722
- composition and nutritive value, a review—952
- genetic aspects of composition of whey proteins and their biological value—1681
- solubles, as protein supplement to diet—3171
- use as energy source with urea in liquid supplements for finishing lambs—2850
- whey-grown yeast as protein source for lambs—47
- WHITE LIVER DISEASE, hepatic dysfunction associated with vitamin B₁₂ deficiency—2893
- in East Gippsland, cobalt deficiency treated with cyanocobalamin—2014
- WHITE MUSCLE DISEASE, outbreak in lambs born of ewes on zero grazing system in Natal—455
- WINTER, damage to bitterbrush related to spring sheep grazing—1451
- effect of management, on pasture regrowth—1272
- WISCONSIN, length of breeding season for 8 sheep breeds—1706
- WOOD MOLASSES, nutrition in ruminants—3336
- WOOD PULP, evaluation in diet for finishing lambs—1735
- magazines, colored, toxicologic studies with sheep fed—1285
- WOOL, a bibliography—181
- abnormalities—1439
- bacterial pigments—1440
- benefits and economics of rugging with polyolefin fabrics—2
- birthcoat-adult fleece relationship, kemp succession in coarse wool breed of sheep—1177
- birthcoat fiber type of lambs and some adult fleece traits—1176
- biuret reaction, quantitative determination of insoluble proteins—1125
- bulletin on—1788
- canary colouration of Indian, note on sweat glands of Nali sheep in relation to—1439
- carpet, review of research at Lincoln College—1291
- carpet, review of research at Massey University—3243
- cell proliferation and cortical cell production—3270
- changes in pigmentation in autografts—2592
- characteristics—3287
- characteristics, Barki sheep, semi-arid conditions—desert conditions—883
- characteristics, iodine supplementation of pregnant and lactating ewes, offspring—1598
- characteristics, phenotypic and genetic parameters for improvement by selection—3302
- characters, skin histology, crossbreds—2991
- chemical defleecing—2489, 2569
- classification and trade prices in USSR—3090
- comparative production and quality traits in Patanwadi and Deccani crosses—681
- comparative productivity, Merino and Border Leicester ewes—2884
- comparisons of progeny by Finnish Landrace and Romanov rams out of mutton Merino and Awassi ewes—1119
- compensatory growth and productivity of highland Corriedale sheep—3340
- crossbreeding Krasnoyarsk ewes and Australia Merino rams—1803
- defects—1440
- dermatophilosis, association with dipping and effects on production—3253
- eating by Mallophaga, review—261
- economic comparison of open and closed nucleus breeding schemes for wool production—1471
- economic losses due to fascioliasis—2502

- effect of biochemical characters on production traits—2752
- effect of defaunation of rumen—335
- effect of rainfall on water and heat dynamics—3120a
- effect of variation in light intensity on movement through narrow and wide races—1321
- efficiency by pen fed Romney, Coopworth, Perendale and Corriedale breeds—2882
- efficiency of production and mechanics of wool follicle production—477
- Elliottdale sheep and carpet industry—1926
- enhancement of growth in response to feeding of methionine esters and polymer encapsulated forms—3235
- evaluation of exotic sheep breeds—330
- fiber characteristics, Mandya, Madras Red and crossbreeds—1501
- fiber diameter profile of wool staples in individual sheep—1427
- fiber types—3287
- fleece, genetic improvement of Baglic sheep—914
- genetic and environmental factors causing variation in fiber diameter and other traits in Merinos—1928
- growth and productivity of different constitutional-productivity types of sheep in relation to nutrition—2871
- growth responses, after administration of two forms of dexamethasone—2273
- improvement of production and reproduction rate—3046
- improvement through genetic selection, environmental factors—3301
- improving quality of fine-wooled sheep—1573
- increased production, use of AI—862
- industry, production, New South Wales—36
- inheritance of content of pigmented fibers of Saraja breed—154
- kemp succession in adult fleece of two coarse-wool breeds in relation to birthcoat—1178
- levels of lead, indicative of lead in blood of sheep exposed to automotive emissions—3194
- market comment, wool clip sellout likely—1273
- morphology and ultrastructure—3160
- motorized cradle for easier shearing—3267
- new type, mutton, biochemical markers, analysis of production characteristics, early stages of breed formation—1093
- physical characteristics, Barki sheep, phenotypic and genetic correlations—884
- potential for harvesting weakened wool, comparison of breeds for staple strength and depilation force after cyclophosphamide treatment—1121
- problems of sheep industry in Queensland—1995
- production by new Volgograd breed—3038
- production, crossbred Finn and Suffolk ewes—1518
- WOOL PRODUCTION, crossbred Polish mountain × Polish longwool, Olkusz type—584
- crossbred Sardinian and East Friesian sheep in Sardinia—400
- effect of energy and protein levels—2757
- effect of season—602
- effect of water deprivation, semi-arid conditions—2040
- efficiency of visual classing of Merino—2105
- forecast for 2000 A. D.—2443
- genetic aspects—1604
- in arid areas—2110
- in semi-arid areas with special reference to African conditions, a review—1623
- in the United States of America—1976
- male lambs—1556
- New Zealand during 1978 and 79—2138
- quality, and skin morphology of sheep fed urea and ration with supplement of urea—790
- quality, development of new breeds—9
- quality, effect of methionine and sulphur-containing amino acids—836
- quality, effect of time of shearing and location—3197
- quality, in orcadian sheep of Lihou—3249
- quality, of fattened lambs of different commercial types from Polish Merino ewes and mutton-type rams—2237
- rate of growth of fibers, division of germinative cells in hair bulb—2415
- relationship of fibre length to pelt characteristics—1404
- relationship of staple length, fineness, moisture content and vegetable matter with age of sheep—1973
- roots, metabolism of tritiated cortisol and tritiated estradiol—3193
- rugging of sheep with polyolefin fabrics—1
- selection for uniformity—393
- selection of Merinos for resistance to fleece-rot and body strike—173
- skin folds affect fleece weight—204
- skin folds affect Merino production—800A
- staple length, genetic selection, Polish Merinos—1586
- structure and chemical composition of wool cortex of fine-wooled sheep—791
- synergistic effect of thiocyanate with flumethasone in inhibiting wool growth in Merino wethers—2274
- taking fiber diameter into account in ram selection—392
- technical details of new sheep blowfly insecticide—1257
- traits of meat-wool sheep in western Kazakhstan, USSR—2944
- use, ancient Near East—28
- weight, effect of selenium supplementation—3177
- yellow, Indian, bacteriological investigations—1440
- yield and quality and live weight development of young ewes of different genotypes—3351

yield, effect of feeding formaldehyde-treated concentrate mixture to growing lambs—322
 yield, influence of stud on performance of Merino meat yearlings—2989
 yield, on synthetic protein sources—1642

XY

X-RAY, functional and morphological changes in adenohypophysis—1852
 qualitative and quantitative histological changes in oviduct and uterus—2841
XYLAZINE, role of spleen for blood circulation after sedation with rompun—379
 sedation, respiratory function changes associated with recumbency and sedation—2011
 use in surgery in field—1403
Y CHROMOSOME, Nali sheep—3143
YANKASSA, cobalt supplementation in northern Nigeria—1211
 lamb, microcephaly associated with kyphocoliosis and cleft palate—1210
YEAST, whey-grown, as protein source for lambs—47
YELLOW FAT, nature—2576
YELLOW WOOL, bacteriological investigations—1440
YERSHINIA ENTEROCOLITICA, isolation and characteristics of similar bacterium from meats—1235
YOGHURT, content of lactic acid—1695
YUCATAN, Mexico, alternatives to monoculture of Henequen, performance of forage crops and livestock—2828
YUGOSLAVIA, epizootiology of *Cysticercus tenuicollis*—3162
 examination of snails and ants on island of Cres for larvae of *Dicrocoelium lanceolatum*—506
 fascioliasis in mountainous pastures—2641
 lead poisoning—2335
 Lici region, foot rot in sheep—2581
 spread of listeriosis during 1965 to 1977—1629
 Valjevo area, spread and consequences of hydatid—1861
 vectors of *Babesia*—2337

Z

ZAIRE, epidemiology of nematode gastroenteritis—2669
ZEA MAYS, utilization by Gaddi ewes supplemented with three levels of linseed-cake—2253
ZERANOL, effect of graded levels, on growing-finishing lambs fed diets of orchardgrass hay vs. cottonseed hulls as their source of roughage—1916
 effect of implantation on growth performance and some blood characteristics of early weaned lambs—3076
 effect on reproductive characteristics in ewe lambs—622
 hazards for meat production—1288
 implants, fattening lambs—1386
 implants, growth and endocrine responses—3248
 influence of implants on lamb growth—2323
 response of wether lambs to treatment—3077
 use in fattening hoggets—1776
ZINC, absorption and duodenal flow, effect of nitrilotriacetic acid—1412
 accumulation in tissue cytosolic proteins—3232
 and alkaline phosphatase levels as indicators of zinc status during pregnancy and lactation—131
 and copper-binding protein in liver, effect of dietary levels—2649
 dietary deficiency—856
 distribution in digestive tract, effect of supplemental calcium carbonate—3307
 effect of low dietary level on pregnancy and lactation—132
 effect of nitrilotriacetic acid solubility in stomach—1414
 effect of supplementation on canary colouration of Nali sheep—1068A
 effect on ciliary micropopulations of rumen—381
 in accessory genital glands of male, distribution uptake and effect on testosterone—1309
 in carcasses and relationship to trace element requirements for growth—2898
 interrelationship with copper poisoning—2500
 levels in cerebrospinal fluid of copper-poisoned sheep—117
 liver, changes and effect of residual grain on utilization of sweet lupin stubbles, and concurrent changes in lupinosis—648
 liver, in utilization of lupin stubbles—49
 metabolism, age and dietary levels—2648
 metabolism, effect of supplemental calcium carbonate—3308
 morbidity and mortality after concurrent administration of mineral supplement—2422
 radio, effects of intraruminal dosing with nitrilotriacetic acid—1411
 toxicity to pregnant sheep—501
ZINC SULPHATE, therapy for prevention of lupinosis—69
 toxicity, effect of method of administration—2787
ZOONOSES, sheep, a review—796
ZYMOGEN, acrosin, in testicular, epididymal and ejaculated sperm—1256

Discussion

The results presented here represent a collection of information sources numbering over 3350 items. These then yielded more than 11,000 general and specific index units providing an in depth entre to the whole body of information on sheep for 1979. This bank of research information should be useful to the professional animal scientist as well as the interested producer. It is especially valuable to the professional scientist, including teachers, extension workers and researchers, who may not have informational retrieval services available by virtue of geographic location.

The tools employed in harvesting the basic information were computer based and presented several sources of error not readily appreciated at first:

1) Many personal names such as Van Tonder were presented in more than one way so that often the information appeared as two unrelated sources, due to alphabetization under "V" or "T" as in the above name.

2) Misspellings, some of which were unintentional and others obviously based upon differences reflecting a programmer's background such as the changing of "y" to "i" in spellings and in authors' initials.

3) The periodic printouts received from the computer bank offered no advice on the time frame covered so that there was apparently no control over areas already searched by the computer. This led to much duplication.

4) Human error in translating titles of articles so that a single reference appeared as two separate works.

5) Varying interpretation of surnames led often to two author names for the same reference, e.g., W. J. Brindley Morgan vs. W. J. B. Morgan.

6) In some instances the title of a paper by a sole author appeared in another journal again, having the sole author as senior author along with one or more junior authors; or in other instances the same title with the same credits appeared in another journal, clearly a violation of the professional ethic established long ago (Council of Biology Editors, 1972).

Acknowledgments

This work was done during my tenure as a Guest Scientist in the Animal Parasitology Institute, U.S. Department of Agriculture Experiment Station, Beltsville, Maryland, U.S.A. Appreciation is expressed to Dr. Ralph Lichtenfels, Mrs. Judith Humphrey Shaw and Mrs. Shirley Edwards for sharing work space, advice and friendly helpfulness. Appreciation is also expressed to Mrs. Hazel Pollard of the National Agriculture Library for advice and services of the Current Awareness Literature Service.

References Cited

- Council of Biology Editors, Committee on Form and Style. 1972. CBE Style Manual. American Institute of Biological Sciences, Publisher, 3900 Wisconsin Avenue, N.W., Washington, D.C. 20016.
- Lincicome, D. R. 1981. Research: Who Needs It? *International Goat and Sheep Research* 1(2):105-107.

...A Comprehensive Bibliography to increase the efficiency of sheep production worldwide through more effective research.

Sheep: Applied and Basic Research Information Published During 1979

Prepared and edited by Dr. David R. Lincicome, editor-in-chief of the International Goat and Sheep Research (IGSR).

Some advantages of this Bibliography are:

- To make research information more rapidly and completely accessible to each investigator.
- To make each investigator more aware of the total information available.
- To stimulate new ideas on sheep production more rapidly.
- To increase effectiveness of future research through improved awareness of knowledge already available.
- To reduce unnecessary duplication of research.
- To increase communication and cooperation among investigators in different countries.
- To stimulate and increase translation of foreign literature to English.
- To provide a ready source of information to administrators, editors and other reviewers.
- To encourage more complete use of research progress in education and extension.

"Those of us that have reviewed this Bibliography feel that it will be useful to everyone concerned with sheep to find out what research is going on in the world that is related to his activities or the needs of his country. We feel that it would be especially useful to developing and food deficient countries."

Dr. Clair E. Terrill
Editorial Board Member

This 324-page Bibliography is an almost complete list of applied and basic references published on sheep during 1979.

Each reference consists of author(s), title in English, publication, page and key words.

The substance of the reference is given by specific explanation of the key words. References are indexed by author and key words. There are more than 3,000 references and more than 11,000 key words.

324 pages **\$25.00 (U.S. funds) per copy,**
surface postage paid.
(10% discount for two (2) more copies ordered and paid for at the same time, with shipping and billing being to the same address.)

Order from:

**International Goat and Sheep Research
P.O. Box 1808
Scottsdale, Arizona 85252 U.S.A.
Telephone: (602) 991-4628**

(This publication funded in part by the United States Agency for International Development, Washington, D.C.; American Breeders Service, DeForest, Wis.; and Winrock International, Morrilton, Ark.)

323

AVAILABLE NOW FOR IMMEDIATE DELIVERY



of the

**THIRD INTERNATIONAL CONFERENCE
ON
GOAT PRODUCTION AND DISEASE**

The **PROCEEDINGS** is a 620-page, 8½" x 11" volume including all 12 Plenary Session presentations, all 64 Symposia presentations, and about 325 abstracts introduced at the **THIRD INTERNATIONAL CONFERENCE ON GOAT PRODUCTION AND DISEASE** held in Tucson, Arizona, January 10-15, 1982. The III Conference was attended by 511 persons from 43 countries.

— SUBJECTS COVERED —

PLENARY SESSIONS

"The Animal as a Food Source for Man"; "The Emerging Role of Goats in World Food Production"; "Social Consequences of Technology in the Improvement of Peasant Agriculture"; "Concepts in Animal Adaptation"

SYMPOSIA/CONTRIBUTED PAPERS

Genetics and Goat Breeding; Goat Products Marketing; Caprine Parasitology; Goat Nutrition; Goat Reproduction; Goats and the Small Farmer Dilemma; Problems and Potentialities; Caprine Mycoplasmosis; Milk Products; Fiber Production; Grazing Management; Goats: Income, Wealth and Status; Caprine Brucellosis; Caprine Caseous Lymphadenitis; Meat and Skin Products

The Dairy Goat Journal printed 2,000 copies of the **PROCEEDINGS** which went on sale at the III Conference. Remaining copies are on sale through mail orders in the order they are received. **ORDER EARLY ... remit in U.S.A. funds only!**

PRICE: \$55.00 per copy (plus \$5.00 postage and packaging to U.S.A. zip code addresses; Outside U.S.A. add \$9.00 (U.S.A. funds) for surface postage and packaging).

Order from: **DAIRY GOAT JOURNAL PUBLISHING CO.**
P.O. Box 1808, Scottsdale, AZ 85252 U.S.A.
(phone : (602) 991-4628)
"Use Your Visa or MasterCard"

324

International Goat Association



International Goat Association Objectives:

- To foster the use of goats to provide for the needs of mankind
 - To encourage research with and development of goats to increase their productivity and usefulness throughout the world
 - To perpetuate International Goat Conferences
 - To sponsor an International Journal
- All 1983 memberships will be listed as **CHARTER MEMBERS**.
 - Membership and/or subscription is for 1-year from date received.

Membership Form

International Goat Association
P.O. Box 1808
Scottsdale, AZ 85252 U.S.A.

ANNUAL DUES:

includes subscription to IGA's Official Publication:
"International Goat Research Journal"
(currently "International Goat and Sheep Research" - IGSR)
(Payable in U.S.A. Funds to "International Goat Assn.")

- INDIVIDUAL MEMBERSHIP \$47.00
- INSTITUTIONAL MEMBERSHIP \$95.00
- Non-Member subscription to "International Goat and Sheep Research" ... \$44.00

PLEASE TYPEWRITE OR PRINT PLAINLY

Name: _____

Address: _____

City: _____ State: _____ Zip _____

Country: _____

Telephone Number: _____ () _____
Country Code Area Code

325