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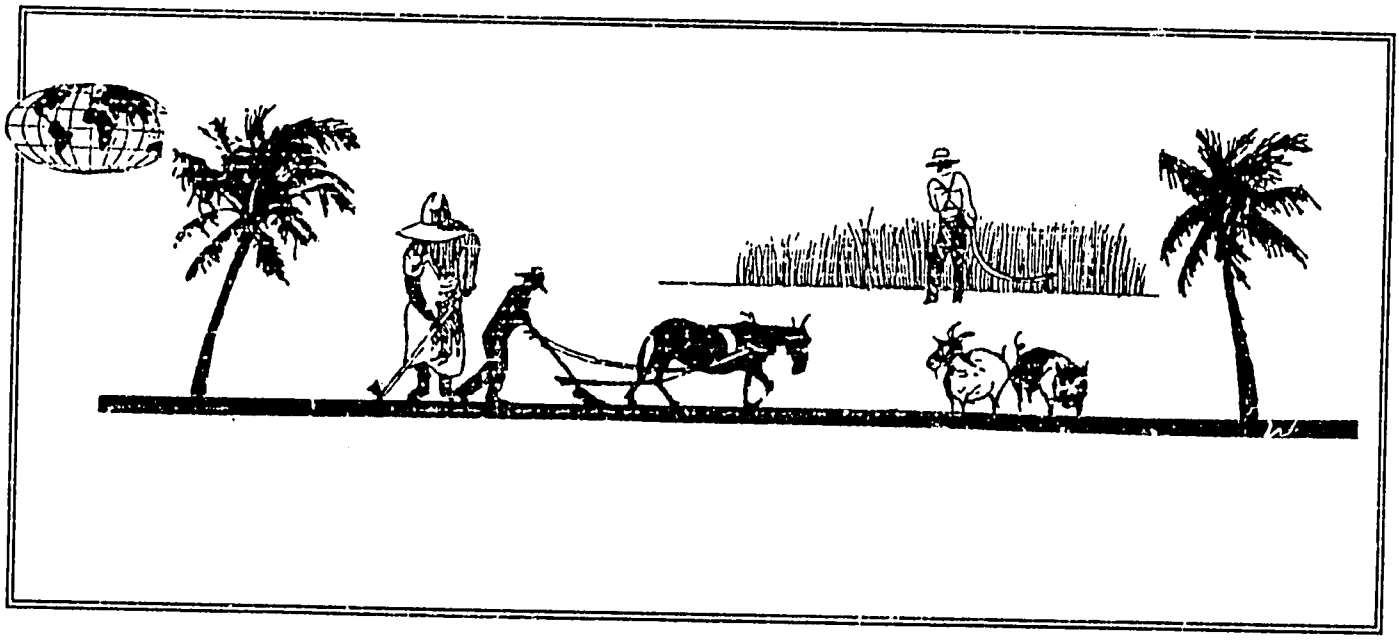
ANNOTATED BIBLIOGRAPHY OF TROPICAL ROOT AND TUBER CROPS

COMPILED BY: OGHENEKOME U. ONOKPISE
IBRAHIMA BAH
PETER HARTMANN
RUPERT GRANT SEALS



UNDER THE AUSPICES OF THE UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT #631-0058 FOR THE CAMEROON ROOT AND TUBER RESEARCH PROJECT.

ANNOTATED BIBLIOGRAPHY OF TROPICAL ROOT AND TUBER CROPS

YAMS
COCOYAMS
CASSAVA
SWEET POTATOES

3489

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for International Development Project #631-0058
for the CAMEROON ROOTS AND TUBERS RESEARCH PROJECT

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Compiled by: Oghenekome U. Onokpise,
Ibrahima Bah
Peter Hartmann
Rupert Grant Seals

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INTRODUCTION

Yams, cocoyams, cassava and sweet potatoes dominate the agricultural production in the Cameroons. Post-harvest losses of these root and tuber crops are considered to be very significant and constitute one of the major factors in the subsistency of the farmers. An awareness of this problem resulted in the Tropical Root and Tuber Research Project (ROTREP) for the Cameroons under the auspices of the United States Agency for International Development (USAID). This project is a collaborative effort involving three Historically Black Land Grant Institutions: University of Maryland, Eastern Shores (UMES), Alabama A and M University (AAMU) and the Florida A and M University (FAMU) with UMES as the lead institution. Literature on root and tuber crops research is widely scattered in several publications or restricted to specialized areas of research, thereby creating reference difficulties for scientists seeking information on these tropical crops. Therefore, the objective of this bibliography is to provide a comprehensive informational source that will become a repository for research scientists and scholars working with or interested in yams, cocoyams, cassava and sweet potatoes in the tropics and elsewhere.

Materials for this bibliography were obtained through computer searches, direct literature review and telephone calls to several institutions within the United States known to have some research work or information on tropical root crops. Initially, index cards were used to obtain the necessary information which was then transferred onto an IBM PC for storage and processing. The bibliography contains titles, authors and publications in which the work can be found. Occasionally, an abstract is included especially in cases where the paper had been written in French and it was felt that the translation of the abstract will be very useful to the reader. There is a separate listing for yams, cocoyams, cassava and sweet potatoes and authors are listed alphabetically for each crop.

Much of the information presented in this issue deals mainly with post-harvest storage research on root and tubers. this is a reflection of the initial efforts of Florida A&M University in surveying the post-harvest storage problems of these crops in the Cameroons. As more titles are added in the future, other areas of roots and tubers research will be included for completeness.

We wish to acknowledge with many thanks the Post Harvest Institute, Colorado for their cooperation and information supplied for this issue of the bibliography. Thanks are also extended to the libraries of Florida A&M, and Florida State Universities respectively for the facilities used in many of the computer researches.

Please direct any comments, inquiries and requests for copies of the bibliography to:

Dr. Rupert Grant Seals, Director
Office of International Programs
C.E.S.T.A.
Florida Agricultural and Mechanical University
Tallahassee, Florida 32307
Telephone: (904) 599-3562

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YAMS (Dioscorea spp)

AUTHOR(S)	TITLE	SOURCE
Adeniji, M. O.	Fungi Associated with Storage Decay of Yam in Nigeria.	Phytopathology v 60 (4) pp. 590-592. April 1970.
Adesuyi, S. A. (edited by J. Miege & S. N. Lyonga, P.)	The Application of Advanced Technology to the improvement of Yam Storage (Dioscorea).	Oxford: Clarendon Press, 1982.
Adesuyi, S. A., Mackenzie, J. S.	The inhibition of Sprouting in Stored Yams, Dioscorea rotundata Poir, by Gamma Radiation and Chemicals.	In: Radiation and Preservation of Food; Proceedings of a Symposium, Bombay, 1972 organized by IAEA & FAO, pp. 127-136. Ref. 1973.
Akoroda, M. O. (International Institute for Tropical Agriculture Ibadan, Nigeria.	Long-term Storage of Yam Pollen.	Scientia Horticulturae, 1983. Vol. 20 (3) pp. 225-230.
Been, B. O., Perkins, C; Thompson, A. K.	Yam Curing for Storage.	Acta Hortic v. 62, pp. 311-316, June 1977.
Boulter, D., Harvey, P. J. (Univ. of Durkham, UK, Department of Botany.	Accumulation, Structure and Utilization of Tuber Storage Proteins with particular reference to Dioscorea rotundata (Tuber, amino acid composition, yam, potato).	Physiologie Vegetale, Jan.- Feb. 1985, v. 23 (1) pp. 61-74.
Coursey, D. G., Proctor, F. J.	"Towards the Quantification of Post-harvest loss in Horticultural	Acta Horticulture. 1975 v. 49, pp. 55-56.

	Produce." Conservative estimates would suggest that out of the more than 200 million tons of horticulture crops produced annually in the tropical world (25%) is lost between harvest and consumption. The paper reviews the limited information that exists in this field. The importance of further attempts to quantify the various elements in loss is stressed, and some indications given of possible ways of reducing losses.	
Coursey, D. G.	"The Magnitude & Origins of Storage Losses in Nigerian Yams."	Journal of the Science of Food & Agriculture. v.12, August 1961.

Coursey, D. G.	"(Yams) Storage, Transport & Processing." Though West Africa is the primary focus, the chapter looks at yam practice world-wide: Storage practices, magnitudes of storage losses, factors responsible for storage losses, seed-yam storage, effects of inhibitor treatments, chilling damages, transport-yam flour and industrial processing. Also a good literature review is included.	Chapter 8 in Coursey, D. G. Yams London, Longman, Green & Co., 1967, pp. 172-194. A Survey of the Current practices of yams.
Demeaux, M., Babacauh, K. D., Vivier, P.	Problems poses par la conservation des ignames en cote d'Tirire et essais de techniques pour les resousbe. (Storage. Efficiency of Thiabendafole. Gamma irradiation controlled atmosphere).	Oxford University Press, New York, 1982.
Demeaus, M., Vivier, P. (Ecole Nationale Superieure de Biologie Appliquee a la Nutrition et a Alim. DIJON, France).	Modern Methods for Storage of Yams [cold storage, modified atmosphere, iomisation] "Methodes Moderne de Conservation des ignames [stockage, aufroid, atmosphere modifice, Trcu' tement Tonisant].	Agronomie Tropicale, April-June 1984, v. 39 (2): pp. 186-191.

Language French, Summary in English, French & Spanish.

Dina, S. O. (National Cereals Research Institute, Moor Plantation, Ibadan.	Occurrence of Dasyses Rugosella Stainton (Lepidoptera: Tineidae) on Stored Yam Tubers in Nigeria.	Tropical Sciences, 1977, v. 19 (2), pp. 113-116.
Gonzales, M. A., Collazo de Riviera, A.	Storage of fresh yam (Dioscorea alata L.) Under Controlled Conditions.	P. R. Univ. J. Agr. v.56 (1): pp. 46-56, Ref. June 1972.
Guenda, W., Bere, Al, Saoura, J., Kongo, J.L., Kabre, T. S.	Des Methodes traditionelles de Conservation de ligname en zone Soudanienne Haute Volta. Traditional methods of preservation for yams in Sudan region of Burkina Faso.	

Hanson, J. (IBPGR, FAO, Via Delle Ferme di Caracalla, 00100 Rome, Italy).	Methods of Storing Tropical root Crop Germplasm with Special reference to yam. (Summary in French & Spanish. Language English). Different means of storage are considered (field gene banks, seed gene banks, in vitro gene banks). Their combinations are deemed necessary for proper conservation and the fulfilling of various needs for research & production. the list of the major <u>Dioscorea species</u> (13 species for food and 7 for medicine) is provided with their common names, centers of origins, areas of cultivation, seed production and in vitro culturing. Fellows a separate list of 16 collections of Dioscorea germplasm with 100 accessions by country, institution, major species & type of material maintained.	<u>Plant Genetic Resources Newsletter</u> 1985 (#64) pp. 24-32 (34 references).

Hickling, G. E. Jamaica).	Investigations on the Control of Nematodes in Stored Yams in Jamaica and the Effects of Nematicides on the Germination of Tubers.	Bulletin. New Series. Ministry of Agriculture & Fisheries 1976 #64, pp. 119-121.
International Institute of Tropical Agriculture.	"Yams". Root, Tuber & Vegetable Improvement Program. Summary of the 1972 IITA activity regarding yams. It is focused on prolonging yam dormancy with Maleic hydrezide & NIA 10656 and then on breaking the dormancy using different products such as gibberellic acid solution of whole tubers.	I.I.T.A. Report, 1972, pp. 35-40.
Kpeglo, K. D., Obigbesan, G. O., Wilson, J. E.	Influence des emgrais chimiquees sur le reudement et la duree de conservation de l'igname blanche. [Yield and Shelf life of white yam as influenced by Fertilizer. Storage].	I.D.R.C. - 263f, Ottawa, Ontario, 1982, pp. 209-213.
Mantell, S. H. (Caribbean Agric. Resource & Development Institute, West Indies, Univ. of St. Augustine, Trinidad and Tobago), Hague, S. Q.	Incidence of Internal Brown Spot Disease in White Lisbon Yam (Dioscorea Alata) during Storage.	Experimental Agriculture, 1978 v.14 (12) pp. 167-172.

Martin, R. W.	Effects of Type of Wound, Species and Humidity on Curing of Yam (Dioscorea alata L.) tubers before Storage.	J. Agric. University F. R. V.58 (2) pp. 211-218, Apr. 1974
Martin, R. W., Sadik, S.	Tropical Yams and their Potential. 4. Dioscorea Cayenensis [Culture, Processing, Storage, Value as a food crop].	Agr. Handbook US Department of Agriculture #502, p. 36, ref. Mar. 1977.
Mozie, O. (Nigeria University, NSUKKA, Nigeria).	Sprout growth in Stored White Yams (Dioscorea Rotundata Poir).	Tropical Science, 1975, v. 17 (1), pp. 45-46.
Nakayama, T. O. M., Moy, James, H., Da-Fonseca, Jose, L.F.	"A system of Food Delivery From Root Crops." The production of stable convenience foods from root crops involves several steps that may be taken in diverse orders... these steps are part of a larger study aimed at the entire system of delivery food calories from root crops.	In Proceedings of the 4th Symposium of the International Society for Tropical Root Crops. IDRC-080E. OTTAWA.

Noon, R. A.	"Storage and Market Diseases of Yams". Post harvest deterioration through attack by micro-organisms is considered to be the major cause of loss of yam tubers during storage and marketing. Botryodiplodia theobromae, and several species of penicillium and fungi, and bacteria are the main agents. The study describes the conditions under which their micro-organisms are pathogenic, the symptoms of disease produced and methods for their control are discussed. Also, the effects of chilling temperature are analyzed.	Tropical Sciences, 1978, v.20, #3, pp. 177-188.
Noon, R. A. (Tropical Products Institute, London, UK); Colhoun, J.	Market & Storage Diseases of Yams imported into the United Kingdom.	Phytopathologische Zeifschrift, 1979, v.94 (4) pp. 289-302.

Language: English. Summary in German and English.

Olorunda, A. O. (Division of Agriculture Botany, School of Agriculture, Aberdeen, AB9 IVD, U.K.); McKelvie, A.D., Macklon, A.E.S.	Effects of Temperatures and Chlorpropham on the Storage of the Yam.	Journal of the Science of Food and Agriculture 1974, v.25 (10), pp. 1233-1238.

Olorunda Ayodele O., Macklon, Alan E. S.	Effects of Storage at Chilling Temperature on the absorption, Salt Retention Capacity and Respiratory Pattern in Yam Tubers. Observation of the effects of chilling temperature on yams found that incipient chilling injury could be rapidly detected by changes in Ton absorption and salt retention capacity of tuber disks. Chilling effects were also reflected by changes in respiratory rates. This proposed that these techniques can be used for rapid screening of tubers of a wide range of yam varieties, to establish optimum & minimum safe storage temperatures.	Journal of Science of Food & Agriculture, 1976, v.27, pp. 405-412.
Onwueme, I. C.	Influence of Storage time on Earliness of Sprouting and Tubering in Dioscorea rotundata Yams.	Journal of Agric Science, v.84 (3) pp. 503-505, June 1975.
Osuji, G. O.	Thermodynamics Applied to the Storage of Yam Tubers.	Tropical root crops: Production & Uses in Africa; Proceeding, 2nd Triennal Symposium; Society for Tropical Root Crops, Africa Branch, Douala, Cameroon, Aug. 83, pp. 143-146.

Passam, H.C. (ed by J. Miege and S. N.	Dormancy of Yams in Relation to Storage.	Oxford: Clarendon Press, pp. 285-293, 1982.
Passam, H. C. (Trop. Products Insti. London WCIX 8LU, UK) Noon, R. A.	Deterioration of Yams and Cassava During Storage.	Annals of Applied Biology, 1977, v.85 (3) pp. 436-440.
Passam, H. (Tropical Prod. Insti. , 56/63 Grays Inn Road, London, UK).	"GA dip Slows Yam decay". The application of Gibberellic Acid (GA) was found to be effective in extending the storage life of yams and other root crops by 3 months. Also, curing reduces post-harvest infection. Enclosing tubers in boxes containing a moist packing material could prevent post-curing damages.	International Agricultural Development, 1982, v.2 (9) pp. 10-11.

Language: English & French. Includes references.

Passam, H. C., Noon, R. A.	"Deterioration of Yams and Cassava During Storage". Yams are a tropical, annual root crop while cassava is a perennial crop. The influences of senescence on the storage of yams and cassava are discussed in relation to the physiological roles of the storage organs.	Annals of Applied Biology 1977, v.85, pp. 436-440.

Passam, H. C., Read, S. J., Richard, J. E. (Tropical Products Institute, London, UK).	The Respiration of Yam Dioscorea Spp. Tubers and its Contribution to Storage Loss.	Tropical Agriculture, July 1978, v.55 (3) pp. 207-214.
Passam, H. C., Wickham, L. D., Wilson, L. A. (Depart of Crop Sci., West Indies Univ., St. Augustine, Trinidad and Tobago).	The Long Term Storage of Yam Tubers (Dioscorea alata L.) with reference to early season Production. (Sprouting, Trinidad).	Tropical Sciences, 1982 v.24 (2) pp. 99-110.
Ricci, P., Colendo, A., Feure, F. (INRA Centre de Recherche des Antilles et de la Guyane, 971. Petit-Bourg, Guadeloupe, France).	Storage Problems in the Cush-Cush Yam. 2: Control of Penicillium Oxalicum rots.	Annales de Phytopathologie Oct-Dec 1978, v.10 (4) pp. 433-440.

Language: English. Summary in French and English.

Ricci, P., Torregrossa, J. P., Amolin, R. (INRA Petit-Bourg, Guadeloupe, France).	Storage Problems in Cush-Cush Yam (Dioscorea enfida) 1: Post Harvest Decay.	Tropical Agriculture, Jan 1979, v.56 (2) pp. 41-48.

Language: English. Summary in English.

Riveria, J. R., Gonzales, M. A., Collazo de Rivera, A., Ceuvas-Ruiz, J.	An Improved Method for Storing Yam (Dioscorea alata).	J. Agric Univ P.R. v.58 (4) pp. 456-465, Ref. Oct 1974.
Thompson, A. K., Been, B. O., Perkins, C.	Nematodes in Stored Yams.	Exp Agr, v.9 (3) pp. 281-286, July 1973.
Terche, S., Delpench, F. (Office Natonal de la Recherche Scientifique et Technique outre-Mer, Yaounde, Cameroon).	Evidence of Thickened Cell Walls in the Parenchyma of Dioscorea dumetorum Tubers after Storage Yam.	Comptes Rendus Hefdomadaires de Seances de l'Academie des Sciences. Serie D. 8 Jan. 1979, v.288 (1) pp. 67-70.

Language French. Summary in English and French.

Terche, S., Delpench, F.	Le Durcissement de dioscorea dumetorum au Cameroun., (Hardening of Yams after harvesting).	Oxford University Press. New York, 1982.
Terche, S., Guion, P. (Office National de la Recherche scientifique et technique, Yaounde, Cameroun).	Study of the Nutritional Potential of Some Tropical Tubers Dioscorea dumetorum, Dioscorea rotundata, Dioscorea cayenensis, Xanthosoma sagittifolium in Cameroon, 1: Influence of Maturity at Harvest Time; 2: Storage Capacity of Tubers Harvested After Maturity; 3: Influence of Maturity at Harvest on Storage Behaviour.	Agronomie Tropicale, Ap-Jn 1979, v.34 (2), pp. 127-156.

Language of Study: French. Translated Summary in English Spanish and French.

Ugochukwu, E. N. (Dep of Biochem., Nigeria Univ., Nsukka, Nigeria), Anojike, E. O.	Effects of Storage Under Nitrogen on Ethanol, Lactate, Malate and their Dehydrogenases in Yam Tubers.	Phytochemistry, 1979, v.18 (10) pp. 1621-1624.
United States Agency for International Development; University of Idaho (Storage and Processing of fruits and vegetable, Postharvest Institute for Perishable).	Roots and Tubers a Post Postharvest Bibliography.	Project # AID/DSAN-CA-0265, July 1981. Document type: Monograph; Bibliographies.

Wickham, L. D., Passam, H.C., Wilson, L. A.	Tuber Development, Storage and Germination in Yams (Dioscorea spp.), in Response to Preharvest Application of Plant Growth-Regulators (Tuber-Yields Trinidad).	The Journal of Agricultural Science, v.102 (pt. 2) Apr. 84, pp. 437-442.
Wilson, Jill.	Careful Storage of Yams: Some Basic Principles to Reduce Losses. This booklet outlines some important principles which can improve traditional on-farm storages. The illustrations are made from observation in West Africa: Shaded barns of the high rainfall zones, staking in the field and covering with dry plant material in the Savana Zone, Storing in elevated cribs, etc.	Food Production and Rural Development Division. Commonwealth Secretariat. Pall Mall. London.

COCOYAMS (Colocasia and Xanthosoma)

AUTHOR(S)	TITLE	SOURCE
Aguegueia, A. and S. Nzietchneng (1983)	Production of hybrid Xanthosoma sagittifolium and test for resistance to Pythium myriotylum	In: E. R. Terry, E.V. Doku, O. B. Arene, and N.A. Mohungu (Eds.). Tropical Root Crops: Production and uses in Africa. Ottawa, IDRC. 169-171.
Amoah, F.E. K(1975).	The centers of origin and spread of some staple food plants in West Africa; A review of recent evidence.	African studies Journal 1:56-80.
Anonymous (1978)	Cocoyam - Inducing flowering.	IITA Research Highlights pp. 13-16.
Anonymous (1982)	Cocoyam	IITA, Annual Report. 111-112.
Arene, O.B. and E.U. Okpala (1981).	Effect of previous cropping on cocoyam disease in Nigeria caused by C. rolfsii (Socc) Curzi.	Niger. J. Pl. Protection 5:90-93.
Bachman, E. (1986)	Die organisation von Yam/Maniok-Betrieben in drei Dverfern Suednigerias.	University Stuttgart Hohenheim.
Bates, W.N. (1957).	Mechanization of tropical crops.	Temple Press Ltd. Xiiit p. 410.
Bell, J.M. and D.G. Coursey (1971).	Tropical vegetables in Britain.	Tropical Science 13:251-263.
Booth, R.H. (1973).	Postharvest deterioration of tropical root crops: Losses and their control.	2nd International Congress. Plant Pathology. Minneapolis, U.S.A. 5-12 September, 1973.

Braithwaite, C.W.D. (1972).	Preliminary studies on plant parasitic nematodes associated with selected root crops at the University of the West Indies.	Plant Disease Reporter, 56:1077-1079.
Campbell, L.G. (1974).	Mechanizing tropical root crop production.	Span 17(3): 118-120.
Caesar, K. (1980).	Growth and development of Xanthosoma and Colocassia under different light and water supply conditions.	Field Crops Research 3: 235-244.
Collard, P. and S. Levis (1959).	A two stage fermentation of cassava.	Nature, 183: 620-621.
Coursey, D.G. (1967).	Yam storage, a review of yam storage practices and information on storage losses.	J. Stored Product Res. 2: 229-244.
Doku, E.V. (1908)	Strategies for progress in Cocoyam Research.	In: E.R. Terry, K.A. Oduro and F. Caveness (Eds.). Tropical Root Crops: Research Strategies for the 1980's. Ottawa, IDRC, 227-230.
Eggum, B.D. (1970).	The protein quality of cassava leaves.	Brit. J. Nutr. res. 2:229-244.
Enyi, B.A.C. (1967).	Effects of age on establishment and yield of cocoyam setts (Xanthosoma sagittifolium Schott).	Expt. Agric. 3: 121-127.

Faboya, O.O. p. (1981).	The fatty acid composition of some tubers grown in Nigeria.	Food Chemistry 7(2): 151-154.
Favier, J.C. (1977).	Valeur alimentairre de deux aliments de base Africains: le manioc et le sorgho.	Travaux et Documents No. 67. ORSTOM, Paris.
Favier, J.C., A. Chevassaus and G. Gallon (1971).	La technologie traditionelle du manioc au Cameroun, influence sur la valeur nutritive.	Annales de la nutrition et de l'ailmentation. vol. 25. no. 1.
Ghuman, B. S. and E. Lal (1983).	Effect of water-table depth on cocoyam.	In: E.R. Terry, E.V. Doku, O.B. Arene and M.M. Muhungu (Eds). Tropical Root Crops: Production and uses in Africa. Ottowa, IDRC 175-181.
Han, S.K. (1983).	Cocoyam: Tropical Root Corps; their improvement and utilization.	Conference paper 2. IITA, Ibadan. pp. 25-28.
Idusogie, E.O. and S.O. Olayide (1973).	Role of roots and tubers in Nigerian nutrition and Agricultural development.	Third international symposium on Tropical Root crops. IITA, Ibadan 2-9 Dec. 1973. Vol. 2: 23p(Mimeo).
Igbokwe, M.C. and J.C. Ogbonnaya.	Yield and nitrogen uptake by cocoyam as affected by nitrogen application and spacing.	In: E.R. Terry, K.A. Oduso and F. Caveness (Eds.). Tropical Root Crops: Research strategies for the 1980's. Ottawa. IDRC 255-258.
Jackson, G.V.H. and D.E. Gollifer (1975).	Storage rots of taro (Colocasia esculenta) in the British Solomon Islands.	Ann. Appl. Biol. 80: 217-230.

Johnston, B. P. (1958).	The staple food economics of Western Africa.	Stanford University Press xi. 305 pp. Stanford, California.
Jones, W.D. (1959).	Manioc in Africa.	Stanford University Press. Stanford, California.
Karikari, S.K. (1971).	Cocoyam cultivation in Ghana.	World Crops. 23(3): 118-122.
Karikari, S.K. (1974).	Effect of nitrogen and potassium on yield and leaf area in cocoyam (Xanthosoma sagittifolium).	Ghana J. Agric. Science 7: 3-6.
Kasasian L. (1967).	Chemical weed control in tropical root crops.	Tropical Agric. (Trinidad) 44(4): 143-150.
Kasasian, L. and J. Seeyane (1969).	Critical period for weed competition.	PANS 15(2): 208-212.
Lyonga, S.N. (1980).	Cocoyam production in Cameroon.	International Foundation for Science. Provisional Report #5. Stockholm, Sweden.
Lyonga, S.N. and S. Nzietchueng (1986).	Cocoyam and African Food Crisis.	In: E.R. Terry, O.B. Arene and M. Okorocha. Tropical Root Crops, IDRC, Ottawa, Canada.
Madnewesi, J.N.C. and R.C.I. Onyike.	Fungal rotting of cocoyam in storage in Nigeria.	In: E.R. Terry K.A. Oduro, and F. Caveness (Eds.). Tropical Root Crops: Research Strategies for the 1980's. IDRC, Ottawa, Canada 235-238.

Martin, F.W. (1975).	The storage of germplasm of tropical roots and tubers in the vegetative form.	In: O.H. Frankel and J.G. Hawkes (Eds). Crop genetic resources for today and tomorrow. Cambridge University Press. 369-377.
Moody, K. and A.C. Ezumah (1974).	Weed control in major root and tuber crops. - A review.	PANS. 20(3): 292-299.
Nzoku, J.E., and J.C. Obiefuna.	The economics of intercropping yams, cocoyams, cassava and plantains under different levels of fertilizer.	Book of Abstracts. 3rd Triennial Symposium of the International Society for Tropical crops - African Branch 17-23 August 1986. Owerri, Imo State, Nigeria.
Numfor, F.A. (1983).	An improved technique of processing cassava fufu.	In: Tropical Root Crops, proceedings of the 2nd Triennial Symposium of the International Society of Tropical Root Crops - Africa Branch, Douala, Cameroon pp. 111-113.
Numfor, F.A. and Ay. P. (1987).	Postharvest technologies of root and tuber crops in Cameroon - A survey.	Memories et Travaux de L'IRA no. 1. Ministere de L'Enseignment Superieux et de la Recherche Scientifique. IRA B.P. 2123, Laounde.
Nzietchueng, S. (1983a).	Root rot of Xanthosoma sagittifolium in Cameroon.	In: E.R. Terry, E.V. Doku, O.B. Arene and N.M. Muhungu (Eds.). Tropical Root Crops: Production and uses in Africa. Ottawa, IDRC. 169-171.

Nzietchueng, S. (1983b).	La pourriture vacinaire du macabo (Xanthosoma sagittifolium) au Cameroon: I. Symptomatologie et etilogie de la maladie.	L'Agronomie Tropicale 38: 321-325.
Nzietchueng, S. (1983c).	Pourriture zacinairre du macabo (Xanthosoma sagittifolium) au Cameroon: II Epidemiologie Et moyens de lutte.	L'Agronomie Tropicale. 38: 326-329.
Olatunji, O., and I.A. Akinrele (1978).	Comparative rheological properties and bread qualities of wheat flour diluted with tropical tuber and bread fruit flour.	Cereal Chemistry 55(1): 1-6.
Okeke, G.C. (1980).	Root and Storage root diseases of cocoyam in Nigeria.	In: E.R. Terry; K.A. Oduro, and F. Caveness (Eds.). tropical Root Crops: Research strategies for the 1980's, Ottawa, IDRC 235-238.
Opute, F.I. and A.U. Osagie (1978).	Fatty acid composition of total lipids from some tropical storage organs (includes potatoes, yams, cassava and cocoyams).	J. Science of Food and Agriculture 29(11): 959-962.
Pasnette, A.F. (1945).	Root rot of cocoyam (xanthosoma sagittifolium Schott).	Tropical Agriculture. 22:164-178.

Plucknett, D.L. (1979).	Small-scale processing and storage of tropical root crops.	Westview Tropical Agricultural Series No. 1 Boulder, Colorado, Westview Press Inc. pp. 483.
Rasper, V. (1969).	Starches from major starch crops grown in Ghana. I. Hot paste viscosity and gel forming power.	J. Sci. Food and Agriculture 20(3): 165-171.
Rasper, V. (1969b).	Investigations on starches from major starch crops grown in Ghana. II. Swelling and solubility patterns: amylolactic susceptibility.	J. Sci. Food and Agriculture 20(11): 642-646.
Splittstoesser, W.E. (1977).	Protein quality and quantifying of tropical roots and tubers.	HortScience 12(4.1): 294-298.
Terche, S. and ph. Guion (1979).	Etude des potentialites nutritionelles des quelques tubercules tropicaux en Cameroun. I. Influence de la maturite' et la recolte. 2. Aptitude a la conservation des tubercules recoltes apres maturites. 3. Influence de la maturite a la recolte sur la behaviour en etage.	L'Agronomie Tropicale 34(2): 127-157.

Terche, S. and Ph. Guion (1980).	Etude des potentialites nutritionelles des quelques tubercules tropicaux an Cemeroon. I. Influence de la maturite' a la recolte'.	Revue science et Technique. I(1): 55-69.
Terche, S. and Ph. Guion (1980).	Etudes des potentialites nutritionelles des quelques tubercules tropicaux au Cameroon. II. Aptitude de la conservation des tubercules recoltes apres maturite'.	Revue Science et Technique I(1): 71-83.
Uzozie, L.C. (1971).	Patterns of crop combination in the three Eastern states of Nigeria.	Journal of Tropical Geography. 33:62-72.
Watson, J.D. (1976).	Ascorbic acid content of plant foods in Ghana and the effects of cooking and storage in vitamin content.	Biology of Food and Nutrition 4(4): 207-313.

CASSAVA (Manihot spp)

AUTHOR(S)	TITLE	SOURCE
Abaulo, E.V., Nestel-Barry, Campbell, Marilyn. (1974).	Cassava Processing & Storage. (Microfiche).	Philippines, Sri-Lanka, Malaysia. Indonesia, India, Thailand. Proceedings from interdisciplinary workshop in Pattaya. Thailand . April 17-19 of 1976. IDRC documents.
Anadeti, A.O. (1983).	"Traditional Food Preservation Techniques & their Relevance Today".	Unpublished paper. Tanzanian Food & Nutrition Centre. symposium of Nov. 30. Dec 1st, 1983.
Andrade, Antonio M., Sales D.E., Leihner, Dietrich, E. (1980).	Influence of Period and Conditions of Storage on Growth and Yield of Cassava. Inadequate storage conditions, clinically treated stakes can be preserved for 6 months under CIAT's conditions practices that could reduce the effects of storage on the initial vigour and formation of thick roots are discussed.	Weber- Edward J. IDRC p. 33-37.
Balagopalan, C, Padmaja, G. (1984).	Indian Farming.	Indian Farming, Mar. 1984 v.33(12) p. 51-53.

Beaver, Gary (1983).	Workshop on Postharvest Handling of Tropical Crops (Summary & Conclusions. Indonesia development of tropical tuber crops. Cassava 1540. Sweet potato 1580. Yam 1587. Taro 1550. Storage facilities).	Postharvest Institute for Perishables. University of Idaho. 1983.
Banawa, G.P. (1984). (Bureau of Plant Industry, Bengel, Philippines).	"Assessment of Weight Loss of Seed Potatoes in Storage." Seed potatoes stored in 3 different conditions in 7 months gave different % of weight loss and sprouts: In refrigerated store (5 degrees C) there was a weight loss of 16.6% and sprouts of 4.2 cm; kept in simple store (12.25 degrees C) the measurements showed respectively 28.66% and 3.50 cm; In ordinary farmer's storage (15.5 degrees C) the weight loss was about 43.33% and the sprouts 16.4 cm.	Highland Express, Oct-Dec 1984, v.4(4) pp.7-8.

Booth, R.H. (1975).	Cassava Storage: Post Harvest Deterioration and Storage of Fresh Cassava Roots. Mechanical damage is a crucial factor in the rapid post-harvest deterioration of cassava roots. Primary deterioration usually commences at the site of cell injury and the pathogens largely invade through these harvest wounds. Like many roots cassava roots can be cured and the onset of primary deterioration prevented. The study discusses these considerations and gives practical advice especially regarding the techniques of storage boxes and in field camps.	Centro International De Agricultura Publication (C.I.A.T.) EE-16 1975 Columbia Cali.
Booth, R.H. (1976). (Tropical Products Inst., TPI, 56-62. Grays Inn Road, London WCIX 8LU, UK); Buckle, T.S. de; Cardenas, O.S., Gomez, G; Hervas, E.	Changes in Quality of Cassava Roots During storage Tropical America.	Journal of Food Technology, v.11(3) pp. 263-265.
Booth, R.H. (1975).	Cassava Storage:; Post-Harvest Deterioration and Storage of Fresh Cassava Roots.	Ser EE Cent Int Agric Trop. v.16, 18.

Booth, R.H. (1976). (CIAT, Cali, Colombia).	Storage of Fresh Cassava (Marrihot Esculenta). 1. Post Harvest Deterioration and Its Control.	Experimental Agriculture 1976 v.12(2) pp. 103-111.
Booth, R.H. (1977) (CIAT, Cali; Colombia).	Storage of Fresh Cassava (Marrihot Esculenta) 2. Simple Storage Techniques.	Experimental Agriculture, v.13(4) pp. 119-128.
Booth, R.H. and Coursey, D.G. (1974).	Storage of Cassava Roots and Related Post-harvest Problems. This paper reviews the present knowledge of post-harvest deterioration and storage of fresh cassava roots and summarized recent experimental work undertaken by the senior author at the centro International de Agricultura Tropical (CTAT) Cali, Colombia.	IDRC-037E (Interdisciplinary Workshop in Thailand, Pattaya, 17-19.
Booth, R.H., Dhiauddin, M.N. (1979). (London ISSN 0014-4797).	Storage of Fresh Cassava (Marrihot esculenta III. Preserving Chipped roots before and during sun-dry.	Experimental Agriculture v.15(#2), pp. 135-144, ill.

Coursey, D.G.	"Traditional Post-harvest Technology of tropical Perishable Staples." Traditional techniques are studied as the mostly best suited methods to the small or medium scale operation of the subsistence sector and for the expanding market economics. For the big scales modern techniques such as refrigeration, controlled atmosphere or hypobaric storage may become optimal. The article recommends to carefully examine all the advantages offered by the traditional tehcniques more suited to the small production.	Industry and Environment. Jan.-Feb. 1981.

Coursey, D.G., Booth, R.H. (1977).	"Postharvest Problems of Non-Grain Staples." The tropical staple foods other than grains, are much more important, especially in humid tropical ecosystems, than is generally appreciated. These non-grain staples includes...cassava, yams, potatos, cocoyam and crop products. ...Postharvest losses in these crops is at 25%. The paper discusses some consideration common to all non-grain staples, and also major crop-specific problems.	ACTA Horticulturae. v.53 pp. 23-33.
Data, Emma, S. Arrienda II Faustino, Q. (1981).	"Village Level Technology on Cassava Storage."	The Radix: Philippine Root Crop Research & Training Center (v.3, Jan-June 1981. ISSN# 0115-4346. p.17).
Ekundayo, C.A. (1984).	Microbial Spoilage of Packaged Gari in Storage.	Microbios Letters, v.26 (103/104) p. 145-150.
Ellis, R.H. (1979). (Dept. of Agriculture & Hort., Reading Univ., Reading RGG 2AT, UK); Roberts, E.H.	Germination of Stored Cassava Seed at Constant and Alternating Temperatures.	Annals of Botany, v.44(6) pp.677-684.
Herath, H.M.P. (1978).	Cassava Roots Storage and Post Harvest Deterioration.	Karmantha, Mar. v.5(3) p.11.

Hirose, S. (1986). (Coll. of Agriculture and Vet. Medicine, Nihon Univ., Tokyo 154).	Physiological Studies on Postharvest Deterioration of Cassava Roots. In series of experiments conducted between 1981 and 1984 it was found that : cv differences appear more clearly in tissue blocks than in intact tubers; PD was negatively correlated with root moisture content at harvest and positively correlated with starch content. The experiments showed also that: Pruning to 30 cm 2-3 weeks before harvest delayed PD; Root piece respiration rate increase in injured roots; root ethylene content varied between pruned and unpruned plants but application of ethrel did not affect root tissue respiration rate.	JARQ (Japan Agricultural Research Quarterly), v.19 (#6) pp. 241-252, (31 references).

Ingram, Jean, S., Humphries, J.R.	"Cassava Storage. A Review." Few reliable data on techniques for preserving and storing fresh cassava exist. Apparently, the most effective measure appears to be refrigeration...But in tropical countries this would be too expensive. The study presents some other methods such as those described by Reine in 1741, sealed container storage, etc...It insists on the necessity for further researches into informal storage procedures at or near subsistence farming level, using local materials and methods which are within the reach of, and acceptable to local producers.	Tropical Science. v.14 #2, pp. 131-148.
Ingram, J.S., Humphries, J.R.O. (1972).	Cassava Storage - A Review.	Trop Science V.14(2) pp. 131-168. ref. 1972.

Kawano, K., Rojanaridpiched, C. (CIAT, AA G7-13 Cali, Colombia).	Genetic Study on Post-harvest root deterioration in cassava. Series of experiments conducted in Bolivia between 1974-80 indicated that inheritance of post-harvest root deterioration is partially controlled by additive and quantitative factors (rather than qualitative). Genotype x environment factors were highly significant.	Kasetsant Journal 1983 v.17(2):14-26.
Keating, B.A.; Breen, A.R.; Evenson, J.P. (1981) (Dept. of Agriculture, Univ. Queensland, A.R. Australia).	Estimation of Starch and total fermentables contents in storage roots of cassava (Manihot esculenta Crantz).	Journal of the Science of Food and Agriculture, v.32(10) pp. 997-1004.

Lozano, J.C.; Cock, J.C.; Castano, J. (1977).	New Development in Cassava Storage. Experimental results show that physiological deterioration can be prevented either by pruning the plants 2-3 weeks before harvest or by packing the roots in polyethylene-lined paper bags after harvest. Microbial deterioration can be prevented by dip-treating the roots with broad-spectrum fungicide such as manzate.	Cassava Protection Workshop CIAT, Cali, Colombia 7-12 November 1977.
Marriott, J; Been, B.O.; Perkins, C. (1974) (Ministry of Industry Commerce and Tourism, Kingston, Jamaica).	Storage of the fresh Cassava Roots in Moist Coir Dust (Manihot esculenta, Almacemamento).	Proceedings of the Caribbean Food Crops Society, v.12 pp.79-81
Mosha, A.C. (1983).	"Beans, Cassava, Groundnuts and Sweet Potatoes." A guide to Handling and Storage.	Lishe. Dar es Salam v.4(2) p.44.
Objuehi, S.N. (1981). (National Root Crops Research Inst., Umuahia, Nigeria).	A Preliminary Study of Preplant Cassava Stem Storage on Tuber Yield; Note.	Journal of Root Crops, v.7(1&2) pp.65-66.

Parker, B.L. (1979) (Malaysian Agricultural Research & Development Institute, Serolang, Selangar, Malaysia)	Storage of Cassava Chips (Marrihot esculenta): Insects Infection & Damage.	Experimental Agriculture, v.15(2) pp. 145-151.
Parker, B.L.; Booth, R.H.; Haines C.P. (1981) (Malayasian Agricultural research & Development Inst. Serolang, Selangor, Malaysia).	Anthropods Infesting Stored Cassava (Manihot esculenta crantz) in Peninsular, Malaysia. Ten arachnid and sixty insect species were found in a sample of cassava chips from different locations of the Malayasian peninsula. The most abundant species were Rhyzopertha dominica, Lipoacelis sp and Tribolium castaneum. Also Sitophilus Zeamais and cryptolestes Klappericlu were very common.	Protection Ecology v.3(2) pp.141-156.
Plucknett, Donald L.(1979). (Hawaii University College of Tropical Agriculture).	Small-Scale Processing and Storage of Tropical Root Crops.	Boulder, Colorado. Westview Press.
Raja, J.C.M.; Abraham, E. (1978). (Trivandrum, Indian Society for Root Crops. ISSN: 0378-2409).	Post-Harvest Storage of Cassava Tubers under Modified Environmental Conditions.	Journal of Root Crops. v.4(#1), pp. 1-6, ill.

Rickard, J.E.; Coursey, D.G. (1981). (Tropical Prod. Inst., 56/62 Gray's Inn Road, London, UK).	"Cassava Storage. 1. Storage of Fresh Cassava roots." Review and updating of earlier literature review (NAR 43, 1675) on cassava storage.	Tropical Science 23(1): 1-32.
Skiles, Robert L.	"Postharvest Storage for Perishable Crops."/ Draft article.	Post Harvest Institute for Perishables. University of Idaho. 1982.
Weir, C. (1976) (Jamaica).	Cassava Propagation, Storage, Rooting Experiment.	Bulletin New Series - Ministry of Agriculture and Fisheries 1976, (#64) pp. 193-196.
Wholey, D.W. (1977) (CIAT, Cali, Colombia).	Changes During Storage of Cassava Planting Material and Their effects on Regeneration.	Tropical Science, 1977 v.19(4) pp.205-216.

SWEET POTATOES (Ipomoea batatas)

AUTHOR(S)	TITLE	SOURCE
Carswell, G.K.; Locy, R.D. (1984).	Roots and Shoot initiation by leaf, stem, and Storage Root Explants of Sweet Potato.	Plant Cell, Tissue & Organ Culture., v.3(3) pp.229-236.
Eromico, C.A.; Escalada, R.C.; Trenuela, R.M. (1981) (Visayas State Coll. of Agriculture, Baybay, Leyte, Philippines).	Effects of Different Portions and Length of Storage of Cuttings on the Growth and Yield of Sweet Potato Study Conducted in the Philippines.	Annals of Tropical Research, v.3(2) pp.144-149.
Granberry, D.M., Conover, R.A.; Whately, B.J. (1977).	Storage Root Production of Sweet Potato Seedling and Vegetative Progeny [Propagation].	Hort Sci v.12(1) pp.62-63.
Hammett, L.K. (1985) (Department Hort. Sc., N. Carolina State Univ. Raleigh, NC. 27695-7609, USA).	Comparative Study of Storage Characteristics of Sweet Potato Selection & Cultivars. The study of root weight loss, dry matter changes and intercellular space during storage concludes that Jewel is the only Ipomoea batatas selection wotj excellent storage characteristics and high storage potential.	Hort Science. 20(4): 661.

Hancock, K.W. (Mississippi State Univ. Miss. State, MS. 39762-USA).	"A Study of Growth regulators IAA - oxidase, and watering levels on storage root initiation in sweet potato (ipomoea batatas L. Lam)." Application of IAA, BA, and GA to Sweet Potato CV showed IAA was evenly distributed among CV, but it was higher on MS-33 than in M3-702.	Mississippi State University, Mississippi State, MS. 39762 USA.
Islam, M.A., Greenhalgh, W.J. (1984).	"A study on the effects of storage periods and three temperature regimes on weight loss of potato tubers [in Australia]. A 6 month study of weight loss in 3 different sets of temperature (3-4 degrees C, 13-18 degrees C, 22-27 degrees C) showed that greater loss of weight and rotteny occurred during later stages of storage at high temperature.	Bangladesh Horticulture, v.12(1) pp. 47-48.
Jenkins, P.D. (1982) (Cryptogamic Botany Laboratories, Manchester University, Manchester M13 9PL, UK).	Losses in Sweet Potatoes (Ipomoea batatas) stored under traditional conditions in Bangladesh.	Tropical Science v.24(1) pp.17-28.

Kuo, C.G.; Shen, B.J.; Shen, M.J.; Green, S.K.; Lee, D.R.; (1985).	Virus-Free Sweet Potato Storage Roots Derived from Meristem-Tips and Leaf Cuttings.	Scientia Horticulturae v.26(3) pp. 231-240. ill.
Mathus, S.P. and Levesque, M.P. (1983).	The effect of liming on yield, nutrition, and copper status of potatoes, carrots and onions grown sequentially in two peat soils.	Can. Journal of Soil Sci. 63(2):229-244.
Morris, S.C. (1981) (New South Wales Dept. of Agriculture, Gosford, Australia, Horticultural Post Harvest Laboratory).	Postharvest storage and handling of Sweet Potatoes.	CSIRO Food Research Quality, v.41(3-4): 63-67.
Patrick, Ruth M. (1978).	Freezing Yams or Sweet Potatoes. This pamphlet focuses on the techniques for storing partially backed and partially canned "yams".	Louisiana, cooperative extension service publications. 1964.
Picha, D.H. (1986).	Post harvest Storage Characteristics of Sweet Potatoes.	Louisiana Agriculture - Louisiana Agricultural Experiment Station. v.30(1) p.12-13, 15. ill.
Prasad, S.M.; Srinivasan, Cr.; Srawa, P. (1981). (Central Tuber Crops Research Inst. Trivandrum, India).	Post Harvest Loss in Sweet Potato in Relation to Common Methods of Harvest and Storage; Note.	Journal of Root Crops, v.7(1&2) pp. 69-73

Randle, W.M.; Woodson, W.R. (1986).	The Effects of Storage and Wounding on Ethylene Production by Sweet Potato.	HortScience v.21(4) pp. 1018-1019. ill.
Saladaga, F.A.; Hernandez, T.P. (1981). (Louisiana State University, Louisiana (USA).	Heritability and Expected Grains From Selection for Yield, Weight Loss in Storage and Sprouting in Field Bed of Sweet Potato Study Conducted in Louisiana, USA. Frequency distribution and heritability estimates were analyzed for yield, weight loss in storage and sprouting in field bed of a true seed of sweet potato. It was found that the genetic variance was negative, the heritability negative or zero, sprouting also had low genetic variance. This implies that either the population under study has already attained its potential limits for these traits or that these traits are largely influenced by the environment.	Annals of Tropical research, v.3(1) pp. 1-7.
Singh, N.; Mukherjee, P.K. (1976). (Government Horticultural research Institute, Saharanpur, India).	Storage of Sweet Potato (Ipomea Batatas Poir) India; Note.	Haryana Journal of Horticultural Science, v.5(1)&(2) pp. 104-106.

Thompson, H.C.	Sweet Potato Storage HC Thompson.	Washington, D.C., U.S. Department of Agriculture, #970.
Wagner, A.B. HJHSA; Burns, E.E.; Paterson, D.R. (1983).	The Effects of Storage Systems on Sweet Potato Quality. (Ipomoea batatas).	HortScience v.18(3), pp. 336-338. ill.