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Results of the Thirteenth International Triticale Yield Nursery (ITYN) 1981-82

CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO
INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER
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GLOSSAIRE DES NOMS DES VARIABLES UTILISES DANS LES TABLEAUX.

TABLE ABBREVIATION	VARIABLE NAME	NOMBRE DE LA VARIABLE	NOM DE LA VARIABLE
ALT BLT	Alternaria blight (0–9 scale)	Tizón por Alternaria (escala 0–9)	Alternaria (échelle 0–9)
ANT DMGE	Ant Damage percentage	Porcentaje de daño de hormigas	Dégâts dûs aux fourmis en pourcentage
APHD DMGE	Aphid damage percentage	Porcentaje de daño de áfidos	Dégâts dûs aux pucerons en pourcentage
ARMY WORM	Army worm percentage	Porcentaje de gusano cogollero	Chenille soldat en pourcentage
BACT STRP	Bacterial stripe (0–9 scale)	Rayado bacteriano (escala 0–9)	Rayée bacterienne (échelle 0–9)
BACT B	Bacterial blight (0–9 scale)	Tizón bacteriano (escala 0–9)	Tache bacterienne (échelle 0–9)
BARL S	Barley stripe (0-9 scale)	Rayado de la cebada (escala 0–9)	Moucheture de l'orge (échelle 0–9)
BIRD DMGE	Bird damage percentage	Porcentaje de daño de pájaros	Dégâts dûs aux oiseaux en pourcentage
BYD	Barley yellow dwarf (0–9 scale)	Enanismo amarillo de la cebada (escala 0–9)	Virose jaune de l'orge (échelle 0–9)
CHECK MARK	Check mark	Marca	Signal
COVD SMUT	Covered smut percentage	Porcentaje de carbón cubierto	Charbon couvert en pourcentage
EARS/M^2	Ears per square meter	Espigas o mazorcas por metro cuadrado	Epis par mètre^2
FALL NO	Falling number (seconds)	Actividad alfa amilasa (segundos)	Activité du amylase (en secondes)
FERT o/o	Fertility percentage	Porcentaje de fertilidad	Fertilité en pourcentage
FLGW DAYS	Number days to flower	Días a floración	Nombre de jours a la floraison
FRST DMGE	Frost damage percentage	Porcentaje de daño por heladas	Dégâts par la gelée en pourcentage
FUS N	Fusarium nivale (0–9 scale)	Moho níveo (escala 0–9)	Moisissure de la neige (échelle 0–9)
FUS NIV	Fusarium nivale spot	Mancha foliar (Fusarium nivale)	Tache de la feuille (Fusarium nivale)
FUS WILT	Fusarium wilt percentage	Porcentaje de marchitez por Fusarium	Fusarium en pourcentage
GERM o/o	Germination percentage	Porcentaje de germinación	Germination en pourcentage
HAIL DMGE	Hail damage percentage	Porcentaje de daño por granizo	Dégâts dûs á la grêle en pourcentage
HELM	Helminthosporium (0–S scale)	Helminthosporium (escala 0–9)	Helminthosporium (échelle 0–9)
HELM TERES	Leaf spot Helminthosporium teres	Mancha foliar (Helminthosporium teres)	Tache de la feuille (Helminthosporium teres)
KERN APP	Kernel appearance	Apariencia del grano	Apparence du grain
LEAF FIRE	Leaf fire (0–9 scale)	Tizón foliar (escala 0–9)	Sécheresse des feuilles (échelle 0–9)
LEAF RUST	Leaf rust (Cobb scale)	Roya de la hoja (escala de Cobb)	Rouille brune (échelle de Cobb)
LEAF RUST/P. HORDEI	Barley leaf rust (Puccinia hordei)	Roya de la hoja (cebada)	Rouille brune de l'orge
LODG o/o	Lodging percentage	Porcentaje de acame	Versé en pourcentage
LSE SMUT	Loose smut percentage	Porcentaje de carbón volador	Charbon nu en pourcentage
MAT DAYS	Number days to maturity	Número de días a la madurez	Nombre de jours à la maturation
MST o/o	Moisture percentage	Porcentaje de humedad	Humidité en pourcentage
NECK BRK	Neck break percentage	Porcentaje de rotura del cuello	Cassure du pédoncule en pourcentage
NET BLOT	Net blotch (0–9 scale)	Mancha reticular (escala 0–9)	Helminthosporium de l'orge (échelle 0–9)
PHYR TRIT	Pyrenophora tritici repentis leaf spot	Mancha foliar (Pyrenophora tritici-repentis)	Tache de la feuille (Pyrenophora tritici-repentis)
PLNT DENS	Plant density (stems/square meter)	Densidad de plantas (tallos/metro cuadrado)	Population des plantes (tiges/mètre^2)
PLNT HT	Height (cm)	Altura (cm)	Hauteur (cm)
PLNT WT	Plant weight (grams)	Peso de la planta (gramos)	Poids de la plante (grames)
POWD	Powdery mildew (0–9 scale)	Mildiú polvoriento (escala 0–9)	Oidium (échelle 0–9)
PROT o/o	Protein percentage	Porcentaje de proteína	Protein en pourcentage
ROOT ROT	Root rot percentage	Porcentaje de pudrición de maíz	Putréfaction du maïs en pourcentage
SCAB o/o	Scab percentage	Porcentaje de roña	Fusarium de l'épi en pourcentage
SCLD	Scald (0–9 scale)	Porcentaje de escaldadura (escala 0–9)	Rhyncosporium (échelle 0–9)
SDMT INDX	Sedimentation index (cc)	Indice de sedimentación (cc)	Indice de sédimentation (cc)
SEED TYPE	Seed type (L=large, M=medium, S=small)	Tipo de semilla (L grande, M=mediano, S=pequeño)	Type de grain (L=large, M=moyen, S=petit)
SEPT NODO	Septoria nodorum (0–9 scale)	Septoria nodorum (escala 0–9)	Septoria nodorum (échelle 0–9)
SEPT SPP.	Septoria spp (0–9 scale)	Septoria spp (escala 0–9)	Septoria spp. (échelle 0–9)
SEPT TRIT	Septoria tritici (0–9 scale)	Septoria tritici (escala 0–9)	Septoria tritici (échelle 0–9)
SHTR HEAD	Shattering head (o/o)	Porcentaje de desgrane	Chute de grains en pourcentage
SMLS SMUT	Semi loose smut percentage	Porcentaje de carbón semi-volador	Charbon semi-nu en pourcentage
SPOT BLOT	Spot blotch (0–9 scale)	Tizón de la hoja (escala 0–9)	Tache de la feuille (échelle 0–9)
SPOT BLOTCH/HELM SATV	Spot blotch (0–9 scale)	Tizón de la hoja (escala 0–9)	Tache de la feuille (échelle 0–9)
STEM RUST	Stem rust (Cobb scale)	Roya del tallo (escala de Cobb)	Rouille noire (échelle de Cobb)
STRP RT.H	Stripe rust (head) percentage	Porcentaje de roya lineal (espiga)	Rouille jaune sur l'épi en pourcentage
STRP RT. L	Stripe rust (leaf) (Cobb scale)	Roya lineal (hoja) (escala de Cobb)	Rouille jaune sur feuilles (échelle de Cobb)
TAN S	Tan spot (0–9 scale)	Mancha de cobre (escala 0–9)	Tache de cuivre (échelle 0–9)
TEST WT	Test weight (kg/hl)	Peso hectolítrico (kg/hl)	Poids specifique (kg/hl)
1000 G.W.	1000 grain weight (grams)	Peso de 1000 granos (gramos)	Poids de 1000 grains (grames)
YELL BERR	Yellow berry percentage	Porcentaje de panza blanca	Mitadinage en pourcentage
YIELD KG/HA	Yield kg/ha	Rendimiento kg/ha	Rendement kg/ha

RESULTS OF THE 13TH INTERNATIONAL TRITICALE YIELD NURSERY

(ITYN) 1981-82

The 13th International Triticale Yield Nursery (ITYN) was sent in September 1981, to be grown by cooperators in their spring season of 1982. Ninety nurseries went to cooperators in 58 countries. The 50 advanced lines and varieties included in the nursery had been chosen from among CIMMYT's best materials and nominations from plant breeders in different parts of the world. All had been grown and observed under a high yield environment with pressure from major diseases on the CIANO Experiment Station in the Yaqui Valley in northwest Mexico. The selected lines thus comprised a collection of the world's best lines or varieties which cooperators could compare under the specific conditions of their own sites. Seed for this international nursery was multiplied in plots on the CIANO Experiment Station, and the seed was cleaned and treated with insecticide and organic fungicide before shipment.

Instructions accompanied the mailing of seeds to each cooperator; the plot sizes, replications and similar procedures were specified. It is recommended that each plot should consist of six 3.0 m rows planted 30 cm apart and that each line should be gorwn in three replications. However, plot configuration may differ to conform to local equipment. A field book was sent with each nursery set, providing a format for recording data desired by CIMMYT.

Sixty-one of the cooperators receiving the 13th ITYN returned field books reporting performance at their location in time to be included in this report. In receiving and processing the data, CIMMYT assumes that instructions were carried out and that accurate results were reported. We cannot, however, attest to the rigor with which the trials were grown and results were obtained.

The choice of variables measured and the data returned rests with the individual cooperator. We have included in this summary all measures of all variables reported to us. Some variables are presented for which a limited number of observations were made. The user of these tables should be aware of the importance of the number of locations and the number of observations in interpreting data on a given variable; summary tables for regional and international results specify both for the guidance of the reader.

Presentation of Results

So that data in this report will be of optimal use to the user, we present the results in two forms:

1. All data provided from *each trial site* are reported in a single table for that site. Each reports latitude and longitude coordinates as supplied by the cooperator. With these points, the reader can determine an exact location and, if desired, relate to it environmental data from other sources.
2. *Two International summaries* presenting (a) the variables for which data were reported, by trial site, and (b) the means computed for all sites.

Statistical coefficients[1/] accompany the trial site data to assist the reader in evaluating and interpreting the data. While we assume accuracy in the data supplied to us, we encourage users of this report to approach specific elements with the reasonable skepticism of their own standard of proof.

Feedback

Feedback of two kinds from cooperators is vital to the quality of this and other CIMMYT international nursery reports: First, the prompt return of carefully recorded data from each and every trial site; second, identification of errors that become part of our cooperator's station file—location coordinates, etc. We ask for feedback of both kinds.

Nominations of lines or varieties for future ITYNs are always welcomed from breeders. A sample of 200 g of seed will join 150 or more other nominations in PMI plots (*parcela multiplicacion internacional*). Those showing favorable yield, agronomic and disease reaction characteristics will appear in a subsequent international yield nursery. Seed samples should be sent to:

International Wheat Nurseries—CIMMYT
Londres 40, Apdo. Postal 6-641
Mexico 6, D. F., Mexico

1/ Details of the statistical analyses (by a computer program called NAP) may be obtained from the Computer Services unit at CIMMYT. The procedure was described in CIMMYT Information Bulletin 40, 13th IBWSN for 1976-77.

Variety or cross and pedigree (including origin) of 13th ITYN entries

Entry No.	Variety or Cross and Pedigree	Origin
1	CANANEA 79	MEXICO
2	BEAGLE	MEXICO
3	CABORCA 79	MEXICO
4	T65 X-2832-24N-6M-1N-1M-0Y	KENYA
5	T74 X-10140-L-1-A-0B	KENYA
6	COORONG	AUSTRALIA
7	SATU	AUSTRALIA
8	DUA	AUSTRALIA
9	TYALLA	AUSTRALIA
10	TR37	YUGOSLAVIA
11	MIZAR	ITALY
12	MANIGERO	SPAIN
13	M2A X-2802-9N-1M-2N-1M-3Y-0Y	ECUADOR
14	M2A-IA X-12665-14Y-1Y-6M-0Y	ECUADOR
15	PFT 7717	BRAZIL
16	PFT 765	BRAZIL
17	RAM "S" X-12257-1N-0M	MEXICO
18	JUANILLO 97	MEXICO
19	MUSKOX "S" X-15570-1Y-1B-100B-0Y	MEXICO
20	TIGRE "S" X-27947-22M-1Y-0M	MEXICO
21	CHIVA "S" X-24551-8Y-3M-1Y-0M	MEXICO
22	BOA "S" X-24560-9Y-3M-1Y-0M	MEXICO
23	PUMA "S" X-27554-A-1M-6Y-3M-1Y-0M	MEXICO
24	JUPPA "S" X-28579-1KE-0KE-1Y-1B-0Y	MEXICO
25	JUPPA "S" X-28579-1KE-0KE-1Y-2B-0Y	MEXICO
26	CHUU "S" X-14536-10Y-1Y-1Y-1B-1Y-1B-0Y	MEXICO
27	CARMAN	CANADA
28	OAC TRIWELL	CANADA
29	ALMA	ETHIOPIA
30	BVR-ARM	ECUADOR
31	BGL/ARS-MEX MUTI X BGL "S" X-22562-101Y-3Y-1M-0Y	ECUADOR
32	M2A-IA X-12665-11Y-6Y-5M	ECUADOR
33	PTR"R"-CASTOR"S" X-31731-24Y-9M-0Y	MEXICO
34	VACA "S" X-36437-7M-2Y-3M-0Y	MEXICO
35	YE 75 X IA-BUSH X-31095-1Y-4M-1Y-3M-0Y	MEXICO
36	LECHON "S" X-27605-11M-1Y-1M-1Y-2M-0Y	MEXICO
37	LECHON "S" X-27605-11M-1Y-1M-1Y-3M-0Y	MEXICO
38	PONY "S" X-24209-3Y-1M-5Y-1M-2Y-0M	MEXICO
39	IRA-DRIRA B 507	MEXICO
40	MULA "S" X-18330-3M-2Y-2M-1Y-2M-0Y	MEXICO
41	JUANILLO 159	MEXICO
42	IRA-DRIRA B 507	MEXICO
43	TOPO 1419	MEXICO
44	DELFIN 205	MEXICO
45	M2A(2)-STR"S" X IA-ABN X-38248-D-6M-1Y-1M-0Y	MEXICO
46	PND "R"-YE 75 X-36521-40H-1Y-1M-0Y	MEXICO
47	NACOZARI 76 (Bread Wheat)	MEXICO
48	VEERY "S" (Bread Wheat) CM-33027-F-12M-1Y-6M-0Y	MEXICO
49	YAVAROS (Durum)	MEXICO
50	LOCAL CHECK	

Locations from which data were reported, with variables reported

LOCATIONS INCLUDED IN THIS SUMMARY REPORT

TABLE	CONTINENT	COUNTRY	CITY	VARIABLES INCLUDED*									
1	AFRICA	ALGERIA	CONSTANTINE	1	3								
2	AFRICA	ANGOLA	HUAMBO	1	2	3	4	9	11	13			
3	AFRICA	CAMEROON	NGAOUNDERE	1	3	4	9	13	70				
4	AFRICA	EGYPT	CAIRO	1	3	4	9	13					
5	AFRICA	KENYA	RIFT VALLEY	1	2	5	8						
6	AFRICA	MALAWI	NTCHEU	1	2	9							
7	AFRICA	SOUTH AFRICA	CAPE PROVINCE	1	2	3	9	62					
8	AFRICA	SOUTH AFRICA	ORANGE FREE STATE	1	2	3	4	7	8	9	10	11	13
9	AFRICA	SUDAN	GEZIRA	1	3	4	9	13					
10	AFRICA	TANZANIA	IRINGA	1	2	3	9	10	64				
11	AFRICA	TUNISIA	TUNIS	1	3	9							
12	AFRICA	ZIMBABWE	HARARE	1	3	4	9	10	56				
13	ASIA	CHINA	HEI LANG JIANG	1	2	3	4	9	13	62			
14	ASIA	INDIA	UTTAR PRADESH	1	3	4	9	10	11	13			
15	ASIA	NEPAL	KABRE	1	3	4	8	9	13				
16	ASIA	PAKISTAN	PUNJAB	1	2	3	4	5	7	9	10	13	70
17	ASIA	THAILAND	NAKHON RATCHSIMA	1	3	4	9	13					
19	EUROPE	FRANCE	CLERMONT FERRAND	1	2	3	9	13					
20	EUROPE	GREECE	THESSALONIKI	1	3	4	9	55					
21	EUROPE	HUNGARY	KECSKEMET	1	2	3	4	9					
22	EUROPE	ITALY	CASACCIA	1	2	9							
23	EUROPE	NORWAY		1	2	3	4	9	13	53	55		
24	EUROPE	POLAND	DANKOW	1	2	3	9	13					
25	EUROPE	POLAND	KRAKOW	1	2	3	4	7	9	13	63		
26	EUROPE	PORTUGAL	ELVAS	1	2	3	4	9					
27	EUROPE	ROMANIA		1	2	3	4	9	10	13	25	62	
28	EUROPE	ROMANIA	ILFOV	1	2	3	4	7	9	62			
29	EUROPE	SPAIN	CORDOVA	1	2	3	9	10	13	62			
30	EUROPE	SPAIN	LLEIDA	1	2	3	4	9	10	11	13	61	62
31	EUROPE	SPAIN	MADRID	1	2	3	4	9	10				
32	EUROPE	SWEDEN		1	2	3	9	13					
33	EUROPE	SWITZERLAND	VAUD	1	2	3							
34	EUROPE	W. GERMANY	BADEN-WUTTEMBERG	1	2	3	9	13					
35	MIDDLE EAST	CYPRUS	LAXIA	1	3	9							
36	MIDDLE EAST	SYRIA	ALEPPO	1	3	4							
37	MIDDLE EAST	TURKEY	IZMIR	1	2	3	9	13					
38	NORTH AMERICA	CANADA	ALBERTA	1	2	3	4	9	13				
39	NORTH AMERICA	CANADA	MANITOBA	1	2	4	9	10	13				
40	NORTH AMERICA	CANADA	P.E.I	1	2	3	4	9	13				
41	NORTH AMERICA	MEXICO	EDO DE MEXICO	1	2	3	4	7	9	13			
42	NORTH AMERICA	MEXICO	EDO DE MEXICO	1	2	3	7	9	13	74			
43	NORTH AMERICA	MEXICO	GUANAJUATO	1	3	4	9						
44	NORTH AMERICA	MEXICO	SONORA	1	2	3	7	9					

45	NORTH AMERICA	MEXICO	TLAXCALA	1	2	3	4	9	13			
46	NORTH AMERICA	U S A.	ARIZONA	1	2	3	4	9				
47	NORTH AMERICA	U S. A.	CALIFORNIA	1	2	3	9	13	62			
48	NORTH AMERICA	U S A.	MONTANA	1	2	3	9	10				
49	NORTH AMERICA	U. S. A	NORTH DAKOTA	1	2	3	7	9	13			
50	NORTH AMERICA	U S A	SOUTH DAKOTA	1	3	7	9	10				
51	OCEANIA	NEW ZEALAND	MANAWATU	1	2	3	9	10	11	77		
52	SOUTH AFRICA	BRAZIL	R S	1	2	9	36	63				
53	SOUTH AMERICA	ARGENTINA	SAN MIGUEL DE TUCUMAN	1	2	3	4	9				
54	SOUTH AMERICA	BOLIVIA	COCHABAMBA	1	3	4	5	9				
55	SOUTH AMERICA	BOLIVIA	SANTA CRUZ	1	3	4	7	8	9	10	11	
56	SOUTH AMERICA	BRAZIL	DISTRITO FEDERAL	1	2	7	9	13				
57	SOUTH AMERICA	BRAZIL	PARANA	1	2	3	4	7	9	10	13	36
58	SOUTH AMERICA	BRAZIL	RIO GRANDE DO SUL	1	2	7	8	63				
59	SOUTH AMERICA	CHILE	CHILLAN, NUBLE	1	2	3	5	7	9			
60	SOUTH AMERICA	ECUADOR	QUITO PICHINCHA	1	2	3	5	9	13			
61	SOUTH AMERICA	PARAGUAY	CACUPE	1	2	3	4	7	8	9	13	

#VARIABLE IDENTIFICATIONS

1	YIELD	KG/HA	2	TEST	WT	3	FLOW	DAYS	4	MAT	DAYS	5	STRP	RT. L	7	LEAF	RUST
8	STEM	RUST	9	PLNT	HT	10	LODG	%	11	SHTR	%	13	1000	G. W.	25	FRST	DMGE
36	SCAB	%	53	FALL	NO	55	PROT	%	56	MOIST	%	61	POW M	0-9	62	SEP T	0-9
63	SEP N	0-9	64	SEP S	0-9	70	HEL S	0-9	74	BAC S	0-9	77	BYDV	0-9			

Summary for all locations: yield, agronomic and disease data

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT. L	LEAF RUST	STEM RUST	PLNT HT	LODG %	SHTR %	1000 G W	FRST DMGE	SCAB %
41	JUANILLO 159	MEXICO	4543	67	96	143	6	13	5	117	30	9	47	56	42
18	JUANILLO 97	MEXICO	4484	67	97	144	3	9	3	114	18	6	47	63	33
43	TOPO 1419	MEXICO	4405	65	101	147	1	2	0	103	26	6	43	56	17
40	MULA"S"	MEXICO	4341	67	101	147	4	19	1	106	13	5	44	63	10
22	BOA"S"	MEXICO	4334	65	93	138	0	10	0	92	19	23	38	85	39
26	CHUU"S"	MEXICO	4229	66	96	141	1	2	0	91	32	19	36	56	17
17	RAM"S"	MEXICO	4219	63	97	145	2	7	0	103	20	7	42	71	27
21	CHIVA"S"	MEXICO	4202	67	95	142	0	5	2	92	26	18	37	56	45
42	IRA-DRIRA	MEXICO	4189	67	93	139	0	2	0	100	33	7	42	100	17
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4182	65	98	144	1	7	0	99	17	11	37	48	23
3	CABORCA 79	MEXICO	4153	65	93	140	0	2	1	90	41	14	36	93	17
20	TIGRE"S"	MEXICO	4147	68	95	140	1	4	1	97	22	25	38	71	17
13	M2A	ECUADOR	4135	66	91	139	1	4	3	92	29	15	37	93	27
6	COORONG	AUSTRALIA	4122	62	93	140	1	2	4	89	37	14	36	67	10
23	PUMA"S"	MEXICO	4098	66	93	140	0	3	1	91	29	7	40	85	29
11	MIZAR	ITALY	4082	63	93	139	11	4	3	99	21	16	39	41	33
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	4073	66	96	143	2	12	7	113	29	7	44	56	29
32	M2A-IA	ECUADOR	4068	67	100	145	3	1	0	93	25	6	38	48	29
44	DELFIN 205	MEXICO	4063	70	97	145	2	18	0	112	21	6	41	56	17
37	LECHON"S"	MEXICO	4061	68	93	140	0	3	4	89	12	14	38	85	23
25	JUPPA"S"	MEXICO	4060	67	91	139	1	10	1	92	24	8	37	78	17
39	IRA-DRIRA	MEXICO	4060	67	93	140	0	2	0	107	33	6	42	100	27
28	DAC TRIWELL	CANADA	4051	64	100	148	2	4	5	115	33	4	42	33	0
7	SATU	AUSTRALIA	4047	64	93	141	5	3	0	86	24	18	38	48	27
36	LECHON"S"	MEXICO	4040	68	95	141	0	3	5	90	15	11	38	71	33
2	BEAGLE	MEXICO	4023	64	98	146	2	3	9	112	30	8	43	41	23
38	PONY"S"	MEXICO	4016	66	98	142	0	1	1	101	31	17	38	71	23
30	BVR-ARM	ECUADOR	4009	65	96	143	1	3	2	97	34	15	35	63	23
50	LOCAL CHECK		3993	73	98	141	6	18	5	98	34	15	40	33	20
27	CARMAN	CANADA	3972	64	102	149	1	4	4	114	30	7	42	33	0
19	MUSKOX"S"	MEXICO	3968	68	101	149	1	2	0	115	24	2	43	56	29
15	PFT 7717	BRAZIL	3954	66	92	139	1	2	3	91	31	9	35	82	20
4	T65	KENYA	3903	65	94	139	0	10	1	95	34	21	37	60	23
1	CANANEA 79	MEXICO	3886	62	93	138	8	5	0	96	22	9	39	63	20
5	T74	KENYA	3886	63	97	140	3	20	2	95	21	9	38	41	29
9	TYALLA	AUSTRALIA	3855	65	95	141	0	10	1	90	16	25	39	78	23
48	VEERY"S" (BREAD WHEAT)	MEXICO	3842	77	102	141	0	2	1	78	25	14	34	93	58
34	VACA"S"	MEXICO	3831	65	92	140	0	10	1	89	27	12	42	71	49
8	DUA	AUSTRALIA	3812	65	94	140	0	12	0	85	21	25	40	93	39
14	M2A-IA	ECUADOR	3806	66	94	141	1	1	1	90	32	20	34	71	33
24	JUPPA"S"	MEXICO	3787	67	94	140	0	11	2	93	24	11	37	71	39
29	ALMA	ETHIOPIA	3782	64	95	141	4	9	6	97	29	14	36	56	23
12	HANIGERO	SPAIN	3761	65	101	144	8	9	24	97	18	22	36	44	27
35	YE 75 X IA-BUSH	MEXICO	3714	68	94	139	0	6	1	92	28	22	36	71	23
33	PTR"R"-CASTOR"S"	MEXICO	3704	66	96	141	0	4	4	91	21	14	41	63	29
46	PND"R"-YE 75	MEXICO	3678	68	93	141	0	8	1	93	20	22	38	71	29
10	TR37	YUGOSLAVIA	3632	65	99	141	4	10	31	95	21	26	36	48	17
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3593	74	96	137	26	25	7	78	33	17	35	100	68
16	PFT 765	BRAZIL	3418	70	92	139	1	1	0	97	30	24	35	63	27
49	YAVAROS (DURUM)	MEXICO	2790	75	102	144	1	2	10	73	24	11	41	100	20
	SUMMARY MEANS OVER VARIETIES		3980.0	66.4	95.8	141.8	2.3	6.7	3.2	96.7	25.9	13.4	38.9	66.3	26.1
	NUMBER OF LOCATIONS FOR EACH VARIABLE		60	44	53	33	5	15	6	55	15	6	32	1	2
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		178	85	131	84	9	27	11	138	37	18	62	3	2

VAR NO	VARIETY OR CROSS	ORIGIN	FALL NO	PROT %	MOIST %	POW M 0-9	SEP T 0-9	SEP N 0-9	SEP S 0-9	HEL S 0-9	BAC S 0-9	BYDV 0-9
41	JUANILLO 159	MEXICO	62	12	10	2	2	4	7	7	0	3
18	JUANILLO 97	MEXICO	62	13	10	1	2	3	8	6	0	3
43	TOPO 1419	MEXICO	62	13	9	2	3	4	7	6	5	3
40	MULA"S"	MEXICO	62	14	10	2	2	3	6	6	0	3
22	BOA"S"	MEXICO	62	12	9	2	3	5	9	7	0	5
26	CHUU"S"	MEXICO	62	13	9	2	3	6	8	5	5	5
17	RAM"S"	MEXICO	62	12	9	1	2	4	8	6	0	3
21	CHIVA"S"	MEXICO	62	14	9	1	3	3	8	7	0	5
42	IRA-DRIRA	MEXICO	62	14	10	1	3	3	8	6	0	4
45	M2A(2)-BTR"S" X IA-ABN	MEXICO	62	14	10	2	3	5	8	4	5	4
3	CABORCA 79	MEXICO	62	13	10	1	4	5	9	7	0	4
20	TIGRE"S"	MEXICO	62	13	9	0	4	4	9	7	0	5
13	M2A	ECUADOR	62	14	10	0	3	3	9	7	0	4
6	CODRONG	AUSTRALIA	62	13	9	1	4	5	9	6	0	4
23	PUMA"S"	MEXICO	62	13	9	1	3	5	9	7	0	5
11	MIZAR	ITALY	62	12	10	2	2	5	9	7	5	4
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	62	13	9	2	3	4	8	6	0	3
32	M2A-IA	ECUADOR	62	14	10	1	3	3	7	5	5	5
44	DELFIN 205	MEXICO	62	15	9	1	3	4	8	6	0	4
37	LECHON"S"	MEXICO	62	14	10	2	3	5	9	7	0	4
25	JUPPA"S"	MEXICO	62	14	10	1	2	4	9	7	0	5
39	IRA-DRIRA	MEXICO	62	15	10	2	3	4	9	7	0	4
28	OAC TRIWELL	CANADA	62	13	10	2	2	3	7	5	0	3
7	SATU	AUSTRALIA	62	13	10	0	4	4	9	8	0	4
36	LECHON"S"	MEXICO	62	14	9	1	3	5	8	7	0	3
2	BEAGLE	MEXICO	62	13	9	1	2	3	7	5	5	3
38	PONY"S"	MEXICO	62	14	9	1	3	4	8	7	5	4
30	BVR-ARM	ECUADOR	62	14	10	1	3	4	8	6	0	5
50	LOCAL CHECK		121	15	10	2	3	5	8	3	5	3
27	CARMAN	CANADA	62	14	10	1	2	3	7	4	0	2
19	MUSKOX"S"	MEXICO	62	12	10	0	2	3	8	4	0	3
15	PFT 7717	BRAZIL	62	15	10	1	3	4	9	7	0	4
4	T65	KENYA	62	13	9	0	3	5	8	7	0	5
1	CANANEA 79	MEXICO	62	13	10	1	3	4	9	7	0	5
5	T74	KENYA	62	13	9	2	3	6	8	7	0	4
9	TYALLA	AUSTRALIA	62	13	10	1	3	6	8	7	5	4
48	VSERY"S" (BREAD WHEAT)	MEXICO	82	16	10	2	4	6	8	5	0	4
34	VACA"S"	MEXICO	62	13	10	2	4	4	9	8	0	3
8	DUA	AUSTRALIA	62	13	9	2	3	6	9	7	0	5
14	M2A-IA	ECUADOR	62	13	9	1	3	4	8	7	0	4
24	JUPPA"S"	MEXICO	62	15	10	1	3	4	9	7	0	3
29	ALMA	ETHIOPIA	62	12	10	2	3	4	8	6	0	5
12	HANIGERO	SPAIN	62	13	10	2	3	6	8	6	0	4
35	YE 75 X IA-BUSH	MEXICO	62	15	10	2	3	5	9	7	0	5
33	PTR"R"-CASTOR"S"	MEXICO	62	14	9	1	3	5	8	7	5	3
46	PND"R"-YE 75	MEXICO	62	14	10	1	3	5	9	5	0	5
10	TR37	YUGOSLAVIA	62	13	10	0	3	6	8	6	0	4
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	62	17	10	4	3	7	7	8	0	4
16	PFT 765	BRAZIL	62	14	10	1	3	4	9	8	0	6
49	YAVAROS (DURUM)	MEXICO	62	16	10	2	3	6	9	5	0	3
	SUMMARY MEANS OVER VARIETIES		63 6	13 4	9.6	1 3	2 9	4.4	8 2	6 1	1 0	4 0
	NUMBER OF LOCATIONS FOR EACH VARIABLE		1	2	1	1	7	3	1	2	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		1	3	1	3	15	5	3	6	1	3

TABLE 1 AFRICA ALGERIA CONSTANTINE

EL KHROUB
INRAA CEREAL PROJECT

LATITUDE	036 16'N	DATE PLANTED	12/ 8/81	NITROGEN	APPLIED
LONGITUDE	006 42'E '	DATE HARVESTED	7/ 1/82	PHOSPHORUS	APPLIED
ELEVATION	0640 M ABOVE S L	AMOUNT OF MOISTURE	392 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE MODERATE WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS WEATHER NOT REPORTED.
LOCAL CHECK BAIDA (BARLEY)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS
39	IRA-DRIRA	MEXICO	6630	130
13	M2A	ECUADOR	6302	127
9	TYALLA	AUSTRALIA	6297	128
30	BVR-ARM	ECUADOR	6018	128
2	BEAGLE	MEXICO	5309	129
26	CHUU"S"	MEXICO	5260	131
41	JUANILLO 159	MEXICO	5236	133
6	COORONG	AUSTRALIA	5202	128
8	DUA	AUSTRALIA	5115	130
44	DELFIN 205	MEXICO	5115	132
42	IRA-DRIRA	MEXICO	5091	131
28	OAC TRIWELL	CANADA	5079	135
18	JUANILLO 97	MEXICO	5024	134
17	RAM"S"	MEXICO	5024	133
24	JUPPA"S"	MEXICO	5000	128
7	BATU	AUSTRALIA	4975	133
48	VEERY"S" (BREAD WHEAT)	MEXICO	4960	136
19	MUSKOX"S"	MEXICO	4951	134
29	ALMA	ETHIOPIA	4951	138
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4945	136
15	PFT 7717	BRAZIL	4927	128
45	M2A(2)-STR"S" X IA-ABA	MEXICO	4897	131
22	BOA"S"	MEXICO	4809	131
21	CHIVA"S"	MEXICO	4788	132
33	PTR"R"-CASTOR"S"	MEXICO	4775	133
40	MULA"S"	MEXICO	4772	135
23	PUMA"S"	MEXICO	4745	129
5	T74	KENYA	4715	130
32	M2A-IA	ECUADOR	4678	130
36	LECHON"S"	MEXICO	4636	135
14	M2A-IA	ECUADOR	4605	131
3	CABORCA 79	MEXICO	4430	128
10	TR37	YUGOSLAVIA	4285	127
12	MANIGERO	SPAIN	4278	129
35	YE 75 X IA-BUSH	MEXICO	4248	133
11	MIZAR	ITALY	4163	127
43	TOPO 1419	MEXICO	4097	133
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	4087	128
37	LECHON"S"	MEXICO	4085	135
20	TIGRE"S"	MEXICO	4078	133
25	JUPPA"S"	MEXICO	4048	128
16	PFT 765	BRAZIL	3794	127
34	VACA"S"	MEXICO	3539	131
38	PONY"S"	MEXICO	3357	131
4	T65	KENYA	3339	128
46	PND"R"-YE 75	MEXICO	3279	130
1	CANANEA 79	MEXICO	3009	131
27	CARMAN	CANADA	2854	135
49	YAVAROS (DURUM)	MEXICO	2703	144
50	LOCAL CHECK		2351	133

GRAND MEAN 4576 8 131 4
STANDARD ERROR OF GRAND MEAN
COEFFICIENT OF VARIATION 48 PC
LSD VARIETY MEANS 5 PC

CORRELATIONS

YIELD KG/HA
FLOW DAYS -0 23

TABLE 2 AFRICA ANGOLA HUAMBO

ESTACAO AGRICOLA DE CHIANCA
CEREAL STAFF

LATITUDE	012 15'S	DATE PLANTED	4/30/82	NITROGEN	APPLIED
LONGITUDE	015 50'E	DATE HARVESTED	9/30/82	PHOSPHORUS	APPLIED
ELEVATION	+01695 M ABOVE S L	AMOUNT OF MOISTURE	495 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
SLIGHT BIRD DAMAGE WEATHER NORMAL
LOCAL CHECK BIE (SOFT WHEAT)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	SHTR %	1000 G W
6	COORONG	AUSTRALIA	3839	69	67	122	95	56	35
15	PFT 7717	BRAZIL	3820	74	65	124	98	33	34
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	3679	74	73	125	111	0	44
37	LECHON"S"	MEXICO	3536	74	66	122	95	55	35
42	IRA-DRIRA	MEXICO	3519	74	71	123	114	0	41
27	CARMAN	CANADA	3489	72	87	136	121	0	37
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3387	69	76	127	103	48	34
17	RAM"S"	MEXICO	3329	74	76	128	110	7	38
40	MULA"S"	MEXICO	3304	72	82	135	112	0	38
41	JUANILLO 159	MEXICO	3301	76	73	128	127	0	46
25	JUPPA'S"	MEXICO	3279	72	61	118	92	26	35
36	LECHON"S"	MEXICO	3209	73	67	121	88	30	33
13	M2A	ECUADOR	3141	73	63	122	99	71	38
19	MUSKOX"S"	MEXICO	3113	75	86	136	106	0	36
43	TOPO 1419	MEXICO	3107	73	85	132	107	18	39
28	OAC TRIWELL	CANADA	3091	73	85	134	115	0	39
44	DELFIN 205	MEXICO	3013	77	75	130	122	0	38
5	T74	KENYA	3004	71	74	124	96	18	35
11	MIZAR	ITALY	2989	71	64	120	99	67	40
39	IRA-DRIRA	MEXICO	2957	74	70	122	110	0	40
26	CHUU"S"	MEXICO	2955	72	66	125	98	74	34
46	PND"R"-YE 75	MEXICO	2888	75	64	120	92	82	36
22	BOA"S"	MEXICO	2864	69	64	121	94	78	36
14	M2A-IA	ECUADOR	2856	73	68	126	89	89	34
34	VACA"S"	MEXICO	2688	71	64	122	9J	33	38
35	YE 75 X IA-BUSH	MEXICO	2647	72	66	120	98	89	34
23	PUMA"S"	MEXICO	2625	72	64	120	90	22	34
2	BEAGLE	MEXICO	2601	74	75	128	112	0	43
4	T65	KENYA	2600	72	68	120	92	74	35
29	ALMA	ETHIOPIA	2596	67	69	124	99	48	30
10	TR37	YUGOSLAVIA	2567	68	78	128	98	100	30
20	TIGRE"S"	MEXICO	2543	71	70	122	99	96	33
38	PONY"S"	MEXICO	2543	67	73	124	103	71	32
7	SATU	AUSTRALIA	2536	70	60	121	80	78	36
16	PFT 765	BRAZIL	2512	76	62	121	96	100	36
24	JUPPA"S"	MEXICO	2505	70	69	144	89	33	31
9	TYALLA	AUSTRALIA	2385	70	70	95	92	96	33
18	JUANILLO 97	MEXICO	2385	78	73	125	106	0	46
30	BVR-ARM	ECUADOR	2320	69	73	126	94	59	33
21	CHIVA"S"	MEXICO	2319	74	74	126	91	74	36
8	DUA	AUSTRALIA	2288	71	66	120	79	93	38
32	M2A-IA	ECUADOR ***	2179	69	81	131	90	7	30
3	CABORCA 79	MEXICO	2145	71	68	122	96	30	33
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2076	81	75	119	79	33	39
49	YAVAROS (DURUM)	MEXICO	1984	84	76	129	71	22	44
33	PTR"R"-CASTOR"S"	MEXICO	1929	71	66	123	87	41	38
48	VEERY"S" (BREAD WHEAT)	MEXICO	1852	81	76	123	75	37	35
12	MANIGERO	SPAIN	1744	70	77	127	92	100	32
1	CANANEA 79	MEXICO	1716	69	60	118	90	29	38
50	LOCAL CHECK		879	81	62	117	83	45	39
		GRAND MEAN	2736 7	72 7	70 9	124 4	97 3	43 3	36 4
		STANDARD ERROR OF GRAND MEAN	63 0	0 2			0 7		0 3
		COEFFICIENT OF VARIATION AS PC	28 2	2 9			8 9		8 7
		LSD VARIETY MEANS 5 PC	1251 1	3 4			14 1		5 1

CORRELATIONS

	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	SHTR %	1000 G W
TEST WT	-0 19						
FLOW DAYS	0 15	0 11					
MAT DAYS	0 22	0 03	0 60				
PLNT HT	0 60	-0 12	0 44	0 37			
SHTR %	-0 28	-0 32	-0 45	-0 45	-0 49		
1000 G W	0 10	0 58	0 08	0 06	0 12	-0 50	

TABLE 3 AFRICA CAMEROON NGADUNDERE

WASSANDE
J HABAS ET AL

LATITUDE	7 05'N	DATE PLANTED	9/ 7/82	NITROGEN	APPLIED
LONGITUDE	14 05'E	DATE HARVESTED	1/ 1/83	PHOSPHORUS	APPLIED
ELEVATION	1400 M ABOVE S L	AMOUNT OF MOISTURE	394 MM	POTASSIUM	--

LATE SOWING DATE SOIL MOISTURE AT SOWING GERMINATION POOR
SERIOUS DISEASE INCIDENCE MODERATE INSECT DAMAGE MODERATE WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE HAND WEEDING LOCAL CHECK NAME NOT REPORTED
WEATHER NORMAL

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W	HEL S 0-9
28	OAC TRIWELL	CANADA	3677	66	133	112	49	2
44	DELFIN 205	MEXICO	3350	56	123	97	42	4
2	BEAGLE	MEXICO	3021	56	120	105	46	3
17	RAM"S"	MEXICO ***	2924	53	122	90	47	4
31	BGL/ARS-MEX M/CI X BGL"S"	ECUADOR	2759	53	116	100	45	4
27	CARMAN	CANADA	2684	65	128	107	48	2
18	JUANILLO 97	MEXICO	2660	52	120	107	47	4
39	IRA-DRIRA	MEXICO	2640	50	113	88	39	6
41	JUANILLO 159	MEXICO	2587	55	121	103	46	5
42	IRA-DRIRA	MEXICO	2501	50	110	102	39	4
43	TOPO 1419	MEXICO	2439	69	129	98	46	3
19	MUSKOX"S"	MEXICO	2371	57	130	107	41	3
21	CHIVA"S"	MEXICO	2285	60	122	80	43	5
46	PND"R"-YE 75	MEXICO	2250	48	113	73	33	5
30	BVR-ARM	ECUADOR	2181	52	120	85	39	4
50	LOCAL CHECK		2165	59	122	92	43	3
29	ALMA	ETHIOPIA	2145	51	117	95	39	4
40	MULA"S"	MEXICO	2124	60	128	88	41	4
35	YE 75 X IA-RUSH	MEXICO	2073	46	116	77	33	7
5	T74	KENYA	2050	55	117	80	36	5
48	VEERY"S" (BREAD WHEAT)	MEXICO	2007	63	125	65	29	5
3	CABORCA 79	MEXICO	1984	48	118	75	41	5
25	JUPPA"S"	MEXICO	1979	45	111	78	29	6
37	LECHON"S"	MEXICO	1931	47	108	70	34	6
22	BOA"S"	MEXICO	1927	47	109	78	37	6
12	MANIGERO	SPAIN	1922	60	119	87	32	4
11	MIZAR	ITALY	1876	50	113	85	41	6
13	M2A	ECUADOR	1869	47	109	72	35	6
14	M2A-IA	ECUADOR	1859	51	124	80	34	5
7	SATU	AUSTRALIA	1821	48	115	73	34	7
45	M2A(2)-STR"S" X IA-ABN	MEXICO	1763	61	121	83	35	4
6	COORONG	AUSTRALIA	1738	50	119	78	38	4
38	PONY"S"	MEXICO	1737	56	116	87	32	6
36	LECHON"S"	MEXICO	1710	49	111	75	36	7
24	JUPPA"S"	MEXICO	1705	50	112	77	32	6
32	M2A-IA	ECUADOR	1664	67	131	80	37	3
20	TIGRE"S"	MEXICO	1662	50	111	77	36	5
8	DUA	AUSTRALIA	1657	51	115	70	35	6
26	CHUU"S"	MEXICO	1617	48	111	72	33	5
10	TR37	YUGOSLAVIA	1608	59	118	83	33	4
4	T65	KENYA	1578	51	118	83	34	5
23	PUMA"S"	MEXICO	1507	46	108	73	40	6
33	PTR R"-CASTOR"B"	MEXICO	1447	51	113	77	39	6
9	TYALLA	AUSTRALIA	1361	54	120	78	39	5
1	CANANEA 79	MEXICO	1336	52	114	87	41	5
15	PFT 7717	BRAZIL	1292	48	115	77	31	6
16	PFT 765	BRAZIL	1148	47	110	75	37	7
49	YAVAROS (DURUM)	MEXICO	1104	67	122	44	28	5
34	VACA"S"	MEXICO	1089	45	105	70	40	7
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	677	48	110	52	37	8
		GRAND MEAN	1989 2	53 1	117 5	82 9	38 0	4 9
		STANDARD ERROR OF GRAND MEAN	32 5			0 5	0 4	
		COEFFICIENT OF VARIATION AS PC	20 0			6 9	13 9	
		LSD VARIETY MEANS 5 PC	644 1			9 3	8 6	

CORRELATIONS

YIELD KG/HA						
FLOW	DAYS	0 32				
MAT	DAYS	0 50	0 84			
PLNT	HT	0 79	0 31	0 48		
1000	G W	0 63	0 26	0 39	0 77	
HEL S	0-9	-0 66	-0 74	-0 80	-0 72	-0 55

TABLE 4 AFRICA EGYPT CAIRO

EL GEMMEIZA
M M BADEK

LATITUDE	030 15'N	DATE PLANTED	11/28/81	NITROGEN	APPLIED
LONGITUDE	031 13'E	DATE HARVESTED	5/27/82	PHOSPHORUS	APPLIED
ELEVATION	0021 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
SERIOUS DISEASE INCIDENCE SLIGHT INSECT DAMAGE. SERIOUS WEED PROBLEM
SLIGHT BIRD DAMAGE
LOCAL CHECK SAKA61

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W
4	T65	KENYA	8888	107	156	133	38
43	TOPO 1419	MEXICO	8466	110	159	146	41
21	CHIVA"S"	MEXICO	8299	106	156	131	37
42	IRA-DRIRA	MEXICO	8266	105	156	148	44
48	VEERY"S" (BREAD WHEAT)	MEXICO	7977	114	159	119	33
20	TIGRE"S"	MEXICO	7810	107	158	142	36
41	JUANILLO 159	MEXICO	7788	108	158	162	44
18	JUANILLO 97	MEXICO	7755	108	157	157	41
22	BOA"S"	MEXICO	7544	106	157	130	36
24	JUPPA"S"	MEXICO	7455	106	156	136	38
46	PND"R"-YE 75	MEXICO	7321	106	156	129	36
26	CHUU"S"	MEXICO	7244	111	160	122	33
27	CARMAN	CANADA	7155	111	163	162	37
33	PTR"R"-CASTOR"S"	MEXICO	7144	105	158	121	38
39	IRA-DRIRA	MEXICO	7122	106	157	152	44
13	M2A	ECUADOR	7033	105	157	136	37
35	YE 75 X IA-BUSH	MEXICO	7033	106	156	135	34
10	TR37	YUGOSLAVIA	7010	111	160	131	35
37	LECHON"S"	MEXICO	6966	104	156	122	38
44	DELFIN 205	MEXICO	6955	106	157	161	38
32	M2A-IA	ECUADOR	6899	110	159	127	35
38	PONY"S"	MEXICO	6833	109	158	146	37
19	MUSKOX"S"	MEXICO	6833	111	161	153	41
7	BATU	AUSTRALIA	6766	107	160	117	33
40	MULA"S"	MEXICO	6688	111	164	156	51
11	MIZAR	ITALY	6655	105	156	141	40
25	JUPPA"S"	MEXICO	6555	105	156	130	37
8	DUA	AUSTRALIA	6544	106	158	122	38
15	PFT 7717	BRAZIL	6533	104	156	127	34
17	RAM"S"	MEXICO	6533	108	156	142	36
1	CANANEA 79	MEXICO ***	6477	104	158	128	35
23	PUMA"S"	MEXICO	6466	106	157	124	38
36	LECHON"S"	MEXICO	6410	106	156	126	36
45	M2A(2)-STR"S" X IA-ABN	MEXICO	6410	108	158	130	37
6	COORONG	AUSTRALIA	6388	105	157	126	33
9	TYALLA	AUSTRALIA	6033	105	159	127	38
12	MANIGERO	SPAIN	5988	111	161	133	33
29	ALMA	ETHIOPIA	5977	106	157	126	32
3	CABORCA 79	MEXICO	5966	106	157	127	37
28	OAC TRIWELL	CANADA	5911	109	162	157	38
34	VACA"S"	MEXICO	5899	105	155	121	42
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	5822	106	157	114	39
2	BEAGLE	MEXICO	5777	107	160	148	39
5	T74	KENYA	5577	109	158	129	36
14	M2A-IA	ECUADOR	5533	107	157	129	33
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	5444	106	157	155	40
30	BVR-ARM	ECUADOR	5211	108	158	135	32
49	YAVAROS (DURUM)	MEXICO	4811	102	156	110	41
50	LOCAL CHECK		4133	99	155	103	41
16	PFT 765	BRAZIL	3755	105	156	142	36
		GRAND MEAN	6641 1	106 9	157 8	134 5	37 5
		STANDARD ERROR OF GRAND MEAN	97 5			0 5	0 2
		COEFFICIENT OF VARIATION AS PC	18 0			4 4	5 6
		LSD VARIETY MEANS 5 PC	1934 6			9 6	3 4

CORRELATIONS

YIELD KG/HA					
FLOW	DAYS	0 37			
MAT	DAYS	0 08	0 72		
PLNT	HT	0 28	0 39	0 38	
1000	G W	0 11	-0 11	0 09	0 41

TABLE 5 AFRICA KENYA RIFT VALLEY

NJORO
NATIONAL P B S

LATITUDE	000 00'S	DATE PLANTED	5/23/82	NITROGEN	APPLIED
LONGITUDE	036 00'E	DATE HARVESTED	10/13/82	PHOSPHORUS	APPLIED
ELEVATION	2165 M ABOVE S L	AMOUNT OF MOISTURE	412 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS LOCAL CHECK TCL 65
(WEATHER DRY IN JUNE & JULY, AUGUST VERY WET(248MM)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	STRP RT L	STEM RUST
50	LOCAL CHECK		6608	66	0	0
42	IRA-DRIRA	MEXICO	6233	69	0	0
18	JUANILLO 07	MEXICO	6038	68	40R	TMS
6	COORONG	AUSTRALIA	5679	64	0	20S
4	T65	KENYA	5579	67	0	TMS
43	TOPO 1419	MEXICO	5521	65	0	0
39	IRA-DRIRA	MEXICO	5483	66	0	0
30	BVR-ARM	ECUADOR	5483	64	0	10S
48	VEERY"S" (BREAD WHEAT)	MEXICO	5479	75	0	TR
25	JUPPA"S"	MEXICO	5442	68	0	5MS
28	OAC TRIWELL	CANADA	5350	54	20R	0
3	CABORCA 79	MEXICO	5271	62	0	5S
22	BOA"S"	MEXICO	5254	67	0	0
36	LECHON"S"	MEXICO	5242	66	0	30S
29	ALMA	ETHIOPIA	5238	59	0	30S
37	LECHON"S"	MEXICO	5213	67	0	20S
44	DELFIN 205	MEXICO	5192	68	0	0
34	VACA"S"	MEXICO	5179	64	0	5S
45	M2A(2)-STR"S" X IA-ABN	MEXICO	5146	63	0	0
26	CHUU"S"	MEXICO	5125	66	0	0
9	TYALLA	AUSTRALIA	5117	64	0	TMR-MS
38	PONY"S"	MEXICO	5113	68	0	5MS-S
19	MUSKOX"S"	MEXICO	4996	64	0	0
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	4963	66	30R	5MS-S
5	T74	KENYA	4963	66	0	5MS
46	PND"R"-YE 75	MEXICO	4938	69	0	5MS-S
11	MIZAR	ITALY ***	4883	59	0	5MS-S
20	TIGRE"S"	MEXICO	4875	67	0	5MS
33	PTR"R"-CASTOR"S"	MEXICO	4729	65	0	20S
17	RAM"S"	MEXICO	4704	63	10R	0
2	BEAGLE	MEXICO	4688	61	20R	TS
35	YE 75 X IA-BUSH	MEXICO	4683	69	0	5MS
15	PFT 7717	BRAZIL	4675	63	0	20S
13	M2A	ECUADOR	4671	64	0	20S
32	M2A-IA	ECUADOR	4500	67	0	0
41	JUANILLO 159	MEXICO	4450	68	20R	0
10	TR37	YUGOSLAVIA	4442	68	0	40S
7	SATU	AUSTRALIA	4421	61	0	0
12	MANIGERO	SPAIN	4408	66	0	20S
27	CARMAN	CANADA	4379	51	10R	0
40	MULA"S"	MEXICO	4371	63	0	0
14	M2A-IA	ECUADOR	4308	67	0	5S
24	JUPPA"S"	MEXICO	4304	68	0	10MS-S
23	PUMA"S"	MEXICO	4221	65	0	5MR-MS
21	CHIVA"S"	MEXICO	4163	68	0	10MS-S
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4154	72	0	5R-MR
8	DUA	AUSTRALIA	3917	64	0	TR
1	CANANEA 79	MEXICO	3892	58	0	0
16	PFT 765	BRAZIL	3679	69	0	TS
49	YAVAROS (DURUM)	MEXICO	3000	72	0	60S
		GRAND MEAN	4887 2	65 3	0 8	7 3
		STANDARD ERROR OF GRAND MEAN	69 0			
		COEFFICIENT OF VARIATION AS PC	17 3			
		LSD VARIETY MEANS 5 PC	1370 3			

CORRELATIONS

YIELD KG/HA				
TEST	WT	0 00		
STRP	RT L	-0 18	0 19	
STEM	RUST	-0 29	0 15	-0 04

TABLE 6 AFRICA MALAWI NTCHEU

TSANGANO HILL STATION
O Y MKAMANGA & C M KAMLAZA

LATITUDE	15 18'S	DATE PLANTED	3/30/82	NITROGEN	APPLIED
LONGITUDE	34 56'E	DATE HARVESTED	10/ 1/82	PHOSPHORUS	APPLIED
ELEVATION	1615 M ABOVE S L	AMOUNT OF MOISTURE	140 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE HAND WEEDING WEATHER NOT REPORTED
LOCAL CHECK CULT NB11 TCL

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	PLNT HT
41	JUANILLO 139	MEXICO	4355	72	109
48	VEERY"S" (BREAD WHEAT)	MEXICO	4288	79	75
26	CHUU"S"	MEXICO	3822	69	86
34	VACA"S"	MEXICO	3800	71	89
40	MULA"S"	MEXICO	3766	71	98
8	DUA	AUSTRALIA	3744	71	81
42	IRA-DRIRA	MEXICO	3689	72	108
28	OAC TRIWELL	CANADA	3689	68	107
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3689	78	79
44	DELFIN 205	MEXICO	3655	77	101
39	IRA-DRIRA	MEXICO	3644	72	102
36	LECHON"S"	MEXICO	3577	72	82
43	TOPO 1419	MEXICO	3533	72	95
29	ALMA	ETHIOPIA	3533	72	90
33	PTR"R"-CASTO"S"	MEXICO	3455	72	89
13	M2A	ECUADOR	3400	73	83
38	PONY"S"	MEXICO	3400	71	86
37	LECHON"S"	MEXICO	3400	73	79
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3377	69	88
4	T65	KENYA	3377	72	88
21	CHIVA"S"	MEXICO	3377	73	79
12	MANIGERO	SPAIN	3355	71	86
20	TIGRE"S"	MEXICO	3311	73	84
46	PND"R"-YE 75	MEXICO	3300	73	87
32	M2A-IA	ECUADOR	3289	72	87
7	SATU	AUSTRALIA	3266	68	72
14	M2A-IA	ECUADOR	3222	72	80
35	YE 75 X IA-BUSH	MEXICO	3200	73	87
30	BVR-ARM	ECUADOR	3177	72	87
9	TYALLA	AUSTRALIA	3155	73	81
15	PFT 7717	BRAZIL	3100	72	82
22	BOA"S"	MEXICO	3044	70	85
1	CANANEA 79	MEXICO	3044	68	90
6	COORONG	AUSTRALIA	3033	68	87
49	YAVAROS (DURUM)	MEXICO	3000	81	73
5	T74	KENYA	2955	70	88
19	MUSKOX"S"	MEXICO	2944	73	100
25	JUPPA"S"	MEXICO	2933	71	87
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	2911	72	102
3	CABORCA 79	MEXICO	2889	70	85
2	BEAGLE	MEXICO ***	2844	68	104
50	LOCAL CHECK		2844	73	109
17	RAM"S"	MEXICO	2811	68	84
11	MIZAR	ITALY	2689	69	87
16	PFT 765	BRAZIL	2689	74	85
27	CARMAN	CANADA	2666	69	103
18	JUANILLO 97	MEXICO	2644	72	103
23	PUMA"S"	MEXICO	2644	72	75
24	JUPPA"S"	MEXICO	2400	71	83
10	TR37	YUGOSLAVIA	2200	71	82
		GRAND MEAN	3242 6	71 8	88 8
		STANDARD ERROR OF GRAND MEAN	59 2	0 1	0 5
		COEFFICIENT OF VARIATION AS PC	22 4	1 2	7 1
		LSD VARIETY MEANS 5 PC	1174 6	1 3	10 2

CORRELATIONS

YIELD KG/HA			
TEST	WT	0 26	
PLNT	HT	0 10	-0 23

TABLE 7 AFRICA SOUTH AFRICA CAPE PROVINCE

MARIENTAL E S
R DE V PIENAAR ET AL

LATITUDE	033 50'S	DATE PLANTED	5/ 6/82	NITROGEN	APPLIED
LONGITUDE	018 50'E	DATE HARVESTED	11/11/82	PHOSPHORUS	APPLIED
ELEVATION	0152 M ABOVE S L	AMOUNT OF MOISTURE	336 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS WEATHER NORMAL
LOCAL CHECK A1327(INIA-ARM'S)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	SEP T 0-9
41	JUANILLO 159	MEXICO	5837	65	116	152	3
18	JUANILLO 97	MEXICO	5705	64	115	155	2
13	M2A	ECUADOR	5395	65	101	113	6
15	PFT 7717	BRAZIL	5314	64	101	113	4
20	TIGRE"S"	MEXICO	5306	66	106	129	4
21	CHIVA"S"	MEXICO	5256	66	106	120	5
43	TOPO 1419	MEXICO	5191	62	117	132	3
22	BOA"S"	MEXICO	5095	60	108	123	4
6	COORONG	AUSTRALIA	5057	59	100	113	5
36	LECHON"S"	MEXICO	4978	65	104	114	5
37	LECHON"S"	MEXICO	4928	66	105	115	5
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	4889	62	112	155	3
3	CABORCA 79	MEXICO ***	4833	61	102	108	5
19	MUSKOX"S"	MEXICO	4830	66	124	144	2
39	IRA-DRIRA	MEXICO	4816	62	103	140	3
44	DELFIN 205	MEXICO	4787	67	116	146	3
30	BVR-ARM	ECUADOR	4782	62	111	128	3
42	IRA-DRIRA	MEXICO	4686	62	101	135	4
17	RAM"S"	MEXICO	4667	57	116	140	3
50	LOCAL CHECK		4662	63	99	114	5
25	JUPPA"S"	MEXICO	4638	64	105	122	5
33	PTR"R"-CASTOR"S"	MEXICO	4619	64	114	121	3
29	ALMA	ETHIOPIA	4616	59	112	122	4
23	PUMA"S"	MEXICO	4539	64	107	115	6
2	BEAGLE	MEXICO	4487	60	116	146	3
34	VACA"S"	MEXICO	4485	66	99	109	6
28	OAC TRIWELL	CANADA	4471	65	124	153	3
48	VEERY"S" (BREAD WHEAT)	MEXICO	4428	78	121	107	3
40	MULA"S"	MEXICO	4427	64	95	145	3
10	TR37	YUGOSLAVIA	4362	63	116	127	4
11	MIZAR	ITALY	4351	60	108	125	4
32	M2A-IA	ECUADOR	4335	67	120	124	3
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4324	72	112	102	5
24	JUPPA"S"	MEXICO	4314	64	112	122	5
14	M2A-IA	ECUADOR	4281	65	111	116	5
4	T65	KENYA	4280	60	106	122	4
38	PONY"S"	MEXICO	4277	62	116	138	3
35	YE 75 X IA-BUSH	MEXICO	4274	67	104	122	4
1	CANANEA 79	MEXICO	4236	58	104	114	5
9	TYALLA	AUSTRALIA	4202	63	108	118	5
12	MANIGERO	SPAIN	4197	55	118	130	4
26	CHUU"S"	MEXICO	4161	60	116	112	4
7	SATU	AUSTRALIA	4153	61	105	112	6
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4144	62	112	122	4
8	DUA	AUSTRALIA	4114	64	106	114	5
27	CARMAN	CANADA	4113	62	125	146	3
5	T74	KENYA	3643	61	115	119	5
16	PFT 765	BRAZIL	3597	68	103	127	5
46	PND"R"-YE 75	MEXICO	3531	67	109	123	3
49	YAVAROS (DURUM)	MEXICO	2004	78	124	83	3
		GRAND MEAN	4532 3	63 9	110 1	124 9	4 0
	STANDARD ERROR OF GRAND MEAN		41 3				
	COEFFICIENT OF VARIATION AS PC		11 2				
	LSD VARIETY MEANS 5 PC		820 6				

CORRELATIONS

YIELD KG HA					
TEST WT	-0 32				
FLOW DAYS	-0 24	0 25			
PLNT HT	0 42	-0 33	0 28		
SEP T 0-9	-0 05	-0 10	-0 61	-0 62	

TABLE 8 AFRICA SOUTH AFRICA ORANGE FREE STATE

BETHLEHEM
SMALL GRAIN CENTRE
LATITUDE 028 10'S DATE PLANTED 8/20/82 NITROGEN APPLIED
LONGITUDE 028 18'E DATE HARVESTED 1/11/83 PHOSPHORUS APPLIED
ELEVATION 1631 M ABOVE S L AMOUNT OF MOISTURE 517 MM POTASSIUM APPLIED

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION POOR
MODERATE DISEASE INCIDENCE SERIOUS INSECT DAMAGE MODERATE WEED PROBLEM
SLIGHT BIRD DAMAGE CHEMICAL CONTROL OF INSECTS MECHANICAL CONTROL OF WEEDS
HAND WEEDING LOCAL CHECK GOURITZ (BW)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	STEM RUST	PLNT HT	LODG %	SHTR %	1000 G W
26	CHUU"S"	MEXICO	4931	63	78	131	10R	0	96	0	0	28
43	TOPO 1419	MEXICO	4880	63	85	129	10R	0	104	0	0	33
32	M2A-IA	ECUADOR	4837	66	83	130	0	0	98	0	0	30
3	CABORCA 79	MEXICO	4748	62	78	126	10MR	0	92	0	0	28
6	COORONG	AUSTRALIA	4652	61	76	123	0	0	90	0	0	30
44	DELFIN 205	MEXICO	4595	65	83	129	10S	0	115	0	0	28
27	CARMAN	CANADA	4566	63	87	130	40MR	0	121	0	0	34
21	CHIVA"S"	MEXICO	4530	64	78	126	0	0	91	0	0	31
17	RAM"S"	MEXICO	4484	60	82	130	10MR	0	107	0	0	34
33	PTR"R"-CASTOR"S"	MEXICO	4480	61	82	124	30MR	0	98	0	0	32
2	BEAGLE	MEXICO	4466	63	82	130	30MS	5MR	116	0	0	32
29	ALMA	ETHIOPIA	4452	62	73	125	5MR	0	96	0	0	30
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4340	60	81	127	20S	0	95	2	0	27
36	LECHON"S"	MEXICO	4266	66	84	131	30R	0	88	0	0	28
18	JUANILLO 97	MEXICO	4219	65	79	128	20S	0	108	2	0	30
41	JUANILLO 159	MEXICO	4219	64	78	125	5S	0	118	0	0	34
22	BOA"S"	MEXICO	4142	60	74	122	40S	0	89	0	3	29
34	VACA"S"	MEXICO	4123	64	78	130	70S	0	83	0	0	33
25	JUPPA"S"	MEXICO	4123	63	76	125	80S	0	93	2	0	28
14	M2A-IA	ECUADOR	4097	63	78	131	5R	0	89	0	0	26
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4093	63	81	130	20MS	TMS	108	0	0	31
23	PUMA"S"	MEXICO	4059	62	74	123	40R-10MR	0	91	2	0	30
4	T65	KENYA ***	4046	61	75	125	10MR-80S	0	93	2	2	25
5	T74	KENYA	4038	63	82	128	10R-10S	0	90	0	0	32
42	IRA-DRIRA	MEXICO	3996	62	75	122	60R-5S	0	105	8	0	30
15	PFT 771?	BRAZIL	3987	61	75	123	10R	0	86	0	0	26
7	BATU	AUSTRALIA	3976	61	74	129	20S	0	82	0	2	29
28	OAC TRIWHEL	CANADA	3975	62	85	133	20MR	0	174	0	0	28
40	MULA"S"	MEXICO	3892	63	86	131	20S	TMS	108	0	0	34
20	TIGRE"S"	MEXICO	3886	66	78	128	10MS	0	97	0	10	30
8	DUA	AUSTRALIA	3794	61	77	126	40S	0	83	0	2	30
13	M2A	ECUADOR	3747	59	76	123	TS	0	83	2	0	27
37	LECHON"S"	MEXICO	3705	64	82	129	20MR	0	80	0	0	28
35	YE 75 X IA-BUSH	MEXICO	3698	63	83	124	20S	0	87	0	3	26
9	TYALLA	AUSTRALIA	3688	61	84	130	20S	0	88	0	2	28
1	CANANEA 79	MEXICO	3678	60	76	124	20MR-10S	0	93	0	0	31
11	MIZAR	ITALY	3658	60	78	124	5MR	0	90	0	0	28
38	PONY"S"	MEXICO	3638	60	84	127	5R	0	85	2	2	28
39	IRA-DRIRA	MEXICO	3524	60	73	122	5MR	0	103	2	0	28
30	BVR-ARM	ECUADOR	3520	61	84	126	20R	0	89	0	0	26
24	JUPPA'S'	MEXICO	3517	65	81	128	90S	0	93	0	0	28
46	PND"R"-YE 75	MEXICO	3438	63	74	122	2MR	0	85	3	3	29
50	LOCAL CHECK		3312	78	72	123	50S	0	93	0	2	33
12	MANIGERO	SPAIN	3284	59	87	128	TMR	70S	90	0	3	23
19	MUSKOX"S'	MEXICO	3235	67	91	134	30MR	0	104	0	0	33
48	VEERY"S' (BREAD WHEAT)	MEXICO	3174	73	87	124	0	0	70	0	0	25
10	TR37	YUGOSLAVIA	3141	59	87	131	10S	60S	87	0	2	22
16	PFT 765	BRAZIL	2890	69	75	126	0	0	89	5	7	27
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2742	72	80	128	5S	TS	72	0	2	25
49	YAVAROS (DURUM)	MEXICO	2658	76	84	126	10R	0	68	0	0	37
		GRAND MEAN	3942 8	63 5	79 9	127 0	14 4	3 3	93 9	0 6	0 9	29 3
		STANDARD ERROR OF GRAND MEAN	35 8	0 1					0 2			0 1
		COEFFICIENT OF VARIATION AS PC	11 1	2 4					3 1			5 7
		LSD VARIETY MEANS 5 PC	710 6	2 4					4 8			2 7

CORRELATIONS

YIELD	KG/HA									
TEST	WT	-0 41								
FLOW	DAYS	-0 10	0 08							
MAT	DAYS	0 17	0 04	0 67						
LEAF	RUST	-0 19	0 24	-0 14	-0 03					
STEM	RUST	-0 38	-0 09	0 30	0 16	0 16				
PLNT	HT	0 50	-0 24	0 15	0 37	0 01	-0 18			
LODG		-0 15	-0 07	-0 36	-0 40	-0 10	-0 11	0 04		
SHTR	%	-0 36	0 13	-0 16	-0 10	0 09	0 20	-0 19	0 17	
1000	G W	0 26	0 27	0 02	0 13	0 02	-0 50	0 34	-0 12	-0 23

TABLE 9 AFRICA SUDAN GEZIRA

GEZIRA RS
CEREALS STAFF

LATITUDE	014 24'N	DATE PLANTED	11/ 2/81	NITROGEN	APPLIED
LONGITUDE	033 29'E	DATE HARVESTED	2/--/82	PHOSPHORUS	--
ELEVATION	0411 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT MODERATE INSECT DAMAGE SLIGHT WEED PROBLEM
SLIGHT BIRD DAMAGE CHEMICAL CONTROL OF INSECTS HAND WEEDING
LOCAL CHECK MEXICANI (BW)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	1300	43	88	67	28
29	ALMA	ETHIOPIA	1258	43	93	63	30
48	VEERY"S" (BREAD WHEAT)	MEXICO	1175	55	93	53	25
4	T65	KENYA	1167	44	90	57	29
18	JUANILLO 97	MEXICO	1142	47	99	78	33
12	MANIGERO	SPAIN	1133	48	92	60	27
39	IRA-DRIRA	MEXICO	1133	46	99	72	30
17	RAM"S"	MEXICO	1125	51	103	70	31
50	LOCAL CHECK		1100	49	90	50	27
5	T74	KENYA	1092	49	95	58	31
8	DUA	AUSTRALIA	1083	44	90	53	32
49	YAVAROS (DURUM)	MEXICO	1042	61	111	50	32
44	DELFIN 205	MEXICO	1042	52	102	80	32
20	TIGRE"S"	MEXICO	1017	44	90	55	26
3	CABORCA 79	MEXICO	1008	43	93	53	28
30	BVR-ARM	ECUADOR	992	48	95	67	23
21	CHIVA"S"	MEXICO	975	48	96	60	27
22	BOA"S"	MEXICO	975	44	89	58	28
19	MUSKOX"S"	MEXICO	942	51	101	77	31
27	CARMAN	CANADA	942	62	104	88	32
9	TYALLA	AUSTRALIA	933	46	101	58	29
14	M2A-IA	ECUADOR	925	45	99	58	29
33	PTR"R"-CASTOR"S"	MEXICO	917	43	88	52	34
40	MULA"S"	MEXICO	892	59	109	73	32
7	BATU	AUSTRALIA	875	43	91	45	27
37	LECHON"S"	MEXICO	867	43	88	47	26
46	PND"R"-YE 75	MEXICO	867	43	88	57	26
26	CHUU"S"	MEXICO	858	43	88	50	29
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	853	49	103	65	33
42	IRA-DRIRA	MEXICO	855	48	101	65	31
43	TOPO 1419	MEXICO	855	61	101	68	21
2	BEAGLE	MEXICO	842	51	95	82	32
32	M2A-IA	ECUADOR	833	49	106	58	30
45	M2A(2)-STR'S" X IA-ABN	MEXICO	817	48	102	52	28
6	COORONG	AUSTRALIA	800	44	93	58	29
28	OAC TRIWELL	CANADA	767	63	104	85	35
16	PFT 765	BRAZIL	742	42	90	50	29
13	M2A	ECUADOR	733	43	88	55	25
15	PFT 7717	BRAZIL ***	708	44	88	57	23
23	PUMA'S"	MEXICO	708	43	88	55	31
25	JUPPA"S'	MEXICO	700	42	88	47	25
11	MIZAR	ITALY	692	45	97	60	29
35	YE 75 X IA-BUSH	MEXICO	617	43	88	47	27
38	PONY"S"	MEXICO	600	47	91	57	29
41	JUANILLO 159	MEXICO	580	47	102	73	30
1	CANANEA 79	MEXICO	567	43	88	52	28
10	TR37	YUGOSLAVIA	558	50	102	60	27
36	LECHON'S'	MEXICO	558	43	88	52	23
34	VACA"S"	MEXICO	483	41	86	45	29
24	JUPPA"S"	MEXICO	358	44	86	52	28
		GRAND MEAN	880 3	47 4	94 8	60 1	28 7
		STANDARD ERROR OF GRAND MEAN	23 8			0 0	0 1
		COEFFICIENT OF VARIATION AS PC	33 1			1 0	5 3
		LSD VARIETY MEANS 5 PC	472 5			0 9	2 5

CORRELATIONS

YIELD KG/HA				
FLOW DAYS	0 19			
MAT DAYS	0 19	0 76		
PLNT HT	0 26	0 61	0 60	
1000 G W	0 19	0 27	0 45	0 45

TABLE 10 AFRICA TANZANIA IRINGA

TANGANYIKA WATER CO
R A. HAGGARTY

LATITUDE	9 17'S	DATE PLANTED	3/ 1/82	NITROGEN	APPLIED
LONGITUDE	34 46'E	DATE HARVESTED	8/30/82	PHOSPHORUS	APPLIED
ELEVATION	1980 M ABOVE S L	AMOUNT OF MOISTURE	479 MM	POTASSIUM	—

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SERIOUS DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM.
NEGLIGIBLE BIRD DAMAGE HAND WEEDING LOCAL CHECK
EXCESS RAINFALL DURING PLANTING AND EARLY ESTABLISHMENT STAGES

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	LODG %	SEP S 0-9
44	DELFIN 203	MEXICO	4174	74	63	119	0	8
21	CHIVA"S"	MEXICO	4097	71	68	95	0	8
50	LOCAL CHECK		4035	69	63	100	0	8
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3961	69	68	96	0	8
29	ALMA	ETHIOPIA	3949	63	61	106	0	8
39	IRA-DRIRA	MEXICO	3922	66	59	113	0	9
20	TIGRE"S"	MEXICO	3893	67	59	98	0	9
42	IRA-DRIRA	MEXICO	3870	68	58	112	0	8
38	PONY"S"	MEXICO	3861	68	68	108	0	8
40	MULA"S"	MEXICO	3844	71	72	105	0	6
27	CARMAN	CANADA	3839	69	76	119	20	7
5	T74	KENYA	3835	67	66	99	0	8
6	COORONG	AUSTRALIA	3826	64	60	93	0	9
32	M3A-IA	ECUADOR	3803	70	78	93	0	7
18	JUANILLO 97	MEXICO	3755	64	63	121	15	8
10	TR37	YUGOSLAVIA	3749	71	68	98	0	8
30	BVR-ARM	ECUADOR	3731	67	62	100	0	8
41	JUANILLO 159	MEXICO	3710	66	63	123	0	7
17	RAM"S"	MEXICO	3681	66	64	103	0	8
15	PFT 7717	BRAZIL	3652	65	56	93	0	9
4	T65	KENYA	3619	65	61	99	0	8
14	M2A-IA	ECUADOR	3603	67	59	87	0	8
19	MUSKOX"S"	MEXICO	3593	74	68	117	0	8
25	JUPPA"S"	MEXICO	3549	67	54	96	0	9
48	VEERY"S" (BREAD WHEAT)	MEXICO	3481	77	78	78	0	8
28	OAC TRIWELL	CANADA	3474	67	73	119	0	7
43	TOPO 1419	MEXICO	3473	72	78	106	0	7
33	PTR"R"-CASTOR"S"	MEXICO	3413	65	61	92	0	8
11	MIZAR	ITALY	3407	64	58	95	0	9
1	CANANEA 79	MEXICO	3328	61	50	97	0	9
24	JUPPA"S"	MEXICO	3319	64	58	96	0	9
12	MANIQERO	SPAIN	3293	71	68	98	0	8
2	BEAGLE	MEXICO	3291	67	65	116	10	7
3	CABORCA 79	MEXICO ***	3180	62	57	87	0	9
9	TYALLA	AUSTRALIA	3132	67	61	91	0	8
36	LECHON"S"	MEXICO	3107	65	57	88	0	8
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	3077	66	62	120	0	8
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2825	76	58	72	0	7
13	M2A	ECUADOR	2819	63	56	89	0	9
46	PND"R"-YE 75	MEXICO	2818	65	55	88	0	9
7	SATU	AUSTRALIA	2812	61	57	81	0	9
16	PFT 765	BRAZIL	2778	67	54	99	0	9
37	LECHON"S"	MEXICO	2697	64	56	88	0	9
35	YE 75 X IA-BUSH	MEXICO	2665	64	55	89	0	9
22	BOA"S"	MEXICO	2560	61	56	88	0	9
23	PUMA"S"	MEXICO	2520	60	55	91	0	9
26	CHUJ"S"	MEXICO	2331	56	58	83	0	8
8	DUA	AUSTRALIA	2200	63	59	83	0	9
34	VACA"S"	MEXICO	2232	58	54	86	0	9
49	YAVAROS (DURUM)	MEXICO	617	67	66	56	50	9
		GRAND MEAN	3329 8	66 5	62 2	97 4	1 9	8 2
		STANDARD ERROR OF GRAND MEAN	39 8	0 0		0 3		
		COEFFICIENT OF VARIATION AS PC	14 6	0 1		4 0		
		LSD VARIETY MEANS 5 PC	789 3	0 1		6 3		

CORRELATIONS

YIELD	KG/HA					
TEST	WT	0 42				
FLOW	DAYS	0 36	0 64			
PLNT	HT	0 66	0 19	0.29		
LODG	%	-0 48	0 03	0 20	-0.21	
SEP S	0-9	-0 41	-0 54	-0 71	-0 44	0 00

TABLE 11 AFRICA TUNISIA TUNIS

BEJA
ACPP/INRAT

LATITUDE	036 44'N	DATE PLANTED	11/25/81	NITROGEN	APPLIED
LONGITUDE	009 08'E	DATE HARVESTED	--/--/--	PHOSPHORUS	APPLIED
ELEVATION	0150 M ABOVE S L	AMOUNT OF MOISTURE	609 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD.
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE MECHANICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK MARIM(DURUM)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	PLNT HT
22	BOA"S"	MEXICO	7980	87	100
40	MULA"S"	MEXICO	7840	94	130
18	JUANILLO 97	MEXICO	7413	88	130
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	7387	92	85
8	DUA	AUSTRALIA	7373	86	95
33	PTR"R"-CASTOR"S"	MEXICO	7360	90	95
3	CABORCA 79	MEXICO	7307	85	95
41	JUANILLO 159	MEXICO	7293	88	135
21	CHIVA"S"	MEXICO	7240	87	105
48	VEERY"S" (BREAD WHEAT)	MEXICO	7240	95	90
25	JUPPA"S"	MEXICO	7233	83	105
44	DELFIN 205	MEXICO	7107	88	130
26	CHUU"S"	MEXICO	7100	91	100
45	M2A(2)-STR"S" X IA-ABN	MEXICO	7090	90	120
23	PUMA"S"	MEXICO	7067	85	105
37	LECHON"S"	MEXICO	7060	85	110
11	MIZAR	ITALY	7020	89	110
43	TOPO 1419	MEXICO	6987	91	120
5	T74	KENYA	6900	87	110
32	M2A-IA	ECUADOR	6840	91	105
4	T65	KENYA	6813	84	105
7	BATU	AUSTRALIA	6693	87	100
20	TIGRE"S"	MEXICO	6653	88	115
12	MANIGERO	SPAIN	6640	91	115
10	TR37	YUGOSLAVIA	6573	90	110
6	COORONG	AUSTRALIA	6527	84	95
17	RAM"S"	MEXICO	6513	91	120
1	CANANEA 79	MEXICO	6493	90	105
36	LECHON"S"	MEXICO	6433	85	105
24	JUPPA"S"	MEXICO	6427	79	110
14	M2A-IA	ECUADOR	6393	86	100
29	ALMA	ETHIOPIA	6360	83	115
46	PND"R"-YE 75	MEXICO	6327	86	110
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	6207	86	130
9	TYALLA	AUSTRALIA	6187	86	95
42	IRA-DRIRA	MEXICO	6173	82	115
38	PONY"S"	MEXICO	6153	90	120
35	YE 75 X IA-BUSH	MEXICO	6100	83	105
15	PFT 7717	BRAZIL	6060	82	105
50	LOCAL CHECK		6060	91	95
13	M2A	ECUADOR	6007	82	105
28	OAC TRIWELL	CANADA	5960	91	135
2	BEAGLE	MEXICO	5853	90	105
19	MUSKOX"S"	MEXICO	5847	93	140
34	VACA"S"	MEXICO	5700	82	100
39	IRA-DRIRA	MEXICO	5693	82	120
30	BVR-ARM	ECUADOR	5687	87	115
16	PFT 765	BRAZIL	5380	85	115
49	YAVAROS (DURUM)	MEXICO	5140	100	90
27	CARMAN	CANADA	4920	92	130
		GRAND MEAN	6576 0	87 7	110 0

STANDARD ERROR OF GRAND MEAN
COEFFICIENT OF VARIATION AS PC
LSD VARIETY MEANS 5 PC

CORRELATIONS

YIELD KG/HA		
FLOW DAYS	0 05	
PLNT HT	-0 14	0 08

TABLE 12 AFRICA ZIMBABWE HARARE

GWEBI
C. J. J. BADENHORST ET AL

LATITUDE	017 48'S	DATE PLANTED	9/20/82	NITROGEN	APPLIED
LONGITUDE	031 15'E	DATE HARVESTED	11/ 1/82	PHOSPHORUS	APPLIED
ELEVATION	1486 M ABOVE S L.	AMOUNT OF MOISTURE	717 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE LOCAL CHECK. GANYATI
IT WAS A RATHER COOL WINTER WITHOUT FROST

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	LODG %	MOIST %
42	IRA-DRIRA	MEXICO	11307	77	147	125	10	10
22	BOA"S"	MEXICO	10787	81	144	125	20	9
43	TOKO 1419	MEXICO	10320	84	147	135	80	9
45	M2A(2)-STR"S" X IA-ABN	MEXICO	10227	82	147	125	0	10
7	SATU	AUSTRALIA	10133	77	147	110	10	10
36	LECHON"S"	MEXICO	10067	80	151	120	0	9
8	DUA	AUSTRALIA	9933	80	147	115	40	9
37	LECHON"S"	MEXICO	9833	80	147	110	0	10
31	BOL/ARB-MEX MUTI X BOL"S"	ECUADOR	9827	79	151	145	0	9
40	MULA"S"	MEXICO	9733	88	151	120	0	10
23	PUMA"S"	MEXICO	9693	79	147	120	40	9
44	DELFIN 205	MEXICO	9587	79	151	140	50	9
17	RAM"S"	MEXICO	9567	80	147	135	20	9
46	PND"R"-YE 75	MEXICO	9533	77	147	120	10	10
2	BEAGLE	MEXICO	9480	81	146	135	0	9
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	9440	81	149	100	93	10
18	JUANILLO 97	MEXICO	9227	81	147	135	0	10
11	MIZAR	ITALY	9053	77	142	130	0	10
9	TYALLA	AUSTRALIA	9040	81	151	120	45	10
21	CHIVA"S"	MEXICO	9000	81	147	120	85	9
12	MANIGERO	SPAIN ***	8827	88	151	115	0	10
34	VACA"S"	MEXICO	8800	77	151	110	75	10
33	PTR"R"-CASTOR"S"	MEXICO	8787	85	154	115	45	9
1	CANANEA 79	MEXICO	8747	77	142	120	0	10
3	CABORCA 79	MEXICO	8693	80	146	110	85	10
49	YAVAROS (DURUM)	MEXICO	8613	81	151	90	10	10
48	VEERY"S" (BREAD WHEAT)	MEXICO	8560	91	147	105	95	10
10	TR37	YUGOSLAVIA	8547	89	154	120	0	10
20	TIGRE"S"	MEXICO	8400	84	147	130	20	9
35	YE 75 X IA-BUSH	MEXICO	8307	79	154	125	60	10
15	PFT 7717	BRAZIL	8307	80	151	120	80	10
38	PONY"S"	MEXICO	8293	86	151	120	45	9
13	M2A	ECUADOR	8293	79	151	115	90	10
5	T74	KENYA	8133	88	151	110	0	9
4	T65	KENYA	7947	79	142	120	90	9
25	JUPPA"S"	MEXICO	7867	77	151	110	85	10
16	PFT 76[illegible]	BRAZIL	7840	79	147	130	20	10
14	M2A-IA	ECUADOR	7627	80	154	120	90	9
50	LOCAL CHECK		7547	89	149	80	90	10
39	IRA-DRIRA	MEXICO	7533	79	155	120	75	10
28	OAC TRIWELL	CANADA	7467	84	154	140	80	10
19	MUSKOX"S"	MEXICO	7433	84	154	140	0	10
24	JUPPA"S"	MEXICO	7400	81	146	125	90	10
6	COORONG	AUSTRALIA	7373	80	154	110	90	9
32	M2A-IA	ECUADOR	7307	95	151	110	45	10
27	CARMAN	CANADA	7120	93	151	110	80	10
26	CHUU"S"	MEXICO	6707	84	147	125	95	9
29	ALMA	ETHIOPIA	6693	81	154	120	85	10
30	BVR-ARM	ECUADOR	6467	84	147	125	90	10
41	JUANILLO 159	MEXICO	6133	83	154	140	60	10
		GRAND MEAN	8632 3	82 0	149 3	120 3	46 5	9 5
		STANDARD ERROR OF GRAND MEAN	94 8					
		COEFFICIENT OF VARIATION AS PC	13 5					
		LSD VARIETY MEANS 5 PC	1881 8					

CORRELATIONS

YIELD	KG/HA					
FLOW	DAYS	-0 33				
MAT	DAYS	-0 40	0 26			
PLNT	HT	0 08	-0 24	-0 03		
LODG	%	-0 33	0 09	0 21	-0 27	
MOIST	%	-0 35	0 10	0 18	-0 40	-0 04

TABLE 13 ASIA CHINA HEI LANG JIANG

CEREAL STAFF

LATITUDE	048 52'N	DATE PLANTED	4/27/82	NITROGEN	--
LONGITUDE	125 17'E	DATE HARVESTED	7/27/82	PHOSPHORUS	--
ELEVATION	+02881 M ABOVE S L	AMOUNT OF MOISTURE	472 MM	POTASSIUM	--

LATE SOWING DATE SOIL DRY AT SOWING GERMINATION POOR
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE
NO WEED PROBLEM NEGLIGIBLE BIRD DAMAGE
WEATHER NOT REPORTED

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLHT HT	1000 G W	SEP T 0-9
43	TOPO 1419	MEXICO	4956	68	49	86	80	52	5
42	IRA-DRIRA	MEXICO	4707	68	47	82	85	50	1
41	JUANILLO 159	MEXICO	4696	69	49	86	100	41	0
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4600	69	49	83	75	40	1
40	MULA"S"	MEXICO	4556	69	52	83	90	45	0
2	BEAGLE	MEXICO	4518	66	47	84	95	50	0
27	CARMAN	CANADA	4474	65	51	84	90	45	0
18	JUANILLO 97	MEXICO	4467	62	49	86	95	52	0
44	DELFIN 205	MEXICO	4460	70	46	83	85	45	1
10	TR37	YUGOSLAVIA	4440	69	49	83	80	39	3
3	CABORCA 79	MEXICO	4438	68	45	82	77	38	4
19	MUSKOX"S"	MEXICO	4351	72	50	87	100	40	0
28	DAC TRIWELL	CANADA	4334	66	51	84	87	48	0
22	BOA"S"	MEXICO	4320	68	45	30	74	49	3
31	BOL/ARG-HEX MUTI X BOL"S"	ECUADOR	4309	68	48	82	85	47	3
17	RAM"S"	MEXICO	4302	63	48	86	95	46	1
50	LOCAL CHECK		4111	80	50	82	80	40	0
8	DUA	AUSTRALIA	4096	68	47	83	75	43	7
12	MANIGERO	SPAIN	4074	68	99	83	75	42	5
26	CHUU"S"	MEXICO ***	3978	72	48	81	75	40	3
7	BATU	AUSTRALIA	3960	68	47	82	75	40	5
39	IRA-DRIRA	MEXICO	3958	69	43	79	90	40	2
6	COORONG	AUSTRALIA	3951	65	45	82	75	39	3
32	M2A-IA	ECUADOR	3898	69	51	83	70	40	5
34	VACA"S"	MEXICO	3898	68	45	82	75	42	5
4	T65	KENYA	3862	69	45	81	75	39	3
36	LECHON"S"	MEXICO	3838	71	46	81	70	40	4
30	BVR-ARM	ECUADOR	3825	67	46	81	70	38	2
1	CANANEA 79	MEXICO	3809	65	47	82	85	39	3
11	MIZAR	ITALY	3727	66	46	82	85	43	2
14	M2A-IA	ECUADOR	3718	71	45	82	78	40	5
5	T74	KENYA	3694	65	47	82	75	44	3
38	PONY"S"	MEXICO	3671	70	48	81	80	41	6
48	VEERY"S" (BREAD WHEAT)	MEXICO	3669	80	50	82	70	39	5
21	CHIVA"S"	MEXICO	3667	70	45	79	70	41	3
23	PUMA"S"	MEXICO	3660	67	45	79	75	43	2
37	LECHON"S"	MEXICO	3618	72	45	81	68	39	5
13	M2A	ECUADOR	3609	69	44	82	75	39	1
20	TIGRE"S"	MEXICO	3549	72	45	82	70	44	4
33	PTR"R"-CASTOR"S"	MEXICO	3509	69	50	81	75	42	7
29	ALMA	ETHIOPIA	3474	67	47	81	80	40	2
16	PFT 765	BRAZIL	3456	72	44	82	75	39	0
49	YAVAROS (DURUM)	MEXICO	3438	78	49	84	58	49	7
35	YE 75 X IA-BUSH	MEXICO	3369	71	45	79	75	38	3
9	TYALLA	AUSTRALIA	3291	69	48	83	78	41	5
15	PFT 7717	BRAZIL	3245	69	45	82	75	37	0
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3116	80	49	82	75	46	5
46	PND"R"-YE 75	MEXICO	3062	70	46	84	70	40	5
25	JUPPA"S"	MEXICO	2951	71	45	80	70	40	3
24	JUPPA"S"	MEXICO	2451	68	45	80	70	40	2
		GRAND MEAN	3902 6	69 3	48 1	82 3	78 6	42 3	2 9

STANDARD ERROR OF GRAND MEAN 37 8
COEFFICIENT OF VARIATION AS PC 11 9
LSD VARIETY MEANS 5 PC 750 5

CORRELATIONS

YIELD KG/HA							
TEST	WT	-0 33					
FLOW	DAYS	0 16	-0 32				
MAT	DAYS	0 52	-0 18	0 22			
PLHT	HT	0 61	-0 43	0 04	0 54		
1000	G W	0 46	-0 20	0 09	0 42	0 33	
SEP T	0-9	-0 30	0 29	0 13	-0 20	-0 64	-0 11

TABLE 14 ASIA INDIA UTTAR PRADESH

CROP RESEARCH STATION MASADHA, FAIZABAD
CEREAL STAFF
LATITUDE 026 47' DATE PLANTED --/--/-- NITROGEN --
LONGITUDE 082 12' DATE HARVESTED --/--/-- PHOSPHORUS --
ELEVATION +00113 M ABOVE S L AMOUNT OF MOISTURE -- MM POTASSIUM --

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION POOR
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE WEATHER NORMAL
LOCAL CHECK JYOTI

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	LODG %	SHTR %	1000 G W
5	T74	KENYA	4400	81	136		115	33	33	34
8	DUA	AUSTRALIA	4400	78	131		102	-	45	36
7	BATU	AUSTRALIA	3800	77	131	4	107	56	26	34
12	MANIGERO	SPAIN	3800	91	136		112	-	18	41
18	JUANILLO 57	MEXICO	3600	78	132	4	124	-	33	52
11	MIZAR	ITALY	3533	78	133		115	-	26	38
14	M2A-IA	ECUADOR	3467	84	136		106	-	33	34
20	TIGRE"S"	MEXICO	3467	78	131		113	-	26	40
33	PTR"R"-CASTOR"S"	MEXICO	3400	78	132		106	-	41	47
23	PUMA"S"	MEXICO ***	3200	78	127		108	-	18	52
21	CHIVA"S"	MEXICO	3200	85	132		107	-	33	39
38	PONY"S"	MEXICO	3200	84	136	7	121	-	26	38
2	BEAGLE	MEXICO	3133	84	136	4	131	-	48	39
25	JUPPA"S"	MEXICO	3000	75	127		110	-	22	39
3	CABORCA 79	MEXICO	3000	79	134	4	109	100	56	41
36	LECHON"S"	MEXICO	3000	81	134		104	-	33	38
16	PFT 765	BRAZIL	3000	77	132		113	44	29	31
1	CANANEA 79	MEXICO	2973	78	131	4	111	11	26	38
30	BVR-ARM	ECUADOR	2933	85	134		116	-	26	38
24	JUPPA"S"	MEXICO	2933	78	129	4	107	-	33	34
43	TOPO 1419	MEXICO	2933	84	136	4	117	-	18	40
29	ALMA	ETHIOPIA	2867	85	132		107	-	33	41
4	T65	KENYA	2867	84	131	4	119	89	45	33
41	JUANILLO 159	MEXICO	2867	76	132	4	126	-	41	48
9	TYALLA	AUSTRALIA	2867	82	134	4	115	-	41	38
50	LOCAL CHECK		2867	71	118	0	109	67	41	45
26	CHUU"S"	MEXICO	2800	86	133	5	109	-	41	38
15	PFT 7717	BRAZIL	2800	77	130		106	22	22	45
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2800	84	136	7	117	-	18	37
13	M2A	ECUADOR	2800	76	129		106	-	18	41
22	BOA"S"	MEXICO	2773	77	129		104	-	48	37
10	TR37	YUGOSLAVIA	2733	80	135	4	116	-	41	37
17	RAM"S"	MEXICO	2733	82	135	4	114	-	33	45
6	COORONG	AUSTRALIA	2733	80	129		108	100	26	31
48	VEERY"S" (BREAD WHEAT)	MEXICO	2733	92	134	4	100	-	26	33
40	MULA"S"	MEXICO	2733	83	136	7	123	-	29	40
44	DELFIN 205	MEXICO	2667	85	136	7	122	-	33	40
32	M2A-IA	ECUADOR	2667	82	134	4	109	-	26	33
35	YE 75 X IA-BUSH	MEXICO	2667	82	127		110	-	33	36
39	IRA-DRIRA	MEXICO	2667	76	127	0	122	11	33	50
46	PND"R"-YE 75	MEXICO	2600	78	127	0	111	-	37	38
34	VACA"S"	MEXICO	2533	77	128		105	11	41	45
37	LECHON"S"	MEXICO	2533	78	131		104	-	26	45
49	YAVAROS (DURUM)	MEXICO	2400	81	131	4	101	-	41	44
19	MUSKOX"S"	MEXICO	2400	90	136	4	123	-	11	42
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	2333	85	134		121	-	41	43
28	OAC TRIWELL	CANADA	2307	81	136	5	127	-	22	42
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2267	82	121		96	-	26	37
42	IRA-DRIRA	MEXICO	2267	75	123	0	115	11	18	40
27	CARMAN	CANADA	1933	84	134	4	132	-	33	40
		GRAND MEAN	2931 7	80 8	131 6		112 7	46 3	31 6	39 6
		STANDARD ERROR OF GRAND MEAN	46 5				0 5			0 1
		COEFFICIENT OF VARIATION AS PC	19 4				5 1			3 0
		LSD VARIETY MEANS 5 PC	922 3				9 4			2 0

CORRELATIONS

YIELD KG/HA							
FLOW	DAYS	-0 08					
MAT	DAYS	0 20	0 64				
PLNT	HT	-0 15	0 17	0 44			
LODG	%	0 14	0 28	0 17	-0 00		
SHTR	%	0 08	-0 16	-0 02	-0 02	0 60	
1000	G W	-0 13	-0 27	-0 17	0 21	-0 60	0 00

TABLE 15 ASIA NEPAL KABRE

KABRE AGRICULTURE FARM

LATITUDE	027 06'	DATE PLANTED	12/16/81	NITROGEN	APPLIED
LONGITUDE	086 03'	DATE HARVESTED	5/30/82	PHOSPHORUS	APPLIED
ELEVATION	1700 M ABOVE S L	AMOUNT OF MOISTURE	216 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SLIGHT DISEASE INCIDENCE SLIGHT INSECT DAMAGE
SERIOUS WEED PROBLEM NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS
HAND WEEDING WEATHER NORMAL LOCAL CHECK RR-21

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STEM RUST	PLNT HT	1000 G W
50	LOCAL CHECK		2150	102	150	25MS	69	53
44	DELFIN 205	MEXICO	2108	105	160	0	76	46
11	MIZAR	ITALY	2052	105	158	0	70	46
41	JUANILLO 159	MEXICO	2025	106	166	0	71	54
4	T65	KENYA	1944	104	156	5MS	70	44
2	BEAGLE	MEXICO	1925	108	161	5MS	75	46
21	CHIVA"S"	MEXICO	1916	105	156	0	58	42
35	YE 75 X IA-BUSH	MEXICO	1914	106	155	5MS	62	39
19	MUSKOX'S"	MEXICO	1899	113	168	0	83	53
38	PONY"S"	MEXICO	1887	108	157	0	71	45
18	JUANILLO 97	MEXICO	1884	105	160	0	69	58
34	VACA"S"	MEXICO	1857	103	154	0	60	48
1	CANANEA 79	MEXICO	1842	105	156	0	64	48
40	MULA"S"	MEXICO	1838	116	168	0	72	48
22	BOA"S"	MEXICO	1829	108	155	0	59	42
43	TOPO 1419	MEXICO	1816	110	160	0	71	50
7	BATU	AUSTRALIA	1811	106	159	0	62	45
20	TIGRE"S"	MEXICO	1791	106	157	0	69	44
42	IRA-DRIRA	MEXICO	1754	102	154	0	80	47
5	T74	KENYA	1725	106	158	5MS	61	45
23	PUMA"S"	MEXICO	1725	104	155	0	67	44
9	TYALLA	AUSTRALIA	1714	108	158	0	58	48
37	LECHON"S"	MEXICO	1668	106	161	0	58	45
27	CARMAN	CANADA	1684	112	164	0	80	50
16	PFT 765	BRAZIL	1674	105	156	0	72	37
36	LECHON"S"	MEXICO	1658	109	160	0	51	43
39	IRA-DRIRA	MEXICO	1652	103	157	0	79	47
48	VEERY"S" (BREAD WHEAT)	MEXICO	1627	115	155	0	37	38
17	RAM"S"	MEXICO	1619	108	157	0	64	46
13	M2A	ECUADOR	1568	103	158	0	59	41
6	COORONG	AUSTRALIA	1479	103	152	0	61	43
8	DUA	AUSTRALIA	1469	107	157	0	52	49
14	M2A-IA	ECUADOR ***	1463	108	159	0	63	40
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	1429	105	158	0	72	49
10	TR37	YUGOSLAVIA	1425	109	158	0	72	45
12	MANIGERO	SPAIN	1423	110	162	0	70	48
45	M2A(2)-STR"S" X IA-ABN	MEXICO	1420	107	157	0	68	43
3	CABORCA 79	MEXICO	1384	105	156	0	62	43
24	'UPPA"S"	MEXICO	1377	103	157	0	53	41
15	PFT 7717	BRAZIL	1377	105	157	0	60	39
29	ALMA	ETHIOPIA	1375	105	156	0	65	41
26	CHUU"S"	MEXICO	1333	109	158	0	70	45
28	OAC TRIWELL	CANADA	1318	112	160	0	75	49
25	JUPPA'S"	MEXICO	1317	104	158	0	53	40
32	M2A-IA	ECUADOR	1255	111	161	0	59	45
46	PND"R"-YE 75	MEXICO	1244	107	158	0	58	42
30	BVR-ARM	ECUADOR	1232	105	159	0	60	42
33	PTR"R"-CABTOR"S"	MEXICO	1192	108	161	0	57	51
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	442	116	158	0	33	39
49	YAVAROS (DURUM)	MEXICO	369	117	158	0	29	42
		GRAND MEAN	1598 0	107 1	158 2	0 8	64 0	45 2
		STANDARD ERROR OF GRAND MEAN	27 7				0 5	0 2
		COEFFICIENT OF VARIATION AS PC	21 2				8 8	6 7
		LSD VARIETY MEANS 5 PC	548 7				9 1	4 9

CORRELATIONS

YIELD	KG/HA					
FLOW	DAYS	-0 44				
MAT	DAYS	0 01	0 54			
STEM	RUST	0 27	-0 20	-0 33		
PLNT	HT	0 60	-0 32	0 26	0 08	
1000	G W	0 38	0 00	0 40	0 24	0 49

TABLE 16 ASIA PAKISTAN PUNJAB

NATIONAL AGRC RES CENTER
CEREAL STAFF
LATITUDE 033 39'N DATE PLANTED 11/ 2/81 NITROGEN APPLIED
LONGITUDE 073 5'E DATE HARVESTED 5/25/82 PHOSPHORUS APPLIED
ELEVATION +00683 M ABOVE S L AMOUNT OF MOISTURE 478 MM POTASSIUM -

EARLY SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
BLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SERIOUS WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS HAND WEEDING
LATE & HIGH RAINFALL, WINTER LATE & PROLONGED, WIND STORMS

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	PLNT HT	LODG %	1000 G W	HEL S 0-9
46	PND"R"-YE 75	MEXICO	4656	64	135	184	---	0	116	77	38	-
41	JUANILLO 159	MEXICO	4355	60	125	183	---	0	136	97	40	8
42	IRA-DRIRA	MEXICO	4088	63	121	183	---	0	125	58	38	7
37	LECHON"S"	MEXICO	3970	64	136	185	---	0	113	54	32	8
36	LECHON"S"	MEXICO	3851	64	137	184	10R	0	114	60	30	7
40	MULA"S"	MEXICO	3703	59	141	189	10R	0	131	77	35	8
35	YE 75 X IA-BUSH	MEXICO	3659	60	135	183	0	0	117	96	29	7
33	PTR"R"-CASTOR"S"	MEXICO	3585	60	132	182	10R	---	120	47	33	8
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3452	65	136	183	T-TMS	5MS S	101	88	28	-
34	VACA"S"	MEXICO	3407	59	127	182	---	0	116	92	36	8
25	JUPPA"S"	MEXICO	3333	60	132	184	20R	10R	118	59	32	8
48	VEERY"S" (BREAD WHEAT)	MEXICO	3289	68	146	187	---	0	105	75	30	-
18	JUANILLO 97	MEXICO	3244	60	127	185	0R-10MS-S	0	133	63	39	7
39	IRA-DRIRA	MEXICO	3200	62	120	183	---	0	131	83	37	7
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR ***	3126	59	130	184	10R	---	134	27	37	7
19	MUSKOX"S"	MEXICO	3096	60	138	191	---	0	133	91	35	5
17	RAM"S"	MEXICO	3037	52	131	185	---	20MS-S	122	70	34	7
4	T65	KENYA	3022	55	136	185	5R	0	118	93	22	8
38	PONY"S"	MEXICO	3007	58	140	185	10R	0	126	97	32	8
1	CANANEA 79	MEXICO	3007	53	130	185	20R	0	120	90	28	8
32	M2A-IA	ECUADOR	2992	55	141	186	20R	0	116	98	27	7
15	PFT 7717	BRAZIL	2977	61	131	183	20R	0	116	59	33	8
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2933	51	139	188	10R	0	122	99	21	-
23	PUMA"S"	MEXICO	2918	59	131	184	5R	0	114	73	32	8
13	M2A	ECUADOR	2918	60	131	186	20R	0	116	58	33	8
21	CHIVA"S"	MEXICO	2913	60	136	183	10R	0	116	66	32	8
24	JUPPA"S"	MEXICO	2874	61	137	184	---	0	118	73	28	7
27	CARMAN	CANADA	2859	56	142	189	5R	---	132	60	36	6
22	BOA"S"	MEXICO	2815	53	136	184	10R	0	115	43	30	8
44	DELFIN 205	MEXICO	2815	60	133	186	10R	20MS-10R	143	87	31	6
3	CABORCA 79	MEXICO	2755	54	137	186	10R	0	112	97	29	8
30	BVR-ARM	ECUADOR	2711	57	138	187	20R	10R	123	71	31	8
20	TIGRE"S"	MEXICO	2696	63	139	185	20R	0	122	80	35	8
50	LOCAL CHECK		2578	65	142	185	30MS-TMR	10S-10MR	116	100	30	-
6	COORONG	AUSTRALIA	2548	50	135	184	20R	0	110	98	27	8
43	TOPO 1419	MEXICO	2503	59	140	186	20R	0	123	97	34	8
49	YAVAROS (DURUM)	MEXICO	2429	66	149	188	---	20R	100	56	32	-
16	PFT 765	BRAZIL	2370	64	132	183	20R	0	119	69	34	8
7	SATU	AUSTRALIA	2341	53	133	186	10R	0	109	87	27	8
9	TYALLA	AUSTRALIA	2326	57	137	188	10R	0	121	52	35	8
29	ALMA	ETHIOPIA	2207	54	138	185	20R	0	119	99	27	8
8	DUA	AUSTRALIA	2103	55	135	186	10R	0	113	76	27	8
26	CHUU"S"	MEXICO	2074	56	143	191	5R	10R	116	98	30	5
10	T037	YUGOSLAVIA	2059	55	142	189	10R	0	117	82	27	8
11	MIZAR	ITALY	2059	54	130	184	20R	0	115	99	33	8
28	O.C TRIWELL	CANADA	1955	55	141	188	---	---	138	99	33	7
2	BEAGLE	MEXICO	1763	56	132	185	---	TMR	131	98	33	7
12	MANIGERO	SPAIN	1689	54	143	189	5R	0	118	86	25	8
14	M2A-IA	ECUADOR	1615	58	135	183	20R	0	111	82	24	8
5	T74	KENYA	1259	50	140	186	10R	0	115	99	30	8
		GRAND MEAN	2862 9	58 3	135 5	185 4	2 8	1 0	119 7	78 7	31 5	7 6
		STANDARD ERROR OF GRAND MEAN	61 7	0 0					0 4		0 1	
		COEFFICIENT OF VARIATION AS PC	26 4	0 7					4 5		2 4	
		LSD VARIETY MEANS 5 PC	1224 7	0 7					8 7		1 2	

CORRELATIONS

YIELD	KG/HA											
TEST	WT	0 52										
FLOW	DAYS	-0 37	-0 03									
MAT	DAYS	-0 36	-0 25	0 65								
STRP	RT L	-0 04	0 28	-0 07	-0 20							
LEAF	RUST	0 01	-0 02	0 00	0 03	0 13						
PLNT	HT	0 11	-0 11	-0 31	0 15	-0 07	0 09					
LODG	%	-0 30	-0 35	0 18	0 17	0 09	-0 04	0 02				
1000	G W	0 43	0 42	-0 44	-0 16	0 11	0 05	0 49	-0 36			
HEL S	0-9	-0 07	-0 08	-0 10	-0 45	0 16	-0 14	-0 31	-0 04	-0 22		

TABLE 17 ASIA THAILAND NAKHON RATCHSIMA

SUWAN FARM
CEREAL STAFF

LATITUDE	014 40'N	DATE PLANTED	10/16/81	NITROGEN	APPLIED
LONGITUDE	102 00'E	DATE HARVESTED	2/ 1/82	PHOSPHORUS	APPLIED
ELEVATION	+00300 M ABOVE S L	AMOUNT OF MOISTURE	120 MM	POTASSIUM	--

EARLY SOWING DATE SOIL MOIST AT SOWING CHEMICAL CONTROL OF INSECTS AND WEEDS
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE MODERATE WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE GERMINATION GOOD MECHANICAL CONTROL OF WEEDS
HAND WEEDING WEATHER NORMAL LOCAL CHECK INIA65

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W
39	IRA-DRIRA	MEXICO	3340	58	108	95	34
18	JUANILLO 97	MEXICO	3285	56	108	99	40
41	JUANILLO 159	MEXICO	3103	56	108	101	40
40	MULA"S"	MEXICO	2859	59	108	82	34
44	DELFIN 205	MEXICO	2592	59	108	102	34
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	2511	55	108	95	39
2	BEAGLE	MEXICO	2474	61	108	109	36
19	MUSKOX"S"	MEXICO	2378	54	108	98	39
38	PONY"S"	MEXICO ***	2289	61	108	91	28
20	TIGRE"S"	MEXICO	2244	56	108	78	31
30	BVR-ARM	ECUADOR	2222	58	108	88	25
43	TOPO 1419	MEXICO	2185	80	125	100	32
33	PTR"R"-CASTOR"S"	MEXICO	2148	54	108	80	34
36	LECHON"S"	MEXICO	2144	51	108	69	38
14	M2A-IA	ECUADOR	2129	56	108	83	28
17	RAM"S"	MEXICO	2096	56	108	85	35
6	COORONG	AUSTRALIA	2052	56	108	83	30
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2029	60	108	89	25
42	IRA-DRIRA	MEXICO	2015	57	108	95	35
12	MANIGERO	SPAIN	1948	62	108	88	26
21	CHIVA"S"	MEXICO	1937	69	108	84	25
1	CANANEA 79	MEXICO	1889	52	108	85	32
10	TR37	YUGOSLAVIA	1874	61	108	86	26
15	PFT 7717	BRAZIL	1874	54	108	81	23
16	PFT 765	BRAZIL	1848	49	108	77	35
29	ALMA	ETHIOPIA	1829	55	108	74	25
37	LECHON"S"	MEXICO	1829	49	108	63	31
11	MIZAR	ITALY	1807	52	108	90	29
35	YE 75 X IA-BUSH	MEXICO	1800	46	108	62	32
8	DUA	AUSTRALIA	1785	54	108	68	34
22	BOA"S"	MEXICO	1770	55	108	67	29
3	CABORCA 79	MEXICO	1755	55	108	74	25
13	M2A	ECUADOR	1704	53	108	73	32
9	TYALLA	AUSTRALIA	1667	58	108	76	29
48	VEERY"S" (BREAD WHEAT)	MEXICO	1526	62	108	72	26
46	PND"R"-YE 75	MEXICO	1511	49	108	73	33
4	T65	KENYA	1504	58	108	87	29
32	M2A-IA	ECUADOR	1489	59	108	82	24
5	T74	KENYA	1433	65	108	84	27
7	SATU	AUSTRALIA	1407	45	108	64	37
28	OAC TRIWELL	CANADA	1355	84	125	100	32
25	JUPPA"S"	MEXICO	1296	54	108	74	28
27	CARMAN	CANADA	1104	86	125	96	31
50	LOCAL CHECK		1059	53	101	59	31
23	PUMA"S"	MEXICO	1052	51	108	63	32
24	JUPPA"S"	MEXICO	1052	61	108	73	26
34	VACA"S"	MEXICO	933	51	108	61	38
26	CHUU"S"	MEXICO	855	49	108	62	33
49	YAVAROS (DURUM)	MEXICO	852	82	125	74	30
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	691	46	101	53	31

GRAND MEAN	1850 6	57 6	109 1	80 9	31 1
STANDARD ERROR OF GRAND MEAN	42 1			0 6	0 3
COEFFICIENT OF VARIATION AS PC	27 9			8 4	11 0
LSD VARIETY MEANS 5 PC	836 0			11 0	5 6

CORRELATIONS

YIELD KG/HA				
FLOW DAYS	-0 05			
MAT DAYS	-0 13	0 84		
PLNT HT	0 65	0 51	0 36	
1000 G W	0 34	-0 22	0 01	0 15

TABLE 18 EUROPE BULGARIA GEN TOSHEVO

INST W S B
S TSVETKOV
LATITUDE 48 40'N DATE PLANTED 10/ 8/81 NITROGEN APPLIED
LONGITUDE 29 10'E DATE HARVESTED 7/10/82 PHOSPHORUS APPLIED
ELEVATION 234 M ABOVE S L AMOUNT OF MOISTURE -- MM POTASSIUM --

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
DISEASE DEVELOPMENT NOT REPORTED BIRD DAMAGE NOT REPORTED
INSECT AND WEED PROBLEMS NOT REPORTED
WEATHER NOT REPORTED LOCAL CHECK NAME NOT REPORTED

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	PLNT HT	1000 G W
18	JUANILLO 97	MEXICO	8000	67	105	55
19	MUSKOX"S"	MEXICO	8000	67	110	54
21	CHIVA"S"	MEXICO	8000	67	85	46
17	RAM"S"	MEXICO	7333	68	105	56
2	BEAGLE	MEXICO	7333	67	115	56
5	T74	KENYA	7333	67	95	51
11	MIZAR	ITALY	7333	66	95	48
24	JUPPA"S"	MEXICO	7333	68	85	44
27	CARMAN	CANADA	7333	67	105	55
40	MULA"S"	MEXICO	7333	71	95	59
43	TOPO 1419	MEXICO	7333	67	100	56
50	LOCAL CHECK		7333	67	95	56
12	MANIGERO	SPAIN	6667	66	96	48
38	PONY"S"	MEXICO	6667	69	90	49
22	BOA"S"	MEXICO	6667	66	90	48
4	T65	KENYA	6667	66	87	43
45	M2A(2)-STR"S" X IA-ABN	MEXICO	6667	68	93	45
26	CHUU"S"	MEXICO	6667	69	90	45
3	CABORCA 79	MEXICO	6000	65	90	44
9	TYALLA	AUSTRALIA	6000	67	80	49
41	JUANILLO 159	MEXICO	6000	70	105	59
1	CANANEA 79	MEXICO	6000	65	95	50
32	M2A-IA	ECUADOR	6000	70	90	48
35	YE 75 X IA-BUSH	MEXICO	6000	70	85	40
16	PFT 765	BRAZIL	5667	67	90	44
33	PTR"R"-CASTOR"S"	MEXICO	5667	68	80	55
30	BVR-ARM	ECUADOR	5667	65	80	43
14	M2A-IA	ECUADOR	5333	65	90	42
37	LECHON"S"	MEXICO	5333	68	90	47
15	PFT 7717	BRAZIL	5333	66	80	42
39	IRA-DRIRA	MEXICO	5333	67	100	51
28	OAC TRIWELL	CANADA	5333	67	100	53
23	PUMA"S"	MEXICO	5333	67	85	48
42	IRA-DRIRA	MEXICO	5333	66	90	50
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	5333	67	110	51
20	TIGRE"S"	MEXICO	5333	68	90	46
46	PND"R"-YE 75	MEXICO	5333	69	80	46
25	JUPPA"S"	MEXICO	5333	69	85	43
10	TR37	YUGOSLAVIA	5000	68	90	49
6	COORONG	AUSTRALIA	4667	62	85	44
34	VACA"S"	MEXICO	4667	67	85	49
29	ALMA	ETHIOPIA	4667	66	85	47
36	LECHON"S"	MEXICO	4667	68	80	48
44	DELFIN 205	MEXICO	4667	72	105	54
13	M2A	ECUADOR	4667	65	82	44
7	SATU	AUSTRALIA	4667	66	85	50
8	DUA	AUSTRALIA	4667	66	75	51
48	VEERY"S" (BREAD WHEAT)	MEXICO	3333	75	65	42
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2000	68	75	44
49	YAVAROS (DURUM)	MEXICO	-	-	-	-
		GRAND MEAN	5904 8	67 4	90 7	48 6
		STANDARD ERROR OF GRAND MEAN		0 1	0 1	0 2
		COEFFICIENT OF VARIATION AS PC		1 1	1 4	5 1
		LSD VARIETY MEANS 5 PC		1 2	2 1	4 0

CORRELATIONS

YIELD KG/HA				
TEST	WT	-0 10		
PLNT	HT	0 58	-0 06	
1000	G W	0 41	0 14	0 66

TABLE 19 EUROPE FRANCE CLERMONT FERRAND

S A P , I N R A
M BERNARD

LATITUDE	045 47'N	DATE PLANTED	11/13/81	NITROGEN	APPLIED
LONGITUDE	003 06'E	DATE HARVESTED	8/ 2/82	PHOSPHORUS	APPLIED
ELEVATION	0340 M ABOVE S L	AMOUNT OF MOISTURE	386 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT LOCAL CHECK CLERCAL
WHEATHER VARY DRY FROM JANUARY TO MAY
JULY VERY WET

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W
26	CHUU"S"	MEXICO	9536	71	183	100	39
41	JUANILLO 159	MEXICO	9464	75	183	127	59
43	TOPO 1419	MEXICO	9377	70	182	106	54
40	MULA"S"	MEXICO	9201	75	189	117	57
18	JUANILLO 97	MEXICO	9090	76	183	113	58
20	TIGRE"S"	MEXICO	9018	73	183	107	49
22	BDA"S"	MEXICO	8858	66	182	100	43
12	MANIGERO	SPAIN	8819	72	183	103	48
19	MUSKOX"S"	MEXICO	8771	77	182	130	59
17	RAM"S"	MEXICO	8635	70	187	113	52
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	8587	81	189	93	45
50	LOCAL CHECK		8579	72	190	127	49
J	CABORCA 79	MEXICO	8555	68	182	97	42
11	MIZAR	ITALY	8547	69	187	105	47
30	BVR-ARM	ECUADOR	8539	69	185	105	43
5	T74	KENYA	8523	68	183	100	47
48	VEERY"S" (BREAD WHEAT)	MEXICO ***	8404	80	188	82	45
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	8388	72	187	127	53
28	DAC TRIWELL	CANADA	8340	71	183	122	55
39	IRA-DRIRA	MEXICO	8340	72	182	110	46
42	IRA-DRIRA	MEXICO	8260	71	183	110	47
38	PONY"S"	MEXICO	8244	71	183	110	51
13	M2A	ECUADOR	8165	69	182	100	44
27	CARMAN	CANADA	8077	73	183	130	56
25	JUPPA"S"	MEXICO	8077	73	182	97	43
32	M2A-IA	ECUADOR	8061	69	183	95	43
23	PUMA"S"	MEXICO	8053	70	182	90	45
10	TR37	YUGOSLAVIA	8037	72	183	105	47
36	LECHON"S"	MEXICO	7973	71	183	102	43
4	T65	KENYA	7918	69	182	100	43
2	BEAGLE	MEXICO	7902	72	183	117	52
7	SATU	AUSTRALIA	7886	69	183	88	43
29	ALMA	ETHIOPIA	7822	69	183	104	45
24	JUPPA"S"	MEXICO	7806	73	182	97	47
37	LECHON"S"	MEXICO	7798	72	183	93	46
21	CHIVA"S"	MEXICO	7782	71	183	97	45
9	TYALLA	AUSTRALIA	7726	70	183	90	48
6	COORONG	AUSTRALIA	7726	67	182	92	41
1	CANANEA 79	MEXICO	7654	68	183	99	43
45	M2A(2)-STM"S" X IA-ABN	MEXICO	7575	68	183	100	43
34	VACA"S"	MEXICO	7527	68	182	100	46
54	DELFIN 205	MEXICO	7455	78	183	117	54
15	PFT 7717	BRAZIL	7351	69	187	97	39
46	PND"R"-YE 75	MEXICO	7296	72	183	96	47
14	M2A-IA	ECUADOR	7176	71	187	92	40
35	YE 75 X IA-BUSH	MEXICO	7176	70	183	97	38
16	PFT 765	BRAZIL	7168	73	183	110	43
49	YAVAROS (DURUM)	MEXICO	6969	79	190	83	55
8	DUA	AUSTRALIA	6889	68	187	85	45
33	PTR"R"-CASTOR"S"	MEXICO	5629	65	183	97	48
		GRAND MEAN	8095 0	71 3	183 8	103 5	47 2
		STANDARD ERROR OF GRAND MEAN	43 4			0 3	
		COEFFICIENT OF VARIATION AS PC	6 6			4 1	
		LSD VARIETY MEANS 5 PC	861 8			6 9	

CORRELATIONS

YIELD KG/HA				
TEST WT	0 27			
FLOW DAYS	-0 05	0 44		
PLNT HT	0 43	0 20	-0 04	
1000 G W	0 33	0 49	0 14	0 66

TABLE 20 EUROPE GREECE THESSALONIKI

P B I
E A SKORDA
LATITUDE 040 38'N DATE PLANTED 11/12/81 NITROGEN APPLIED
LONGITUDE 022 57'E DATE HARVESTED 7/ 7/82 PHOSPHORUS APPLIED
ELEVATION 0010 M ABOVE S L AMOUNT OF MOISTURE 398 MM POTASSIUM --

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT SERIOUS WEED PROBLEM NEGLIGIBLE BIRD DAMAGE
CHEMICAL CONTROL OF WEEDS LOCAL CHECK Q-05209
VERY WET WEATHER FROM HEADING TO HARVESTING

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	PROT %
20	TIGRE"S"	MEXICO	5705	164	218	112	11
14	M2A-IA	ECUADOR	5666	158	217	101	11
22	BOA"S"	MEXICO	5666	162	218	108	11
48	VEERY"S" (BREAD WHEAT)	MEXICO	5654	171	218	97	12
4	T65	KENYA	5564	159	217	109	12
35	YE 75 X IA-BUSH	MEXICO	5487	159	217	111	11
5	T74	KENYA	5474	163	219	112	11
41	JUANILLO 159	MEXICO	5436	161	219	140	11
39	IRA-DRIRA	MEXICO	5359	155	215	126	12
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	5295	171	220	97	13
25	JUPPA"S"	MEXICO	5295	160	218	106	12
9	TYALLA	AUSTRALIA	5243	160	217	100	12
34	VACA"S"	MEXICO	5231	158	217	101	11
3	CABORCA 79	MEXICO	5231	162	217	104	12
21	CHIVA"S"	MEXICO	5231	157	216	98	11
24	JUPPA"S"	MEXICO	5179	160	219	106	12
17	RAM"S"	MEXICO	5179	165	220	124	10
50	LOCAL CHECK		5090	161	217	104	12
45	M2A(2)-STR"S" X IA-ABN	MEXICO	5077	160	218	112	12
7	SATU	AUSTRALIA	5013	164	218	98	11
46	PND"R"-YE 75	MEXICO	4987	161	218	107	12
8	DUA	AUSTRALIA	4987	159	217	93	11
18	JUANILLO 97	MEXICO	4974	164	220	132	11
32	M2A-IA	ECUADOR	4974	164	219	103	12
6	COORONG	AUSTRALIA	4974	160	217	101	11
44	DELFIN 205	MEXICO	4949	159	218	131	-
19	MUSKOX"S"	MEXICO	4897	170	220	132	10
16	PFT 765	BRAZIL	4897	159	217	109	12
40	MULA"S"	MEXICO	4884	169	221	121	11
43	TOPO 1419	MEXICO	4820	162	218	115	12
38	PON/"S"	MEXICO	4679	164	217	120	11
30	BVR-ARM	ECUADOR	4654	159	217	113	12
36	LECHON"S"	MEXICO	4602	160	217	106	11
13	M2A	ECUADOR	4602	158	218	108	12
2	BEAGLE	MEXICO	4590	164	219	130	11
15	PFT 7717	BRAZIL	4564	157	216	105	12
1	CANANEA 79	MEXICO	4551	162	217	112	11
28	OAC TRIWELL	CANADA	4513	166	221	129	11
33	PTR"R"-CASTOR"S"	MEXICO	4513	164	219	107	12
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4500	162	218	132	11
27	CARMAN	CANADA	4359	169	223	133	10
10	TR37	YUGOSLAVIA ***	4205	166	218	105	10
37	LECHON"S"	MEXICO	4102	160	217	106	11
23	PUMA"S"	MEXICO	4077	159	217	104	11
42	IRA-DRIRA	MEXICO	4064	157	216	126	11
26	CHUU"S"	MEXICO	3923	166	218	108	11
29	ALMA	ETHIOPIA	3923	161	218	108	10
11	MIZAR	ITALY	3731	162	218	111	10
12	MANIGERO	SPAIN	3705	163	218	110	10
49	YAVAROS (DURUM)	MEXICO	3590	177	222	89	13
		GRAND MEAN	4837 2	162 3	218 1	111 5	11 4
		STANDARD ERROR OF GRAND MEAN	55 8			0 4	
		COEFFICIENT OF VARIATION AS PC	14 1			4 0	
		LSD VARIETY MEANS 5 PC	1107 3			7 2	

CORRELATIONS

YIELD	KG/HA				
FLOW	DAYS	-0 20			
MAT	DAYS	-0 16	0 80		
PLNT	HT	-0 04	0 01	0 29	
PROT	%	0 30	-0 01	-0 11	-0 42

TABLE 21 EUROPE HUNGARY KECSKEMET

V C R I
A KISS ET AL

LATITUDE	046 55'N	DATE PLANTED	10/13/81	NITROGEN	APPLIED
LONGITUDE	019 43'E	DATE HARVESTED	7/12/82	PHOSPHORUS	--
ELEVATION	0122 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS WEATHER NORMAL
LOCAL CHECK TRITICALE BOKOLO

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT
50	LOCAL CHECK		4960	68	149	180	70
38	PONY"S"	MEXICO ***	4458	70	147	174	90
26	CHUU"S"	MEXICO	4299	73	146	176	88
28	DAC TRIWELL	CANADA	4275	72	148	177	92
18	JUANILLO 97	MEXICO	4249	72	149	179	87
27	CARMAN	CANADA	4137	72	148	177	92
2	BEAGLE	MEXICO	4014	68	147	176	88
11	MIZAR	ITALY	3893	68	146	174	85
5	T74	KENYA	3821	68	146	176	83
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3777	73	146	176	87
29	ALMA	ETHIOPIA	3724	68	144	175	83
32	M2A-IA	ECUADOR	3608	73	147	177	83
10	TR37	YUGOSLAVIA	3561	70	146	176	85
1	CANANEA 79	MEXICO	3349	68	147	177	85
6	COORONG	AUSTRALIA	3249	69	145	176	73
40	MULA"S"	MEXICO	3200	73	148	177	83
24	JUPPA"S"	MEXICO	3181	72	146	175	75
41	JUANILLO 159	MEXICO	3120	74	149	177	92
30	BVR-ARM	ECUADOR	3072	70	145	177	78
43	TOPO 1419	MEXICO	3062	72	149	178	88
13	M2A	ECUADOR	3044	69	145	175	75
12	MANIGERO	SPAIN	3031	68	146	176	87
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	2924	71	148	177	88
3	CABORCA 79	MEXICO	2736	69	145	175	75
37	LECHON"S"	MEXICO	2691	74	146	175	75
25	JUPPA"S"	MEXICO	2667	70	145	175	72
33	PTR"R"-CASTOR"S"	MEXICO	2653	70	145	176	77
7	SATU	AUSTRALIA	2610	68	146	176	75
36	LECHON"S"	MEXICO	2511	74	148	178	80
34	VACA"S"	MEXICO	2493	71	145	176	77
23	PUMA"S"	MEXICO	2382	70	146	176	75
15	PFT 7717	BRAZIL	2249	69	146	177	70
44	DELFIN 205	MEXICO	2103	73	148	177	92
22	BOA"S"	MEXICO	2096	68	146	175	75
8	DUA	AUSTRALIA	2028	68	147	177	73
20	TIGRE"S"	MEXICO	1977	72	147	178	77
19	MUSKOX"S"	MEXICO	1889	74	148	180	93
9	TYALLA	AUSTRALIA	1877	69	146	175	72
16	PFT 765	BRAZIL	1834	70	146	176	73
17	RAM"S"	MEXICO	1746	69	148	180	72
4	T65	KENYA	1731	68	145	175	75
48	VEERY"S" (BREAD WHEAT)	MEXICO	1645	74	148	176	70
35	YE 75 X IA-BUSH	MEXICO	1622	71	147	176	73
14	M2A-IA	ECUADOR	1529	71	146	176	70
21	CHIVA"S"	MEXICO	1497	69	146	177	67
46	PND'R"-YE 75	MEXICO	1224	72	146	179	77
39	IRA-DRIRA	MEXICO	914	69	147	177	85
42	IRA-DRIRA	MEXICO	591	69	146	178	78
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	448	70	146	177	53
49	YAVAROS (DURUM)	MEXICO	-	-	149	179	37
		GRAND MEAN	2729 6	70 4	146 6	176 6	78 5
		STANDARD ERROR OF GRAND MEAN	9 2	0 1			0 5
		COEFFICIENT OF VARIATION AS PC	4 1	1 0			8 3
		LSD VARIETY MEANS 5 PC	181 5	1 1			10 6

CORRELATIONS

YIELD	KG/HA				
TEST	WT	0 03			
FLOW	DAYS	0 18	0 46		
MAT	DAYS	-0 14	0 25	0 69	
PLNT	HT	0 45	0 25	0 16	-0 09

TABLE 22 EUROPE ITALY CABACCIA

ANCONA
CEREAL STAFF

LATITUDE	043 30'N	DATE PLANTED	11/ 5/81	NITROGEN	APPLIED
LONGITUDE	013 10'E	DATE HARVESTED	6/30/82	PHOSPHORUS	APPLIED
ELEVATION	+00030 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE MODERATE INSECT DAMAGE
NO WEED PROBLEM NEGLIGIBLE BIRD DAMAGE LOCAL CHECK NAME NOT REPORTED
WEATHER NORMAL

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	PLNT HT
6	COORONG	AUSTRALIA	7610	69	116
41	JUANILLO 159	MEXICO	7291	72	135
21	CHIVA"S"	MEXICO	7249	73	115
13	M2A	ECUADOR	7222	72	115
50	LOCAL CHECK		7110	73	115
2	BEAGLE	MEXICO	6999	69	130
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	6860	82	96
34	VACA"S"	MEXICO	6777	70	116
23	PUMA"S"	MEXICO	6777	73	113
18	JUANI_LO 97	MEXICO	6722	71	133
4	T65	KENYA	6656	72	113
28	OAC TRIWELL	CANADA	6610	69	138
22	BOA"S"	MEXICO	6569	72	116
9	TYALLA	AUSTRALIA	6555	71	116
11	MIZAR	ITALY	6472	72	123
17	RAM"S"	MEXICO ***	6402	69	126
39	IRA-DRIRA	MEXICO	6388	71	125
8	DUA	AUSTRALIA	6277	71	116
42	IRA-DRIRA	MEXICO	6222	70	126
27	CARMAN	CANADA	6166	70	138
25	JUPPA"S"	MEXICO	6166	72	116
29	ALMA	ETHIOPIA	6138	69	117
7	BATU	AUSTRALIA	6124	71	115
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	6111	69	135
5	T74	KENYA	6055	70	114
15	PFT 7717	BRAZIL	6055	71	115
3	CABORCA 79	MEXICO	6027	71	115
24	JUPPA"S"	MEXICO	5888	73	115
45	M2A(2)-STR"S" X IA-ABN	MEXICO	5838	72	116
20	TIORE"S"	MEXICO	5777	73	125
48	VEERY"S" (BREAD WHEAT)	MEXICO	5749	81	97
35	YE 75 X IA-BUSH	MEXICO	5694	72	115
12	MANICERO	SPAIN	5555	72	124
43	TOPO 1419	MEXICO	5444	70	127
36	LECHON"S"	MEXICO	5347	71	116
44	DELFIN 205	MEXICO	5291	74	135
46	PND"R"-YE 75	MEXICO	5236	73	118
30	BVR-ARM	ECUADOR	5236	69	115
19	MUSKOX"S"	MEXICO	5111	73	135
37	LECHON"S"	MEXICO	5069	69	117
32	M2A-IA	ECUADOR	5055	72	115
10	TR37	YUGOSLAVIA	4972	73	116
26	CHUU"S"	MEXICO	4750	71	115
1	CANANEA 79	MEXICO	4666	69	113
40	MULA"S"	MEXICO	4319	70	130
14	M2A-IA	ECUADOR	4250	72	116
38	PONY"S"	MEXICO	4097	71	125
16	PFT 765	BRAZIL	3930	73	123
33	PTR"R"-CASTOR"S"	MEXICO	2916	67	115
49	YAVAROS (DURUM)	MEXICO	2444	82	90

GRAND MEAN	5806 1	71 6	119 0
STANDARD ERROR OF GRAND MEAN	47 1	0 1	
COEFFICIENT OF VARIATION AS PC	8 1	1 1	
LSD VARIETY MEANS 5 PC	946 9	1 5	

CORRELATIONS

YIELD KG/HA			
TEST	WT	-0 12	
PLNT	HT	0 19	-0 59

TABLE 23 EUROPE NORWAY

VOLLE BEKK
CEREAL STAFF

LATITUDE	059 40'N	DATE PLANTED	4/20/82	NITROGEN	APPLIED
LONGITUDE	010 47'E	DATE HARVESTED	9/ 3/82	PHOSPHORUS	APPLIED
ELEVATION	+00090 M ABOVE S L	AMOUNT OF MOISTURE	251 MM	POTASSIUM	APPLIED

EARLY SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE BLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS LOCAL CHECK
JULY WAS DRY, AND AUGUST MOISTY

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W	FALL NO	PROT %
22	BOA"S"	MEXICO	5915	69	67	119	78	46	62	13
3	CABORCA 79	MEXICO	5691	71	67	120	75	45	62	14
26	CHUU"S"	MEXICO	5517	72	70	120	80	44	62	14
6	COORONG	AUSTRALIA	5199	67	67	120	75	47	62	15
43	TOPO 1419	MEXICO	5000	68	72	120	80	55	62	13
32	M2A-IA	ECUADOR	4991	73	72	121	78	52	62	15
9	TYALLA	AUSTRALIA ***	4842	70	70	121	75	48	62	14
23	PUMA"S"	MEXICO	4745	70	67	120	75	50	62	15
30	BVR-ARM	ECUADOR	4739	70	69	121	78	47	62	15
20	TIGRE"S"	MEXICO	4725	73	68	121	83	49	62	15
4	T65	KENYA	4643	71	66	120	82	51	62	14
13	M2A	ECUADOR	4635	71	66	120	80	45	62	16
25	JUPPA"S"	MEXICO	4506	72	67	120	78	46	62	16
7	SATU	AUSTRALIA	4473	70	69	121	72	48	62	14
2	BEAGLE	MEXICO	4470	69	69	122	95	60	62	14
11	MIZAR	ITALY	4461	69	68	120	83	47	62	14
45	M2A(L -STR"S" X IA-ABN	MEXICO	4430	70	69	121	85	48	62	15
40	MULA"S"	MEXICO	4302	73	75	123	82	58	62	17
1	CANANEA 79	MEXICO	4295	70	68	120	82	49	62	14
19	MUSKOX"S"	MEXICO	4269	66	74	124	98	55	62	14
28	OAC TRIWELL	CANADA	4258	69	72	122	98	57	62	14
8	DUA	AUSTRALIA	4242	69	68	121	70	51	62	15
27	CARMAN	CANADA	4179	69	74	122	98	57	62	17
41	JUANILLO 159	MEXICO	4151	73	72	122	97	61	62	13
5	T74	KENYA	4132	69	69	120	82	53	62	14
38	PONY"S"	MEXICO	4106	70	69	120	85	48	62	16
21	CHIVA"S"	MEXICO	4080	69	67	121	73	50	62	16
17	RAM"S"	MEXICO	4015	69	71	123	80	53	62	13
15	PFT 7717	BRAZIL	4003	71	70	120	77	44	62	17
48	VEERY"S" (BREAD WHEAT)	MEXICO	3992	79	71	116	63	43	82	19
16	PFT 765	BRAZIL	3805	76	67	121	78	35	62	15
14	M2A-IA	ECUADOR	3753	71	68	121	75	40	62	15
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	3750	70	69	121	97	55	62	15
46	PND"R"-YE 75	MEXICO	3706	72	69	122	77	48	62	16
29	ALMA	ETHIOPIA	3701	70	67	121	78	48	62	14
12	MANIGERO	SPAIN	3698	74	73	121	78	46	62	15
42	IRA-DRIRA	MEXICO	3694	68	67	120	83	51	62	16
24	JUPPA"S"	MEXICO	3662	71	67	121	75	45	62	17
18	JUANILLO 97	MEXICO	3579	72	72	124	93	61	62	14
36	LECHON"S"	MEXICO	3576	68	68	122	75	49	62	17
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3564	77	69	118	68	48	62	20
34	VACA"S"	MEXICO	3463	67	66	121	75	50	62	15
10	TR37	YUGOSLAVIA	3321	74	72	122	77	47	62	15
44	DELFIN 205	MEXICO	3085	72	67	122	85	54	62	15
33	PTR"R"-CASTOR"S"	MEXICO	3083	69	73	122	80	36	62	16
39	IRA-DRIRA	MEXICO	2832	67	68	121	82	51	62	17
37	LECHON"S"	MEXICO	2694	67	67	121	72	48	62	17
35	YE 75 X IA-BUSH	MEXICO	2660	71	68	121	73	45	62	18
50	LOCAL CHECK		2525	82	71	116	78	47	121	18
49	YAVAROS (DURUM)	MEXICO	1926	77	73	122	52	59	62	19
		GRAND MEAN	4061 6	70 9	69 3	120 8	79 8	49 3	63 6	15 3
		STANDARD ERROR OF GRAND MEAN	44 2				0 3			
		COEFFICIENT OF VARIATION AS PC	13 3				4 5			
		LSD VARIETY MEANS 5 PC	876 5				5 8			

CORRELATIONS

YIELD	KG/HA								
TEST	WT	-0 27							
FLOW	DAYS	-0 13	0 23						
MAT	DAYS	-0 12	-0 45	0 31					
PLNT	HT	0 21	-0 34	0 23	0 41				
1000	G W	-0 04	-0 16	0 36	0 44	0 45			
FALL	NO	-0 27	0 60	0 12	-0 59	-0 11	-0 11		
PROT	%	-0 61	0 47	0 06	-0 34	-0 50	-0 19	0 33	

TABLE 24 EUROPE POLAND DANKOW

LASKI PBB
T. WOLSKI

LATITUDE	051 45'N	DATE PLANTED	4/ 8/82	NITROGEN	APPLIED
LONGITUDE	021 15'E	DATE HARVESTED	8/17/82	PHOSPHORUS	APPLIED
ELEVATION	0100 M ABOVE S L	AMOUNT OF MOISTURE	170 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE BLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS LOCAL CHECK TRITICALE DATTJ 1/79
WEATHER: JULY & AUGUST VERY DRY

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W
41	JUANILLO 159	MEXICO	6798	70	75	118	54
18	JUANILLO 97	MEXICO ***	5877	69	74	115	52
40	MULA"S"	MEXICO	5848	70	76	110	50
17	RAM"S"	MEXICO	5519	65	73	100	49
11	MIZAR	ITALY	5506	64	69	103	44
30	BVR-ARM	ECUADOR	5415	67	68	93	39
26	CHUU"S"	MEXICO	5388	69	69	93	37
31	BGL/ARB-MEX MUTI X BGL"S"	ECUADOR	5363	68	72	110	48
2	BEAGLE	MEXICO	5273	66	72	112	47
20	TIGRE"S"	MEXICO	5227	70	67	92	44
22	BOA"S"	MEXICO	5208	68	67	87	43
47	TOPO 1419	MEXICO	5133	68	73	98	50
44	DELFIN 205	MEXICO	5131	72	68	105	49
38	PONY"S"	MEXICO	5125	69	70	100	47
27	CARMAN	CANADA	5117	66	76	112	47
39	IRA-DRIRA	MEXICO	4988	69	66	102	47
7	BATU	AUSTRALIA	4960	67	68	83	43
23	PUMA"S"	MEXICO	4902	69	67	88	43
34	VACA"S"	MEXICO	4875	68	62	88	44
28	OAC TRIWELL	CANADA	4838	66	75	110	48
19	MUSKOX"S"	MEXICO	4760	67	76	110	50
5	T74	KENYA	4750	67	68	97	46
25	JUPPA"S"	MEXICO	4738	68	66	90	40
32	M2A-IA	ECUADOR	4731	69	71	92	43
50	LOCAL CHECK		4706	66	75	113	41
42	IRA-DRIRA	MEXICO	4694	68	66	97	47
12	MANIGERO	SPAIN	4671	68	73	95	42
1	CANANEA 79	MEXICO	4663	64	68	102	42
21	CHIVA"S"	MEXICO	4658	68	66	85	43
13	M2A	ECUADOR	4642	68	66	90	42
10	TR37	YUGOSLAVIA	4642	69	73	90	44
6	COORONG	AUSTRALIA	4610	64	66	85	40
37	LECHON"S"	MEXICO	4606	69	67	85	45
33	PTR"R"-CASTOR"S"	MEXICO	4594	68	73	92	49
36	LECHON"S"	MEXICO	4583	69	68	87	44
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4492	68	69	97	43
8	DUA	AUSTRALIA	4488	66	68	85	47
14	M2A-IA	ECUADOR	4440	67	68	88	39
4	T65	KENYA	4350	66	65	90	42
24	JUPPA"S"	MEXICO	4335	69	67	87	42
29	ALMA	ETHIOPIA	4306	66	67	95	41
3	CABORCA 79	MEXICO	4106	67	66	88	39
9	TYALLA	AUSTRALIA	4106	66	69	85	43
15	PFT 7717	BRAZIL	3967	69	65	85	41
16	PFT 765	BRAZIL	3958	71	67	95	37
35	YE 75 X IA-BUSH	MEXICO	3846	68	68	93	44
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3721	79	69	80	43
46	PND"R"-YE 75	MEXICO	3533	69	68	85	40
48	VEERY"S" (BREAD WHEAT)	MEXICO	3475	80	74	72	36
49	YAVAROS (DURUM)	MEXICO	1642	75	72	58	44
		GRAND MEAN	4706 0	68 3	69 4	94 2	44 0
		STANDARD ERROR OF GRAND MEAN	42 3	0 1		0 3	0 1
		COEFFICIENT OF VARIATION AS PC	11 0	1 4		3 8	3 7
		LSD VARIETY MEANS 5 PC	838 8	1 5		5 8	2 7

CORRELATIONS

YIELD KG/HA					
TEST	WT	-0 40			
FLOW	DAYS	0 23	0 11		
PLNT	HT	0 76	-0 42	0 48	
1000	G W	0 51	-0 11	0 49	0 59

TABLE 25 EUROPE POLAND KRAKOW

PLANT B & ACCLIMATIZATION INST / GRODKOWICE EXP STATION
CEREAL STAFF

LATITUDE	049 59'N	DATE PLANTED	4/ 2/82	NITROGEN	APPLIED
LONGITUDE	020 16'E	DATE HARVESTED	8/ 9/82	PHOSPHORUS	APPLIED
ELEVATION	+00220 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE SLIGHT INSECT DAMAGE MODERATE WEED PROBLEM
SLIGHT BIRD DAMAGE CHEMICAL CONTROL OF WEEDS MECHANICAL CONTROL OF WEEDS
HAND WEEDING WEATHER NOT REPORTED LOCAL CHECK JARA WHEAT

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	1000 G W	SEP N 0-9
5	T74	KENYA	4612	68	60	101	40MS	103	44	6
11	MIZAR	ITALY	4435	67	59	101	0	108	43	4
30	BVP ARM	ECUADOR	4095	68	60	103	0	102	36	4
13	M2A	ECUADOR	3958	69	59	101	0	94	40	4
6	COORONG	AUSTRALIA	3862	67	58	102	0	86	43	5
18	JUANILLO 97	MEXICO	3809	69	64	109	0	121	50	3
40	MULA"S"	MEXICO	3721	69	64	107	0	113	48	4
15	PFT 7717	BRAZIL	3711	68	58	102	0	97	38	4
20	TIGRE"S"	MEXICO	3685	79	59	101	0	100	42	2
21	CHIVA"S"	MEXICO	3655	68	59	102	0	97	39	3
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3651	67	60	102	40S	104	40	4
37	LECHON"S"	MEXICO	3646	70	59	103	25MS	99	40	5
42	IRA-DRIRA	MEXICO	3643	69	58	102	25MS	108	49	3
28	OAC TRIWELL	CANADA	3599	65	62	108	0	124	48	3
23	PUMA"S"	MEXICO	3575	70	58	103	0	99	46	4
7	SATU	AUSTRALIA	3550	66	58	101	0	89	42	5
26	CHUU"S"	MEXICO	3541	68	59	101	0	99	39	6
38	PONY"S"	MEXICO	3521	69	60	102	0	108	45	5
27	CARMAN	CANADA	3519	66	64	108	0	118	48	3
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	3431	67	61	104	0	128	50	2
2	BCAGLE	MEXICO	3411	65	61	107	----	119	50	4
22	BOA"S"	MEXICO	3364	69	58	101	6SS	93	44	5
32	M2A-IA	ECUADOR	3357	69	61	104	0	96	48	3
43	TOPO 1419	MEXICO ***	3348	69	61	105	10MS	106	48	3
39	IRA-DRIRA	MEXICO	3284	68	58	102	0	112	46	4
14	M2A-IA	ECUADOR	3239	68	58	99	0	96	37	5
41	JUANILLO 199	MEXICO	3233	70	62	108	25MS	126	54	3
16	PFT 765	BRAZIL	3179	72	58	101	10MS	97	38	3
44	DELFIN 205	MEXICO	3124	72	59	104	40MS	119	45	4
17	RAM"S"	MEXICO	3093	65	61	108	0	108	46	4
36	LECHON"S"	MEXICO	3080	69	59	103	10MS	99	42	4
3	CABORCA 79	MEXICO	2993	69	59	101	0	93	41	6
25	JUPPA"S"	MEXICO	2971	69	58	102	10MS	97	42	3
34	VACA"S"	MEXICO	2843	67	58	102	40MS	99	43	3
4	T65	KENYA	2830	68	58	101	40MS	102	44	4
10	TR37	YUGOSLAVIA	2742	67	61	102	10MS	100	42	5
35	YE 75 X IA-BUSH	MEXICO	2731	69	59	102	40MS	101	40	5
29	ALMA	ETHIOPIA	2704	67	58	104	40MS	95	43	4
12	MANIGERO	SPAIN	2702	68	60	103	0	96	40	6
9	TYALLA	AUSTRALIA	2665	66	60	102	10MS	89	42	6
1	CANANEA 79	MEXICO	2648	63	59	101	0	111	39	4
48	VEERY"S" (BREAD WHEAT)	MEXICO	2601	80	58	100	0	80	35	4
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2491	79	56	100	0	88	41	5
8	DUA	AUSTRALIA	2489	65	60	100	10MS	89	45	7
24	JUPPA"S"	MEXICO	2443	66	58	103	0	99	44	4
46	PND"R"-YE 75	MEXICO	2318	69	60	102	65S	99	43	4
19	MUSKOX"S"	MEXICO	2136	67	65	109	0	126	46	3
33	PTR"R"-CASTOR"S"	MEXICO	1652	64	61	106	0	93	40	4
50	LOCAL CHECK		1389	68	62	100	100S	87	31	6
49	YAVAROS (DURUM)	MEXICO	623	75	61	102	0	59	41	2
		GRAND MEAN	3137 2	68 6	59 8	103 0	11 2	101 3	42 7	4 1
		STANDARD ERROR OF GRAND MEAN	51 6	0 2				0 4	0 2	
		COEFFICIENT OF VARIATION AS PC	20 1	3 7				4 8	5 7	
		LSD VARIETY MEANS 5 PC	1023 2	4 1				7 9	4 0	

CORRELATIONS

YIELD	KG/HA								
TEST	WT	-0 11							
FLOW	DAYS	-0 09	-0 28						
MAT	DAYS	0 06	0 31	0.79					
LEAF	RUST	-0 29	-0 06	0 00	-0 25				
PLNT	HT	0 43	-0 35	0 48	0 67	[illegible]			
1000	G W	0 27	-0 20	0 40	0 67	[illegible]	0 66		
SEP N	0-9	-0 07	-0 20	-0 22	-0 47	[illegible]	0 33	0 [illegible]	

TABLE 26 EUROPE PORTUGAL ELVAS

PBS ALENTEJO
M T CARMADAS ET AL
LATITUDE 038 54'N DATE PLANTED 11/18/81 NITROGEN APPLIED
LONGITUDE 007 09'W DATE HARVESTED 6/14/82 PHOSPHORUS APPLIED
ELEVATION 0208 M ABOVE S L. AMOUNT OF MOISTURE 366 MM POTASSIUM APPLIED

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD.
SLIGHT DISEASE INCIDENCE SLIGHT INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK ANZA

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT
6	COORONG	AUSTRALIA	5305	76	125	188	95
18	JUANILLO 97	MEXICO	5245	77	127	191	122
15	PFT 7717	BRAZIL	5134	79	125	188	90
41	JUANILLO 159	MEXICO	4980	77	127	189	119
3	CABORCA 79	MEXICO	4921	77	126	188	92
1	CANANEA 79	MEXICO	4872	74	128	188	107
21	CHIVA"S"	MEXICO	4775	78	126	189	95
22	BOA"S"	MEXICO	4702	77	127	187	88
28	OAC TRIWELL	CANADA	4687	74	135	196	121
20	TIGRE"S"	MEXICO	4672	80	128	190	100
26	CHUU"S"	MEXICO	4634	78	135	192	96
34	VACA"S"	MEXICO	4628	77	125	188	90
36	LECHON"S"	MEXICO	4581	79	126	190	88
44	DELFIN 205	MEXICO	4580	80	132	193	119
2	BEAGLE	MEXICO	4571	74	132	194	124
8	DUA	AUSTRALIA	4568	76	126	187	82
43	TOPO 1419	MEXICO	4566	76	135	195	103
17	RAM"S"	MEXICO	4548	73	134	189	111
23	PUMA"S"	MEXICO	4540	79	126	188	91
7	SATU	AUSTRALIA	4526	77	127	189	88
13	M2A	ECUADOR	4510	77	123	188	90
5	T74	KENYA	4474	76	130	181	101
11	MIZAR	ITALY	4456	73	128	189	103
42	IRA-DRIRA	MEXICO	4437	76	125	189	103
25	JUPPA"S"	MEXICO	4375	79	125	187	94
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	4344	75	128	192	114
39	IRA-DRIRA	MEXICO	4332	76	125	188	108
9	TYALLA	AUSTRALIA	4250	77	127	188	88
24	JUPPA"S"	MEXICO	4238	78	125	189	93
37	LECHON"S"	MEXICO	4208	80	125	190	87
32	M2A-IA	ECUADOR	4200	78	135	191	94
4	T65	KENYA	4196	77	126	187	97
46	PND"R"-YE 75	MEXICO	4150	79	127	190	97
27	CARMAN	CANADA ***	4125	74	136	196	122
30	BVR-ARM	ECUADOR	4091	77	126	190	94
14	M2A-IA	ECUADOR	4086	77	126	189	95
12	MANIGERO	SPAIN	4020	77	135	182	95
29	ALMA	ETHIOPIA	4007	76	127	190	100
10	TR37	YUGOSLAVIA	3869	77	134	181	97
33	PTR"R"-CASTOR"S"	MEXICO	3800	76	130	191	96
40	MULA"S"	MEXICO	3773	75	138	197	109
16	PFT 765	BRAZIL	3719	80	126	190	105
19	MUSKOX"S"	MEXICO	3702	77	136	203	119
38	PONY"S"	MEXICO	3679	77	132	190	100
35	VE 75 X IA-BUSH	MEXICO	3679	80	125	189	90
45	M2A.2/-STR"S" X IA-ABN	MEXICO	3609	77	132	192	99
50	LOCAL CHECK		3232	87	141	190	79
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3032	84	134	187	81
48	VEERY"S" (BREAD WHEAT)	MEXICO	2380	85	135	187	76
49	YAVAROS (DURUM)	MEXICO	2181	84	142	191	80
		GRAND MEAN	4243 7	77 5	129 5	189 7	98 6
		STANDARD ERROR OF GRAND MEAN	47 5	0 0	0 1	0 3	0 4
		COEFFICIENT OF VARIATION AS PC	13 7	0 8	1 0	2 3	5 2
		LSD VARIETY MEANS 5 PC	942 4	1 0	2 0	6 9	8 3

CORRELATIONS

YIELD	KG/HA				
TEST	WT	-0 59			
FLOW	DAYS	-0 57	0 24		
MAT	DAYS	-0 06	-0 15	0 37	
PLNT	HT	0 38	-0 62	0 10	0 51

TABLE 27 EUROPE ROMANIA

AGRONOMIC INST TIMISOARA
CEREAL STAFF

LATITUDE	045 46'N	DATE PLANTED	10/21/81	NITROGEN	APPLIED
LONGITUDE	021 15'E	DATE HARVESTED	7/--/82	PHOSPHORUS	APPLIED
ELEVATION	+00085 M ABOVE S L	AMOUNT OF MOISTURE	663 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK TIMISAN

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	PLNT HT	LODG %	1000 G W	FRST DMGE	SEP T 0-9
28	OAC TRIWELL	CANADA	3973	64	199	244	1	1	92	40	56	33	2
50	LOCAL CHECK		3720	78	202	238	1	6	67	40	51	33	2
32	M2A-IA	ECUADOR	3621	64	200	242	1	1	67	40	63	48	2
40	MULA"S"	MEXICO	3448	74	202	245	1	8	85	23	61	63	2
43	TOPO 1419	MEXICO	3430	63	203	240	1	1	80	37	[illegible]	56	2
27	CARMAN	CANADA	3336	64	200	245	1	1	88	37	60	33	2
19	MUSKOX"S"	MEXICO	3291	62	204	245	1	1	91	40	64	56	2
2	BEAGLE	MEXICO ***	3268	64	200	243	1	3	82	40	61	41	2
11	MIZAR	ITALY	3207	63	201	242	1	1	76	33	56	41	1
5	T7'	KENYA	3167	62	201	243	1	4	76	37	54	41	2
26	CHUU"S"	MEXICO	3158	65	201	242	1	1	71	40	43	56	1
7	BATU	AUSTRALIA	3125	62	201	244	1	1	69	27	46	48	2
12	MANIGERO	SPAIN	3070	62	202	240	1	3	69	33	46	44	2
41	JUANILLO 159	MEXICO	3028	72	201	245	1	8	83	53	65	56	2
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2996	70	202	242	1	2	78	37	48	48	2
17	RAM"S"	MEXICO	2886	59	204	245	1	2	74	53	50	71	2
29	ALMA	ETHIOPIA	2658	61	200	243	1	3	72	50	48	56	2
18	JUANILLO 97	MEXICO	2506	66	202	245	1	7	85	40	65	63	2
31	BCL/ARS-MEX MUTI X BCL"S"	ECUADOR	2324	65	200	242	1	8	82	47	55	56	1
10	TR37	YUGOSLAVIA	2174	62	203	243	2	1	72	33	47	48	2
6	COORONG	AUSTRALIA	2033	62	202	243	2	2	69	30	47	67	2
36	LECHON"S"	MEXICO	1992	70	205	245	1	3	67	43	45	71	2
21	CHIVA"S"	MEXICO	1968	62	202	242	1	1	61	50	43	56	2
44	DELFIN 205	MEXICO	1938	74	201	243	1	5	85	33	55	56	2
25	JUPPA"S"	MEXICO	1937	62	205	243	1	3	63	37	49	78	1
30	BVR-ARM	ECUADOR	1902	64	202	244	1	5	71	43	46	63	1
16	PFT 765	BRAZIL	1896	67	203	244	1	1	66	47	46	63	2
1	CANANEA 79	MEXICO	1893	58	202	239	1	1	75	43	52	63	2
34	VACA"S"	MEXICO	1853	68	202	245	1	2	73	40	53	71	2
20	TIGRE"S"	MEXICO	1801	63	204	245	1	2	71	47	41	71	2
33	PTR"R"-CASTOR"S"	MEXICO	1559	68	204	242	1	1	67	43	48	63	2
23	PUMA"S"	MEXICO	1453	63	202	245	1	3	66	53	50	85	2
4	T65	KENYA	1451	64	201	243	1	2	70	43	48	60	2
38	PONY"S'	MEXICO	1417	68	203	241	1	1	67	57	45	71	2
24	JUPPA"S"	MEXICO	1387	62	203	243	1	1	65	43	52	71	1
14	M2A-IA	ECUADOR	1373	64	203	244	2	1	67	47	44	71	2
46	PND"R"-YE 75	MEXICO	1342	69	205	243	1	2	67	43	42	71	2
9	TYALLA	AUSTRALIA	1313	65	204	245	1	1	62	43	45	78	2
37	LECHON"S"	MEXICO	1217	68	205	245	1	3	72	43	42	85	2
35	YE 75 X IA-BUSH	MEXICO	1193	68	205	243	1	3	67	53	40	71	2
3	CABORCA 79	MEXICO	1170	65	203	244	1	2	69	43	43	93	2
15	PFT 7717	BRAZIL	1016	62	202	240	1	2	58	57	40	82	2
8	DUA	AUSTRALIA	848	62	204	243	1	2	58	37	51	93	2
13	M2A	ECUADOR	790	62	203	243	1	2	65	57	43	93	2
48	VEERY"S" (BREAD WHEAT)	MEXICO	760	76	205	239	1	1	58	50	51	93	2
42	IRA-DRIRA	MEXICO	726	68	204	245	1	2	72	43	46	100	2
22	BOA"S"	MEXICO	721	61	203	245	1	2	66	50	48	85	2
39	IRA-DRIRA	MEXICO	418	69	203	243	1	2	77	33	55	100	1
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	120	-	205	242	1	5	50	57	42	100	1
49	YAVAROS (DURUM)	MEXICO	79	-	205	245	1	1	48	43	50	100	2
		GRAND MEAN	2038 9	65 3	202 6	243 0			71 0	42 7	49 6	66 3	1 8
		STANDARD ERROR OF GRAND MEAN	30 4						0 4				
		COEFFICIENT OF VARIATION AS PC	18 3						7.6				
		LSD VARIETY MEANS 5 PC	603 9						8 7				

CORRELATIONS

YIELD	KG/HA									
TEST	WT	-0 01								
FLOW	DAYS	-0 63	0 14							
MAT	DAYS	-0 10	-0 12	0 10						
PLNT	HT	0 68	0 08	-0 54	0 22					
LODG	%	-0 46	-0 09	0 25	-0 05	-0 41				
1000	G W	0 54	0 12	-0 41	0 10	0 70	-0 39			
FRST	DMGE	-0 89	0 03	0 68	0 20	-0 60	0 41	-0 40		
SEP T	0-9	0 11	0 11	0 02	0 12	0 08	0 06	0 01	-0 11	

TABLE 28 EUROPE ROMANIA ILFOV

FUNDULEA
N SAULESCU

LATITUDE	044 03'N	DATE PLANTED	3/ 3/82	NITROGEN	APPLIED
LONGITUDE	024 10'E	DATE HARVESTED	7/20/82	PHOSPHORUS	APPLIED
ELEVATION	0066 M ABOVE S L	AMOUNT OF MOISTURE	750 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS ABNORMAL WEATHER
LOCAL CHECK RUBIN

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	SEP T 0-9
41	JUANILLO 159	MEXICO	4361	66	85	119	----	117	2
43	TOPO 1419	MEXICO	4278	63	84	118	----	98	1
13	M2A	ECUADOR	4181	65	80	114	----	89	4
30	BVR-ARM	ECUADOR	4098	63	83	117	----	95	4
42	IRA-DRIRA	MEXICO	4098	63	79	113	----	102	4
18	JUANILLO 97	MEXICO	4084	65	84	118	----	108	1
37	LECHON"S"	MEXICO	3986	67	80	114	----	86	3
20	TIGRE"S"	MEXICO	3986	64	81	116	----	89	3
44	DELFIN 205	MEXICO	3959	67	82	117	----	107	2
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3931	64	83	117	----	99	4
11	MIZAR	ITALY	3889	61	82	116	----	92	2
31	BOL/ARG-MEX MUTI X BOL"S"	ECUADOR	3806	64	84	118	----	113	2
39	IRA-DRIRA	MEXICO	3723	64	79	112	----	102	5
22	BOA"S"	MEXICO ***	3709	64	80	114	----	85	3
24	JUPPA"S"	MEXICO	3681	65	82	116	20MR	91	3
35	YE 75 X IA-BUSH	MEXICO	3667	65	82	116	20MR	88	4
40	MULA"S"	MEXICO	3646	64	87	120	----	107	1
36	LECHON"S"	MEXICO	3625	68	82	116	----	85	2
32	M2A-IA	ECUADOR	3611	64	85	119	----	86	3
23	PUMA"S"	MEXICO	3556	63	80	114	30MR	90	3
50	LOCAL CHECK		3556	73	87	112	20MR-MS	113	5
28	OAC TRIWELL	CANADA	3473	63	86	119	----	110	2
2	BEAGLE	MEXICO	3473	63	83	117	----	107	1
25	JUPPA"S"	MEXICO	3473	66	82	116	----	89	2
1	CANANEA 79	MEXICO	3382	61	83	116	----	92	1
34	VACA"S"	MEXICO	3306	61	79	114	----	87	6
15	PFT 7717	BRAZIL	3306	65	79	112	----	87	3
17	RAM"S"	MEXICO	3292	61	84	118	----	100	1
4	T65	KENYA	3236	64	80	115	30MR	88	4
27	CARMAN	CANADA	3139	64	86	115	----	115	2
19	MUSKOX"S"	MEXICO	3125	63	86	120	----	111	1
3	CABORCA 79	MEXICO	3111	64	81	115	----	85	5
10	TR37	YUGOSLAVIA	3097	65	84	118	----	91	2
33	PTR"R"-CASTOR"S"	MEXICO	3097	62	86	119	----	88	3
48	VEERY"S" (BREAD WHEAT)	MEXICO	3014	75	86	111	----	69	6
38	PONY'S"	MEXICO	3014	64	82	115	----	97	4
12	MANIGERO	SPAIN	2986	62	84	118	----	93	2
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2952	74	82	106	----	75	3
21	CHIVA"S"	MEXICO	2792	61	82	117	----	83	2
29	ALMA	ETHIOPIA	2764	62	81	115	----	92	5
16	PFT 765	BRAZIL	2722	67	82	117	----	89	5
9	TYALLA	AUSTRALIA	2653	62	83	117	30MR	83	4
46	PND"R"-YE 75	MEXICO	2611	65	82	116	20MS	85	2
7	SATU	AUSTRALIA	2597	59	84	118	----	83	2
8	DUA	AUSTRALIA	2445	61	83	117	20MR	77	3
14	M2A-IA	ECUADOR	2334	64	82	116	----	82	3
6	COORONG	AUSTRALIA	2292	61	83	117	----	84	5
5	T74	KENYA	2195	63	84	118	----	95	2
26	CHUU"S"	MEXICO	1861	61	83	117	----	92	4
49	YAVAROS (DURUM)	MEXICO	1278	67	87	112	----	57	4
		GRAND MEAN	3289 0	64 2	82 8	116 0	11 8	92 5	3 0
		STANDARD ERROR OF GRAND MEAN	27 1	0 1				0 3	
		COEFFICIENT OF VARIATION AS PC	10 1	2 1				4 3	
		LSD VARIETY MEANS 5 PC	538 1	2 2				6 4	

CORRELATIONS

YIELD	KG/HA						
TEST	WT	0 12					
FLOW	DAYS	-0 22	0 16				
MAT	DAYS	0 07	-0 61	0 45			
LEAF	RUST	-0 43	0 33	0 45	-0 05		
PLNT	HT	0 54	-0 13	0 22	0 47	0 18	
SEP T	0-9	-0 21	0 26	-0 32	-0 54	0 02	-0 39

TABLE 29 EUROPE SPAIN CORDOVA

EL ENCINAL
M GUERRA

LATITUDE	038 01'N	DATE PLANTED	12/18/81	NITROGEN	APPLIED
LONGITUDE	000 40'W	DATE HARVESTED	6/16/82	PHOSPHORUS	APPLIED
ELEVATION	200 M ABOVE S L	AMOUNT OF MOISTURE	373 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS HAND WEEDING
LOCAL CHECK ANZA

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	LODG %	1000 G W	SEP T 0-9
38	PONY"S"	MEXICO	13554	73	111	130	60	43	-
24	JUPPA"S"	MEXICO	13443	75	103	117	-	44	-
1	CANANEA 79	MEXICO	13221	72	106	124	-	50	-
30	BVR-ARM	ECUADOR	12999	72	105	128	73	40	
11	MIZAR	ITALY	12999	72	105	127	-	49	1
13	M2A	ECUADOR	12888	77	104	118	-	46	-
41	JUANILLO 159	MEXICO	12777	74	103	130	-	55	-
22	BOA"S"	MEXICO	12665	74	104	120	-	44	-
49	YAVAROS (DURUM)	MEXICO	12665	82	115	93	-	52	1
50	LOCAL CHECK		12665	83	115	96	5	38	2
26	CHUU"S"	MEXICO	12554	72	107	112	60	39	5
3	CABORCA 79	MEXICO	12554	74	105	112	77	46	-
14	M2A-IA	ECUADOR	12332	74	105	117	60	41	1
43	TOPO 1419	MEXICO	12332	73	106	127	-	53	-
37	LECHON"S"	MEXICO	12332	76	103	119	-	45	-
9	TYALLA	AUSTRALIA	12332	75	104	117	-	48	1
36	LECHON"S"	MEXICO	12221	76	104	116	-	43	-
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	12110	81	112	107	38	42	1
32	M2A-IA	ECUADOR	11999	73	110	113	60	42	1
18	JUANILLO 97	MEXICO	11888	76	104	143	-	59	-
42	IRA-DRIRA	MEXICO	11888	74	100	135	60	53	-
35	YE 75 X 1A-BUSH	MEXICO	11777	75	103	133	-	37	1
7	SATU	AUSTRALIA	11777	72	105	117	-	44	-
23	PUMA"S"	MEXICO	11666	76	104	123	-	47	-
34	VACA"S"	MEXICO	11666	72	103	125	25	49	-
4	T65	KENYA	11666	73	104	114	-	46	-
5	T74	KENYA	11554	71	109	120	40	44	2
15	PFT 7717	BRAZIL	11554	77	104	123	60	46	-
48	VEERY"S" (BREAD WHEAT)	MEXICO	11443	84	113	118	-	41	2
10	TR37	YUGOSLAVIA	11332	75	111	121	-	45	-
44	DELFIN 205	MEXICO	11221	77	105	148	-	50	-
45	M2A(2)-STR"S" X IA-ABN	MEXICO	11110	74	106	127	-	45	1
33	PTR"R"-CASTOR"S"	MEXICO	11110	70	106	125	-	45	1
25	JUPPA"S"	MEXICO	11110	74	102	129	-	44	1
17	RAM"S"	MEXICO	11110	71	106	130	-	52	2
40	MULA"S"	MEXICO	11110	73	113	142	-	49	2
8	DUA	AUSTRALIA	10999	74	104	112	50	50	1
20	TIGRE"S"	MEXICO	10888	77	106	129	38	46	-
27	CARMAN	CANADA	10888	68	111	114	90	43	1
21	CHIVA"S"	MEXICO	10888	76	103	122	-	44	3
2	BEAGLE	MEXICO	10888	71	107	147	50	53	-
12	MANIGERO	SPAIN	10777	74	112	124	-	42	1
19	MUSKOX"S"	MEXICO ***	10555	75	112	145	90	45	1
29	ALMA	ETHIOPIA	10443	71	105	110	20	42	1
6	COORONG	AUSTRALIA	10332	71	104	115	8	44	-
46	PND"R"-YE 75	MEXICO	10332	76	105	119	-	40	-
28	OAC TRIWELL	CANADA	10332	68	112	127	88	46	-
39	IRA-DRIRA	MEXICO	9999	75	101	132	-	58	-
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	9999	71	105	146	90	49	-
16	PFT 765	BRAZIL	9888	77	105	127	77	42	1
		GRAND MEAN	11657	74	106	123	59	46	2
		STANDARD ERROR OF GRAND MEAN	116	0		0		0	
		COEFFICIENT OF VARIATION AS PC	12	1		2		5	
		LSD VARIETY MEANS 5 PC	2310	2		4		4	

CORRELATIONS

YIELD	KG/HA							
TEST	WT	0 19						
FLOW	DAYS	0 00	0 24					
PLNT	HT	-0 32	-0 31	-0 25				
LODG	%	-0 14	-0 39	0 05	0 57			
1000	G W	-0 05	-0 12	-0 28	0 44	0 12		
SEP T	0-9	0 17	-0 01	0 02	-0 08	-0 15	-0 16	

TABLE 30 EUROPE SPAIN LLEIDA

LA PUJADA
CEREAL STAFF

LATITUDE	041 31'N	DATE PLANTED	11/11/81	NITROGEN	APPLIED
LONGITUDE	000 52'E	DATE HARVESTED	7/ 6/82	PHOSPHORUS	APPLIED
ELEVATION	+00290 M ABOVE S L	AMOUNT OF MOISTURE	130 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE SERIOUS WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS HAND WEEDING
LOCAL CHECK MANIGERO

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	LODG %	GHTR %	1000 G W	POW M 0-9	SEP T 0-9
27	CARMAN	CANADA	5830	65	103	162	141	15	7	44	1	0
41	JUANILLO 159	MEXICO	5804	73	115	179	141	33	15	52	2	0
37	LECHON"S"	MEXICO	5770	71	110	174	111	0	0	33	2	0
42	IRA-DRIRA	MEXICO	5403	73	104	168	124	59	22	44	1	0
28	OAC TRIWELL	CANADA	5120	67	107	168	133	15	4	41	2	0
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	5084	70	113	170	134	41	0	46	2	1
32	M2A-IA	ECUADOR	5027	72	117	176	106	7	4	44	1	0
43	TOPO 1419	MEXICO	4993	73	115	179	121	26	0	48	2	1
25	JUPPA"S"	MEXICO	4919	69	97	157	108	4	0	35	1	0
26	CHUU"S"	MEXICO	4904	66	110	168	108	0	0	33	2	0
34	VACA"S"	MEXICO	4878	67	107	164	105	7	0	41	2	0
17	RAM"S"	MEXICO	4861	66	106	169	120	4	0	41	1	0
21	CHIVA"S"	MEXICO	4701	70	99	163	104	7	0	36	1	0
3	CABORCA 79	MEXICO	4680	65	106	168	106	4	0	35	1	0
20	TIGRE"S"	MEXICO	4663	71	108	168	115	0	4	36	0	0
40	MULA"S"	MEXICO	4637	73	121	176	121	7	0	53	2	1
48	VEERY"S" (BREAD WHEAT)	MEXICO	4635	80	117	169	93	7	0	36	2	0
24	JUPPA"S"	MEXICO	4587	71	109	170	112	4	0	43	1	0
19	MUSKOX"S"	MEXICO	4577	74	108	158	126	7	0	46	0	0
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4568	69	106	168	113	11	0	40	2	0
23	PUMA"S"	MEXICO	4403	71	106	163	106	0	0	38	1	0
44	DELFIN 205	MEXICO	4378	74	115	176	130	11	4	43	1	1
6	COORONG	AUSTRALIA	4328	64	103	174	104	0	4	36	1	1
33	PTR"R"-CASTOR"S"	MEXICO	4277	67	115	173	104	0	0	39	1	0
13	M2A	ECUADOR	4199	70	110	174	112	18	0	40	0	0
22	BOA"S"	MEXICO	4198	70	108	164	108	11	0	39	2	0
36	LECHON"S"	MEXICO	4041	70	110	169	103	0	0	39	1	1
4	T65	KENYA	4020	68	102	160	114	11	0	36	0	0
15	PFT 7717	BRAZIL	4013	71	109	167	106	7	0	37	1	0
39	IRA-DRIRA	MEXICO	3976	70	111	173	123	18	4	44	2	0
29	ALMA	ETHIOPIA	3968	66	110	170	113	11	0	31	2	0
46	PND"R"-YE 75	MEXICO	3871	73	112	169	104	7	0	38	1	0
30	BVR-ARM	ECUADOR	3870	66	105	169	115	18	4	32	1	0
38	PONY"S"	MEXICO	3858	72	117	173	121	33	0	44	1	0
18	JUANILLO 97	MEXICO	3646	72	107	167	123	4	0	48	1	0
7	SATU	AUSTRALIA	3615	69	114	171	98	0	0	36	0	0
9	TYALLA	AUSTRALIA	3588	68	111	171	103	4	0	36	1	1
11	MIZAR	ITALY	3511	67	112	175	110	22	0	39	2	0
5	T74	KENYA	3482	66	108	165	108	0	0	34	2	0
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3372	79	114	167	101	0	4	35	4	0
12	MANIGERO	SPAIN	3363	73	119	174	115	22	0	43	2	0
8	DUA	AUSTRALIA	3318	68	112	172	95	11	0	39	2	1
1	CANANEA 79	MEXICO	3055	65	112	171	109	7	0	37	1	0
35	YE '5 X IA-BUSH	MEXICO	3038	70	115	169	112	11	0	36	2	0
2	BEAGLE	MEXICO	2951	69	114	169	122	11	0	47	1	1
16	PFT 765	BRAZIL	2805	75	109	170	122	11	4	35	1	0
14	M2A-IA	ECUADOR	2790	69	109	170	100	0	0	31	1	0
50	LOCAL CHECK		2744	66	110	166	109	30	0	37	2	0
10	TR37	YUGOSLAVIA	2669	69	109	161	109	11	0	35	0	1
49	YAVAROS (DURUM)	MEXICO	874	79	119	162	85	0	0	43	2	0
		GRAND MEAN	4145 0	70 0	110 1	169 0	112 5	11 0	1 5	39 4	1 3	0 3
		STANDARD ERROR OF GRAND MEAN					0 4					
		COEFFICIENT OF VARIATION AS PC					4 6					
		LSD VARIETY MEANS 5 PC					8 4					

CORRELATIONS

YIELD	KG/HA										
TEST	WT	-0 14									
FLOW	DAYS	-0 31	0 49								
MAT	DAYS	0 15	0 06	0 61							
PLNT	HT	0 49	-0 08	-0 08	0 17						
LODG	%	0 21	0 07	0 08	0 24	0 54					
GHTR	%	0 37	0 15	-0 12	0 17	0 45	0 58				
1000	G W	0 25	0 32	0 39	0 31	0 57	0 43	0 28			
POW M	0-9	-0 02	0 24	0 37	0 24	-0 06	0 12	0 03	0 07		
SEP T	0-9	-0 07	-0 03	0 24	0 30	0 08	0 06	-0 11	0 28	-0 03	

TABLE 31 EUROPE SPAIN MADRID

EL ENCIN
MA LUISA GRANDA NOGUES

LATITUDE	040 33'N	DATE PLANTED	11/13/81	NITROGEN	APPLIED
LONGITUDE	003 19'W	DATE HARVESTED	7/26/82	PHOSPHORUS	APPLIED
ELEVATION	+00600 M ABOVE S L	AMOUNT OF MOISTURE	367 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK TRITICALE BADIEL

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	LODG %
40	MULA"S"	MEXICO	6118	74	161	223	108	-
19	MUSKOX"S"	MEXICO	5811	76	160	222	111	-
50	LOCAL CHECK		5562	73	173	223	105	-
26	CHUU"S"	MEXICO	5546	72	157	221	91	-
48	VEERY"S" (BREAD WHEAT)	MEXICO	5497	80	160	220	82	-
5	T74	KENYA	5491	68	156	220	95	-
21	CHIVA"S"	MEXICO	5478	69	153	220	93	-
17	RAM"S"	MEXICO	5346	70	156	220	110	-
3	CABORCA 79	MEXICO ***	5238	66	154	219	97	-
23	PUMA"S"	MEXICO	5235	68	153	220	93	-
20	TIGRE"S"	MEXICO	5210	70	155	220	102	-
41	JUANILLO 159	MEXICO	5210	75	154	219	114	58
18	JUANILLO 97	MEXICO	5205	74	154	219	111	40
37	LECHON"S"	MEXICO	5140	70	153	220	90	-
36	LECHON"S"	MEXICO	5080	71	155	220	94	-
13	M2A	ECUADOR	5050	69	153	219	96	-
43	TOPO 1419	MEXICO	5022	72	158	221	104	-
22	BOA"S"	MEXICO	5004	68	156	219	89	-
27	CARMAN	CANADA	4946	72	157	221	116	10
39	IRA-DRIRA	MEXICO	4893	72	153	219	104	60
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4879	72	155	219	120	28
11	MIZAR	ITALY	4849	67	155	220	103	-
38	PONY"S"	MEXICO	4825	70	155	221	102	-
15	PFT 7717	BRAZIL	4768	69	153	219	91	-
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4707	68	154	219	97	-
30	BVR-ARM	ECUADOR	4701	69	154	219	99	-
1	CANANEA 79	MEXICO	4683	67	155	219	101	-
42	IRA-DRIRA	MEXICO	4682	73	153	219	101	50
44	DELFIN 205	MEXICO	4626	76	154	219	116	10
34	VACA"S"	MEXICO	4597	71	154	219	87	-
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4592	79	160	220	83	-
32	M2A-IA	ECUADOR	4590	72	158	220	95	-
14	M2A-IA	ECUADOR	4587	70	155	220	97	-
6	COORONG	AUSTRALIA	4585	66	153	219	92	-
28	OAC TRIWELL	CANADA	4530	71	157	220	110	10
12	MANIGERO	SPAIN	4460	69	158	219	101	-
24	JUPPA"S"	MEXICO	4306	69	153	219	95	-
35	YE 75 X IA-BUSH	MEXICO	4305	71	154	220	99	-
9	TYALLA	AUSTRALIA	4293	68	154	220	90	-
8	DUA	AUSTRALIA	4281	67	153	219	87	-
29	ALMA	ETHIOPIA	4259	66	156	219	92	25
25	JUPPA"S"	MEXICO	4244	70	153	219	88	-
49	YAVAROS (DURUM)	MEXICO	4217	79	165	220	80	-
7	SATU	AUSTRALIA	4193	68	154	220	86	-
46	PND"R"-YE 75	MEXICO	4125	72	156	220	94	-
4	T65	KENYA	4029	67	153	220	96	-
16	PFT 765	BRAZIL	4015	74	157	221	111	5
2	BEAGLE	MEXICO	3930	70	154	219	117	53
33	PTR'R"-CASTOR"S"	MEXICO	3660	68	156	220	89	-
10	TR37	YUGOSLAVIA	3572	69	158	219	97	-
		GRAND MEAN	4763 4	70 7	155 8	219 8	98 5	31 3
		STANDARD ERROR OF GRAND MEAN	36 1	0 1			0 4	
		COEFFICIENT OF VARIATION AS PC	9 3	1 1			4 4	
		LSD VARIETY MEANS 5 PC	716 2	1 3			6 9	

CORRELATIONS

YIELD KG/HA					
TEST WT	0 25				
FLOW DAYS	0 23	0 51			
MAT DAYS	0 46	0 34	0 67		
PLNT HT	0 20	0 14	0 02	0 17	
LODG %	0 23	-0 01	-0 36	-0 58	-0 1[illegible]

TABLE 32 EUROPI SWEDEN

SVALOF AB
CEREAL STAFF

LATITUDE	055 35'N	DATE PLANTED	4/ 6/82	NITROGEN	APPLIED
LONGITUDE	013 06'E	DATE HARVESTED	9/ 2/82	PHOSPHORUS	--
ELEVATION	+00050 M ABOVE S L	AMOUNT OF MOISTURE	236 MM	POTASSIUM	--

EARLY SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS
LOCAL CHECK DRABANT (B W)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W
50	LOCAL CHECK		3825	76	80	100	41
41	JUANILLO 159	MEXICO	3425	70	79	103	55
28	DAC TRIWELL	CANADA	3400	65	79	107	52
27	CARMAN	CANADA ***	3094	66	80	108	50
26	CHUU"S"	MEXICO	2997	68	77	87	42
2	BEAGLE	MEXICO	2842	66	77	102	50
18	JUANILLO 97	MEXICO	2778	69	79	103	54
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	2747	66	77	108	49
22	BOA"S"	MEXICO	2730	66	74	82	42
17	RAM"S"	MEXICO	2653	64	77	90	49
40	MULA"S"	MEXICO	2486	69	80	95	51
43	TOPO 1419	MEXICO	2286	66	78	88	45
3	CABORCA 79	MEXICO	2286	65	74	78	39
34	VACA"S"	MEXICO	2261	63	72	83	48
20	TIGRE"S"	MEXICO	2028	66	75	85	47
11	MIZAR	ITALY	2014	64	76	93	43
23	PUMA"S"	MEXICO	2011	67	73	78	44
12	MANIGERO	SPAIN	1914	67	78	63	41
19	MUSKOX"S"	MEXICO	1914	67	79	108	52
32	M2A-IA	ECUADOR	1894	67	78	82	49
21	CHIVA"S"	MEXICO	1886	64	74	75	40
13	M2A	ECUADOR	1878	65	72	77	40
6	COORONG	AUSTRALIA	1842	63	73	75	40
7	GATU	AUSTRALIA	1792	64	75	77	46
9	TYALLA	AUSTRALIA	1792	66	77	77	48
30	BVR-ARM	ECUADOR	1772	65	75	88	40
5	T74	KENYA	1705	66	75	90	51
1	CANANEA 79	MEXICO	1675	64	76	93	42
44	DELFIN 205	MEXICO	1664	70	74	97	47
29	ALMA	ETHIOPIA	1661	62	74	83	42
10	TR37	YUGOSLAVIA	1611	68	78	80	44
48	VEERY"S" (BREAD WHEAT)	MEXICO	1605	78	79	67	40
38	PONY"S"	MEXICO	1603	64	77	88	41
4	T65	KENYA	1586	62	74	83	40
15	PFT 7717	BRAZIL	1519	66	73	78	35
45	M2A(2) STR"S" X IA-ABN	MEXICO	1511	64	77	90	44
42	IRA-DRIRA	MEXICO	1417	64	74	85	44
46	PND'R' YE 75	MEXICO	1414	64	76	83	42
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	1378	75	78	77	42
39	IRA DRIRA	MEXICO	1375	64	74	90	41
36	LECHON"S	MEXICO	1367	62	75	82	47
25	JUPPA "S"	MEXICO	1333	65	74	82	47
8	DUA	AUSTRALIA	1286	63	75	72	49
14	M2A-IA	ECUADOR	1261	66	75	80	43
37	LECHON'S'	MEXICO	1261	63	74	78	45
16	PFT 765	BRAZIL	1211	68	75	78	35
35	YE 75 X IA-BUSH	MEXICO	1044	66	76	78	44
24	JUPPA"S'	MEXICO	1033	64	73	82	42
33	PTR"R" CASTOR"S"	MEXICO	783	61	78	82	43
49	YAVAROS (DURUM)	MEXICO	386	-	81	60	46
		GRAND MEAN	1904 7	66 0	76 0	85 8	44 4
		STANDARD ERROR OF GRAND MEAN	30 7			0 3	
		COEFFICIENT OF VARIATION AS PC	19 7			4 5	
		LSD VARIETY MEANS 5 PC	608 7			6 2	

CORRELATIONS

YIELD KG/HA					
TEST WT	0 33				
FLOW DAYS	0 34	0 51			
PLNT HT	0 68	0 10	0 37		
1000 G W	0 39	0 03	0 45	0 55	

TABLE 33 EUROPE SWITZERLAND VAUD

M INGOLD

LATITUDE	046 32'N	DATE PLANTED	3/ 9/82	NITROGEN	APPLIED
LONGITUDE	006 40'E	DATE HARVESTED	8/13/82	PHOSPHORUS	APPLIED
ELEVATION	0430 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION POOR
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS
LOCAL CHECK SPRING WHEAT TANO

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS
22	BOA"S"	MEXICO	4284	66	91
19	MUSKOX"S"	MEXICO	4132	67	95
40	MULA"S"	MEXICO	4094	70	96
50	LOCAL CHECK		4076	81	98
3	CABORCA 79	MEXICO	3923	69	90
27	CARMAN	CANADA	3920	67	95
28	OAC TRIWELL	CANADA	3916	66	94
48	VEERY"S" (BREAD WHEAT)	MEXICO	3842	80	95
13	M2A	ECUADOR	3767	71	89
17	RAM"S"	MEXICO	3761	68	93
2	BEAGLE	MEXICO	3719	68	93
4	T65	KENYA	3614	70	89
37	LECHON"S"	MEXICO	3556	68	93
32	M2A-IA	ECUADOR	3510	70	94
6	COORONG	AUSTRALIA	3473	68	93
15	PFT 7717	BRAZIL	3430	70	90
20	TIGRE"S"	MEXICO	3400	71	91
18	JUANILLO 97	MEXICO	3349	68	94
36	LECHON"S"	MEXICO	3320	71	93
23	PUMA"S"	MEXICO ***	3273	70	90
30	BVR-ARM	ECUADOR	3253	68	92
25	JUPPA"S"	MEXICO	3250	68	90
29	ALMA	ETHIOPIA	3239	68	91
5	T74	KENYA	3213	69	93
41	JUANILLO 159	MEXICO	3186	66	94
14	M2A-IA	ECUADOR	3184	70	92
10	TR37	YUGOSLAVIA	3180	71	94
31	BGL/ARG-MEX MUTI X BGL"S"	ECUADOR	3175	69	93
12	MANIGERO	SPAIN	3131	70	94
38	PONY"S"	MEXICO	3101	68	92
26	CHUU"S"	MEXICO	3070	69	94
7	GATU	AUSTRALIA	3053	68	92
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2995	66	93
16	PFT 765	BRAZIL	2970	74	93
9	TYALLA	AUSTRALIA	2886	67	93
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2781	76	95
24	JUPPA"S"	MEXICO	2778	66	89
8	DUA	AUSTRALIA	2773	68	92
43	TOPO 1419	MEXICO	2739	64	94
11	MIZAR	ITALY	2735	68	93
44	DELFIN 205	MEXICO	2679	70	93
46	PND"R"-YE 75	MEXICO	2668	68	92
39	IRA-DRIRA	MEXICO	2644	68	87
42	IRA-DRIRA	MEXICO	2619	69	87
1	CANANEA 79	MEXICO	2619	67	93
35	YE 75 X IA-BUSH	MEXICO	2588	68	91
34	VACA"S"	MEXICO	2482	66	90
21	CHIVA"S"	MEXICO	2416	66	91
33	PTR"R"-CASTOR"S"	MEXICO	2399	68	94
49	YAVAROS (DURUM)	MEXICO	1936	74	94

GRAND MEAN	3201 9	69 2	92 4
STANDARD ERROR OF GRAND MEAN	41 1		
COEFFICIENT OF VARIATION AS PC	15 7		
LSD VARIETY MEANS 5 PC	816 0		

CORRELATIONS

	YIELD KG/HA	
TEST WT	0 17	
FLOW DAYS	0 26	0 36

TABLE 34 EUROPE W GERMANY BADEN-WUTTEMBERG

HOHENHEIM
G OETTLER

LATITUDE	48 43'N	DATE PLANTED	3/31/82	NITROGEN	APPLIED
LONGITUDE	9 13'E	DATE HARVESTED	8/18/82	PHOSPHORUS	APPLIED
ELEVATION	407 M ABOVE S L	AMOUNT OF MOISTURE	343 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS LOCAL CHECK T AESTIVUM SCHIROKKO
CONSIDERABLE PREHARVEST SPROUTING

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W
50	LOCAL CHECK		5938	79	83	95	44
40	MULA'S'	MEXICO	5688	67	80	107	49
26	CHUU"S	MEXICO ***	5070	68	75	87	40
27	CARMAN	CANADA	5057	64	79	112	45
41	JUANILLO 159	MEXICO	5047	67	79	108	49
17	RAM'S'	MEXICO	4962	63	76	98	46
43	TOPO 1419	MEXICO	4902	63	76	97	46
28	OAC TRIWELL	CANADA	4780	63	78	108	47
2	BEAGLE	MEXICO	4676	63	76	107	46
45	M2A(2) STR"S" X IA-ABN	MEXICO	4658	63	75	92	42
19	MUSKOX"S'	MEXICO	4628	66	79	117	48
18	JUANILLO 97	MEXICO	4587	67	78	105	49
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4475	63	75	102	45
12	MANIGERO	SPAIN	4378	65	77	90	41
37	LECHON"S"	MEXICO	4331	64	73	82	41
32	M2A-IA	ECUADOR	4201	64	76	85	42
5	T74	KENYA	42 1	64	74	88	44
22	BOA"S"	MEXICO	4268	61	73	85	41
30	BVR-ARM	ECUADOR	4266	61	74	85	38
11	MIZAR	ITALY	4254	62	74	93	41
3	CABORCA 79	MEXICO	4235	62	72	78	37
48	VEERY"S" (BREAD WHEAT)	MEXICO	4206	76	79	78	39
44	DELFIN 205	MEXICO	4159	69	73	97	44
36	LECHON"S"	MEXICO	4117	64	73	83	40
20	TIGRE"S'	MEXICO	4116	65	74	85	40
38	PONY"S'	MEXICO	4093	62	75	90	40
33	PTR'R"-CASTOR"S"	MEXICO	4071	61	77	88	47
21	CHIVA S'	MEXICO	4052	62	73	77	39
7	SATU	AUSTRALIA	4017	64	74	78	43
6	COORONG	AUSTRALIA	4006	61	72	80	40
1	CANANEA 79	MEXICO	3997	61	72	92	39
10	TR37	YUGOSLAVIA	3988	63	76	87	42
13	M2A	ECUADOR	3856	62	71	83	38
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3831	75	78	78	42
9	TYALLA	AUSTRALIA	3733	62	75	85	39
15	PFT 7717	BRAZIL	3733	61	72	83	37
39	IRA-DRIRA	MEXICO	3546	61	71	90	42
42	IRA-DRIRA	MEXICO	3454	61	71	90	43
23	PUMA"S"	MEXICO	3445	62	72	82	41
25	JUPPA'S"	MEXICO	3389	62	72	80	39
34	VACA"S"	MEXICO	3364	61	72	80	42
4	T65	KENYA	3345	61	71	90	40
35	YE 75 X IA-BUSH	MEXICO	3344	61	73	87	37
8	DUA	AUSTRALIA	3274	60	73	77	43
14	M2A-IA	ECUADOR	3238	64	72	80	36
29	ALMA	ETHIOPIA	3094	60	72	92	40
16	PFT 765	BRAZIL	2960	65	72	85	35
24	JUPPA"S'	MEXICO	2889	60	72	82	37
46	PND"R"-YE 75	MEXICO	2802	61	74	82	36
49	YAVAROS (DURUM)	MEXICO	1758	66	82	65	37
	GRAND MEAN		4053 4	63 9	74 8	88 9	41 6
	STANDARD ERROR OF GRAND MEAN		27 2	0 1		0 3	0 1
	COEFFICIENT OF VARIATION AS PC		8 2	1 4		3 9	3 1
	LSD VARIETY MEANS 5 PC		538 8	1 4		5 6	2 1

CORRELATIONS

YIELD KG/HA				
TEST WT	0 42			
FLOW DAYS	0 49	0 69		
PLNT HT	0 66	0 11	0 40	
1000 G W	0 67	0 23	0 54	0 74

TABLE 35 MIDDLE EAST CYPRUS LAXIA

AGRIC RES INST
A HADJICHRISTODOULOU

LATITUDE	35 04'N	DATE PLANTED	12/14/81	NITROGEN	APPLIED
LONGITUDE	33 20'E	DATE HARVESTED	6/25/82	PHOSPHORUS	APPLIED
ELEVATION	150 M ABOVE S L	AMOUNT OF MOISTURE	210 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE HAND WEEDING
WEATHER EXTREMELY DRY

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	PLNT HT
40	MUI A"S"	MEXICO	5243	95	113
20	TIGRE"S"	MEXICO	4997	92	111
41	JUANILLO 159	MEXICO	4943	84	124
18	JUANILLO 97	MEXICO	4935	84	128
22	BOA"S"	MEXICO	4831	92	100
26	CHUU"S"	MEXICO	4671	95	95
19	MUSKOX"S"	MEXICO	4481	94	124
39	IRA-DRIRA	MEXICO	4403	84	113
2	BEAGLE	MEXICO	4261	91	118
6	COORONG	AUSTRALIA	4247	92	93
23	PUMA"S"	MEXICO	4214	91	101
3	CABORCA 79	MEXICO	4193	92	98
21	CHIVA"S"	MEXICO	4193	92	93
43	TOPO 1419	MEXICO	4050	94	102
17	RAM"S"	MEXICO	4040	87	105
32	M2A-IA	ECUADOR	4020	95	102
1	CANANEA 79	MEXICO	4000	92	98
9	TYALLA	AUSTRALIA	3950	94	95
42	IRA-DRIRA	MEXICO	3933	84	110
37	LECHON"S"	MEXICO	3916	92	95
48	VEERY"S" (BREAD WHEAT)	MEXICO	3890	97	86
16	PFT 765	BRAZIL	3866	93	78
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3850	94	89
50	LOCAL CHECK		3850	93	93
5	T74	KENYA ***	3766	93	105
14	M2A-IA	ECUADOR	3761	94	93
15	PFT 7717	BRAZIL	3734	88	93
49	YAVAROS (DURUM)	MEXICO	3686	96	80
38	PONY"S"	MEXICO	3648	93	109
30	BVR-ARM	ECUADOR	3641	92	95
34	VACA"S"	MEXICO	3640	88	92
8	DUA	AUSTRALIA	3637	91	93
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3590	94	99
4	T65	KENYA	3566	94	98
44	DELFIN 205	MEXICO	3550	91	119
29	ALMA	ETHIOPIA	3548	95	99
25	JUPPA"S"	MEXICO	3504	89	101
13	M2A	ECUADOR	3500	84	94
33	PTR"R"-CASTOR"S"	MEXICO	3458	92	95
7	SATU	AUSTRALIA	3450	93	84
24	JUPPA"S"	MEXICO	3364	92	100
28	OAC TRIWELL	CANADA	3344	93	118
27	CARMAN	CANADA	3281	94	119
46	PND"R"-YE 75	MEXICO	3164	94	94
36	LECHON"S"	MEXICO	3140	91	88
12	MANIGERO	SPAIN	3076	96	100
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	3074	87	115
35	YE 75 X IA-BUSH	MEXICO	3046	94	96
11	MIZAR	ITALY	3043	88	94
10	TR37	YUGOSLAVIA	2944	96	93
		GRAND MEAN	3842 6	91 4	100 3
		STANDARD ERROR OF GRAND MEAN	58 4		0 9
		COEFFICIENT OF VARIATION AS PC	15 2		8 8
		LSD VARIETY MEANS 5 PC	1173 8		17 7

CORRELATIONS

YIELD KG/HA		
FLOW DAYS	-0 17	
PLNT HT	0 37	-0 37

TABLE 36 MIDDLE EAST SYRIA ALEPPO

ICARDA
J P SIRIVASTAVA

LATITUDE	36 09'N	DATE PLANTED	11/24/81	NITROGEN	APPLIED
LONGITUDE	36 04'E	DATE HARVESTED	6/10/82	PHOSPHORUS	APPLIED
ELEVATION	300 M ABOVE S L	AMOUNT OF MOISTURE	338 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT SLIGHT INSECT DAMAGE SLIGHT WEED PROBLEM
SLIGHT BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK BEAGLE

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS
25	JUPPA"S"	MEXICO	5355	137	178
26	CHUU"S"	MEXICO	5099	140	182
24	JUPPA"S"	MEXICO	5000	137	178
40	MULA"S"	MEXICO	4950	141	182
1	CANANEA 79	MEXICO	4755	139	177
22	BOA"S"	MEXICO	4733	138	175
43	TOPO 1419	MEXICO	4722	139	182
2	BEAGLE	MEXICO	4666	139	182
30	BVR-ARM	ECUADOR	4661	138	178
41	JUANILLO 159	MEXICO	4638	137	175
48	VEERY"S" (BREAD WHEAT)	MEXICO	4627	142	175
19	MUSKOX"S"	MEXICO	4516	141	182
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4516	138	178
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4500	141	178
27	CARMAN	CANADA	4488	140	179
23	PUMA"S"	MEXICO	4483	137	178
29	ALMA	ETHIOPIA	4472	139	178
50	LOCAL CHECK		4450	139	182
18	JUANILLO 97	MEXICO	4405	138	178
28	OAC TRIWELL	CANADA	4383	139	178
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4361	138	175
46	PND"R"-YE 75	MEXICO	4338	139	175
37	LECHON"S"	MEXICO	4322	138	175
21	CHIVA"S"	MEXICO	4305	136	173
5	T74	KENYA	4283	139	178
9	TYALLA	AUSTRALIA	4205	138	177
3	CABORCA 79	MEXICO	4166	138	177
44	DELFIN 205	MEXICO ***	4072	138	182
38	PONY"S"	MEXICO	4061	138	174
6	COORONG	AUSTRALIA	4044	137	175
11	MIZAR	ITALY	4016	139	175
8	DUA	AUSTRALIA	3988	138	177
4	T65	KENYA	3983	138	174
20	TIGRE"S"	MEXICO	3961	139	178
42	IRA-DRIRA	MEXICO	3933	139	176
13	M2A	ECUADOR	3855	137	178
16	PFT 765	BRAZIL	3794	139	178
17	RAM"S"	MEXICO	3772	139	178
15	PFT 7717	BRAZIL	3755	137	175
32	M2A-IA	ECUADOR	3750	140	178
35	YE 75 X IA-BUSH	MEXICO	3739	138	175
12	MANIGERO	SPAIN	3716	141	178
14	M2A-IA	ECUADOR	3644	138	174
7	SATU	AUSTRALIA	3600	139	182
49	YAVAROS (DURUM)	MEXICO	3533	147	182
33	PTR"R"-CASTOR"S"	MEXICO	3516	140	178
10	TR37	YUGOSLAVIA	3489	140	178
36	LLCHON"S"	MEXICO	3466	138	178
34	VACA"S"	MEXICO	3433	137	177
39	IRA-DRIRA	MEXICO	3311	138	178

GRAND MEAN	4196 6	138 6	177 7
STANDARD ERROR OF GRAND MEAN	50 0		
COEFFICIENT OF VARIATION AS PC	14 6		
LSD VARIETY MEANS 5 PC	993 1		

CORRELATIONS

YIELD KG/HA		
FLOW DAYS	-0 09	
MAT DAYS	0 17	0 46

TABLE 37 MIDDLE EAST TURKEY IZMIR

I A G P B
EGE UNIVERSITY

LATITUDE	038 27'N	DATE PLANTED	1/18/82	NITROGEN	APPLIED
LONGITUDE	027 14'E	DATE HARVESTED	6/28/82	PHOSPHORUS	APPLIED
ELEVATION	0010 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	APPLIED

LATE SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS
WEATHER NORMAL LOCAL CHECK MAYA II-ARM"S"

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W
32	M2A-IA	ECUADOR	5385	74	99	121	39
5	T74	KENYA	5010	71	99	119	40
13	M2A	ECUADOR	4896	74	95	112	35
40	MULA"S"	MEXICO	4885	72	106	122	42
11	MIZAR	ITALY	4865	71	98	107	40
22	BOA"S"	MEXICO	4729	74	97	118	37
7	SATU	AUSTRALIA	4688	71	99	118	37
14	M2A-IA	ECUADOR	4677	72	98	109	35
42	IRA-DRIRA	MEXICO	4594	73	94	131	39
30	BVR-ARM	ECUADOR	4583	73	97	126	37
48	VEERY"S" (BREAD WHEAT)	MEXICO	4510	83	102	95	34
1	CANANEA 79	MEXICO	4448	70	99	111	40
50	LOCAL CHECK		4448	74	96	109	39
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4427	74	98	115	37
26	CHUU"S"	MEXICO	4344	72	101	104	37
38	PONY"S"	MEXICO	4333	74	99	115	40
12	MANIGERO	SPAIN	4313	70	101	115	36
21	CHIVA"S"	MEXICO	4302	75	95	114	34
36	LECHON"S"	MEXICO	4302	75	97	114	39
33	PTR"R"-CASTOR"S"	MEXICO	4292	73	99	108	40
6	COORONG	AUSTRALIA	4260	69	95	111	35
28	OAC TRIWELL	CANADA	4260	70	102	115	39
43	TOPO 1419	MEXICO	4229	74	100	111	43
9	TYALLA	AUSTRALIA	4229	73	97	117	39
37	LECHON"S"	MEXICO	4219	76	97	108	37
41	JUANILLO 159	MEXICO	4208	73	99	126	42
18	JUANILLO 97	MEXICO	4156	73	100	123	43
17	RAM"S"	MEXICO	4135	68	100	131	41
8	DUA	AUSTRALIA	4073	71	95	105	41
19	MUSKOX"S"	MEXICO	4073	76	105	122	41
25	JUPPA"S"	MEXICO	4073	75	95	111	38
23	PUMA"S"	MEXICO	4042	73	95	116	38
16	PFT 765	BRAZIL ***	4000	78	97	126	37
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4000	82	104	99	36
15	PFT 7717	BRAZIL	3958	75	95	111	37
39	IRA-DRIRA	MEXICO	3865	73	94	120	40
29	ALMA	ETHIOPIA	3844	72	96	110	38
3	CABORCA 79	MEXICO	3792	73	96	109	36
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	3771	71	99	119	41
44	DELFIN 205	MEXICO	3771	74	102	114	39
2	BEAGLE	MEXICO	3740	70	99	118	42
24	JUPPA"S"	MEXICO	3708	75	95	113	38
34	VACA"S"	MEXICO	3656	72	94	112	39
4	T65	KENYA	3646	74	97	109	38
20	TIGRE"S"	MEXICO	3583	75	97	102	37
46	PND"R -YE 75	MEXICO	3531	76	98	122	38
35	YE 75 X IA-BUSH	MEXICO	3365	75	98	127	38
27	CARMAN	CANADA	3213	71	103	118	38
10	TR37	YUGOSLAVIA	2896	67	104	113	34
49	YAVAROS (DURUM)	MEXICO	1854	82	-	107	45
		GRAND MEAN	4123 6	73 4	98 3	114 6	38 5
		STANDARD ERROR OF GRAND MEAN	55 6	0 1		1 0	0 2
		COEFFICIENT OF VARIATION AS PC	16 5	1 3		11 1	5 6
		LSD VARIETY MEANS 5 PC	1103 6	1 6		20 6	3 5

CORRELATIONS

YIELD KG/HA					
TEST	WT	-0 19			
FLOW	DAYS	-0 03	0.00		
PLNT	HT	0 11	-0 33	0 00	
1000	G W	-0 17	-0 06	0 15	0 31

TABLE 38 NORTH AMERICA CANADA ALBERTA

OLDS
J HELM

LATITUDE	51 47'N	DATE PLANTED	5/11/82	NITROGEN	APPLIED
LONGITUDE	114 W	DATE HARVESTED	--/--/--	PHOSPHORUS	APPLIED
ELEVATION	914 M ABOVE S L	AMOUNT OF MOISTURE	399 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
WEATHER NORMAL LOCAL CHECK GLENLEA(WHEAT)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W
6	COORONG	AUSTRALIA	6995	56	72	141	96	36
41	JUANILLO 159	MEXICO	6758	57	75	145	111	39
43	TOPO 1419	MEXICO	6607	56	72	143	96	38
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	6601	59	72	140	101	37
10	TR37	YUGOSLAVIA	6373	59	73	142	93	32
8	DUA	AUSTRALIA	6358	58	73	142	91	35
4	T65	KENYA	6336	60	71	141	94	35
9	TYALLA	AUSTRALIA	6303	57	74	142	98	34
7	GATU	AUSTRALIA	6236	60	73	144	102	34
12	MANIGERO	SPAIN	6225	57	74	140	97	32
26	CHUU"S"	MEXICO	6205	60	73	140	95	37
50	LOCAL CHECK		6182	67	74	144	98	39
45	M2A(2)-STR"S" X IA-ABN	MEXICO	6103	59	72	141	98	33
23	PUMA"S"	MEXICO	6090	60	72	143	99	33
48	VEERY"S" (BREAD WHEAT)	MEXICO	6047	69	72	142	84	33
38	PONY"S"	MEXICO	6033	58	73	142	99	38
27	CARMAN	CANADA	5979	53	74	144	103	33
25	JUPPA"S"	MEXICO	5958	59	71	143	92	37
18	JUANILLO 97	MEXICO	5857	57	74	144	109	39
39	IRA-DRIRA	MEXICO	5786	60	74	144	110	39
44	DELFIN 205	MEXICO	5758	63	73	140	94	41
33	PTR"R"-CASTOR"S"	MEXICO	5751	58	71	144	94	36
3	CABORCA 79	MEXICO	5749	60	71	142	92	35
46	PND"R"-YE 75	MEXICO	5748	61	72	141	98	35
14	M2A-IA	ECUADOR	5727	57	72	141	90	34
15	PFT 7717	BRAZIL	5716	60	72	144	97	34
20	TIGRE"S"	MEXICO	5700	61	72	142	87	36
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	5665	69	71	141	82	36
28	OAC TRIWELL	CANADA	5641	55	73	143	98	34
32	M2A-IA	ECUADOR	5588	56	73	145	104	30
36	LECHON"S"	MEXICO	5579	59	74	142	94	33
35	YE 75 X IA-BUSH	MEXICO	5519	61	73	143	106	35
2	BEAGLE	MEXICO	5475	57	74	143	99	39
34	VACA"S"	MEXICO	5382	59	71	142	90	38
11	MIZAR	ITALY	5333	57	73	144	94	35
37	LECHON"S"	MEXICO	5314	58	72	142	93	33
13	M2A	ECUADOR	5256	58	71	143	99	38
5	T74	KENYA	5253	57	73	145	105	34
29	ALMA	ETHIOPIA	5241	58	73	143	93	31
16	PFT 765	BRAZIL	5167	62	72	141	97	33
17	RAM"S"	MEXICO	5151	55	72	145	108	38
30	BVR-ARM	ECUADOR ***	5097	55	74	145	107	34
22	BOA"S"	MEXICO	5063	60	73	144	99	36
24	JUPPA"S"	MEXICO	5045	58	73	141	95	35
40	MULA"S"	MEXICO	5026	56	73	142	100	33
1	CANANEA 79	MEXICO	5023	57	72	144	94	32
19	MUSKOX"S"	MEXICO	4872	58	74	148	105	37
49	YAVAROS (DURUM)	MEXICO	4684	67	74	146	92	42
21	CHIVA"S"	MEXICO	4613	59	71	142	91	34
42	IRA-DRIRA	MEXICO	4534	59	73	144	110	36
		GRAND MEAN	5694 0	59 0	72 6	142 7	97 4	35 2
		STANDARD ERROR OF GRAND MEAN	76 4				0 9	
		COEFFICIENT OF VARIATION AS PC	16 4				11 9	
		LSD VARIETY MEANS 5 PC	1515 3				18 9	

CORRELATIONS

YIELD	KG/HA					
TEST	WT	-0 02				
FLOW	DAYS	0 03	-0 19			
MAT	DAYS	-0 39	-0 17	0 40		
PLNT	HT	-0 06	-0 48	0 56	0 51	
1000	G W	0 02	0 25	0 14	0 16	0 16

TABLE 39 NORTH AMERICA CANADA MANITOBA

WINNIPEG
UNIV OF MANITOBA

LATITUDE 049 38'N	DATE PLANTED	5/12/82	NITROGEN	--
LONGITUDE 097 07'W	DATE HARVESTED	9/ 9/82	PHOSPHORUS	--
ELEVATION 0235 M ABOVE S L	AMOUNT OF MOISTURE	202 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK GLENLEA

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	MAT DAYS	PLNT HT	LODG %	1000 G W
18	JUANILLO 97	MEXICO	6757	69	106	100	10	51
41	JUANILLO 159	MEXICO	6563	70	107	105	10	50
50	LOCAL CHECK	***	6112	79	101	100	30	49
43	TOPO 1419	MEXICO	6021	66	103	88	0	44
19	MUSKOX"S"	MEXICO	6014	70	106	106	20	52
17	RAM'S"	MEXICO	5869	63	103	92	0	47
7	SATU	AUSTRALIA	5855	66	101	74	0	41
26	CHUU"S"	MEXICO	5841	67	98	80	10	36
27	CARMAN	CANADA	5820	65	106	106	30	48
42	IRA-DRIRA	MEXICO	5820	67	102	103	20	47
2	BEAGLE	MEXICO	5757	65	104	102	40	44
28	OAC TRIWELL	CANADA	5757	64	105	106	40	46
21	CHIVA"S"	MEXICO	5716	67	101	84	0	40
36	LECHON"S"	MEXICO	5702	70	101	80	0	35
6	COORONG	AUSTRALIA	5646	63	100	78	20	44
40	MULA"S"	MEXICO	5584	68	105	94	0	48
1	CANANEA 79	MEXICO	5563	65	98	88	0	42
45	M2A(2)-STR"S" X IA-ABN	MEXICO	5549	66	103	90	0	43
30	BVR-ARM	ECUADOR	5459	66	100	88	20	42
38	PONY"S"	MEXICO	5424	64	100	92	30	42
22	BOA"S"	MEXICO	5403	66	98	82	0	40
37	LECHON"S"	MEXICO	5403	70	100	78	0	38
32	M2A-IA	ECUADOR	5403	68	102	82	0	41
48	VEERY"S" (BREAD WHEAT)	MEXICO	5396	79	99	71	0	37
23	PUMA"S"	MEXICO	5292	67	100	86	10	43
31	BGL/ARB-MEX MUTI X BGL"S"	ECUADOR	5285	67	102	100	40	44
25	JUPPA"S"	MEXICO	5257	69	100	85	0	38
11	MIZAR	ITALY	5250	64	101	86	0	43
13	M2A	ECUADOR	5167	65	100	84	10	41
5	T74	KENYA	5091	63	101	86	5	43
3	CABORCA 79	MEXICO	5091	66	98	84	10	40
20	TIGRE"S"	MEXICO	5056	68	100	86	10	40
29	ALMA	ETHIOPIA	5042	67	98	90	20	39
15	PFT 7717	BRAZIL	5028	65	98	80	10	38
34	VACA"S"	MEXICO	5000	67	97	78	10	44
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4959	78	97	76	20	40
44	DELFIN 205	MEXICO	4855	69	103	96	0	41
4	T65	KENYA	4820	65	98	84	10	42
35	YE 75 X IA-BUSH	MEXICO	4792	70	100	80	0	39
14	M2A-IA	ECUADOR	4660	66	98	77	0	36
33	PIR"R"-CASTOR"S"	MEXICO	4660	68	103	84	0	48
39	IRA-DRIRA	MEXICO	4625	67	101	96	20	46
12	MANIGERO	SPAIN	4618	65	102	90	0	40
10	TR37	YUGOSLAVIA	4598	67	103	86	0	43
16	PFT 765	BRAZIL	4542	72	100	86	10	49
9	TYALLA	AUSTRALIA	4459	65	103	76	0	42
46	PND'R"-YE 75	MEXICO	4361	68	105	88	5	44
8	DUA	AUSTRALIA	4348	66	101	74	0	42
24	JUPPA"S"	MEXICO	3882	68	100	80	0	39
49	YAVAROS (DURUM)	MEXICO	2584	72	99	64	5	38
		GRAND MEAN	5235 1	67 4	101 1	87 0	9 5	42 3
		STANDARD ERROR OF GRAND MEAN	29 6					
		COEFFICIENT OF VARIATION AS PC	6 9					
		LSD VARIETY MEANS 5 PC	587 7					

CORRELATIONS

YIELD KG/HA						
TEST	WT	-0 06				
MAT	DAYS	0 38	-0 11			
PLNT	HT	0 57	-0 13	0 67		
LODG	%	0 27	0 00	0 16	0 59	
1000	G W	0 40	-0 01	0 68	0 71	0 36

TABLE 40 NORTH AMERICA CANADA P E I

CHARLOTTETOWN
H Q NASS
LATITUDE 046 17'N DATE PLANTED 5/ 7/82 NITROGEN APPLIED
LONGITUDE 063 05'W DATE HARVESTED 9/10/82 PHOSPHORUS APPLIED
ELEVATION 0015 M ABOVE S L AMOUNT OF MOISTURE 300 MM POTASSIUM APPLIED

EARLY SOWING DATE SOIL MOIST AT SOWING GERMINATION POOR
LOCAL CHECK NAME NOT REPORTED NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK VERNON

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W
41	JUANILLO 159	MEXICO	2870	58	66	128	96	43
50	LOCAL CHECK		2753	72	67	117	85	34
22	BOA S	MEXICO	2665	53	62	113	76	29
19	MUSKOX'S"	MEXICO	2558	57	67	128	98	38
10	TR37	YUGOSLAVIA	2548	56	66	116	80	29
26	CHUU'S"	MEXICO	2528	54	66	113	74	26
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2492	54	66	117	77	28
12	MANIGERO	SPAIN	2492	56	66	117	76	30
18	JUANILLO 97	MEXICO	2444	58	66	127	87	43
27	CARMAN	CANADA	2427	51	67	123	88	35
39	IRA-DRIRA	MEXICO	2419	56	62	116	80	29
40	MULA"S"	MEXICO	2401	55	68	124	77	37
28	OAC TRIWELL	CANADA	2335	54	67	124	77	36
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	2332	55	66	120	88	34
42	IRA-DRIRA	MEXICO	2325	55	61	114	82	29
5	T74	KENYA	2325	52	65	112	78	32
32	M2A-IA	ECUADOR	2299	55	66	116	70	27
43	TOPO 1419	MEXICO	2187	54	66	118	75	32
35	YE 75 X IA-BUSH	MEXICO	2156	55	62	114	70	24
14	M2A-IA	ECUADOR	2141	55	63	113	68	25
44	DELFIN 205	MEXICO	2136	58	63	118	80	33
36	LECHON"S"	MEXICO	2135	55	64	118	69	27
23	PUMA"S"	MEXICO	2129	54	62	121	73	27
7	SATU	AUSTRALIA	2062	53	63	115	67	30
9	TYALLA	AUSTRALIA	2036	52	65	117	72	28
38	PONY"S"	MEXICO	2030	53	65	113	77	28
3	CABORCA 79	MEXICO	2016	54	63	114	67	24
6	COORONG	AUSTRALIA	2012	52	63	119	65	26
17	RAM S"	MEXICO	1995	48	66	119	78	32
29	ALMA	ETHIOPIA ***	1892	51	63	119	75	28
33	PTR R CASTOR"S"	MEXICO	1886	55	66	121	71	35
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	1884	72	65	111	60	31
37	LECHON"S"	MEXICO	1881	56	63	121	66	26
30	BVR-ARM	ECUADOR	1861	55	65	118	68	30
2	BEAGLE	MEXICO	1835	52	65	124	79	34
4	T65	KENYA	1833	51	63	112	71	27
8	DUA	AUSTRALIA	1829	49	63	113	66	27
25	JUPPA'S'	MEXICO	1819	55	63	114	72	26
24	JUPPA'S"	MEXICO	1766	53	63	115	75	24
13	M2A	ECUADOR	1738	52	62	114	69	24
20	TIGRE S"	MEXICO	1727	53	64	116	70	25
15	PFT 7717	BRAZIL	1679	51	62	117	66	24
21	CHIVA"S"	MEXICO	1678	49	63	113	67	24
11	MIZAR	ITALY	1636	50	64	117	74	29
48	VEERY'S" (BREAD WHEAT)	MEXICO	1606	73	68	112	57	29
46	PND"R'-YE 75	MEXICO	1404	53	63	121	66	25
34	VACA"S"	MEXICO	1312	48	62	120	65	28
16	PFT 765	BRAZIL	1278	58	62	113	66	24
1	CANANEA 79	MEXICO	1161	49	64	115	64	27
49	YAVAROS (DURUM)	MEXICO	829	66	68	112	43	29
		GRAND MEAN	2035 7	54 8	64 5	117 3	73 2	29 3
		STANDARD ERROR OF GRAND MEAN	37 1		0 1	0 2	0 4	
		COEFFICIENT OF VARIATION AS PC	22 3		1 1	2 2	6 8	
		LSD VARIETY MEANS 5 PC	736 5		1 2	4 3	8 0	

CORRELATIONS

YIELD KG/HA						
TEST	WT	0 09				
FLOW	DAYS	0 28	0 44			
MAT	DAYS	0 33	-0 13	0 34		
PLNT	HT	0 78	-0 13	0 23	0 59	
1000	G W	0 51	0 24	0 66	0 71	0 65

TABLE 41 NORTH AMERICA MEXICO EDO DE MEXICO

EL BATAN
CIMMYT

LATITUDE	019 31'N	DATE PLANTED	5/28/81	NITROGEN	APPLIED
LONGITUDE	098 50'W	DATE HARVESTED	10/21/81	PHOSPHORUS	APPLIED
ELEVATION	2249 M ABOVE S L	AMOUNT OF MOISTURE	508 MM	POTASSIUM	—

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS WEATHER NORMAL
LOCAL CHECK MERINO"S"(TCL)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	1000 G W
25	JUPPA"S"	MEXICO	5077	70	55	118	T-10S	110	40
13	M2A	ECUADOR	4952	66	53	120	0	115	40
42	IRA-DRIRA	MEXICO	4952	71	63	116	0	130	47
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4938	68	66	118	TR-MR	135	50
1	CANANEA 79	MEXICO	4882	64	59	113	TR	120	41
15	PFT 7717	BRAZIL	4820	71	60	120	TMR	120	39
23	PUMA"S"	MEXICO	4778	68	58	113	TMR	110	41
36	LECHON"S"	MEXICO	4716	72	60	118	TR	105	39
35	YE 75 X IA-BUSH	MEXICO	4528	71	60	115	TS	110	40
22	BOA"S"	MEXICO	4507	64	62	115	TMR	110	-
18	JUANILLO 97	MEXICO	4459	64	68	127	TMS	150	43
7	SATU	AUSTRALIA	4459	66	57	120	TMS	100	41
37	LECHON"S"	MEXICO	4445	69	59	118	TR	100	38
39	IRA-DRIRA	MEXICO	4431	71	64	116	TR	130	46
50	LOCAL CHECK		4417	72	67	118	TMR	145	55
46	PND"R"-YE 75	MEXICO	4341	72	59	116	TS	110	39
3	CABORCA 79	MEXICO	4285	64	60	118	TMR	110	36
11	MIZAR	ITALY	4202	62	59	115	TMR	120	43
16	PFT 765	BRAZIL	4167	71	55	113	TMR	125	36
34	VACA"S"	MEXICO	4146	66	54	111	5S	100	45
49	YAVAROS (DURUM)	MEXICO	4125	78	67	123	TR	95	44
21	CHIVA"S"	MEXICO ***	4049	69	69	123	0	110	39
41	JUANILLO 159	MEXICO	4007	68	69	127	TMR	145	47
6	COORONG	AUSTRALIA	4000	61	63	116	0	110	36
24	JUPPA"S"	MEXICO	3938	65	66	118	T-10S	115	34
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3924	63	69	118	TMR	115	35
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3903	71	56	113	T-30MS-S	95	32
48	VEERY"S" (BREAD WHEAT)	MEXICO	3882	76	83	127	0	100	29
44	DELFIN 205	MEXICO	3854	72	66	116	TS	140	42
38	PONY"S"	MEXICO	3834	65	69	118	TR	115	39
26	CHUU"S"	MEXICO	3820	66	59	116	TR	105	36
33	PTR"R"-CASTOR"S"	MEXICO	3792	62	69	120	TR	115	38
8	DUA	AUSTRALIA	3709	64	63	118	20S-MS	105	40
14	M2A-IA	ECUADOR	3709	66	63	121	0	115	32
17	RAM'S"	MEXICO	3639	57	69	127	TMS	130	35
43	TOPO 1419	MEXICO	3604	66	75	127	TR	125	41
40	MULA"S"	MEXICO	3598	64	73	130	0	135	43
30	BVR-ARM	ECUADOR	3507	54	67	120	TR-MR	110	26
12	MANIGERO	SPAIN	3445	58	73	125	TMS	120	32
20	TIGRE"S"	MEXICO	3396	69	63	118	TMS-MR	120	37
10	TR37	YUGOSLAVIA	3368	57	73	123	TMR	115	28
2	BEAGLE	MEXICO	3188	59	70	125	TMS-MR	140	38
9	TYALLA	AUSTRALIA	3139	63	66	122	5MS-S	110	34
29	ALMA	ETHIOPIA	3104	61	67	120	TMR	110	35
4	T65	KENYA	3084	61	68	118	TMS-MR	110	31
19	MUSKOX"S"	MEXICO	2903	62	72	127	0	145	33
27	CARMAN	CANADA	2757	58	76	132	TR	150	33
5	T74	KENYA	2743	55	70	118	5S	115	28
32	M2A-IA	ECUADOR	2549	66	75	129	TR	110	37
28	OAC TRIWELL	CANADA	2472	49	75	132	TMS	145	29
		GRAND MEAN	3930 9	65 3	65 2	120 1	1 5	118 5	38 0
		STANDARD ERROR OF GRAND MEAN	40 1	0 0					
		COEFFICIENT OF VARIATION AS PC	12 5	0 4					
		LSD VARIETY MEANS 5 PC	796 0	0 4					

CORRELATIONS

	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	1000 G W
TEST WT	0 61						
FLOW DAYS	-0 66	-0 34					
MAT DAYS	-0 57	-0 36	0 78				
LEAF RUST	-0 08	0 00	-0 22	-0 22			
PLNT HT	-0 18	-0 27	0 39	0 47	-0 30		
1000 G W	0 62	0 55	-0 31	-0 24	-0 11	0 26	

TABLE 42 NORTH AMERICA MEXICO EDO DE MEXICO

ATIZAPAN
CIMMYT

LATITUDE	019 16'N	DATE PLANTED	5/30/81	NITROGEN	APPLIED
LONGITUDE	099 51'W	DATE HARVESTED	11/ 6/81	PHOSPHORUS	APPLIED
ELEVATION	2640 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS WEATHER NOT REPORTED
LOCAL CHECK MERINO"S" (TCL)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	LEAF RUST	PLNT HT	1000 G W	BAC S 0-9
1	CANANEA 79	MEXICO	5994	57	66	0	125	38	0
17	RAM"S"	MEXICO	5591	59	72	0	130	37	0
44	DELFIN 205	MEXICO	5431	65	70	0	160	37	0
7	SATU	AUSTRALIA	5389	58	64	0	100	31	0
35	YE 75 X IA-BUSH	MEXICO	5320	64	66	0	130	32	0
37	LECHON"S'	MEXICO	4889	62	66	0	115	34	0
43	TOPO 1419	MEXICO	4743	57	74	0	140	38	5
32	M2A-IA	ECUADOR	4681	61	74	0	110	40	5
31	BGL/ARS-MEX MUTI X BGL"B"	ECUADOR	4514	65	65	0	155	46	0
23	PUMA"S"	MEXICO	4480	63	64	0	115	40	0
12	M. NIGERO	SPAIN	4473	61	74	0	125	34	0
15	PF. 7717	BRAZIL	4438	54	64	0	120	31	0
36	LECHON"S"	MEXICO	4431	62	66	0	120	34	0
20	TIGRE"S"	MEXICO	4313	62	68	0	120	37	0
14	M2A-IA	ECUADOR	4285	53	68	0	120	25	0
39	IRA-DRIRA	MEXICO	4243	59	64	0	140	37	0
2	BEAGLE	MEXICO	4084	59	73	TMS	150	39	5
19	MUSKOX"S"	MEXICO	4077	65	74	0	150	41	0
41	JUANILLO 159	MEXICO	4070	57	73	TMS	160	33	0
22	BOA"S"	MEXICO	4007	63	66	TMS	120	36	0
40	M.LA"S"	MEXICO	4000	60	74	0	135	34	0
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3938	55	72	0	130	29	5
3	CABORCA 79	MEXICO	3792	58	66	0	120	32	0
18	JUANILLO 97	MEXICO	3785	61	73	0	150	43	0
25	JUPPA"S"	MEXICO	3778	67	62	0	120	41	0
33	PTR"R"-CASTOR"S"	MEXICO	3743	60	70	0	120	37	5
10	TR37	YUGOSLAVIA	3743	60	74	TS	125	33	0
6	COORONG	AUSTRALIA	3681	54	66	5MS-S	110	28	0
13	M2A	ECUADOR ***	3660	69	64	TMS	125	31	0
8	DUA	AUSTRALIA	3618	60	68	TMS	100	41	0
34	VACA"S"	MEXICO	3493	61	60	0	115	39	0
30	BVR-ARM	ECUADOR	3486	58	68	0	130	32	0
21	CHIVA"S"	MEXICO	3486	61	70	0	115	40	0
42	IRA-DRIRA	MEXICO	3424	61	64	0	145	38	0
48	VEERY"S" (BREAD WHEAT)	MEXICO	3368	73	78	0	100	30	0
24	JUPPA"S"	MEXICO	3347	61	68	TMS	120	39	0
28	OAC TRIWELL	CANADA	3327	61	73	0	150	40	0
5	T74	KENYA	3299	53	73	0	125	29	0
50	LOCAL CHECK		3188	58	70	0	170	39	5
11	MIZAR	ITALY	3063	48	66	0	125	29	5
46	PND"R"-YL 75	MEXICO	3035	58	64	0	125	39	0
38	PONY"S"	MEXICO	2959	55	74	0	130	31	5
26	CHUU"S"	MEXICO	2945	63	66	0	95	38	5
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2931	63	64	TMR	95	25	0
9	TYALLA	AUSTRALIA	2882	57	70	0	120	38	5
4	T65	KENYA	2875	52	70	20MS-S	125	28	0
29	ALMA	ETHIOPIA	2674	55	68	0	135	34	0
16	PFT 765	BRAZIL	2445	62	62	0	130	29	0
27	CARMAN	CANADA	2257	59	75	0	145	43	0
49	YAVAROS (DURUM)	MEXICO	1729	64	69	0	90	28	0
		GRAND MEAN	3828 1	59 9	68 6	0 6	126 5	35 1	1 0
		STANDARD ERROR OF GRAND MEAN	94 2						
		COEFFICIENT OF VARIATION AS PC	30 1						
		LSD VARIETY MEANS 5 PC	1868 5						

CORRELATIONS

YIELD	KG/HA							
TEST	WT	0 09						
FLOW	DAYS	-0 04	-0 04					
LEAF	RUST	-0 16	-0 28	0 03				
PLNT	HT	0 14	-0 11	0 28	-0 04			
1000	G W	0 17	0 31	0 07	-0 25	0 39		
BAC S	0-9	-0 12	-0 29	0 27	-0 10	0 07	0 07	

TABLE 43 NORTH AMERICA MEXICO GUANAJUATO

EL BAJIO
R URBINA

LATITUDE	020 32'N	DATE PLANTED	12/--/81	NITROGEN	APPLIED
LONGITUDE	100 49'W	DATE HARVESTED	5/--/82	PHOSPHORUS	APPLIED
ELEVATION	1765 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
SLIGHT DISEASE INCIDENCE SLIGHT INSECT DAMAGE
SLIGHT WEED PROBLEM NEGLIGIBLE BIRD DAMAGE
CHEMICAL CONTROL OF INSECTS AND WEEDS WEATHER NORMAL

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT
18	JUANILLO 97	MEXICO	8499	90	141	135
41	JUANILLO 159	MEXICO	7999	89	141	135
38	PONY"S"	MEXICO	7110	93	139	110
21	CHIVA"S"	MEXICO	7036	89	140	100
25	JUPPA"S"	MEXICO	6972	90	140	100
20	TIGRE"S"	MEXICO	6962	90	139	110
43	TOPO 1419	MEXICO	6962	93	143	125
10	TR37	YUGOSLAVIA	6962	93	141	110
6	COORONG	AUSTRALIA ***	6870	89	139	95
1	CANANEA 79	MEXICO	6842	94	138	105
27	CARMAN	CANADA	6768	92	143	135
39	IRA-DRIRA	MEXICO	6685	88	136	130
13	M2A	ECUADOR	6629	84	134	105
40	MULA"S"	MEXICO	6629	92	143	115
26	CHUU"S"	MEXICO	6592	94	141	110
46	PND"R"-YE 75	MEXICO	6573	90	138	105
4	T65	KENYA	6555	90	139	110
22	BOA"S"	MEXICO	6453	90	140	100
15	PFT 7717	BRAZIL	6416	86	136	95
42	IRA-DRIRA	MEXICO	6333	88	136	135
3	CABORCA 79	MEXICO	6323	90	140	95
19	MUSKOX"S"	MEXICO	6323	93	143	125
23	PUMA"S"	MEXICO	6305	89	140	100
44	DELFIN 205	MEXICO	6222	89	140	130
16	PFT 765	BRAZIL	6175	87	136	120
28	GAC TRIWELL	CANADA	6018	93	143	135
34	VACA"S"	MEXICO	5972	88	140	100
31	EGL/ARG-MEX MUTI X BGL"S"	ECUADOR	5888	87	136	130
24	JUPPA"S"	MEXICO	5851	94	140	110
8	DUA	AUSTRALIA	5833	89	140	90
11	MIZAR	ITALY	5823	86	134	110
30	BVR-APM	ECUADOR	5796	92	141	120
33	PTR"R"-CASTOR"S"	MEXICO	5796	89	141	100
35	YE 75 X IA-BUSH	MEXICO	5768	92	140	110
37	LECHON"S"	MEXICO	5712	89	139	95
12	MANIGERO	SPAIN	5703	92	140	100
45	M2A(2)-STR"S" X IA-ABN	MEXICO	5685	94	140	115
17	RAM'S"	MEXICO	5657	90	142	120
9	TYALLA	AUSTRALIA	5499	94	141	95
7	SATU	AUSTRALIA	5435	87	140	95
50	LOCAL CHECK		5416	89	136	110
29	ALMA	ETHIOPIA	5407	93	140	110
32	M2A-IA	ECUADOR	5324	94	138	100
2	BEAGLE	MEXICO	5249	93	140	125
14	M2A-IA	ECUADOR	5231	89	140	95
36	LECHON"S"	MEXICO	5222	89	139	95
5	T74	KENYA	4824	92	140	100
49	YAVAROS (DURUM)	MEXICO	4740	93	130	85
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4703	89	134	85
48	VEERY'S" (BREAD WHEAT)	MEXICO	4444	92	134	35

GRAND MEAN	6123 8	90 4	139 1	108 0
STANDARD ERROR OF GRAND MEAN	68 8			
COEFFICIENT OF VARIATION AS PC	13 8			
LSD VARIETY MEANS 5 PC	1366 0			

CORRELATIONS

YIELD KG/HA				
FLOW DAYS	-0 11			
MAT DAYS	0 35	0 41		
PLNT HT	0 52	0 01	0 40	

TABLE 44 NORTH AMERICA MEXICO SONORA

CIANO (1ST DATE)
CIMMYT

LATITUDE	027 20'N	DATE PLANTED	11/--/81	NITROGEN	APPLIED
LONGITUDE	109 54'W	DATE HARVESTED	5/--/82	PHOSPHORUS	APPLIED
ELEVATION	0038 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS
WEATHER NORMAL LOCAL CHECK MERINO"S"(TCL)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	LEAF RUST	PLNT HT
19	MUSMOX"S"	MEXICO	6976	70	88	5MR	147
48	VFERY"S" (BREAD WHEAT)	MEXICO	6892	80	92	10MS	98
21	CHIVA"S"	MEXICO	6837	72	86	TS-MS	120
40	MULA"S"	MEXICO	6817	66	9010-40S-MS		133
14	M2A-IA	ECUADOR	6639	71	84	TMS	115
6	COORONG	AUSTRALIA	6431	69	83	5MS-MR	115
22	BOA"S"	MEXICO	6298	70	85	5MS	113
50	LOCAL CHECK		6281	71	85	TMR	128
45	M2A(2)-STR"S" X IA-ABN	MEXICO	6276	70	85	TMR	128
13	M2A	ECUADOR	6270	70	79		122
3	CABORCA 79	MEXICO	6234	72	83	TMS	117
49	YAVAROS (DURUM)	MEXICO	6134	83	86	10R-MR	97
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	6114	79	83	20MS-S	95
33	PTR"R"-CASTOR"S"	MEXICO	6103	72	83	5MR	115
8	DUA	AUSTRALIA	6078	70	83	TMS	108
9	TYALLA	AUSTRALIA	6062	69	85	5MS-MR	115
10	TR37	YUGOSLAVIA	6059	69	87	5MS	127
25	JUPPA"S"	MEXICO	6050	72	80	TMR	122
37	LECHON"S"	MEXICO	6003	73	84	TR	113
43	TOPO 1419	MEXICO	5975	68	91	TMS	138
38	PONY"S"	MEXICO	5967	70	87	TMS	132
24	JUPPA"S"	MEXICO	5909	72	86	5MS	125
15	PFT 7717	BRAZIL	5909	72	82	TMR	122
42	IRA-DRIRA	MEXICO	5887	72	80	TMR	138
39	IRA-DRIRA	MEXICO	5878	72	80	TMS-MR	137
36	LECHON"S"	MEXICO	5825	73	85	5MR	118
23	PUMA"S"	MEXICO	5764	72	82	TMS	120
11	MIZAR	ITALY	5712	67	80	TMS	125
35	YE 75 X IA-BUSH	MEXICO	5614	73	86	TR	123
12	MANIGERO	SPAIN	5587	70	8910MR-40MS		127
4	T65	KENYA	5564	71	86	10MS	123
32	M2A-IA	ECUADOR	5553	69	90	10MR	120
46	PND"R"-YE 75	MEXICO	5478	75	84	TMS-MR	123
17	RAM"S"	MEXICO	5475	64	83	10MR-MS	127
18	JUANILLO 97	MEXICO	5474	69	81	T-30S-MS	147
30	BVR-AFM	ECUADOR	5406	67	87	TS	130
34	VACA"S"	MEXICO ***	5373	70	79	TMR	115
.	CANANEA 79	MEXICO	5059	67	80	TMR	120
26	CHUU"S"	MEXICO	5034	70	88	TMR-MS	115
5	T74	KENYA	4981	66	89	TS	123
20	TIGRE"S"	MEXICO	4978	72	85	TMR	130
44	DELFIN 205	MEXICO	4975	70	85	5-20MS-S	142
7	SATU	AUSTRALIA	4811	70	80	TMR	108
41	JUANILLO 159	MEXICO	4706	67	80	5-30S-MS	140
2	BEAGLE	MEXICO	4470	67	84	5MS	142
16	PFT 765	BRAZIL	4300	76	83	5MS-MR	135
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4275	69	79	20S-MS	137
27	LARMAN	CANADA	4073	63	90T-30MS-MR		140
29	ALMA	ETHIOPIA	3931	64	86	5MR-MS	118
28	DAC TRIWELL	CANADA	3467	60	89	20MS	140
		GRAND MEAN	5639 3	70 3	84 6	4 9	124 2
		STANDARD ERROR OF GRAND MEAN	63 6				0 3
		COEFFICIENT OF VARIATION AS PC	13 8				2 9
		LSD VARIETY MEANS 5 PC	1261 6				5 8

CORRELATIONS

YIELD	KG/HA				
TEST	WT	0 47			
FLOW	DAYS	0 08	-0 09		
LEAF	RUST	-0 28	-0 10	0 08	
PLNT	HT	-0 36	-0 55	0 02	0 05

TABLE 45 NORTH AMERICA MEXICO TLAXCALA

HUAMANTLA
C LIMON
LATITUDE DATE PLANTED 6/ 4/81 NITROGEN APPLIED
LONGITUDE DATE HARVESTED 10/27/81 PHOSPHORUS APPLIED
ELEVATION M ABOVE S L AMOUNT OF MOISTURE -- MM POTASSIUM --

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS AND WEEDS WEATHER NORMAL
LOCAL CHECK MERINO"S" (TCL)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W
30	BVR-ARM	ECUADOR	6105	68	72	125	105	41
3	CABORCA 79	MEXICO	5757	68	68	121	93	42
11	MIZAR	ITALY	5688	66	68	120	103	44
6	COORONG	AUSTRALIA	5688	66	69	123	93	39
39	IRA-DRIRA	MEXICO	5646	68	70	124	113	49
14	M2A-IA	ECUADOR	5584	68	70	122	93	38
13	M2A	ECUADOR	5577	69	67	122	98	42
37	LECHON"S"	MEXICO	5563	70	67	124	88	46
45	M2A(2)-BTR"S" X IA-ABN	MEXICO	5507	65	74	127	103	39
20	TIGRE"S"	MEXICO	5459	70	69	124	98	45
26	CHUU"S"	MEXICO	5430	68	67	123	95	39
8	DUA	AUSTRALIA	5431	67	69	124	93	46
15	PFT 7717	BRAZIL	5431	70	66	122	93	45
22	BOA"S"	MEXICO	5382	69	68	121	93	45
4	T65	KENYA	5382	67	70	125	103	42
36	LECHON"S"	MEXICO	5285	70	68	123	88	44
34	VACA"S"	MEXICO	5285	70	63	122	88	50
29	ALMA	ETHIOPIA	5167	66	69	126	113	45
1	CANANEA 79	MEXICO	5146	67	66	119	103	49
5	T74	KENYA	5139	64	71	126	95	42
23	PUMA"S"	MEXICO	5132	70	64	121	95	47
25	JUPPA"S"	MEXICO	5049	70	64	124	90	42
21	CHIVA"B"	MEXICO ***	4882	69	73	125	95	39
24	JUPPA"S"	MEXICO	4848	69	71	127	100	40
48	VEERY"B" (BREAD WHEAT)	MEXICO	4750	77	82	126	83	36
17	RAM"S"	MEXICO	4743	66	70	129	110	48
42	IRA-DRIRA	MEXICO	4674	68	68	121	98	47
9	TYALLA	AUSTRALIA	4667	63	71	126	88	43
32	M2A-IA	ECUADOR	4646	68	80	128	100	41
41	JUANILLO 159	MEXICO	4618	61	74	130	128	49
33	PTR"R"-CASTOR"S"	MEXICO	4618	68	70	126	90	49
40	MULA"S"	MEXICO	4570	62	74	130	110	51
46	PND"R"-YE 75	MEXICO	4563	71	68	123	93	38
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4528	69	68	126	120	51
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4521	70	66	119	80	29
10	TR37	YUGOSLAVIA	4521	67	80	128	98	41
7	SATU	AUSTRALIA	4514	65	67	124	85	42
38	PONY"S"	MEXICO	4431	67	73	126	98	40
50	LOCAL CHECK		4431	71	71	126	135	53
44	DELFIN 205	MEXICO	4410	67	70	130	118	46
35	YE 75 X IA-BUSH	MEXICO	4389	71	67	120	88	48
16	PFT 765	BRAZIL	4327	73	63	119	103	37
18	JUANILLO 97	MEXICO	4299	67	74	127	120	53
12	MANIGERO	SPAIN	4285	66	80	128	100	43
2	BEAGLE	MEXICO	4278	59	71	130	118	54
27	CARMAN	CANADA	4042	58	80	130	118	49
19	MUSKOX"S"	MEXICO	4021	65	76	130	118	46
28	OAC TRIWELL	CANADA	3707	60	80	130	120	49
43	TOPO 1419	MEXICO	3625	58	80	130	103	48
49	YAVAROS (DURUM)	MEXICO	2542	79	64	122	75	47
		GRAND MEAN	4845 8	67 4	70 3	124 6	100 4	44 4
		STANDARD ERROR OF GRAND MEAN	46 0				0 5	
		COEFFICIENT OF VARIATION AS PC	11 6				4 7	
		LSD VARIETY MEANS 5 PC	913 8				9 5	

CORRELATIONS

YIELD KG/HA						
TEST	WT	0 09				
FLOW	DAYS	-0 31	-0 46			
MAT	DAYS	-0 39	-0 60	0 73		
PLNT	HT	-0 15	-0 51	0 34	0 58	
1000	G W	-0 26	-0 33	0 03	0 34	0 56

TABLE 46 NORTH AMERICA U S A ARIZONA

YUMA EXP STN
UNIV OF ARIZONA

LATITUDE	032 44'N	DATE PLANTED	12/21/81	NITROGEN	APPLIED
LONGITUDE	114 36'W	DATE HARVESTED	6/ 4/82	PHOSPHORUS	--
ELEVATION	0046 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING NEGLIGIBLE DISEASE DEVELOPMENT
NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM NEGLIGIBLE BIRD DAMAGE
MECHANICAL CONTROL OF WEEDS WEATHER NORMAL
LOCAL CHECK YECORO ROJO

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT
49	YAVAROS (DURUM)	MEXICO	8459	83	123	147	71
41	JUANILLO 159	MEXICO	7861	70	103	149	113
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	7857	81	118	146	76
21	CHIVA"S"	MEXICO	7131	72	104	146	85
26	CHUU"S"	MEXICO	7087	73	116	148	81
32	M2A-IA	ECUADOR	7025	73	109	149	80
17	RAM"S"	MEXICO	6959	66	107	148	82
40	MULA"S"	MEXICO	6891	68	123	152	76
50	LOCAL CHECK		6872	81	103	145	69
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	6845	69	101	151	103
18	JUANILLO 97	MEXICO	6814	70	101	145	107
16	PFT 765	BRAZIL	6651	74	101	147	99
3	CABORCA 79	MEXICO	6597	70	104	148	81
2	BEAGLE	MEXICO	6539	68	104	146	91
11	MIZAR	ITALY	6419	68	104	146	93
19	MUSKOX"S"	MEXICO	6417	71	119	152	78
12	MANIGERO	SPAIN	6343	70	107	149	83
30	BVR-ARM	ECUADOR	6223	70	104	151	92
8	DUA	AUSTRALIA	6150	69	101	149	81
39	IRA-DRIRA	MEXICO	6116	70	101	145	102
7	SATU	AUSTRALIA	6115	68	106	148	78
43	TOPO 1419	MEXICO	6063	69	119	152	77
1	CANANEA 79	MEXICO	6055	68	102	145	88
28	OAC TRIWELL	CANADA	5979	68	117	151	95
48	VEERY"S" (BREAD WHEAT)	MEXICO	5925	79	123	147	66
46	PND"R"-YE 75	MEXICO	5813	73	105	150	85
27	CARMAN	CANADA	5776	68	118	151	91
13	M2A	ECUADOR	5763	68	103	150	79
4	T65	KENYA	5759	70	104	146	83
20	TIGRE"S"	MEXICO	5747	71	103	150	83
23	PUMA"S"	MEXICO	5726	71	107	150	78
36	LECHON"S"	MEXICO	5697	73	109	150	78
37	LECHON"S"	MEXICO	5668	72	110	151	79
9	TYALLA	AUSTRALIA	5632	67	108	150	75
14	M2A-IA	ECUADOR ***	5544	73	117	150	71
24	JUPPA"S"	MEXICO	5507	72	108	147	80
6	COORONG	AUSTRALIA	5499	65	104	150	71
38	PONY"S"	MEXICO	5466	71	110	151	80
44	DELFIN 205	MEXICO	5445	71	112	150	92
42	IRA-DRIRA	MEXICO	5367	70	101	147	98
29	ALMA	ETHIOPIA	5335	69	107	149	83
15	PFT 7717	BRAZIL	5317	69	106	150	78
33	PTR"R"-CASTOR"S"	MEXICO	5294	70	104	149	78
22	BOA"S"	MEXICO	5288	69	103	146	80
34	VACA"S"	MEXICO	5234	69	105	151	75
10	TR37	YUGOSLAVIA	5052	69	113	150	75
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4839	68	115	151	76
25	JUPPA"S"	MEXICO	4667	71	107	149	77
5	T74	KENYA	4659	65	114	150	76
35	YE 75 X IA-BUSH	MEXICO	2696	69	123	152	64
		GRAND MEAN	6003 7	70 6	108 7	148 8	82 7
		STANDARD ERROR OF GRAND MEAN	116 5				0 8
		COEFFICIENT OF VARIATION AS PC	23 8				11 8
		LSD VARIETY MEANS 5 PC	2311 6				15 8

CORRELATIONS

YIELD KG/HA					
TEST	WT	0 45			
FLOW	DAYS	-0 07	0 27		
MAT	DAYS	-0 40	-0 35	0 42	
PLNT	HT	0 34	-0 23	-0 50	-0 25

TABLE 47 NORTH AMERICA U S A CALIFORNIA

DAVIS (UNIV CALIF)
C O QUALSET ET AL

LATITUDE	038 32'N	DATE PLANTED	11/ 1/81	NITROGEN	APPLIED
LONGITUDE	121 46'W	DATE HARVESTED	7/ 8/82	PHOSPHORUS	--
ELEVATION	0018 M ABOVE S L	AMOUNT OF MOISTURE	990 MM	POTASSIUM	--

EARLY SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS
LOCAL CHECK 6TA-204

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W	SEP T 0-9
32	M2A-IA	ECUADOR	5687	68	142	96	40	4
1	CANAMEA 79	MEXICO	5577	66	135	97	38	7
49	YAVAROS (DURUM)	MEXICO	5559	83	159	87	61	6
18	JUANILLO 97	MEXICO	5547	70	137	111	49	5
26	CHUU"S"	MEXICO	5257	68	139	98	43	4
8	DUA	AUSTRALIA	5243	67	133	89	43	1
11	MIZAR	ITALY	5229	64	136	97	40	6
3	CABORCA 79	MEXICO	5193	66	138	90	33	7
9	TYALLA	AUSTRALIA	5125	66	137	94	40	4
40	MULA"S"	MEXICO	5049	67	148	109	42	5
28	OAC TRIWELL	CANADA	4980	64	147	110	38	7
41	JUANILLO 159	MEXICO	4867	68	135	111	49	5
20	TIGRE"S"	MEXICO	4829	68	140	98	42	8
25	JUPPA"S"	MEXICO	4725	69	134	95	38	5
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4717	66	139	97	37	8
13	M2A	ECUADOR	4670	68	132	91	41	6
38	PONY"S"	MEXICO	4634	69	144	110	40	5
21	CHIVA"S"	MEXICO	4583	68	136	98	40	7
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	4581	67	139	106	42	6
27	CARMAN	CANADA	4561	67	147	110	44	5
42	TOPO 1419	MEXICO	4516	68	143	102	41	6
14	M2A-IA	ECUADOR	4509	67	139	91	39	6
34	VACA"S"	MEXICO	4499	69	134	92	45	5
7	SATU	AUSTRALIA	4434	66	133	94	44	6
23	PUMA"S"	MEXICO	4314	65	135	87	41	7
33	PTR"R"-CASTOR"S"	MEXICO	4294	68	139	93	48	6
24	JUPPA"S"	MEXICO	4263	69	135	98	42	8
2	BEAGLE	MEXICO	4138	64	143	112	37	7
5	T74	KENYA	4117	65	137	98	40	6
44	DELFIN 205	MEXICO	4097	70	143	107	41	8
17	RAM"S"	MEXICO	4097	65	145	103	39	5
4	COORONG	AUSTRALIA	4016	64	133	88	38	6
22	BOA"S"	MEXICO	3951	66	136	87	40	6
10	TR37	YUGOSLAVIA ***	3856	67	144	104	39	6
37	LECHON"S"	MEXICO	3851	66	135	90	42	4
29	ALMA	ETHIOPIA	3834	65	140	101	34	5
12	MANIGERO	SPAIN	3710	67	144	99	42	6
36	LECHON"S"	MEXICO	3645	68	134	93	45	3
39	IRA-DRIRA	MEXICO	3631	68	135	98	39	4
42	IRA-DRIRA	MEXICO	3354	67	134	97	33	6
15	PFT 7717	BRAZIL	3289	68	134	89	37	7
46	PHO"R"-YE 75	MEXICO	3272	70	135	98	41	7
19	MUSKOX"S"	MEXICO	3019	68	146	110	37	7
4	T65	KENYA	2967	65	138	94	40	6
30	BVR-ARM	ECUADOR	2959	64	140	87	38	7
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2843	75	150	81	31	9
48	VEERY"S" (BREAD WHEAT)	MEXICO	2651	76	148	79	32	9
16	PFT 765	BRAZIL	2637	69	135	92	39	6
35	YE 75 X IA-BUSH	MEXICO	2444	67	133	98	40	5
50	LOCAL CHECK		1341	-	146	123	36	6
		GRAND MEAN	4184 6	67 6	139 3	97 6	40 4	5 9
		STANDARD ERROR OF GRAND MEAN	73 4			0 5		
		COEFFICIENT OF VARIATION AS PC	21.5			5 8		
		LSD VARIETY MEANS 5 PC	1456 9			9 2		

CORRELATIONS

YIELD KG/HA						
TEST	WT	-0 02				
FLOW	DAYS	-0 05	0 50			
PLNT	HT	0 03	-0 25	0 26		
1000	G W	0 44	0 37	0 09	0 08	
SEP T	0-9	-0 27	0 20	0 28	-0 10	-0 35

TABLE 48 NORTH AMERICA U S A MONTANA

BOZEMAN
H MCNEAL ET AL

LATITUDE	045 00'N	DATE PLANTED	5/15/82	NITROGEN	APPLIED
LONGITUDE	111 00'W	DATE HARVESTED	10/ 2/82	PHOSPHORUS	APPLIED
ELEVATION	1463 M ABOVE S L	AMOUNT OF MOISTURE	657 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE MODERATE WEED PROBLEM
MODERATE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS MECHANICAL CONTROL OF WEEDS
WEATHER NORMAL LOCAL CHECK NEWANA

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	LODG %
41	JUANILLO 159	MEXICO	7292	71	196	128	0
18	JUANILLO 97	MEXICO	6908	71	195	121	0
22	BOA"S"	MEXICO	6820	71	191	98	2
26	CHUU"S"	MEXICO	6784	71	193	95	2
42	IRA-DRIRA	MEXICO	6782	70	190	110	0
3	CABORCA 79	MEXICO	6741	71	191	93	0
9	TYALLA	AUSTRALIA	6607	70	191	98	0
2	BEAGLE	MEXICO	6587	67	193	122	2
43	TOPO 1419	MEXICO ***	6574	70	198	103	0
37	LECHON"S"	MEXICO	6498	74	192	103	0
20	TIGRE"S"	MEXICO	6448	73	192	104	0
21	CHIVA"S"	MEXICO	6419	72	192	95	0
30	BVR-ARM	ECUADOR	6410	70	192	107	7
39	IRA-DRIRA	MEXICO	6393	69	194	111	13
13	M2A	ECUADOR	6384	71	189	100	0
32	M2A-IA	ECUADOR	6380	72	195	97	0
27	CARMAN	CANADA	6376	68	198	130	2
36	LECHON"S"	MEXICO	6367	74	192	94	0
8	DUA	AUSTRALIA	6318	70	190	91	0
34	VACA"S"	MEXICO	6301	71	189	97	2
11	MIZAR	ITALY	6275	68	192	106	0
28	OAC TRIWELL	CANADA	6271	68	145	126	2
19	MUSKOX"S"	MEXICO	6256	70	195	126	0
35	YE 75 X IA-BUSH	MEXICO	6235	74	191	102	0
23	PUMA"S"	MEXICO	6186	71	190	94	0
45	M2A(2)-STR"S" X IA-ABN	MEXICO	6134	69	193	104	0
15	PFT 7717	BRAZIL	6119	71	191	100	2
7	GATU	AUSTRALIA	6062	68	190	87	2
38	PONY"S"	MEXICO	6051	69	191	108	0
14	M2A-IA	ECUADOR	6008	71	192	96	0
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	5966	69	193	120	8
10	TR37	YUGOSLAVIA	5963	70	193	104	0
33	PTR"R"-C, STOR"S"	MEXICO	5944	70	196	98	0
1	CANANEA 79	MEXICO	5788	66	191	103	0
5	T74	KENYA	5775	67	193	98	0
46	PND"R"-YE 75	MEXICO	5748	73	191	99	0
29	ALMA	ETHIOPIA	5745	70	189	104	5
12	MANIGERO	SPAIN	5745	68	194	102	0
44	DELFIN 205	MEXICO	5713	72	192	97	0
25	JUPPA"S"	MEXICO	5703	73	189	97	0
17	RAM"S"	MEXICO	5684	65	193	107	2
40	MULA"S"	MEXICO	5658	69	198	109	0
6	GOORONG	AUSTRALIA	5656	66	190	91	2
48	'EERY"S" (BREAD WHEAT)	MEXICO	5515	80	196	81	0
4	T.5	KENYA	5506	70	190	103	2
50	LOCAL CHECK		5346	81	196	98	2
16	PFT 765	BRAZIL	5299	74	189	104	12
24	JUPPA"S'	MEXICO	5104	71	192	99	0
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	5055	80	193	85	0
49	YAVAROS (DURUM)	MEXICO	4908	83	196	81	0
		GRAND MEAN	6095 4	71 1	191 5	102 6	1 3
		STANDARD ERROR OF GRAND MEAN	30 8			0 5	
		COEFFICIENT OF VARIATION AS PC	6 2			5 6	
		LSD VARIETY MEANS 5 PC	612 2			9 3	

CORRELATIONS

YIELD KG/ A					
TEST	WT	-0 36			
FLOW	DAYS	-0 04	0 17		
PLNT	HT	0 43	-0 47	-0 18	
LODG	%	-0 08	-0 10	-0 08	0 22

TABLE 49 NORTH AMERICA U S A NORTH DAKOTA

LANGDON, FARGO
J S QUICK

LATITUDE	046 51'N	DATE PLANTED	4/30/82	NITROGEN	--
LONGITUDE	096 44'W	DATE HARVESTED	8/10/82	PHOSPHORUS	--
ELEVATION	M ABOVE S L	AMOUNT OF MOISTURE	154 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS MECHANICAL CONTROL OF WEEDS
HAND WEEDING WEATHER NOT REPORTED LOCAL CHECK NAME NOT REPORTED

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	LEAF RUST	PLNT HT	1000 G W
26	CHUU"S"	MEXICO	4143	67	63	2MS	85	35
45	M2A(2)-STR"S" X IA-ABN	MEXICO	3899	64	65	TMR	85	38
50	LOCAL CHECK		3883	59	62	20MS	89	38
38	PONY"S"	MEXICO	3859	64	64	TMR	89	37
23	PUMA"S"	MEXICO	3789	66	58	TR	83	39
20	TIGRE"S"	MEXICO	3718	67	61	TMR	88	37
21	CHIVA"S"	MEXICO	3702	66	61	TMS	77	38
18	JUANILLO 97	MEXICO	3671	66	65	TMS	99	44
43	TOPO 1419	MEXICO ***	3581	65	64	5MR	85	43
22	BOA"S"	MEXICO	3559	63	58	TMS	80	36
29	ALMA	ETHIOPIA	3557	60	61	5MR	85	34
11	MIZAR	ITALY	3552	61	61	5MR	87	38
9	TYALLA	AUSTRALIA	3543	64	62	TMR	79	40
7	SATU	AUSTRALIA	3526	63	60	2MS	75	39
30	BVR-ARM	ECUADOR	3521	62	62	TR	83	33
48	VEERY"S" (BREAD WHEAT)	MEXICO	3514	76	65	5S	64	33
17	RAM"S"	MEXICO	3503	61	64	10MR	89	41
46	PND"R"-YE 75	MEXICO	3501	67	61	5MR	81	39
16	PFT 765	BRAZIL	3494	71	58	TR	89	36
41	JUANILLO 159	MEXICO	3447	65	64	TMR	97	45
15	PFT 7717	BRAZIL	3438	63	58	TR	83	35
14	M2A-IA	ECUADOR	3407	65	61	TR	79	35
4	T65	KENYA	3398	63	62	TR	89	35
1	CANANEA 79	MEXICO	3387	60	61	20MR	89	37
6	COORONG	AUSTRALIA	3376	59	60	TR	81	35
35	YE 75 X IA-BUSH	MEXICO	3373	67	60	TMR	81	32
25	JUPPA"S"	MEXICO	3364	66	58	TMR	81	35
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3360	76	63	20S	69	34
13	M2A	ECUADOR	3349	63	59	5MR	83	36
3	CABORCA 79	MEXICO	3347	65	59	TR	79	35
33	PTR"R"-CASTOR"S"	MEXICO	3333	65	64	5MS	81	42
8	DUA	AUSTRALIA	3331	64	61	TR	75	41
36	LECHON'S"	MEXICO	3326	67	61	TR	79	35
39	IRA-DRIRA	MEXICO	3302	66	58	TMR	95	42
34	VACA"S"	MEXICO	3253	64	59	10MS	80	39
42	IRA-DRIRA	MEXICO	3250	66	58	5MR	91	44
10	TR37	YUGOSLAVIA	3109	62	65	30S	78	34
37	LECHON"S"	MEXICO	3100	67	61	TMR	78	35
32	M2A-IA	ECUADOR	3007	64	66	5MR	76	34
12	MANIGERO	SPAIN	2917	62	67	20MR	79	36
49	YAVAROS (DURUM)	MEXICO	2886	74	66	5MR	63	41
19	MUSKOX"S"	MEXICO	2861	66	65	10MR	98	45
5	T74	KENYA	2816	58	63	60S	78	35
28	OAC TRIWELL	CANADA	2792	63	64	2MR	97	42
40	MULA"S"	MEXICO	2781	62	65	80S	93	37
24	JUPPA'S"	MEXICO	2769	67	61	TMS	80	37
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	2716	65	62	30MS	101	43
44	DELFIN 205	MEXICO	2687	65	60	80S	92	38
27	CARMAN	CANADA	2617	62	65	5MR	97	43
2	BEAGLE	MEXICO	2508	63	62	10MR	99	42
		GRAND MEAN	3322 5	64 7	61 9	7 6	84 2	37 9
		STANDARD ERROR OF GRAND MEAN	22 5	0 1			0 3	0 1
		COEFFICIENT OF VARIATION AS PC	8 3	1 3			4 0	2 7
		LSD VARIETY MEANS 5 PC	446 6	1 3			5 5	1 6

CORRELATIONS

YIELD KG/HA					
TEST WT	0 06				
FLOW DAYS	-0 22	0 04			
LEAF RUST	-0 42	-0 17	0 16		
PLNT HT	-0 10	-0 40	0 00	0 10	
1000 G W	-0 22	-0 03	0 19	-0 10	0 07

TABLE 50 NORTH AMERICA U S A SOUTH DAKOTA

BROOKINGS
D L KEIM

LATITUDE	044 20'N	DATE PLANTED	4/23/82	NITROGEN	APPLIED
LONGITUDE	096 50'W	DATE HARVESTED	8/ 1/82	PHOSPHORUS	APPLIED
ELEVATION	0591 M ABOVE S L	AMOUNT OF MOISTURE	380 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS WEATHER NORMAL
LOCAL CHECK SD9009

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	LEAF RUST	PLNT HT	LODG %
23	PUMA'S'	MEXICO	2971	174	10MR	101	11
13	M2A	ECUADOR	2636	173	20MR	96	15
16	PFT 765	BRAZIL	2590	173	TMR	107	41
15	PFT 7717	BRAZIL	2537	174	5MR	98	11
20	TIGRE"S"	MEXICO	2493	175	10MR	101	15
3	CABORCA 79	MEXICO	2481	173	10MR	94	18
46	PND"R"-YE 75	MEXICO ***	2429	174	10MR	98	18
25	JUPPA"S"	MEXICO	2416	173	20MR	101	37
21	CHIVA"S"	MEXICO	2354	175	5MR	97	18
18	JUANILLO 97	MEXICO	2352	178	30MR	119	11
42	IRA-DRIRA	MEXICO	2351	173	10MR	113	48
7	SATU	AUSTRALIA	2339	173	30MR	88	11
22	BOA"S"	MEXICO	2314	17	60MR	97	18
35	YE 75 X IA-BUSH	MEXICO	2294	17	30MR	95	22
17	RAM"S"	MEXICO	2291	178	20MR	102	48
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2282	175	20MR	83	22
26	CHUU"S"	MEXICO	2264	175	20MR	97	18
34	VACA"S"	MEXICO	2251	173	60MS	97	18
39	IRA-DRIRA	MEXICO	2240	173	5MR	108	37
37	LECHON"S"	MEXICO	2233	174	20MR	89	15
38	PONY"S"	MEXICO	2197	178	20MR	102	11
24	JUPPA"S"	MEXICO	2164	175	60MS	102	11
6	COORONG	AUSTRALIA	2121	174	TMR	93	44
31	BOL/ARS-MEX MUTI X BOL"S"	ECUADOR	2104	175	30MR	120	41
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2100	179	20MR	106	15
1	CANANEA 79	MEXICO	2063	174	40S	103	11
44	DELFIN 205	MEXICO	1996	176	60S	119	22
4	T65	KENYA	1984	175	40MS	105	15
43	TOPO 1419	MEXICO	1971	178	10MR	104	11
14	M2A-IA	ECUADOR	1961	175	10MR	91	44
2	BEAGLE	MEXICO	1924	176	30MR	118	37
27	CARMAN	CANADA	1917	181	20MR	118	18
11	MIZAR	ITALY	1914	174	40MS	103	11
48	VEERY"S" (BREAD WHEAT)	MEXICO	1888	179	5MR	80	11
49	YAVAROS (DURUM)	MEXICO	1857	178	TMR	86	15
36	LECHON'S'	MEXICO	1850	175	10MR	88	30
50	LOCAL CHECK		1797	179	10MR	131	52
41	JUANILLO 159	MEXICO	1747	177	10MR	111	18
12	MANIGERO	SPAIN	1690	180	50MS	96	15
30	BVR-ARM	ECUADOR	1676	177	20MR	94	18
32	M2A-IA	ECUADOR	1625	178	10MR	90	11
29	ALMA	ETHIOPIA	1599	174	40S	105	11
8	DUA	AUSTRALIA	1566	175	30MR	85	11
33	PTR"R"-CASTOR"S"	MEXICO	1545	176	30MS	90	15
19	MUSKOX"S"	MEXICO	1466	180	5MR	114	15
28	OAC TRIWELL	CANADA	1366	179	20MR	120	18
10	TR37	YUGOSLAVIA	1319	181	60MS	93	11
9	TYALLA	AUSTRALIA	1228	176	30MR	85	15
5	T74	KENYA	1227	179	80S	95	15
40	MULA"S"	MEXICO	958	179	80S	103	11
		GRAND MEAN	2018 8	175 9	16 6	100 7	20 7
		STANDARD ERROR OF GRAND MEAN	23 5			0 6	
		COEFFICIENT OF VARIATION AS PC	14 3			7 1	
		LSD VARIETY MEANS 5 PC	467 2			11 6	

CORRELATIONS

YIELD	KG/HA				
FLOW	DAYS	-0 63			
LEAF	RUST	-0 49	0 18		
PLNT	HT	0 02	0 20	0 04	
LODG	%	0 19	-0 20	-0 26	0 34

TABLE 51 OCEANIA NEW ZEALAND MANAWATU

PALMERSTON NORTH
H M MCEWAN

LATITUDE	040 23'S	DATE PLANTED	10/21/81	NITROGEN	--
LONGITUDE	175 37'E	DATE HARVESTED	3/ 8/82	PHOSPHORUS	--
ELEVATION	0015 M ABOVE S L	AMOUNT OF MOISTURE	285 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS WEATHER NORMAL
LOCAL CHECK BGL"S"-M2A X CIN

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	LODG %	SHTR %	BYDV 0-9
45	M2A(2)-STR"S" X IA-ABN	MEXICO	7092	63	64	105	21	0	4
40	MULA"S"	MEXICO	6937	67	63	115	25	0	3
43	TOPO 1419	MEXICO	6873	65	63	112	29	0	3
3	CABORCA 79	MEXICO	6740	64	58	97	63	0	4
25	JUPPA"S"	MEXICO	6717	66	59	105	33	0	5
24	JUPPA"S"	MEXICO	6535	65	60	103	38	0	3
13	M2A	ECUADOR	6476	63	57	95	59	0	4
23	PUMA"S"	MEXICO	6446	65	58	100	58	0	5
50	LOCAL CHECK		6438	67	63	122	13	0	3
7	SATU	AUSTRALIA	6409	62	58	88	21	0	4
21	CHIVA'S"	MEXICO	6355	65	61	98	46	0	5
35	YE 75 X IA-BUSH	MEXICO	6254	66	58	100	54	3	5
37	LECHON"S"	MEXICO	6227	67	60	93	21	0	4
36	LECHON"S"	MEXICO	6191	66	60	95	29	0	3
22	BOA"S"	MEXICO	6144	62	57	93	59	3	5
5	T74	KENYA	6094	63	61	105	25	0	4
32	M2A-IA	ECUADOR	6010	64	64	105	25	0	5
42	IRA-DRIRA	MEXICO	5999	64	57	115	50	0	4
33	PTR"R"-CASTOR"S"	MEXICO	5972	64	63	98	21	0	3
26	CHUU"S"	MEXICO	5919	63	60	97	29	0	5
41	JUANILLO 159	MEXICO	5899	67	61	128	21	0	3
30	BVR-ARM	ECUADOR	5897	63	61	102	54	0	5
15	PFT 7717	BRAZIL	5876	63	56	95	50	0	4
44	DELFIN 205	MEXICO	5848	70	59	118	21	0	4
29	ALMA	ETHIOPIA	5840	64	60	103	42	0	5
14	M2A-IA	ECUADOR ***	5831	63	59	95	54	0	4
6	COORONG	AUSTRALIA	5821	59	58	95	54	0	4
2	BEAGLE	MEXICO	5811	64	61	120	25	0	3
39	IRA-DRIRA	MEXICO	5762	63	57	110	42	0	4
19	MUSKOX"S"	MEXICO	5654	68	62	125	17	0	3
27	CARMAN	CANADA	5623	65	64	127	13	0	2
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	5621	66	59	120	38	2	3
28	OAC TRIWELL	CANADA	5613	64	63	125	21	0	3
4	T:5	KENYA	5586	64	60	105	38	3	5
11	MIZAR	ITALY	5545	62	59	105	50	0	4
17	R/M"S"	MEXICO	5527	61	60	107	25	0	3
38	PONY"S"	MEXICO	5486	63	62	107	25	2	4
18	JUANILLO 97	MEXICO	5420	67	62	127	21	0	3
46	PND'R"-YE 75	MEXICO	5399	65	60	98	50	3	5
48	VEERY"S" (BREAD WHEAT)	MEXICO	5328	73	65	88	29	22	4
34	VACA"S"	MEXICO	5299	60	56	97	50	0	3
1	CANANEA 79	MEXICO	5217	62	59	103	46	0	5
20	TIGRE'S"	MEXICO	5161	66	59	102	33	10	5
16	PFT 765	BRAZIL	5079	68	57	103	63	0	6
9	TYALLA	AUSTRALIA	4941	63	61	95	21	10	4
10	TR37	YUGOSLAVIA	4711	64	64	100	21	13	4
8	DUA	AUSTRALIA	4654	62	60	87	25	5	5
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	4616	62	60	85	71	20	4
12	MANIGERO	SPAIN	4288	63	64	103	21	13	4
49	YAVAROS (DURUM)	MEXICO	3714	71	60	72	67	0	3
		GRAND MEAN	5777 9	64 5	60 2	103 8	36 6	2 2	4 0
		STANDARD ERROR OF GRAND MEAN	51 2			0 3			
		COEFFICIENT OF VARIATION AS PC	10 9			3 1			
		LSD VARIETY MEANS 5 PC	1016 0			5 3			

CORRELATIONS

YIELD	KG/HA						
TEST	WT	-0 05					
FLOW	DAYS	-0 07	0 28				
PLNT	HT	0 27	0 16	0 30			
LODG	%	-0 11	-0 17	-0 68	-0 52		
SHTR	%	-0 51	0 14	0 30	-0 33	0 00	
BYDV	0-9	-0 05	-0 14	-0 40	-0 45	0 46	0 14

TABLE 52 SOUTH AFRICA BRAZIL R S

CENTRO NCL PESQUISA EMBRAPA
CEREAL STAFF

LATITUDE	028 15'S	DATE PLANTED	6/15/82	NITROGEN	APPLIED
LONGITUDE	052 24'W	DATE HARVESTED	11/20/82	PHOSPHORUS	APPLIED
ELEVATION	+00684 M ABOVE S L	AMOUNT OF MOISTURE	1332 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE HAND WEEDING LOCAL CHECK CNT9
WEATHER RAIN AND AIR HUMIDITY WERE HIGHT

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	PLNT HT	SCAB %	SEP N 0-9
39	IRA-DRIRA	MEXICO	3214	61	93	13	1
42	IRA-DRIRA	MEXICO	2982	51	91	13	1
20	TIGRE"S"	MEXICO	2758	62	78	13	3
21	CHIVA"S"	MEXICO ***	2720	60	81	50	2
37	LECHON"S"	MEXICO	2678	63	74	25	2
17	RAM"S"	MEXICO	2659	57	87	13	3
25	JUPPA"S"	MEXICO	2561	60	77	13	1
30	PVR-ARM	ECUADOR	2543	62	76	25	2
15	PFT 7717	BRAZIL	2489	61	78	0	1
38	PONY"S"	MEXICO	2482	58	85	25	1
35	YE 75 X IA-BUSH	MEXICO	2471	67	78	25	3
22	BOA"S"	MEXICO	2470	62	76	38	4
32	M2A-IA	ECUADOR	2464	59	80	38	1
3	CABORCA 79	MEXICO	2426	60	70	13	2
36	LECHON"S"	MEXICO	2354	63	75	25	2
45	M2A(2)-STR"S" X IA ABN	MEXICO	2342	56	81	25	3
13	M2A	ECUADOR	2320	59	72	13	1
27	CARMAN	CANADA	2313	53	94	0	1
43	TOPO 1419	MEXICO	2310	58	86	13	1
24	JUPPA"S"	MEXICO	2302	59	82	38	2
23	PUMA"S"	MEXICO	2296	63	77	38	4
44	DELFIN 205	MEXICO	2245	64	94	13	3
6	COORONG	AUSTRALIA	2186	57	75	0	2
29	ALMA	ETHIOPIA	2170	61	82	25	2
26	CHUU"S"	MEXICO	2124	57	71	13	4
7	SATU	AUSTRALIA	2070	57	72	13	3
11	MIZAR	ITALY	2022	54	81	25	3
14	M2A-IA	ECUADOR	1993	59	74	25	2
8	DUA	AUSTRALIA	1989	60	68	38	5
4	T65	KENYA	1988	63	77	25	5
41	JUANILLO 159	MEXICO	1928	59	97	63	2
9	TYALLA	AUSTRALIA	1871	55	74	25	4
2	BEAGLE	MEXICO	1855	53	96	25	2
40	MULA"S"	MEXICO	1850	58	86	0	1
16	PFT 765	BRAZIL	1776	64	75	13	1
1	CANANEA 79	MEXICO	1732	54	83	0	2
34	VACA"S"	MEXICO	1702	59	72	38	2
46	PND"R"-YE 75	MEXICO	1638	62	76	38	4
28	OAC TRIWELL	CANADA	1621	55	97	0	1
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	1577	57	92	38	2
12	MANIGERO	SPAIN	1376	49	77	13	5
5	T74	KENYA	1307	54	79	38	4
19	MUSKOX"S"	MEXICO	1281	58	101	38	1
18	JUANILLO 97	MEXICO	1253	58	96	25	2
33	PTR'R"-CASTOR"S"	MEXICO	1232	59	74	38	4
10	TR37	YUGOSLAVIA	676	42	73	13	6
50	LOCAL CHECK		590	68	83	0	1
48	VEERY'S" (BREAD WHEAT)	MEXICO	315	-	47	75	5
49	YAVAROS (DURUM)	MEXICO	-	-	-	-	-
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	-	-	32	75	-
		GRAND MEAN	2031 7	58 6	79 5	24 2	2 5
		STANDARD ERROR OF GRAND MEAN	22 8	0 3	0 4		
		COEFFICIENT OF VARIATION AS PC	13 5	5 9	5 7		
		LSD VARIETY MEANS 5 PC	443 7	5 6	7 3		

CORRELATIONS

YIELD	KG/HA				
TEST	WT	0 26			
PLNT	HT	0 15	-0 10		
SCAB	%	-0 20	0 13	-0 42	
SEP N	0-9	-0 38	-0 23	-0 42	0 32

TABLE 53 SOUTH AMERICA ARGENTINA SAN MIGUEL DE TUCUMAN

TUCUMAN
RAUL RICCI

LATITUDE	026 48'S	DATE PLANTED	6/29/82	NITROGEN	--
LONGITUDE	065 12'W	DATE HARVESTED	11/10/82	PHOSPHORUS	--
ELEVATION	0460 M ABOVE S L	AMOUNT OF MOISTURE	140 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
DISEASE DEVELOPMENT NOT REPORTED INSECT AND BIRD DAMAGE NOT REPORTED
SLIGHT WEED PROBLEM WEATHER NORMAL
LOCAL CHECK NAME NOT REPORTED

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT
43	TOPO 1419	MEXICO	2722	62	128	170	82
40	MULA"S"	MEXICO	2478	69	88	129	88
29	ALMA	ETHIOPIA	2403	63	91	151	83
44	DELFIN 205	MEXICO	2264	70	128	170	93
30	BVR-ARM	ECUADOR	2194	63	128	170	78
18	JUANILLO 97	MEXICO ***	2085	63	128	170	100
34	VACA"S"	MEXICO	2003	65	128	170	78
25	JUPPA"S"	MEXICO	1934	65	88	133	68
24	JUPPA"S"	MEXICO	1849	68	88	133	72
16	PFT 765	BRAZIL	1833	66	88	128	70
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	1833	64	128	170	95
41	JUANILLO 159	MEXICO	1754	63	88	129	90
2	BEAGLE	MEXICO	1716	66	128	170	103
9	TYALLA	AUSTRALIA	1674	62	91	134	70
7	BATU	AUSTRALIA	1663	62	88	133	67
33	PTR"R"-CASTOR"S"	MEXICO	1615	67	88	129	70
5	T74	KENYA	1611	68	88	128	77
21	CHIVA"S"	MEXICO	1600	62	88	133	70
48	VEERY"S" (BREAD WHEAT)	MEXICO	1542	71	88	132	63
36	LECHON"S"	MEXICO	1533	65	128	170	68
45	M2A(2)-STR"S" X IA-ABN	MEXICO	1521	63	128	170	85
11	MIZAR	ITALY	1505	63	88	128	77
22	BOA"S"	MEXICO	1498	63	88	133	70
38	PONY"S"	MEXICO	1484	65	128	170	80
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	1464	64	88	131	68
12	MANIGERO	SPAIN	1442	62	128	170	80
17	RAM"S"	MEXICO	1441	66	128	170	93
14	M2A-IA	ECUADOR	1432	65	88	133	75
42	IRA-DRIRA	MEXICO	1391	63	88	133	85
32	M2A-IA	ECUADOR	1373	65	84	133	78
26	CHUU"S"	MEXICO	1357	65	128	170	83
13	M2A	ECUADOR	1349	62	91	133	73
35	YE 75 X IA-BUSH	MEXICO	1344	64	91	136	62
28	OAC TRIWELL	CANADA	1328	70	88	134	97
39	IRA-DRIRA	MEXICO	1310	63	91	136	78
23	PUMA"S"	MEXICO	1302	63	128	170	70
19	MUSKOX"S"	MEXICO	1298	69	128	170	100
1	CANANEA 79	MEXICO	1258	62	88	129	60
6	COORONG	AUSTRALIA	1242	62	88	133	62
10	TR37	YUGOSLAVIA	1237	62	88	128	75
37	LECHON"S"	MEXICO	1219	62	88	129	60
20	TIGRE"S"	MEXICO	1215	64	91	135	75
4	T65	KENYA	1163	68	88	128	82
46	PND"R"-YE 75	MEXICO	1150	63	88	133	75
8	DUA	AUSTRALIA	1094	67	91	134	60
27	CARMAN	CANADA	1075	63	128	170	98
49	YAVAROS (DURUM)	MEXICO	988	63	88	133	65
3	CABORCA 79	MEXICO	937	64	91	135	63
15	PFT 7717	BRAZIL	864	63	88	133	62
50	LOCAL CHECK		-	-	-	-	-
		GRAND MEAN	1542 6	64 5	101 5	144 7	77 1
		STANDARD ERROR OF GRAND MEAN	25 3	0 2			0 5
		COEFFICIENT OF VARIATION AS PC	19 9	3 6			7 1
		LSD VARIETY MEANS 5 PC	496 5	3 7			8 9

CORRELATIONS

	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS
TEST WT	0 15			
FLOW DAYS	0 28	0 02		
MAT DAYS	0 31	0 00	0 98	
PLNT HT	0 34	0 27	0 56	0 56

TABLE 54 SOUTH AMERICA BOLIVIA COCHABAMBA

SAN BENITO
G SALAMANCA ET AL

LATITUDE	017 30'S	DATE PLANTED	12/31/81	NITROGEN	APPLIED
LONGITUDE	066 06'W	DATE HARVESTED	5/28/82	PHOSPHORUS	APPLIED
ELEVATION	2730 M ABOVE S L	AMOUNT OF MOISTURE	379 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE MODERATE WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS MECHANICAL CONTROL OF WEEDS
LOCAL CHECK BACUM

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	PLNT HT
18	JUANILLO 97	MEXICO	4874	63	137	TMR	118
11	MIZAR	ITALY	4400	60	131	0	108
29	ALMA	ETHIOPIA	4328	61	133	0	102
50	LOCAL CHECK		4223	52	132	0	97
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4193	67	136	0	108
44	DELFIN 205	MEXICO	4106	63	135	0	113
42	IRA-DRIRA	MEXICO	4070	57	132	0	103
39	IRA-DRIRA	MEXICO	4058	57	131	0	105
23	PUMA"S"	MEXICO	4009	59	132	0	95
12	MANIGERO	SPAIN	4002	69	136	0	105
21	CHIVA"S"	MEXICO	3988	65	134	0	100
46	PND"R"-YE 75	MEXICO	3977	62	132	0	97
41	JUANILLO 159	MEXICO	3963	62	135	TR	122
13	M2A	ECUADOR ***	3915	57	130	0	92
17	RAM"S"	MEXICO	3907	62	135	0	100
22	BOA"S"	MEXICO	3901	61	132	0	97
25	JUPPA"S"	MEXICO	3891	56	131	0	98
48	VEERY"S" (BREAD WHEAT)	MEXICO	3880	72	136	0	90
20	TIGRE"S"	MEXICO	3862	62	133	0	102
10	TR37	YUGOSLAVIA	3786	68	134	TR	103
26	CHUU"S"	MEXICO	3774	59	131	0	100
36	LECHON"S"	MEXICO	3742	64	132	0	97
6	COORONG	AUSTRALIA	3693	61	132	0	90
40	MULA"S"	MEXICO	3679	69	138	0	115
38	PONY"S"	MEXICO	3671	65	134	0	102
30	BVR-ARM	ECUADOR	3656	64	134	0	98
37	LECHON"S"	MEXICO	3633	67	134	0	90
15	PFT 7717	BRAZIL	3617	58	130	TMR	88
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3562	58	131	0	78
34	VACA"S"	MEXICO	3556	55	130	0	92
3	CABORCA 79	MEXICO	3553	59	131	0	90
28	OAC TRIWELL	CANADA	3525	68	138	0	120
35	YE 75 X IA-BUSH	MEXICO	3516	61	130	0	97
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	3511	60	132	0	108
43	TOPO 1419	MEXICO	3506	69	136	0	102
4	T65	KENYA	3407	62	130	0	90
32	M2A-IA	ECUADOR	3383	70	136	0	97
33	PTR"R"-CASTOR"S"	MEXICO	3298	64	133	0	102
1	CANANEA 79	MEXICO	3287	58	130	SMS	98
14	M2A-IA	ECUADOR	3269	62	132	0	88
16	PFT 765	BRAZIL	3250	55	131	0	95
5	T74	KENYA	3247	65	132	0	90
9	TYALLA	AUSTRALIA	3197	64	133	0	90
24	JUPPA"S"	MEXICO	3144	64	133	0	100
8	DUA	AUSTRALIA	3053	62	133	0	88
19	MUSKOX"S"	MEXICO	3035	68	139	0	120
2	BEAGLE	MEXICO	2994	63	135	0	113
27	CARMAN	CANADA	2861	69	138	0	118
7	SATU	AUSTRALIA	2742	55	131	0	75
49	YAVAROS (DURUM)	MEXICO	2544	65	134	0	78
		GRAND MEAN	3644 8	62 2	133 2	0 1	99 3
		STANDARD ERROR OF GRAND MEAN	39 0				0 6
		COEFFICIENT OF VARIATION AS PC	13 1				7 0
		LSD VARIETY MEANS 5 PC	774 9				11 2

CORRELATIONS

YIELD	KG/HA				
FLOW	DAYS	-0 14			
MAT	DAYS	-0 01	0 81		
STRP	RT L	-0 06	-0 13	-0 12	
PLNT	HT	0 34	0 36	0 63	0 12

TABLE 55 SOUTH AMERICA BOLIVIA SANTA CRUZ

EST EXP ARMANDO GOMEZ
E IGNACIO ET AL

LATITUDE	18 39'S	DATE PLANTED	5/17/82	NITROGEN	--
LONGITUDE	63 01'W	DATE HARVESTED	9/--/82	PHOSPHORUS	--
ELEVATION	386 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SLIGHT INSECT DAMAGE MODERATE WEED PROBLEM NEGLIGIBLE BIRD DAMAGE
CHEMICAL CONTROL OF INSECTS HAND WEEDING WEATHER NORMAL
LOCAL CHECK BOL-CIN

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	LEAF RUST	STEM RUST	PLNT HT	LODG %	SHTR %
42	IPA-DRIRA	MEXICO	3183	72	110	10MR	5MR	97	4	0
39	IRA-DRIRA	MEXICO	3094	72	109	10MR	5R	95	0	0
15	PFT 7717	BRAZIL	3052	66	108	-	-	77	11	0
17	RAM"S"	MEXICO	2866	77	115	10MR	0	85	0	0
21	CHIVA"S"	MEXICO	2789	73	111	30S-MS	5MR	82	11	0
26	CHUU"S"	MEXICO	2789	67	107	5MR	TMR	75	7	0
46	PND"R"-YE 75	MEXICO	2766	59	108	5MR-MS	5MR	75	11	4
7	SATU	AUSTRALIA	2755	59	107	5MR	TMR	72	0	0
25	JUPPA"S"	MEXICO	2744	62	109	40S-MS	TMR	75	7	0
32	M2A-IA	ECUADOR	2694	81	117	10MR	TMR	88	11	0
37	LECHON"S"	MEXICO	2678	59	105	10MS	5MR	72	4	0
23	PUMA"S"	MEXICO	2661	62	104	TMR	0	75	15	4
20	TIGRE"S"	MEXICO	2650	70	107	30S-MS	TMR	78	7	4
36	LECHON"S"	MEXICO	2644	63	106	10MS-S	5MR	75	7	0
13	M2A	ECUADOR	2637	64	108	20MR-MS	0	75	6	0
40	MULA"S"	MEXICO	2627	78	116	40S	10MR-R	92	4	0
24	JUPPA"S"	MEXICO ***	2578	75	111	30MS-S	5MR	82	7	0
29	ALMA	ETHIOPIA	2566	69	111	20S-MS	10MS-MR	78	11	0
3	CABORCA 79	MEXICO	2561	65	107	TMS	5MS	73	7	0
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2555	72	111	40S-MS	TMR	82	7	0
41	JUANILLO 159	MEXICO	2544	74	115	10MS	40S-MS	100	4	0
31	BOL/ARS-MEX MUT1 X BOL"S"	ECUADOR	2544	74	113	20MR	40S-MS	95	11	0
22	BOA"S"	MEXICO	2505	65	105	20MR-MS	TMS	73	11	7
6	COORONG	AUSTRALIA	2505	72	109	20MR-MS	10MR	75	7	0
38	PONY"S"	MEXICO	2500	72	110	10MR-R	TMR	82	15	0
19	MUSKOX"S"	MEXICO	2494	81	119	20MR	TMR	95	4	0
35	YE 75 X IA-BUSH	MEXICO	2472	60	102	10MS	TMR	70	11	4
30	BVR-ARM	ECUADOR	2472	71	111	20MR-MS	5MR	80	15	0
18	JUANILLO 97	MEXICO	2461	74	112	5MR	10S-MS	95	15	0
1	CANANEA 79	MEXICO	2422	65	107	TMR	TMR	80	7	0
48	VEERY"S" (BREAD WHEAT)	MEXICO	2400	82	111	TMR	5MR	73	11	0
50	LOCAL CHECK		2400	82	114	20MR-MS	TR	105	18	0
8	DUA	AUSTRALIA	2383	73	105	30MR-MS	0	70	11	4
11	MIZAR	ITALY	2378	64	104	10MR	0	78	15	0
49	YAVAROS (DURUM)	MEXICO	2366	78	113	20MS-S	5MR	77	22	0
16	PFT 765	BRAZIL	2344	59	104	TMS	TMS	75	11	4
43	TOPO 1419	MEXICO	2300	91	115	10MR-R	TMR	92	11	0
14	M2A-IA	ECUADOR	2300	72	110	10MR-MS	TMS	77	15	0
9	TYALLA	AUSTRALIA	2272	73	114	20MR-MS	TMR	75	0	0
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	2222	63	104	20MR-MS	5MS	67	15	15
33	PTR"R"-CASTOR"S"	MEXICO	2211	72	108	5MR	0	77	15	0
28	OAC TRIWELL	CANADA	2178	91	123	10MR-R	30MS-S	102	11	0
34	VACA"S"	MEXICO	2039	63	104	10S-MS	5MR	70	22	0
27	CARMAN	CANADA	2000	92	122	20R-MR	30S-MS	103	11	0
44	DELFIN 205	MEXICO	1950	79	115	40MS	TMR	92	22	0
5	T74	KENYA	1811	73	109	10MS	10MR	80	22	0
2	BEAGLE	MEXICO	1811	89	118	TMR	30S	100	18	0
4	T65	KENYA	1778	71	108	0	5MR	77	26	0
12	MANIGERO	SPAIN	1389	73	105	TMS	30MS-S	78	26	0
10	TR37	YUGOSLAVIA	444	77	104	10MS	50S	80	78	0
		GRAND MEAN	2415 6	71 7	109 9	10 3	5 8	81 9	11.9	0 9
		STANDARD ERROR OF GRAND MEAN	24 7					0 3		
		COEFFICIENT OF VARIATION AS PC	12 5					4 4		
		LSD VARIETY MEANS 5 PC	490 8					5 8		

CORRELATIONS

YIELD	KG/HA							
FLOW	DAYS	-0 30						
MAT	DAYS	0 03	0 82					
LEAF	RUST	0 16	-0 05	0 10				
STEM	RUST	-0 62	0 41	0 25	-0 21			
PLNT	HT	-0 01	0 74	0 79	-0 07	0 42		
LODG	%	-0 85	0 15	-0 20	-0 16	0 53	-0 05	
SHTR	%	0 02	-0 35	-0 40	-0 02	-0 15	-0 39	0 00

TABLE 56 SOUTH AMERICA BRAZIL DISTRITO FEDERAL

DOS CERRADOS
CENT PES AGRO

LATITUDE	015 45'S	DATE PLANTED	5/31/82	NITROGEN	APPLIED
LONGITUDE	047 47'W	DATE HARVESTED	9/30/82	PHOSPHORUS	APPLIED
ELEVATION	1000 M ABOVE S L	AMOUNT OF MOISTURE	850 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT SLIGHT INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS WEATHER NORMAL
LOCAL CHECK ALONDRA 4546

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	LEAF RUST	PLNT HT	1000 G W
28	DAC TRIWELL	CANADA	3737	-	----	100	46
17	RAM"S"	MEXICO	3443	-	----	85	46
27	CARMAN	CANADA	3413	-	----	95	45
43	TOPO 1419	MEXICO	3203	-	----	90	41
19	MUSKOX"S"	MEXICO	3160	-	0	100	47
31	BGL/ARS-MEX MUTI X BGL"B"	ECUADOR	3079	66	----	90	46
40	MULA"S"	MEXICO	3028	-	----	85	46
2	BEAGLE	MEXICO ***	2960	-	0	95	45
18	JUANILLO 97	MEXICO	2952	69	----	90	49
21	CHIVA"S"	MEXICO	2859	68	----	75	38
32	M2A-1A	ECUADOR	2809	66	----	75	40
41	JUANILLO 159	MEXICO	2732	69	----	100	51
29	ALMA	ETHIOPIA	2684	-	----	75	39
44	DELFIN 205	MEXICO	2639	68	----	80	43
39	IRA-DRIRA	MEXICO	2524	66	----	90	47
38	PONY"S"	MEXICO	2468	-	0	85	45
45	M2A(2)-STR"S" X IA-ABN	MEXICO	2467	-	----	75	37
42	IRA-DRIRA	MEXICO	2436	67	----	90	45
14	M2A-IA	ECUADOR	2412	68	----	80	39
26	CHUU"S"	MEXICO	2369	68	----	60	40
23	PUMA"S"	MEXICO	2257	68	----	70	43
12	MANIGERO	SPAIN	2239	-	----	75	34
22	BOA"S"	MEXICO	2139	-	----	65	41
5	T74	KENYA	2077	-	----	70	39
33	PTR"R"-CASTOR"S"	MEXICO	1991	68	----	65	50
10	TR37	YUGOSLAVIA	1975	-	----	70	34
37	LECHON"S"	MEXICO	1897	67	----	65	37
1	CANANEA 79	MEXICO	1857	-	----	70	42
20	TIGRE"S"	MEXICO	1852	69	----	65	38
7	SATU	AUSTRALIA	1841	-	0	60	44
25	JUPPA"S"	MEXICO	1840	-	----	80	37
11	MIZAR	ITALY	1791	-	----	75	42
4	T65	KENYA	1789	-	----	75	38
6	COORONG	AUSTRALIA	1749	-	----	70	37
15	PFT 7717	BRAZIL	1745	-	----	70	33
9	TYALLA	AUSTRALIA	1697	-	----	70	40
46	PND"R"-YE 75	MEXICO	1693	69	10MR	70	41
8	DUA	AUSTRALIA	1691	-	----	60	44
36	LECHON"S"	MEXICO	1621	68	----	60	38
3	CABORCA 79	MEXICO	1595	-	----	70	34
30	BVR-ARM	ECUADOR	1595	-	----	75	33
34	VACA"S"	MEXICO	1548	-	20MR	75	47
13	M2A	ECUADOR	1539	-	----	65	39
24	JUPPA"S"	MEXICO	1519	-	----	75	36
16	PFT 765	BRAZIL	1468	71	----	65	37
35	YE 75 X IA-BUSH	MEXICO	1389	68	----	50	39
48	VEERY"S" (BREAD WHEAT)	MEXICO	881	76	----	55	28
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	645	73	40S	50	35
49	YAVAROS (DURUM)	MEXICO	637	76	----	50	38
50	LOCAL CHECK		620	73	20S	60	34
		GRAND MEAN	2131 0	69 1	9 3	74 2	40 3
		STANDARD ERROR OF GRAND MEAN	31 5				
		COEFFICIENT OF VARIATION AS PC	18 1				
		LSD VARIETY MEANS 5 PC	624 2				

CORRELATIONS

YIELD KG/HA					
TEST	WT	-0 83			
LEAF	RUST	-1 05	1 90		
PLNT	HT	0 83	-0 63	-0 97	
1000	G W	0 61	-0 63	-0 84	0 59

TABLE 37 SOUTH AMERICA BRAZIL PARANA

PALOTINA
OCEPAR/JOHN W GIBLER

LATITUDE	24 17'S	DATE PLANTED	4/23/82	NITROGEN	APPLIED
LONGITUDE	53 26'W	DATE HARVESTED	8/25/82	PHOSPHORUS	APPLIED
ELEVATION	300 M ABOVE S L	AMOUNT OF MOISTURE	764 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SERIOUS DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
CHEMICAL CONTROL OF INSECTS HAND WEEDING
LOCAL CHECK COCORAQUE

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	LODG %	1000 G W	SCAB %
35	YE 75 X IA-BUSH	MEXICO	999	62	54	113	TMR	70	-	24	20
28	OAC TRIWELL	CANADA	994	60	78	135	TMR	95	-	32	-
23	PUMA"S"	MEXICO	994	57	55	102	0	75	80	24	20
50	LOCAL CHECK		984	75	59	110	TMS	55	-	27	40
39	IRA-DRIRA	MEXICO	974	57	90	114	0	95	70	27	40
20	TIGRE"S"	MEXICO	974	59	57	113	0	70	30	24	20
46	PND R"-YE 75	MEXICO	950	61	58	135	0	75	20	26	20
6	COORONG	AUSTRALIA	950	46	59	113	0	80	70	25	20
36	LECHON"S"	MEXICO	935	62	58	113	0	70	-	26	40
48	VEERY"S" (BREAD WHEAT)	MEXICO	930	76	74	113	TMS	60	-	25	40
32	M2A-IA	ECUADOR	920	63	70	122	0	70	-	26	20
24	JUPPA"S"	MEXICO	910	58	55	114	0	70	-	26	40
42	IRA-DRIRA	MEXICO	900	62	90	113	0	85	80	26	20
38	PONY"S"	MEXICO	900	57	63	114	0	70	-	26	20
25	JUPPA"S"	MEXICO	893	58	55	113	0	70	-	24	20
15	PFT 7717	BRAZIL	866	57	55	113	0	75	60	22	40
41	JUANILLO 139	MEXICO	851	66	90	117	TMS	90	-	30	20
21	CHIVA"S"	MEXICO	831	57	63	114	0	75	-	21	40
13	M2A	ECUADOR	806	57	54	113	0	70	-	23	40
37	LECHON"S"	MEXICO	801	55	58	113	0	70	-	25	20
29	ALMA	ETHIOPIA	801	58	58	117	0	75	-	24	20
1	CANANEA 79	MEXICO	791	47	50	102	0	70	70	24	40
30	BVR-ARM	ECUADOR	782	56	61	117	0	70	-	22	20
18	JUANILLO 97	MEXICO	777	55	56	114	TMS	85	-	30	40
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	767	58	61	117	TMS	90	40	29	20
11	MIZAR	ITALY	757	55	55	114	0	75	-	24	40
22	BOA"S"	MEXICO	727	54	55	113	0	70	-	23	40
14	M2A-IA	ECUADOR	717	58	55	114	0	75	30	22	40
7	SATU	AUSTRALIA	717	52	50	113	0	75	100	23	40
33	PTR"R"-CASTOR"S"	MEXICO	707	60	55	113	0	70	-	29	20
45	M2A(2)-STR"S" X IA-ABN	MEXICO	688	54	67	117	0	75	-	23	20
19	MUSKOX"S"	MEXICO	683	60	67	122	TMR	80	-	31	20
40	MULA"S"	MEXICO	678	58	78	135	TMR	80	-	31	20
4	T65	KENYA ***	668	53	59	113	0	70	20	21	20
16	PFT 765	BRAZIL	663	58	52	102	TMS-S	65	40	20	40
34	VACA"S"	MEXICO	658	57	52	113	0	70	-	27	60
26	CHUU"S"	MEXICO	643	54	55	114	0	65	60	23	20
9	TYALLA	AUSTRALIA	643	55	54	114	TMS	75	10	25	20
8	DUA	AUSTRALIA	608	55	50	114	0	70	10	24	40
3	CABORCA 79	MEXICO	589	53	50	113	0	70	70	20	20
27	CARMAN	CANADA	584	58	78	135	TMS	95	-	29	-
44	DELFIN 205	MEXICO	529	62	67	122	0	85	-	24	20
12	MANIGERO	SPAIN	524	53	67	113	TMS	75	-	20	40
43	TOPO 1419	MEXICO	490	60	76	122	0	85	-	28	20
10	TR37	YUGOSLAVIA	485	55	67	114	TMS	70	-	19	20
2	BEAGLE	MEXICO	480	54	62	122	TMR-MS	85	-	28	20
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	376	58	54	102	10MS-S	60	20	16	60
49	YAVAROS (DURUM)	MEXICO	317	69	74	122	0	60	-	25	20
5	T74	KENYA	302	48	61	114	0	65	-	19	20
17	RAM"S"	MEXICO	262	46	62	114	TMS	70	-	22	40
		GRAND MEAN	735 6	57 6	62 1	115 6	0 4	74 3	48 9	24 7	29 2
		STANDARD ERROR OF GRAND MEAN	13 2								
		COEFFICIENT OF VARIATION AS PC	22 0								
		LSD VARIETY MEANS 5 PC	262 6								

CORRELATIONS

YIELD	KG/HA										
TEST	WT	0 33									
FLOW	DAYS	0 04	0 37								
MAT	DAYS	-0 04	0 19	0 49							
LEAF	RUST	-0 34	0 06	-0 05	-0 27						
PLNT	HT	0 14	-0 14	0 55	0 51	-0 18					
LODG	%	0 34	-0 22	0 29	-0 26	-0 52	0 31				
1000	G W	0 35	0 34	0 44	0 57	-0 33	0 58	0 14			
SCAB	%	-0 05	-0 02	-0 27	-0 38	0 42	-0 22	-0 07	-0 24		

TABLE 58 SOUTH AMERICA BRAZIL RIO GRANDE DO SUL

CRUZ ALTA
WHEAT STAFF

LATITUDE	028 38'S	DATE PLANTED	6/ 9/82	NITROGEN	APPLIED
LONGITUDE	053 36'W	DATE HARVESTED	10/13/82	PHOSPHORUS	APPLIED
ELEVATION	0473 M ABOVE S L	AMOUNT OF MOISTURE	68 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SERIOUS DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
MODERATE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS CHEMICAL CONTROL OF WEEDS
MECHANICAL CONTROL OF WEEDS LOCAL CHECK PAT /392

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	LEAF RUST	STEM RUST	SEP N 0-9
28	DAC TRIWELL	CANADA	1880	48	TR	TMS	4
18	JUANILLO 97	MEXICO	1794	51	20MS	0	4
19	MUSKOX"S"	MEXICO	1651	55	5S	0	4
27	CARMAN	CANADA	1592	47	5MS	TMS	4
24	JUPPA"S"	MEXICO	1509	52	5MR-MS	0	6
31	BOL/ARG-MEX MUTI X BOL"S"	ECUADOR	1448	49	TR	TMS	8
17	RAM"S"	MEXICO	1370	45	5MR	0	4
43	TOPO 1419	MEXICO	1318	51	0	0	8
15	PFT 7717	BRAZIL	1318	49	0	0	6
21	CHIVA"S"	MEXICO	1314	49	TMR	0	4
42	IRA-DRIRA	MEXICO	1295	50	TS	0	4
20	TIGRE"S"	MEXICO	1292	50	0	0	6
25	JUPPA"S"	MEXICO	1274	51	10S	0	8
2	BEAGLE	MEXICO ***	1212	46	TMR	10S	4
35	YF 75 X IA-BUSH	MEXICO	1107	53	TMS	0	6
40	MULA"S"	MEXICO	1088	53	5MR	0	4
32	M2A-IA	ECUADOR	1080	50	0	0	6
45	M2A(2)-STR"S" X IA-ABN	MEXICO	1078	49	0	0	8
22	BOA"S"	MEXICO	1059	43	0	0	6
7	SATU	AUSTRALIA	1051	45	TMR	0	4
1	CANANEA 79	MEXICO	1025	43	TMS	0	6
38	PONY"S"	MEXICO	1002	48	0	0	6
39	IRA-DRIRA	MEXICO	1001	50	TMR	0	6
30	BVR-ARM	ECUADOR	999	47	0	0	6
26	CHUU"S"	MEXICO	998	48	TR	0	8
11	MIZAR	ITALY	961	42	0	0	8
36	LECHON"S"	MEXICO	952	49	0	0	8
44	DELFIN 205	MEXICO	921	53	0	0	6
6	COORONG	AUSTRALIA	914	42	0	0	8
16	PFT 765	BRAZIL	886	51	0	0	8
23	PUMA"S"	MEXICO	864	45	TMS	0	6
41	JUANILLO 159	MEXICO	844	51	20S	0	6
3	CABORCA 79	MEXICO	830	43	TMR	0	6
13	M2A	ECUADOR	822	47	10MS	0	4
9	TYALLA	AUSTRALIA	807	48	0	0	8
46	PND"R"-YE 75	MEXICO	798	51	10S	0	6
29	ALMA	ETHIOPIA	769	48	0	TMS	6
14	M2A-IA	ECUADOR	696	43	0	0	6
34	VACA"S"	MEXICO	664	46	5MS	0	8
33	PTR"R"-CASTOR"S"	MEXICO	494	47	TR	0	8
4	T65	KENYA	492	41	TR	0	6
10	TR37	YUGOSLAVIA	475	41	0	20S	6
50	LOCAL CHECK		473	67	30S	TMS	8
8	DUA	AUSTRALIA	469	46	10S	0	6
12	MANIGERO	SPAIN	453	43	0	10S	6
5	T74	KENYA	419	39	5MS-S	0	9
37	LECHÓN"S"	MEXICO	375	51	0	0	8
48	VEERY"S" (BREAD WHEAT)	MEXICO	209	56	5S	0	8
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	135	45	60S	0	8
49	YAVAROS (DURUM)	MEXICO	127	-	TR	0	9
		GRAND MEAN	951 3	48 1	4 0	0 9	6 3
		STANDARD ERROR OF GRAND MEAN	26 0				
		COEFFICIENT OF VARIATION AS PC	33 4				
		LSD VARIETY MEANS 5 PC	515 5				

CORRELATIONS

YIELD KG/HA					
TEST	WT	0 16			
LEAF	RUST	-0 27	0 24		
STEM	RUST	-0 15	-0 25	-0 09	
SEP N	0-9	-0 56	0 01	0 12	-0 13

TABLE 59 SOUTH AMERICA CHILE CHILLAN/ÑUBLE

QUILAMAPU
M MELLADO

LATITUDE	036 34'S	DATE PLANTED	9/ 5/81	NITROGEN	APPLIED
LONGITUDE	072 06 W	DATE HARVESTED	2/19/82	PHOSPHORUS	APPLIED
ELEVATION	0144 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE MECHANICAL CONTROL OF WEEDS WEATHER NOT REPORTED
LOCAL CHECK LABRIEGO INIA

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	STRP RT L	LEAF RUST	PLNT HT
22	BOA"S"	MEXICO	5771	68	70	TMR	40MR	90
9	TYALLA	AUSTRALIA	5639	69	73	0	40S	95
42	IRA-DRIRA	MEXICO	5521	72	67	0	0	115
23	PUMA"S"	MEXICO	5473	73	68	0	0	90
4	T65	KENYA	5445	68	70	0	5S	95
27	CARMAN	CANADA	5389	71	78	0	5MR	110
34	VACA"S"	MEXICO	5306	70	67	0	5MR	85
43	TOPO 1419	MEXICO	5292	70	73	5R-MR	0	110
38	PONY"S"	MEXICO	5285	69	73	0	TMR	110
25	JUPPA"S"	MEXICO	5271	71	69	0	5S	95
21	CHIVA"S"	MEXICO	5257	73	73	0	0	95
17	RAM"S"	MEXICO	5250	68	71	10MR	TMS	108
26	CHYJ"S"	MEXICO	5181	72	73	5MR	0	85
7	GATU	AUSTRALIA	5077	68	72	40M	0	90
44	DELFIN 205	MEXICO	4938	76	70	20MR	TMS	117
33	PTR"R"-CASTOR"S"	MEXICO	4917	71	73	0	0	93
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4889	68	73	10MR	0	112
20	TIGRE"S"	MEXICO	4820	71	72	0	0	100
6	COORONG	AUSTRALIA	4806	65	70	0	0	88
14	M2A-IA	ECUADOR	4785	70	70	0	0	90
28	OAC TRIWFLL	CANADA	4764	70	74	20MR	5MR	115
19	MUSKOX"S"	MEXICO	4743	74	76	5MR	5MR	125
13	M2A	ECUADOR	4730	69	68	0	TMS	90
40	MULA"S"	MEXICO	4653	72	76	40MR	5MS	97
37	LECHON"S"	MEXICO	4591	71	70	0	TMR	90
39	IRA-DRIRA	MEXICO	4584	72	69	0	0	115
24	JUPPA"S"	MEXICO	4556	70	71	TM	10S	93
36	LECHON"S"	MEXICO	4556	71	71	0	0	87
30	BVR-ARM	ECUADOR	4549	66	72	0	5MR	102
41	JUANILLO 159	MEXICO	4535	73	73	40MR	60S	120
15	PFT 7717	BRAZIL	4493	70	69	0	TMS	90
35	YE 75 X IA-BUSH	MEXICO	4445	73	73	0	5MS	90
18	JUANILLO 97	MEXICO	4431	74	72	10MR	40S	125
5	T74	KENYA	4264	69	72	20M	70S	90
2	BEAGLE	MEXICO ***	4181	70	71	10MR	0	113
8	DUA	AUSTRALIA	4139	68	71	0	60S	85
3	CABORCA 79	MEXICO	4139	68	70	0	0	93
10	TR37	YUGOSLAVIA	3973	69	76	40MR	5S	103
46	PND"R"-YE 75	MEXICO	3973	72	70	0	5S	90
11	MIZAR	ITALY	3945	67	71	50S	0	100
12	MANIGERO	SPAIN	3841	67	76	40S	0	95
16	PFT 765	BRAZIL	3792	76	69	0	0	113
29	ALMA	ETHIOPIA	3757	66	72	40MR	TMR	90
32	M2A-IA	ECUADOR	3570	72	75	10S-MS	TMR	92
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	3521	69	71	5MR	50S	120
48	VEERY"S" (BREAD WHEAT)	MEXICO	3354	80	73	0	5S	72
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	3118	78	71	10S	70S	73
1	CANANEA 79	MEXICO	2910	65	70	40S-MS	0	95
50	LOCAL CHECK		2777	76	91	30M	5S	70
49	YAVAROS (DURUM)	MEXICO	1243	78	72	0	0	63
		GRAND MEAN	4488 8	70 7	72 0	6 1	9 4	97 4
		STANDARD ERROR OF GRAND MEAN	63 8	0 1				0 2
		COEFFICIENT OF VARIATION A5 PC	17 4	1 6				2 2
		LSD VARIETY MEANS 5 PC	1267 2	1 8				3 5

CORRELATIONS

YIELD	KG/HA					
TEST	WT	-0 32				
FLOW	DAYS	-0 28	0 20			
STRP	RT L	-0 34	-0 26	0 28		
LEAF	RUST	-0 14	0 11	0 00	0 02	
PLNT	HT	0 39	-0 16	-0 11	-0 01	0 01

TABLE 60 SOUTH AMERICA ECUADOR QUITO, PICHINCHA

STA CATALINA
PROGRAMA CEREALES
LATITUDE 000 22'S DATE PLANTED / / NITROGEN -
LONGITUDE 078 33'W DATE HARVESTED / / PHOSPHORUS -
ELEVATION 3058 M ABOVE S L AMOUNT OF MOISTURE - MM POTASSIUM -

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SERIOUS DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF INSECTS LOCAL CHECK INI'"-ALTAR
VERY WET CICLE

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	STRP RT L	PLNT HT	1000 G W
50	LOCAL CHECK		6505	62	84	TR	135	57
43	TOPO 1419	MEXICO	5598	58	94	TR	130	48
4	T65	KENYA	5573	63	79	TR	105	48
27	CARMAN	CANADA	5555	53	92	5R	130	46
41	JUANILLO 159	MEXICO	5443	60	88	10R	140	51
42	IRA-DRIRA	MEXICO ***	5413	66	75	TR	125	52
22	BOA"S"	MEXICO	5382	63	75	TR	105	48
39	IRA-DRIRA	MEXICO	5295	66	73	TR	120	50
26	CHUU"S"	MEXICO	5234	63	78	5R	100	38
40	MULA"S"	MEXICO	5215	59	93	TR	120	49
31	BGL/ARS-' X MUTI X BGL"S"	ECUADOR	5209	60	84	5R	130	54
18	JUANILLO 97	MEXICO	5172	61	90	5MR	130	48
28	OAC TRIWELL	CANADA	5153	51	92	TR	130	47
35	YE 75 X IA-BUSH	MEXICO	5067	67	78	TR	110	40
3	CABORCA 79	MEXICO	5055	60	78	TR	100	41
5	T74	KENYA	4956	61	90	TR	110	43
17	RAM"S"	MEXICO	4956	56	85	TR	120	42
6	COORONG	AUSTRALIA	4888	59	78	TR	100	41
20	TIGRE"S"	MEXICO	4839	63	80	TR	110	52
36	LECHON"S"	MEXICO	4771	61	79	TR	105	47
23	PUMA"S"	MEXICO	4758	64	75	TR	105	40
30	BVR-ARM	ECUADOR	4672	64	80	TR	110	41
48	VEERY"S' (BREAD WHEAT)	MEXICO	4647	75	92	TR	90	35
25	JUPPA"S"	MEXICO	4610	65	75	TR	100	41
37	LECHON"S"	MEXICO	4555	65	80	TR	100	52
8	DUA	AUSTRALIA	4518	62	75	TR	95	47
38	PONY"S"	MEXICO	4511	61	90	TR	120	42
44	DELFIN 205	MEXICO	4493	66	88	TR	140	44
7	SATU	AUSTRALIA	4462	62	75	TR	90	44
32	M2A-IA	ECUADOR	4462	62	92	TR	105	47
2	BEAGLE	MEXICO	4413	54	85	5M	130	42
45	M2A(2)-STR"S" X IA-ABN	MEXICO	4388	60	90	TR	120	43
21	CHIVA"S"	MEXICO	4370	60	83	TR	110	35
15	PFT 7717	BRAZIL	4345	62	76	TR	95	43
14	M2A-IA	ECUADOR	4320	64	77	TR	100	41
11	MIZAR	ITALY	4308	54	78	TR	105	49
24	JUPPA"S"	MEXICO	4308	63	76	TR	110	41
34	VACA"S"	MEXICO	4154	64	76	TR	95	48
1	CANANEA 79	MEXICO	4117	56	77	TR	110	46
46	PND"R"-YE 75	MEXICO	4104	66	75	TR	100	40
12	MANIGERO	SPAIN	4086	59	92	TR	110	44
13	M2A	ECUADOR	4030	62	75	TR	95	40
9	TYALLA	AUSTRALIA	3975	61	79	TR	105	45
29	ALMA	ETHIOPIA	3598	52	79	TR	115	37
10	TR37	YUGOSLAVIA	3512	59	90	TR	110	37
19	MUSKOX"S"	MEXICO	3444	56	92	TR	130	37
33	PTR"R"-CASTOR"S"	MEXICO	3277	60	85	TR	105	45
16	PFT 765	BRAZIL	3166	65	76	TR	100	34
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	1062	61	90	995	80	30
49	YAVAROS (DURUM)	MEXICO	179	-	94	TR	75	39
		GRAND MEAN	4482 4	61 1	82 7	2 4	110 2	43 8
		STANDARD ERROR OF GRAND MEAN	48 4					
		COEFFICIENT OF VARIATION AS PC	13 2					
		LSD VARIETY MEANS 5 PC	961 4					

CORRELATIONS

YIELD	KG/HA					
TEST	WT	0 05				
FLOW	DAYS	-0 15	-0 31			
STRP	RT L	-0 47	-0 02	0 16		
PLNT	HT	0 57	-0 37	0 35	-0 28	
1000	G W	0 60	-0 07	-0 05	-0 35	0 46

TABLE 61 SOUTH AMERICA PARAGUAY CACUPE

INST AGR NACIONAL
R ARTECONA ET AL

LATITUDE	25 24'S	DATE PLANTED	5/29/82	NITROGEN	APPLIED
LONGITUDE	57 06'W	DATE HARVESTED	--/--/--	PHOSPHORUS	APPLIED
ELEVATION	238 M ABOVE S L	AMOUNT OF MOISTURE	583 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE MECHANICAL CONTROL OF WEEDS LOCAL CHECK C-5849 (WHEAT)
PRECIPITATION ABOVE NORMAL

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	STEM RUST	PLNT HT	1000 G W
14	M2A-IA	ECUADOR	2208	63	54	96	2S	0	72	29
22	BOA'S"	MEXICO	2013	61	57	92	5S	0	75	32
7	SATU	AUSTRALIA	1981	60	50	94	TS	0	67	30
16	PFT 765	BRAZIL	1958	67	47	94	0	0	70	30
20	TIGRE"S"	MEXICO	1950	66	58	94	TR	0	80	31
15	PFT 7717	BRAZIL	1946	63	52	96	0	0	75	29
39	IRA-DRIRA	MEXICO	1900	63	54	94	0	0	85	37
38	PONY"S"	MEXICO	1875	61	60	96	0	0	80	31
47	NACOZARI 76 (BREAD WHEAT)	MEXICO	1867	72	51	90	30MS	0	65	27
45	M2A(2)-STR"S" X IA-ABN	MEXICO	1840	59	61	-	5MR	0	80	29
34	VACA"S"	MEXICO	1825	63	45	94	10MR	0	60	37
33	PTR"R"-CASTOR"S"	MEXICO	1804	66	53	96	2MR	0	65	37
38	VEERY"S" (BREAD WHEAT)	MEXICO	1785	71	72	-	TR	0	70	24
13	M2A	ECUADOR	1773	63	50	92	TS	0	75	29
9	TYALLA	AUSTRALIA	1771	61	57	96	TMS	0	70	29
4	T65	KENYA	1763	60	56	94	5MR	0	75	28
3	CABORCA 79	MEXICO	1746	60	53	94	TMS	0	85	27
11	MIZAR	ITALY	1742	69	51	94	10MS	10S	80	29
6	COORONG	AUSTRALIA	1742	58	51	94	TMR	0	70	32
46	PND"R"-YE 75	MEXICO	1735	56	51	94	10S	0	75	31
36	LECHON"S"	MEXICO	1733	65	52	94	TR	0	68	30
37	LECHON"S"	MEXICO	1729	64	51	94	TMS	0	70	32
2	BEAGLE	MEXICO	1723	58	59	-	TMS		90	33
42	IRA-DRIRA	MEXICO	1708	63	55	94	0	0	96	38
21	CHIVA"S"	MEXICO	1700	62	64	-	10MS	0	75	29
8	DUA	AUSTRALIA	1692	60	53	96	10S	0	75	32
29	ALMA	ETHIOPIA	1685	61	59	96	5S	0	75	29
23	PUMA"S"	MEXICO	1667	63	53	92	TMS	0	70	34
35	YE 75 X IA-BUSH	MEXICO	1663	66	52	94	10S	0	65	30
41	JUANILLO 159	MEXICO	1656	61	57	96	10S	0	85	38
17	RAM"S"	MEXICO	1652	69	58	-	20S	0	85	36
50	LOCAL CHECK		1652	73	73	-	0		75	28
30	BVR-ARM	ECUADOR	1592	61	56	96	TR	0	72	28
31	BGL/ARS-MEX MUTI X BGL"S"	ECUADOR	1563	61	56	96	10S	0	70	34
1	CANANEA 79	MEXICO	1494	59	51	92	0	0	75	30
18	JUANILLO 97	MEXICO ***	1433	62	57	96	20MR	0	85	39
25	JUPPA"S"	MEXICO	1419	63	53	94	TR	0	65	32
26	CHUU"S"	MEXICO	1402	62	59	96	TR	0	68	25
40	MULA"S'	MEXICO	1385	61	71	-	TR	0	82	31
5	T74	KENYA	1385	56	60	95	5S	0	75	27
32	M2A-IA	ECUADOR	1375	63	73	-	0	0	72	27
12	MANIGERO	SPAIN	1375	57	66	-	20MS	10S	80	21
28	OAC TRIWELL	CANADA	1350	56	73	-	TMS	0	70	32
24	JUPPA"S"	MEXICO	1338	67	60	94	TS	0	65	34
44	DELFIN 205	MEXICO	1319	63	58	-	10S	0	90	30
43	TOPO 1419	MEXICO	1317	55	75	-	TR	0	80	30
10	TR37	YUGOSLAVIA	1315	58	64	96	20S	20S	75	24
19	MUSKOX"S"	MEXICO	1010	63	61	-	TR	0	95	27
27	CARMAN	CANADA	919	54	50	-	0	0	80	27
49	YAVAROS (DURUM)	MEXICO	838	64	72	-	TR	0	60	28
		GRAND MEAN	1626 2	62 2	57 7	94 4	4 0	0 8	75 1	30 4
		STANDARD ERROR OF GRAND MEAN	28 9							
		COEFFICIENT OF VARIATION AS PC	21 7							
		LSD VARIETY MEANS 5 PC	573 1							

CORRELATIONS

YIELD	KG/HA								
TEST	WT	0 29							
FLOW	DAYS	-0 45	-0 04						
MAT	DAYS	-0 13	-0 28	0 24					
LEAF	RUST	-0 01	0 11	-0 07	-0 10				
STEM	RUST	-0 16	-0 09	0 13	0 15	0 49			
PLNT	HT	-0 11	-0 21	0 13	0 14	0 07	0 08		
1000	G W	0 23	0 08	-0 32	0 05	-0 07	-0 38	0 11	