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Results of the Thirteenth International Durum Yield Nursery (IDYN) 1981-82

CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO
INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER
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GLOSSARY OF VARIABLE NAMES USED IN THE TABLES.
GLOSARIO DE NOMBRES VARIABLES USADOS EN LAS TABLAS.
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/M2	Ears per square meter	Espigas o mazorcas por metro cuadrado	Epis par mètre2
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
FLOW 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 à la grêle en pourcentage
HELM	Helminthosporium (0–9 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	Porcéntaje 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/mètre2)
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)	Oïdium (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 DURUM YIELD NURSERY

(IDYN) 1981-82

The 13th International Durum Yield Nursery (IDYN) was sent in September 1981, to be grown by cooperators in their spring season of 1982. Seventy nurseries went to cooperators in 49 countries. The 30 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.

Thirty-eight of the cooperators receiving the 13th IDYN 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 three 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. *Regional summaries* of means have been computed from data aggregated from individual sites in several countries grouped by geographic criteria. Each regional table lists the names of all countries and locations from which site date were drawn for that table.
3. *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 IDYNs 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 IDYN entries

Entry No.	Variety or Cross and Pedigree	Origin
1	CANDO	USA
2	D 681	USA
3	EDMORE	USA
4	GEZIRA	SYRIA
5	AMAL 72	TUNISIA
6	KHROUB 76	ALGERIA
7	SAHEL 77	ALGERIA
8	TASSILI 77	ALGERIA
9	BOOHAI	ETHIOPIA
10	DWL 5002	INDIA
11	DWL 5023	INDIA
12	WAHA "S" CM-17904-B-3M-1Y	MEXICO
13	CYUS "S"-SINCAPE 9 X YEL"S"/CFN-FG"S" X PTL"S" CM-19981-I-3Y-3M-2Y-3M-1Y-0Y	MEXICO
14	LA DULCE CD-595-1LD-1LD-3LD	ARGENTINA
15	ROK "S" CD-1895-12Y-0Y-2E-6B-0Y	MEXICO
16	BOY "S" CD-4404-B-9Y-3M-0Y	MEXICO
17	CINC "S" CD-4465-E-4Y-5M-0Y-0KE-1B	MEXICO
18	RABI "S" X WELLS-65150/S15-CR"S" CD-4569-D-9Y-0M-0KE	MEXICO
19	FULI "S" CD-8942-32M-1Y-5M-3Y-1M-0Y	MEXICO
20	SCARS"-GDO VZ 579 CD-9885-5M-2Y-1M-3Y-1M-0Y	MEXICO
21	ERP "S" - RUSO CD-10437-13M-3Y-0M	MEXICO
22	CR"S"-USA.02299 X CR"S"-GS"S" CD-11823-4Y-5M-1Y-1M-0Y	MEXICO
23	BD1543-INRAT 69 X COOT"S"/GTA"S" CD-13557-J-3Y-3M-1Y-0M	MEXICO
24	RUSO X D67.2 - GTA"S"/RUFF"S"-FG"S" CD-16366-B-4M-4Y-2M-1Y-1M-1Y-0Y	MEXICO
25	SHWA "S"-YAV"S" CD-20626-5M-6Y-1M-0Y	MEXICO
26	MEXICALI 75	MEXICO
27	YAVAROS 79	MEXICO
28	CIANO 79	MEXICO
29	CANANEA 79	MEXICO
30	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 56
3	AFRICA	EGYPT	BENI-SUEF	1 3 13
4	AFRICA	KENYA	RIFT VALLEY	1 2 5 8
5	AFRICA	MOROCCO	RABAT	1 4 7 9 10 62
6	AFRICA	NIGERIA	KANO	1 9 13
7	AFRICA	SOUTH AFRICA	CAPE PROVINCE	[illegible] 2 9 [illegible]
8	AFRICA	TUNISIA	TUNIS	[illegible]
9	ASIA	AFGHANISTAN	BALKH	
10	ASIA	PAKISTAN	PUNJAB	1 [illegible] [illegible]
11	ASIA	THAILAND		1 4 13
12	EUROPE	CZECHOSLOVAKIA		8
13	EUROPE	GREECE		1 2 3 7 9 13 61 62
14	EUROPE	GREECE	THESSALONIKI	1 3 9 61
15	EUROPE	ITALY	CASACCIA	1 2 9 61
16	EUROPE	ITALY	ROME	1 2 3 4 7 9 10 13 61 62
17	EUROPE	ITALY	ROME	1 9 13
18	EUROPE	PORTUGAL	ELVAS	1 2 3 4 9 10
19	EUROPE	SPAIN	CORDOVA	1 2 3 9 10 13 61 62
20	EUROPE	SPAIN	LLEIDA	3 4 5 9 10 11 61 62 63 77
21	EUROPE	SPAIN	MADRID	1 2 3 4 9 61 77
22	EUROPE	YUGOSLAVIA	MACEDONIA	1 2 3 4 9 13
23	MIDDLE EAST	CYPRUS	LAXIA	1 3 9
24	MIDDLE EAST	ISRAEL	R D SDE-OAT	1 2 3 9 13
25	MIDDLE EAST	SYRIA	ALEPPO	1 9
26	MIDDLE EAST	TURKEY	IZMIR	1
27	NORTH AMERICA	MEXICO	EDO DE MEXICO	1 2 3 5 7 9 13
28	NORTH AMERICA	MEXICO	SONORA	1 2 3 7 9 13
29	NORTH AMERICA	U S A	ARIZONA	1 2 3 4 9 10
30	NORTH AMERICA	U S A	CALIFORNIA	1 2 3 9 10 13
31	NORTH AMERICA	U S A	NORTH DAKOTA	1 2 3 9 13
32	NORTH AMERICA	U S A	WASHINGTON	1 2 3 9 61
33	OCEANIA	NEW ZEALAND	MANAWATU	1 3 9 77
34	SOUTH AMERICA	ARGENTINA	BUENOS AIRES	1 2 3 7 13
35	SOUTH AMERICA	BOLIVIA	COCHABAMBA	1 3 4 9 62
36	SOUTH AMERICA	BOLIVIA	SANTA CRUZ	1 3 4 7 8 9 10
37	SOUTH AMERICA	CHILE	SANTIAGO	1 2 5 7 8 9 61
38	SOUTH AMERICA	ECUADOR	QUITO, PICHINCHA	3 5 6 49

*VARIABLE IDENTIFICATIONS

1	YIELD KG/HA	2	TEST WT	3	FLOW DAYS	4	MAT DAYS	5	STRP RT L	6	STRP RT H
7	LEAF RUST	8	STEM RUST	9	PLNT HT	10	LODG %	11	SHTR %	13	1000 G W
49	FUS GRAM	56	MOIST %	61	POW M 0-9	62	SEP T 0-9	63	SEP N 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	STRP RT H	LEAF RUST	STEM RUST	PLNT HT	LODG %	SHTR %	1000 G W	FUS GRAM	MOIST %	POW M 0-9	SEP T 0-9	SEP N 0-9	BYDV 0-9
29	CANANEA 79	MEXICO	5225	66	106	157	0	0	2	0	102	16	8	41	-	10	1	2	0	2
30	LOCAL CHECK		4997	78	112	161	1	0	9	4	87	32	2	45	0	11	4	3	0	3
28	CIANO 79	MEXICO	4852	77	111	159	18	-	7	9	84	30	6	36	5	12	2	3	0	3
15	ROM"S"	MEXICO	4714	77	116	161	0	0	3	20	84	[illegible]	3	48	0	12	2	4	0	5
14	LA DULCE	ARGENTINA	4654	78	116	162	1	0	1	6	89	[illegible]	2	55	0	12	3	3	0	5
11	DWL 5023	INDIA	4646	79	114	161	2	0	3	19	80	21	9	50	0	13	4	2	2	5
17	CINC"S"	MEXICO	4488	76	113	159	0	-	9	27	97	25	6	48	1	12	3	2	0	6
12	WAHA"S"	MEXICO	4486	77	113	159	2	0	5	28	81	35	6	45	0	12	3	3	0	5
16	BOY"S"	MEXICO	4442	78	114	160	0	-	10	17	83	40	7	49	[illegible]	15	3	3	0	5
8	TASSILI 77	ALGERIA	4390	79	117	162	2	0	5	20	86	16	8	50	0	13	[illegible]	4	0	5
13	CYUB"S"-SINCAPE 9 X YEL"S"/..	MEXICO	4272	78	111	158	0	0	6	33	98	42	6	50	0	13	2	4	0	6
21	ERP"S"-[illegible]60	MEXICO	4157	77	120	169	1	-	10	39	81	12	6	49	0	13	3	2	0	5
25	SHWA"S"-YAV"S"	MEXICO	4153	77	124	173	0	-	6	21	86	33	6	45	0	13	3	3	0	5
10	DWL 5002	INDIA	4086	77	111	158	3	0	10	18	70	16	9	51	0	12	2	3	0	5
24	RUBO X D67 2-GTA"S"/RUFF"S" .	MEXICO	4078	80	115	160	0	-	2	27	97	20	4	51	1	13	3	2	0	5
7	SAHEL 77	ALGERIA	4004	77	116	160	2	0	2	11	86	30	8	43	0	13	4	3	0	5
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	3980	77	122	164	1	-	21	43	84	24	3	44	0	13	6	3	0	6
1	CANDO	USA	3923	73	129	170	17	0	20	5	82	7	0	37	0	12	2	3	0	5
26	MEXICALI 75	MEXICO	3890	76	109	159	3	0	20	7	82	35	8	51	5	13	2	4	0	6
6	KHROUB 76	ALGERIA	3875	77	116	162	0	0	[illegible]	28	83	27	5	51	0	12	4	4	0	5
19	FULI"S"	MEXICO	3871	79	115	162	0	-	2	9	83	10	4	51	1	12	2	4	0	5
23	BD1543-INRAT 69 X COOT"S"/0 .	MEXICO	3817	76	113	160	0	-	10	29	97	51	2	48	1	13	2	4	0	6
27	YAVAROS 79	MEXICO	3815	78	116	162	0	0	3	10	79	26	8	50	5	12	1	2	0	5
20	SCAR"S"-GDO VZ 579	MEXICO	3603	79	120	165	0	-	5	8	87	18	5	50	1	13	3	3	0	5
2	D 681	USA	3796	78	125	168	6	0	2	3	105	48	0	39	0	12	2	2	0	6
9	BOOHAI	ETHIOPIA	3780	76	113	160	5	0	25	11	105	55	14	48	0	12	3	4	0	6
3	EDMORE	USA	3766	77	127	176	11	0	13	10	120	53	22	43	0	13	3	2	0	5
4	GEZIRA	SYRIA	3706	71	127	170	1	0	2	2	80	7	0	39	0	13	2	4	0	6
5	AMAL 72	TUNISIA	3700	75	111	158	5	0	8	33	76	22	1	47	0	13	[illegible]	3	0	5
18	RABI"S" X WELLS-65150/815-C	MEXICO	3677	74	129	173	1	-	3	5	80	11	0	38	0	12	2	3	0	5
	SUMMARY MEANS OVER VARIETIES		4168 1	76 6	116 9	162.9	2 7	0 9	7.5	16 6	87.7	28 0	5.6	46 4	0 7	12 5	2 7	3 0	0 1	5 1
	NUMBER OF LOCATIONS FOR EACH VARIABLE		35	19	27	13	7	1	9	4	31	9	2	16	1	1	9	6	1	3
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		104	44	65	35	11	1	13	5	73	23	4	40	1	3	22	16	1	7

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 SLIGHT WEED PROBLEM.
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS
LOCAL CHECK NAME NOT REPORTED

\ \R NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	5042	140
14	LA DULCE	ARGENTINA	4963	149
6	KHROUB 76	ALGERIA	4915	150
29	CANANEA 79	MEXICO	4781	135
8	TASSILI 77	ALGERIA	4751	151
16	BOY"S"	MEXICO	4714	147
30	LOCAL CHECK		4660	138
17	CINC"S"	MEXICO	4648	142
15	ROK"S"	MEXICO	4575	149
27	YAVAROS 79	MEXICO	4430	144
28	CIANO 79	MEXICO	4224	140
20	SCAR"S"-GDO VZ 579	MEXICO	4024	152
5	AMAL 72	TUNISIA	3842	141
22	CR"S"-USA 02299 X CR"S"-OS".	MEXICO	3806	156
25	SHWA"S"-YAV"S"	MEXICO	3654	154
26	MEXICALI 75	MEXICO	3515	141
12	WAHA"S"	MEXICO	3503	145
11	DWL 5023	INDIA	3490	144
7	SAHEL 77	ALGERIA	3375	153
1	CANDO	USA	3362	153
24	RUSO X D67 2-G1A"S"/RUFF"S"	MEXICO	3290	154
21	ERP"S"-RUSO	MEXICO	3242	155
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	3212	154
4	GEZIRA	SYRIA	3156	153
3	EDMORE	USA	3042	151
19	FULI"S"	MEXICO	3006	144
9	BOOHAI	ETHIOPIA	2993	144
2.	D 681	USA	2975	150
10	DWL 5002	INDIA	2775	141
18	RABI"S" X WELLS-65150/S15-C	MEXICO	2382	159

GRAND MEAN 3817 4 147 6
STANDARD ERROR OF GRAND MEAN
COEFFICIENT OF VARIATION AS PC
LSD VARIETY MEANS 5 PC

CORRELATIONS

YIELD KG/HA
FLOW DAYS -0 41

TABLE 2 AFRICA ANGOLA HUAMBO

ESTACAO AGRICOLA DE CHIANGA
CEREAL STAFF

LATITUDE	012 15'S	DATE PLANTED	4/10/82	NITROGEN	APPLIED
LONGITUDE	015 50'E	DATE HARVESTED	9/28/82	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 CHEMICAL CONTROL OF WEEDS
LOCAL CHECK· BIE

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	SHTR %	1000 G.W	MOIST %
29	CANANEA 79	MEXICO	3072	73	62	118	91	8	43	10
30	LOCAL CHECK		2368	80	62	113	87	2	41	11
20	SCAR"S"-GDO VZ 579	MEXICO	1913	81	76	128	76	5	48	13
25	SHWA"S"-YAV"S"	MEXICO	1883	82	85	131	75	6	43	13
28	CIANO 79	MEXICO	1756	80	66	119	72	6	36	12
23	BD1543-INRAT 69 X COOT"S"/G...	MEXICO	1583	80	67	127	69	2	49	13
4	GEZIRA	SYRIA	1568	77	91	134	68	0	35	13
15	ROK"S"	MEXICO	1517	82	75	125	67	3	48	12
1	CANDO	USA	1504	79	97	137	62	0	31	12
8	TASSILI 77	ALGERIA	1429	83	75	126	69	8	53	13
27	YAVAROS 79	MEXICO	1352	84	74	128	62	8	50	12
2	D 681	USA	1336	80	87	131	80	0	32	12
6	KHROUB 76	ALGERIA	1293	84	77	129	67	5	51	12
7	SAHEL 77	ALGERIA	1285	83	73	125	71	8	45	13
11	DWL 5023	INDIA	1248	81	69	129	59	9	52	13
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	1236	82	71	120	75	4	50	13
9	BOOHAI	ETHIOPIA	1235	79	71	124	91	6	50	12
22	CR"S"-USA 02299 X CR"S"-QS"	MEXICO	1165	81	83	132	68	3	41	13
12	WAHA"S"	MEXICO	1161	81	68	122	59	6	46	12
5	AMAL 72	TUNISIA	1120	80	69	129	61	1	49	13
18	RABI"S" X WELLS-65150/S15-C.	MEXICO	1080	80	95	137	69	0	33	12
3	EDMORE	USA	1079	78	96	138	93	0	38	13
26	MEXICALI 75	MEXICO	1067	79	65	123	63	8	53	13
16	BOY"S"	MEXICO	1040	82	68	122	64	7	51	15
10	DWL 5002	INDIA	1004	83	65	122	51	9	52	12
13	CYUS"S"-SINCAPE 9 X YEL"S"/..	MEXICO	996	80	68	122	69	6	51	13
21	ERP"S"-RUSO	MEXICO	967	81	80	129	66	6	48	13
17	CINC"S"	MEXICO	899	80	67	122	66	6	48	12
19	FULI"S"	MEXICO	765	81	75	125	65	4	52	12
14	LA DULCE	ARGENTINA	701	81	75	125	68	2	52	12
		GRAND MEAN	1354 5	80 5	75 1	126 4	70 0	4.5	45.8	12 4
		STANDARD ERROR OF GRAND MEAN	76 2	0 1			0.6		0 3	
		COEFFICIENT OF VARIATION AS PC	53.4	1 1			8.3		6 8	
		LSD VARIETY MEANS 5 PC	1181 2	1.4			9 5		5 1	

CORRELATIONS

YIELD	KG/HA							
TEST	WT	-0 47						
FLOW	DAYS	-0 17	-0.07					
MAT	DAYS	-0 27	-0 01	0.90				
PLNT	HT	0 52	-0 51	0 11	-0 08			
SHTR	%	0 05	0 29	-0 65	-0 52	-0 24		
1000	G W	-0 32	0 43	-0 66	-0 45	-0 33	0 65	
MOIST	%	-0 51	0 40	0.15	0 29	-0 32	0 07	0 26

TABLE 3 AFRICA EGYPT BENI-SUEF

SIDS
M M ABDEL-HALAIM ET AL

LATITUDE	029 04'N	DATE PLANTED	11/22/81	NITROGEN	APPLIED
LONGITUDE	031 04'E	DATE HARVESTED	5/15/82	PHOSPHORUS	APPLIED
ELEVATION	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 HAND WEEDING
LOCAL CHECK STORK"S"

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	1000 G W
11	DWL 5023	INDIA	8070	109	60
28	CIANO 79	MEXICO	8033	109	42
27	YAVAROS 79	MEXICO	8010	107	59
21	ERP"S"-RUSO	MEXICO	7904	-	60
30	LOCAL CHECK		7885	100	58
14	LA DULCE	ARGENTINA	7839	109	64
12	WAHA"S"	MEXICO	7798	108	51
26	MEXICALI 75	MEXICO	7692	101	61
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	7567	109	53
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	7419	110	56
25	SHWA"S"-YAV"S"	MEXICO	7364	-	56
15	ROK"S"	MEXICO	7225	110	57
29	CANANEA 79	MEXICO	7135	103	44
17	CINC"S"	MEXICO	7032	108	51
8	TASSILI 77	ALGERIA	7064	109	64
18	RABI"S" X WELLS-65150/S15-C	MEXICO	7031	-	43
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	6976	-	55
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	6971	101	53
16	BOY"S"	MEXICO	6934	111	56
19	FULI"S"	MEXICO	6694	107	65
1	CANDO	USA	6680	-	42
7	SAHEL 77	ALGERIA	6560	110	51
5	AMAL 72	TUNISIA	6537	107	58
10	DWL 5002	INDIA	6482	108	58
4	GEZIRA	SYRIA	6371	-	47
6	KHROUB 76	ALGERIA	6274	111	59
2	D 681	USA	6085	-	41
3	EDMORE	USA	6006	-	47
20	SCAR"S"-GDO VZ 579	MEXICO	6002	109	59
9	BOOHAI	ETHIOPIA	5854	108	56
		GRAND MEAN	7051 0	107 5	54 1
		STANDARD ERROR OF GRAND MEAN	73 2		0 4
		COEFFICIENT OF VARIATION AS PC	9 9		7 1
		LSD VARIETY MEANS 5 PC	1135 3		6 3

CORRELATIONS

YIELD KG/HA		
FLOW DAYS	-0 22	
1000 G W	0 21	0 05

TABLE 4 AFRICA KENYA RIFT VALLEY

NJORO
NATIONAL P B S

LATITUDE	000 00'S	DATE PLANTED	--/--/--	NITROGEN	APPLIED
LONGITUDE	036 00'E	DATE HARVESTED	--/--/--	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 SLIGHT WEED PROBLEM.
NEGLIGIBLE BIRD DAMAGE LOCAL CHECK. K NJIWA

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	STRP RT L	STEM RUST
29	CANANEA 79	MEXICO	4629	59	0	0
28	CIANO 79	MEXICO	4242	77	0	TMR
9	BOOHAI	ETHIOPIA	4225	77	5MR	TR
30	LOCAL CHECK		4063	81	0	TS
12	WAHA"S"	MEXICO	3196	77	0	20MR-MS
13	CYUS"S"-SINCAPE 9 X YEL"S"/ .	MEXICO	3192	78	0	TS
25	SHWA"S"-YAV"S"	MEXICO	3158	79	0	20S
16	BOY"S"	MEXICO	3083	79	0	TR
15	ROK"S"	MEXICO	3067	76	TS	5MS-S
24	RUSO X D67 2-QTA"S"/RUFF"S". .	MEXICO	3067	80	0	TMS
21	ERP"S"-RUSO	MEXICO	3058	76	5MS	60S
7	SAHEL 77	ALGERIA	2983	77	0	10S
3	EDMORE	USA	2950	76	5MS	40S
8	TASSILI 77	ALGERIA	2917	78	5MR	40S
2	D 681	USA	2900	76	5MS	10S
17	CINC"S"	MEXICO	2767	77	0	5S
10	DWL 5002	INDIA	2758	77	0	5MR-MS
20	SCAR"S"-GDO VZ 579	MEXICO	2758	80	0	20S
26	MEXICALI 75	MEXICO	2708	75	5MS	10S
11	DWL 5023	INDIA	2708	77	0	10MS
4	GEZIRA	SYRIA	2542	69	0	TR
23	BD1543-INRAT 69 X COOT"S"/Q	MEXICO	2529	72	0	30MS
14	LA DULCE	ARGENTINA	2500	77	5MR	5S
6	KHROUB 76	ALGERIA	2421	76	0	5MS-S
19	FULI"S"	MEXICO	2313	81	0	20S
18	RABI"S" X WELLS-65150/S15-C	MEXICO	2208	72	0	10S
5	AMAL 72	TUNISIA	2150	74	5MR	5S
27	YAVAROS 79	MEXICO	2121	77	TMR	5S
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	1963	74	0	60S
1	CANDO	USA	1238	58	30S	20S
		GRAND MEAN	2880 4	75 4	1.8	13.3
		STANDARD ERROR OF GRAND MEAN	35 9			
		COEFFICIENT OF VARIATION AS PC	11 8			
		LSD VARIETY MEANS 5 PC	556 3			

CORRELATIONS

	YIELD KG/HA		
TEST	WT	0 16	
STRP	RT L	-0 42	-0 60
STEM	RUST	-0 30	-0 01 0 17

TABLE 5 AFRICA MOROCCO RABAT

MERCHOUCH
OUASSOU ABDALLAH

LATITUDE	033 33'N	DATE PLANTED	10/12/81	NITROGEN	--
LONGITUDE	006 24'W	DATE HARVESTED	--/--/--	PHOSPHORUS	--
ELEVATION	500 M ABOVE S L	AMOUNT OF MOISTURE	383 MM	POTASSIUM	--

SOWING DATE NOT REPORTED
SOIL MOISTURE CONDITION AT SOWING AND GERMINATION % NOT REPORTED
INSECT, WEED AND BIRD PROBLEMS NOT REPORTED WEATHER NOT REPORTED
LOCAL CHECK BD2777

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	MAT DAYS	LEAF RUST	PLNT HT	LODG %	SEP T 0-9
28	CIANO 79	MEXICO	3833	91	0	80	0	0
29	CANANEA 79	MEXICO	3811	83	5R	105	0	0
15	ROK"S"	MEXICO	3522	93	TR	80	0	6
14	LA DULCE	ARGENTINA	3411	93	TR	90	0	0
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	3166	91	10S	100	22	6
16	BOY"S"	MEXICO	3166	94	15S	85	0	4
17	CINC"S"	MEXICO	3066	94	5MS	100	0	1
19	FULI"S"	MEXICO	3000	94	TS	90	0	5
30	LOCAL CHECK		2889	96	60MS	115	89	0
11	DWL 5023	INDIA	2833	90	0	75	0	2
22	CR"S"-USA 02299 X CR"S"-9S".	MEXICO	2822	97	20S	80	0	5
8	TASSILI 77	ALGERIA	2794	92	5S	75	0	6
25	SHWA"S"-YAV"S"	MEXICO	2611	99	5MR	80	0	5
12	WAHA"S"	MEXICO	2466	92	0	75	0	0
1	CANDO	USA	2411	101	60S	80	0	0
7	SAHEL 77	ALGERIA	2400	91	TR	85	0	0
9	BOOHAI	ETHIOPIA	2366	91	60MS	100	44	0
21	ERP"S"-RUSO	MEXICO	2344	-	TS	80	0	2
3	EDMORE	USA	2344	102	70MS	110	0	0
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	2289	93	TR	95	0	0
18	RABI"S" X WELLS-65150/S15-C .	MEXICO	2255	110	TR	85	0	0
26	MEXICALI 75	MEXICO	2111	91	50S	80	0	3
23	BD1543-INRAT 69 X COOT"S"/G .	MEXICO	2033	91	30S	90	0	3
5	AMAL 72	TUNISIA	1989	90	10S	75	0	3
4	GEZIRA	SYRIA	1944	100	5MS	80	0	5
6	KHROUB 76	ALGERIA	1944	93	0	85	0	5
20	SCAR"S"-GDO VZ 579	MEXICO	1911	96	5S	80	0	3
10	DWL 5002	INDIA	1766	90	30S	65	0	0
2	D 681	USA	1622	98	5R	85	0	0
27	YAVAROS 79	MEXICO	1519	93	5MR	75	0	0
		GRAND MEAN	2554 6	94 1	13 5	86 0	5 2	2.1
		STANDARD ERROR OF GRAND MEAN	56 5					
		COEFFICIENT OF VARIATION AS PC	21.0					
		LSD VARIETY MEANS 5 PC	877 4					

CORRELATIONS

YIELD	KG/HA					
MAT	DAYS	-0 30				
LEAF	RUST	-0 18	0 16			
PLNT	HT	0 34	0 03	0.31		
LODG	%	0 11	-0 01	0 44	0 58	
SEP T	0-9	0 12	-0.04	-0.21	-0 22	-0 16

TABLE 6 AFRICA NIGERIA KANO

KADAWA
B OLUGBEMI

LATITUDE	012 00'N	DATE PLANTED	10/30/81	NITROGEN	--
LONGITUDE	008 36'E	DATE HARVESTED	5/ 3/82	PHOSPHORUS	--
ELEVATION	1000 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
NEGLIGIBLE DISEASE DEVELOPMENT SLIGHT INSECT DAMAGE
MODERATE WEED PROBLEM NEGLIGIBLE BIRD DAMAGE HAND WEEDING
WEATHER NORMAL LOCAL CHECK SIETE CERROS

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	PLNT HT	1000 G W
28	CIANO 79	MEXICO	6633	76	43
30	LOCAL CHECK		4633	82	49
27	YAVAROS 79	MEXICO	4144	72	53
24	RUSO X D67 2-GTA"S"/RUFF"S". .	MEXICO	4000	51	53
29	CANANEA 79	MEXICO	3611	66	46
20	SCAR"S"-GDO VZ 579	MEXICO	3589	82	51
8	TASSILI 77	ALGERIA	3456	64	52
6	KHROUB 76	ALGERIA	3111	70	52
10	DWL 5002	INDIA	3111	68	53
19	FULI"S"	MEXICO	3089	75	53
17	LINC"S"	MEXICO	2989	77	53
3	LDMORE	USA	2989	76	48
22	CR"S"-USA 02299 X CR"S"-GB"...	MEXICO	2889	74	46
21	ERP"S"-RUSO	MEXICO	2833	82	48
16	BOY"S"	MEXICO	2833	66	52
14	LA DULCE	ARGENTINA	2800	61	52
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	2678	70	51
11	DWL 5023	INDIA	2611	60	49
12	WAHA"S"	MEXICO	2611	64	50
15	ROK"S"	MEXICO	2478	48	49
1	CANDO	USA	2333	65	39
4	GEZIRA	SYRIA	2333	76	46
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	2300	70	50
2	D 681	USA	2278	62	41
9	BOOHAI	ETHIOPIA	2278	57	49
7	SAHEL 77	ALGERIA	2200	72	47
5	AMAL 72	TUNISIA	1944	73	46
25	SHWA"S"-YAV"S"	MEXICO	1611	72	51
26	MEXICALI 75	MEXICO	1589	67	51
18	RABI"S" X WELLS-65150/S15-C. .	MEXICO	1478	61	53
		GRAND MEAN	2914 4	68 6	49 2
		STANDARD ERROR OF GRAND MEAN	84 2	1 5	0 6
		COEFFICIENT OF VARIATION AS PC	27 4	20 9	11 4
		LSD VARIETY MEANS 5 PC	1306 0	23 5	9 2

CORRELATIONS

	YIELD KG/HA	
PLNT HT	0 27	
1000 G W	-0 05	-0 08

TABLE 7 AFRICA SOUTH AFRICA CAPE PROVINCE

CRADOCK E S
R DE V PIENAAR

LATITUDE	32 08'S	DATE PLANTED	7/22/82	NITROGEN	APPLIED
LONGITUDE	25 38'E	DATE HARVESTED	12/16/82	PHOSPHORUS	--
ELEVATION	660 M ABOVE S L	AMOUNT OF MOISTURE	447 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
SLIGHT BIRD DAMAGE CHEMICAL CONTROL OF WEEDS WEATHER NORMAL
LOCAL CHECK D6962 (FARGO)

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	LEAF RUST	PLNT HT
14	LA DULCE	ARGENTINA	3098	80	TMS	65
15	ROK"S"	MEXICO	2956	80	TMS	70
17	CINC"S"	MEXICO	2764	78	10S	60
30	LOCAL CHECK		2673	78	15S	55
12	WAHA"S"	MEXICO	2656	80	10S	55
18	RABI"S" X WELLS-65150/S15-C	MEXICO	2643	80	TMS	60
21	ERP"S"-RUSO	MEXICO	2632	80	10S	70
9	BOOHAI	ETHIOPIA	2619	77	90S	75
10	DWL 5002	INDIA	2530	78	5MS	45
2	D 681	USA	2494	80	10MS	80
3	EDMORE	USA	2425	79	5S	95
28	CIANO 79	MEXICO	2379	78	10MS	55
29	CANANEA 79	MEXICO	2366	68	10MS	75
7	SAHEL 77	ALGERIA	2355	79	5MS	65
4	GEZIRA	SYRIA	2351	74	10MR	70
1	CANDO	USA	2311	79	15S	65
8	TASSILI 77	ALGERIA	2154	79	----	60
24	RUSO X D67 2-GTA"S"/RUFF"S".	MEXICO	2149	81	5MS	60
25	SHWA"S"-YAV"S"	MEXICO	2135	80	10MS	75
6	KHROUD 76	ALGERIA	1969	80	10MS	65
22	CR"S"-USA 02299 X CR"S"-QS" .	MEXICO	1965	80	10S	60
19	FULI"S"	MEXICO	1888	82	0	70
26	MEXICALI 75	MEXICO	1762	75	60S	60
5	AMAL 72	TUNISIA	1742	80	10MS	55
16	BOY"S"	MEXICO	1692	79	50MS	65
20	SCAR"S"-GDO VZ 579	MEXICO	1526	79	0	65
11	DWL 5023	INDIA	1439	82	TS	60
27	YAVAROS 79	MEXICO	1386	80	TMS	55
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	1019	80	0	60
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	899	78	5S	65
	GRAND MEAN		2165 9	78 5	11 7	64 5
	STANDARD ERROR OF GRAND MEAN		83 9			
	COEFFICIENT OF VARIATION AS PC		36 8			
	LSD VARIETY MEANS 5 PC		1301 3			

CORRELATIONS

YIELD KG/HA				
TEST	WT	-0 12		
LEAF	RUST	0 07	-0 28	
PLNT	HT	0 16	-0 16	0 11

TABLE 8 AFRICA TUNISIA TUNIS

BEJA
ACPP/INRAT

LATITUDE	036 44'N	DATE PLANTED	11/26/81	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 POOR
NEGLIGIBLE DISEASE DEVELOPMENT NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE MECHANICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK KARIM

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	PLNT HT
29	CANANEA 79	MEXICO	6553	89	105
28	CIANO 79	MEXICO	6164	91	90
30	LOCAL CHECK		5711	91	85
17	CINC"S"	MEXICO	5303	97	110
23	BD1343-INRAT 69 X COOT"S"/G ..	MEXICO	5448	110	110
12	WAHA"S"	MEXICO	5285	100	85
21	ERP"S"-RUSO	MEXICO	5256	107	85
11	DWL 5023	INDIA	5187	97	80
16	BOY"S"	MEXICO	5132	100	85
14	LA DULCE	ARGENTINA	4981	102	90
7	SAHEL 77	ALGERIA	4917	102	90
15	ROK"S"	MEXICO	4887	102	90
8	TASSILI 77	ALGERIA	4763	102	100
13	CYUS"S"-SINCAPE 9 X YEL"S"/...	MEXICO	4757	89	105
24	RUSO X D67 2-GTA"S"/RUFF"S"...	MEXICO	4749	102	110
5	AMAL 72	TUNISIA	4712	91	75
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	4693	106	95
26	MEXICALI 75	MEXICO	4624	96	90
2	D 681	USA	4500	111	135
19	FULI"S"	MEXICO	4407	100	95
10	DWL 5002	INDIA	4365	96	75
6	KHROUB 76	ALGERIA	4332	102	85
1	CANDO	USA	4263	113	90
25	SHWA"S"-YAV"S"	MEXICO	4239	112	90
3	EDMORE	USA	4216	113	145
20	SCAR"S"-GDO VZ 579	MEXICO	4117	108	100
27	YAVAROS 79	MEXICO	4017	102	85
9	BOOHAI	ETHIOPIA	3719	96	115
18	RABI"S" X WELLS-65150/S15-C .	MEXICO	3453	125	90
4	GEZIRA	SYRIA	3165	113	85

GRAND MEAN 4737 2 102 2 95.7
STANDARD ERROR OF GRAND MEAN
COEFFICIENT OF VARIATION AS PC
LSD VARIETY MEANS 5 PC

CORRELATIONS

YIELD KG/HA		
FLOW DAYS	-0 60	
PLNT HT	-0 04	0 22

TABLE 9 ASIA AFGHANISTAN BALKH

BALKH AG RES STN
CEREAL STAFF

LATITUDE		DATE PLANTED	12/20/81	NITROGEN	APPLIED
LONGITUDE		DATE HARVESTED	--/--/--	PHOSPHORUS	APPLIED
ELEVATION	+00350 M ABOVE S L	AMOUNT OF MOISTURE	133 MM	POTASSIUM	--

LATE SOWING DATE SOIL DRY AT SOWING GERMINATION POOR
SERIOUS DISEASE INCIDENCE SERIOUS WEED PROBLEM
SLIGHT BIRD DAMAGE LOCAL CHECK MOUN

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	PLNT HT	1000 G W
18	RABI"S" X WELLS-65150/S15-C	MEXICO	4868	151	186	0	78	38
10	DWL 5002	INDIA	4840	145	182	0	70	40
30	LOCAL CHECK		4698	142	182	0	103	52
22	CR"S"-USA 02299 X CR"S"-GS" .	MEXICO	4585	149	185	0	77	40
17	CINC"S"	MEXICO	4573	143	179	0	90	40
29	CANANEA 79	MEXICO	4545	140	179	0	97	33
14	LA DULCE	ARGENTINA	4453	146	182	5R	83	45
4	GEZIRA	SYRIA	4412	149	185	0	76	37
11	DWL 5023	INDIA	4332	145	184	15R	74	40
7	SAHEL 77	ALGERIA	4322	149	185	10R	81	41
12	WAHA"S"	MEXICO	4305	144	180	0	85	36
21	ERP"S"-RUSO	MEXICO	4270	149	187	0	76	42
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	4233	148	180	0	95	41
27	YAVAROS 79	MEXICO	4232	151	186	0	78	41
16	BOY"S"	MEXICO	4202	146	179	5R	77	41
19	FULI"S"	MEXICO	4150	146	182	0	78	45
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	4147	143	180	0	93	40
20	SCAR"S"-GDO VZ 579	MEXICO	4128	149	184	0	83	43
6	KHROUB 76	ALGERIA	4077	145	181	0	82	46
8	TASSILI 77	ALGERIA	4075	145	180	0	81	28
15	ROK"S"	MEXICO	4058	146	184	0	78	40
9	BOOHAI	ETHIOPIA	4048	145	180	5R	96	43
1	CANDO	USA	3983	148	178	0	84	36
26	MEXICALI 75	MEXICO	3960	145	181	0	82	45
25	SHWA"S"-YAV"S"	MEXICO	3950	148	184	0	83	38
5	AMAL 72	TUNISIA	3908	140	180	5R	80	44
3	EDMORE	USA	3760	149	185	0	100	30
24	RUSO X D67 2-GTA"S"/RUFF"S" .	MEXICO	3525	148	182	0	98	40
2	D 681	USA	3398	148	179	0	103	38
28	CIANO 79	MEXICO	3157	146	180	0	82	25
		GRAND MEAN	4173 2	146 3	182 0	0 3	84 8	39 6
		STANDARD ERROR OF GRAND MEAN	76 1				0 7	0 2
		COEFFICIENT OF VARIATION AS PC	17 3				8 2	5 8
		LSD VARIETY MEANS 5 PC	1179 6				11 4	3 7

CORRELATIONS

YIELD	KG/HA				
FLOW	DAYS	-0 09			
MAT	DAYS	0 27	0 64		
STRP	RT L	0 15	-0 18	0 09	
PLNT	HT	-0 30	-0 23	-0 40	-0 13
1000	G W	0 37	-0 13	0 12	0 28 -0 01

TABLE 10 ASIA PAKISTAN PUNJAB

LYALLPUR
N. I A B.

LATITUDE	031 30'N	DATE PLANTED	11/24/81	NITROGEN	APPLIED
LONGITUDE	073 10'E	DATE HARVESTED	5/14/82	PHOSPHORUS	APPLIED
ELEVATION	0213 M ABOVE S L	AMOUNT OF MOISTURE	383 MM	POTASSIUM	--

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS
HAND WEEDING LOCAL CHECK V-79736

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	PLNT HT	LODG %
13	CYUS"S"-SINCAPE 9 X VEL"S"/.	MEXICO	5555	110	149	0	0	113	100
30	LOCAL CHECK		5522	110	147	0	0	90	0
8	TASSILI 77	ALGERIA	5266	112	154	0	0	101	10
16	BOY"S"	MEXICO	4955	111	152	0	TR	95	100
17	CINC"S"	MEXICO	4822	110	147	0	TR	110	0
23	BD1543-INRAT 69 X COOT"S"/9 .	MEXICO	4811	111	150	0	0	110	100
5	AMAL 72	TUNISIA	4777	110	151	5MS	0	90	10
27	YAVAROS 79	MEXICO	4744	111	151	0	0	90	30
21	ERP"S"-RUSO	MEXICO	4666	118	153	TR	0	95	0
24	RUSO X D67 2-QTA"S"/RUFF"S"	MEXICO	4555	113	150	TR	0	120	30
6	KHROUB 76	ALGERIA	4533	114	154	0	TR	88	20
11	DWL 5023	INDIA	4466	112	151	TR	0	90	10
3	EDMORE	USA	4277	126	158	5MS	5MS	146	100
20	SCAR"S"-QDO VZ 579	MEXICO	4233	115	153	TR	0	100	0
28	CIANO 79	MEXICO	4222	112	154	6SS	0	100	60
15	ROK"S"	MEXICO	4222	113	152	0	0	98	10
9	BOOHAI	ETHIOPIA	4200	111	150	0	5MS	125	30
26	MEXICALI 75	MEXICO	4144	109	149	5MR	5MS	90	100
14	LA DULCE	ARGENTINA	4144	114	154	TR	0	113	100
22	CR"S"-USA 02299 X CR"S"-QS"..	MEXICO	4088	121	154	0	5MS	95	0
10	DWL 5002	INDIA	4066	110	150	0	0	75	0
12	WAHA"S"	MEXICO	3933	111	151	0	TMR	94	100
29	CANANEA 79	MEXICO	3677	110	152	0	0	125	0
19	FULI"S"	MEXICO	3566	109	150	0	0	90	0
25	SHWA"S"-YAV"S"	MEXICO	3466	122	155	0	0	96	100
7	SAHEL 75	ALGERIA	3433	113	150	0	0	101	20
4	GEZIRA	SYRIA	3133	124	158	0	TR	88	0
2	D 681	USA	3133	128	155	5MR-MS	0	144	100
18	RABI"S" X WELLS-65150/S15-C..	MEXICO	2200	129	159	0	0	90	0
1	CANDO	USA	2111	128	158	6SS	5MR	83	0
		GRAND MEAN	4164 0	114 9	152.4	4.8	0.6	101.5	37 7

STANDARD ERROR OF GRAND MEAN 73 8
COEFFICIENT OF VARIATION AS PC 16 8
LSD VARIETY MEANS 5 PC 1144.6

CORRELATIONS

YIELD	KG/HA						
FLOW	DAYS	-0 69					
MAT	DAYS	-0 64	0 86				
STRP	RT L	-0 33	0 24	0 33			
LEAF	RUST	-0 12	0 22	0 14	0 10		
PLNT	HT	0 07	0 19	0 07	-0 13	0 24	
LODG	%	0 14	0 02	0.01	-0 03	0.14	0 43

TABLE 11 ASIA THAILAND

PUNGDA HIGHLAND AG STN
CEREAL STAFF

LATITUDE	018 15'N	DATE PLANTED	12/ 3/81	NITROGEN	APPLIED
LONGITUDE	098 36'E	DATE HARVESTED	--/--/--	PHOSPHORUS	APPLIED
ELEVATION	+00820 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

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

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	MAT DAYS	1000 G W.
30	LOCAL CHECK		5053	118	34
28	CIANO 79	MEXICO	4565	118	28
29	CANANEA 79	MEXICO	4437	117	37
12	WAHA"S"	MEXICO	3804	118	45
17	CINC"S"	MEXICO	3729	119	46
13	CYUS"S"-SINCAPE 9 X YEL"S"/ ..	MEXICO	3589	119	47
14	LA DULCE	ARGENTINA	3340	118	48
9	BOOHAI	ETHIOPIA	3323	118	46
15	ROK"S"	MEXICO	3228	119	42
10	DWL 5002	INDIA	3166	118	48
11	DWL 5023	INDIA	2980	118	43
24	RUSO X D67 2-GTA"S"/RUFF"S"...	MEXICO	2905	117	47
27	YAVAROS 79	MEXICO	2777	118	44
21	ERP"S"-RUSO	MEXICO	2449	118	42
8	TASSILI 77	ALGERIA	2393	118	45
26	MEXICALI 75	MEXICO	2341	118	51
16	BOY"S"	MEXICO	2253	118	51
19	FULI"S"	MEXICO	2218	118	46
5	AMAL 72	TUNISIA	2174	119	48
23	BD1543-INRAT 69 X COOT"S"/G.	MEXICO	2068	118	49
6	KHROUB 76	ALGERIA	2041	119	44
7	SAHEL 77	ALGERIA	1741	118	39
20	SCAR"S"-GDO VZ 579	MEXICO	1142	119	41
22	CR"S"-USA 02299 X CR"S"-OS"	MEXICO	951	118	41
25	SHWA"S"-YAV"S"	MEXICO	-	-	-
18	RABI"S" X WELLS-65150/S15-C	MEXICO	-	118	-
4	GEZIRA	SYRIA	-	117	-
3	EDMORE	USA	-	-	-
2	D 681	USA	-	119	-
1	CANDO	USA	-	117	-
		GRAND MEAN	2861 1	118 1	43 9
		STANDARD ERROR OF GRAND MEAN	92 1		0 4
		COEFFICIENT OF VARIATION AS PC	27 3		8.7
		LSD VARIETY MEANS 5 PC	1287 3		6 2

CORRELATIONS

YIELD KG/HA		
MAT DAYS	-0 21	
1000 G W	-0 40	0 12

TABLE 12 EUROPE CZECHOSLOVAKIA

RES INST. FOR CROP PRODUCTION
CEREAL STAFF

LATITUDE	050 00'N	DATE PLANTED	4/ 6/82	NITROGEN
LONGITUDE	014 00'E	DATE HARVESTED	--/--/--	PHOSPHORUS
ELEVATION	+00350 M ABOVE S L	AMOUNT OF MOISTURE	151 MM	POTASSIUM

VAR NO.	VARIETY OR CROSS	ORIGIN	STEM RUST
1	CANDO	USA	0
2	D 681	USA	0
3	EDMORE	USA	0
4	GEZIRA	SYRIA	5R
5	AMAL 72	TUNISIA	60S
6	KHROUB 76	ALGERIA	60S
7	SAHEL 77	ALGERIA	5R-40MS
8	TASSILI 77	ALGERIA	10R-60MS
9	BOOHAI	ETHIOPIA	40MS
10	DWL 5002	INDIA	60S
11	DWL 5023	INDIA	50S
12	WAHA"S"	MEXICO	60S
13	CYUS"S"-SINCAPE 9 X YEL"S"/ ..	MEXICO	60S
14	LA DULCE	ARGENTINA	TS
15	ROK"S"	MEXICO	60S
16	BOY"S"	MEXICO	50S
17	CINC"S"	MEXICO	60S
18	RABI"S" X WELLS-65150/S15-C.	MEXICO	5R
19	FULI"S"	MEXICO	10MR
20	SCAR"S"-GDO VZ 579	MEXICO	10MR
21	ERP"S"-RUSO	MEXICO	60S
22	CR"S"-USA 02299 Y CR"S"-GS"..	MEXICO	60S
23	BD1543-INRAT 69 X COOT"S"/G .	MEXICO	60S
24	RUSO X D67 2-GTA"S"/RUFF"S" .	MEXICO	60S
25	SHWA"S"-YAV"S"	MEXICO	50S
26	MEXICALI 75	MEXICO	20MR
27	YAVAROS 79	MEXICO	50MS-15MR
28	CIANO 79	MEXICO	30MS
29	CANANEA 79	MEXICO	0
30	LOCAL CHECK		----

GRAND MEAN 32.7
STANDARD ERROR OF GRAND MEAN
COEFFICIENT OF VARIATION AS PC
LSD VARIETY MEANS 5 PC

TABLE 13 EUROPE GREECE

PLATY EXPERIMENTAL STATION
CEREAL STAFF

LATITUDE	040 39'N	DATE PLANTED	11/26/81	NITROGEN	APPLIED
LONGITUDE	022 31'E	DATE HARVESTED	6/28/82	PHOSPHORUS	APPLIED
ELEVATION	+00010 M ABOVE S L	AMOUNT OF MOISTURE	338 MM	POTASSIUM	--

LATE SOWING DATE SOIL MOIST AT SOWING GERMINATION POOR
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS WEATHER NORMAL
LOCAL CHECK 04989

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	LEAF RUST	PLNT HT	1000 G.W	POW M 0-9	SEP T 0-9
29	CANANEA 79	MEXICO	7320	68	157	0	119	41	0	3
28	CIANO 79	MEXICO	6974	74	164	2	99	46	4	7
8	TASSILI 77	ALGERIA	6192	75	167	5	96	48	4	7
30	LOCAL CHECK		5936	71	163	2	88	40	4	8
11	DWL 5023	INDIA	5884	76	166	5	91	43	3	7
15	ROK"S"	MEXICO	5807	74	166	14	95	45	3	8
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	5346	76	161	10	111	47	3	7
14	LA DULCE	ARGENTINA	5231	79	166	8	103	54	5	8
16	BOY"S"	MEXICO	5205	75	165	8	95	43	4	7
7	SAHEL 77	ALGERIA	4872	74	169	5	94	41	4	8
24	RUSO X D67 2-GTA"S"/RUFF"S"...	MEXICO	4859	79	167	3	109	52	4	8
1	CANDO	USA	4795	74	169	18	92	47	3	5
17	CINC"S"	MEXICO	4692	73	166	7	109	43	4	7
12	WAHA"S"	MEXICO	4654	72	164	4	92	40	4	7
9	BOOHAI	ETHIOPIA	4628	73	166	7	113	46	4	7
18	RABI"S" X WELLS-65150/S15-C	MEXICO	4590	71	173	3	93	40	3	8
10	DWL 5002	INDIA	4410	75	162	7	75	49	3	7
25	SHWA"S"-YAV"S"	MEXICO	4346	72	169	15	92	42	4	7
6	KHROUB 76	ALGERIA	4346	72	163	3	92	43	3	8
19	FULI"S"	MEXICO	4295	79	165	2	91	51	3	8
20	SCAR"S"-GDO VZ 579	MEXICO	4167	75	167	25	97	47	4	7
3	EDMORE	USA	4141	78	169	6	125	49	4	5
4	GEZIRA	SYRIA	4000	68	168	0	89	45	4	7
22	CR"S"-USA 02299 X CR"S"-GS" .	MEXICO	3795	70	170	55	97	44	5	4
2	D 681	USA	3705	79	168	6	113	51	3	5
5	AMAL 72	TUNISIA	3628	74	162	12	87	44	3	7
26	MEXICALI 75	MEXICO	3590	75	162	23	90	52	4	7
21	ERP"S"-RUSO	MEXICO	3577	74	170	5	90	46	4	7
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	3372	69	167	6	109	45	3	7
27	YAVAROS 79	MEXICO	2936	75	168	8	88	51	2	7
		GRAND MEAN	4709 6	74 0	166 0	9 3	97 8	46 0	3 5	6 7
		STANDARD ERROR OF GRAND MEAN	62.6	0 2			0.3	0 2		
		COEFFICIENT OF VARIATION AS PC	12 6	2 8			3 2	4 1		
		LSD VARIETY MEANS 5 PC	970 6	3 3			5 1	3 1		

CORRELATIONS

YIELD	KG/HA							
TEST	WT	-0 07						
FLOW	DAYS	-0 43	0 07					
LEAF	RUST	-0 31	-0 09	0 21				
PLNT	HT	0 19	0 13	-0 04	-0 10			
1000	G W	-0 29	0 74	0 02	0 07	0 13		
POW M	0-9	-0 20	0 20	0.44	0 33	-0 11	0 14	
SEP T	0-9	-0 07	0 23	0 11	-0 38	-0 45	0 04	0 35

TABLE 14 EUROPE GREECE THESSALONIKI

P B I.
E A SKORDA
LATITUDE 040 38'N DATE PLANTED 12/21/81 NITROGEN APPLIED
LONGITUDE 022 57'E DATE HARVESTED 7/20/82 PHOSPHORUS APPLIED
ELEVATION 0010 M ABOVE S L AMOUNT OF MOISTURE 323 MM POTASSIUM --

LATE SOWING DATE SOIL MOIST AT SOWING GERMINATION POOR
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
SERIOUS BIRD DAMAGE CHEMICAL CONTROL OF WEEDS
LOCAL CHECK 0-69673

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	PLNT HT	POW M 0-9
30	LOCAL CHECK		4110	137	95	2
28	CIANO 79	MEXICO	3641	142	92	2
12	WAHA"S"	MEXICO	3581	142	97	4
29	CANANEA 79	MEXICO	3461	137	105	0
14	LA DULCE	ARGENTINA	3445	144	98	3
8	TASBILI 77	ALGERIA	3401	143	93	1
10	DWL 5002	INDIA	3282	142	80	4
6	KHROUB 76	ALGERIA	3222	143	100	2
3	EDMORE	USA	3181	146	140	2
15	ROK"S"	MEXICO	3146	144	92	0
22	CR"S"-USA 02299 X CR"S"-GB"...	MEXICO	2956	147	92	4
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	2897	141	105	2
5	AMAL 72	TUNISIA	2896	141	87	0
7	SAHEL 77	ALGERIA	2683	144	98	3
16	BOY"S"	MEXICO	2668	144	92	0
11	DWL 5023	INDIA	2641	143	90	1
9	BOOHAI	ETHIOPIA	2504	144	120	4
4	GEZIRA	SYRIA	2461	145	88	2
20	SCAR"S"-GDO VZ 579	MEXICO	2411	145	102	2
1	CANDO	USA	2410	147	88	0
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	2376	144	108	0
19	FULI"S"	MEXICO	2299	143	83	0
25	SHWA"S"-YAV"S"	MEXICO	2290	145	93	3
17	CINC"S"	MEXICO	2265	145	93	1
2	D 681	USA	2181	146	112	1
21	ERP"S"-RUSO	MEXICO	2119	147	88	0
26	MEXICALI 75	MEXICO	2059	141	87	1
23	BD1543-INRAT 69 X CDOT"S"/G .	MEXICO	2051	143	107	0
18	RABI"S" X WELLS-65150/S13-C .	MEXICO	1401	148	85	0
27	YAVAROS 79	MEXICO	1291	143	83	0
	GRAND MEAN		2711.0	143 4	96.4	1 4
	STANDARD ERROR OF GRAND MEAN		63 8		0.9	
	COEFFICIENT OF VARIATION AS PC		22 3		9.0	
	LSD VARIETY MEANS 5 PC		989 7		14.1	

CORRELATIONS

	YIELD KG/HA	FLOW DAYS	PLNT HT	POW M 0-9
FLOW DAYS	-0 53			
PLNT HT	0 18	0 05		
POW M 0-9	0 44	0 00	0.20	

TABLE 15 EUROPE ITALY CASACCIA

ANCONA
CEREAL STAFF

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

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

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	PLNT HT	POW M 0-9
9	BOOHAI	ETHIOPIA	6847	80	126	3
30	LOCAL CHECK		5944	81	81	2
15	ROK"S"	MEXICO	5902	80	89	1
28	CIANO 79	MEXICO	5680	82	100	0
17	CINC"S"	MEXICO	5513	78	110	3
19	FULI"S"	MEXICO	5305	82	83	0
25	SHWA'S"-YAV"S"	MEXICO	5152	79	82	2
11	DWL 5023	INDIA	5138	82	90	4
3	EDMORE	USA	5111	80	126	1
4	GEZIRA	SYRIA	4847	[illegible]	79	0
10	DWL 5002	INDIA	4805	78	80	0
22	CR"S"-USA 02299 X CR"S"-OS"	MEXICO	4666	80	83	6
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	4611	80	113	1
14	LA DULCE	ARGENTINA	4402	81	94	0
8	TASSILI 77	ALGERIA	4388	82	90	4
12	WAHA"S"	MEXICO	4347	79	84	3
6	KHROUB 76	ALGERIA	4347	79	81	4
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	4277	82	110	0
29	CANANEA 79	MEXICO	4138	70	118	0
7	SAHEL 77	ALGERIA	4055	80	90	4
2	D 681	USA	4000	82	100	0
20	SCAR"S"-GDO VZ 579	MEXICO	3861	82	83	1
21	ERP"S"-RUSO	MEXICO	3750	79	80	4
1	CANDO	USA	3555	81	100	0
16	BOY"S"	MEXICO	3514	80	80	0
26	MEXICALI 75	MEXICO	3194	79	80	0
5	AMAL 72	TUNISIA	2916	79	83	1
18	RABI"S" X WELLS-65150/S15-C	MEXICO	2833	79	80	0
27	YAVAROS 79	MEXICO	2389	80	81	0
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	2291	79	108	0

GRAND MEAN	4392 6	79 7	92 7	1 5
STANDARD ERROR OF GRAND MEAN	75 3	0 1	1 0	
COEFFICIENT OF VARIATION AS PC	13 3	0 8	8 6	
LSD VARIETY MEANS 5 PC	1192 4	1 4	16 3	

CORRELATIONS

YIELD KG/HA				
TEST	WT	0 13		
PLNT	HT	0 29	-0 16	
POW M	0-9	0 29	0 10	-0 11

TABLE 16 EUROPE ITALY ROME

PONTE GALERIA
F I D C A

LATITUDE	41 48'N	DATE PLANTED	11/10/81	NITROGEN	APPLIED
LONGITUDE	12 41'E	DATE HARVESTED	7/ 2/82	PHOSPHORUS	APPLIED
ELEVATION	3 M ABOVE S L	AMOUNT OF MOISTURE	301 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SERIOUS DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE
NO WEED PROBLEM NEGLIGIBLE BIRD DAMAGE LOCAL CHECK CRESO
VERY DRY DURING THE RIPENING STAGE

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	LODG %	1000 G.W	POW M 0-9	SEP T 0-9
28	CIANO 79	MEXICO	8024	82	151	195	-	90	18	40	-	4
30	LOCAL CHECK		7839	84	168	215	-	88	5	47	4	3
11	DWL 5023	INDIA	7222	81	160	203	-	88	-	44	4	3
29	CANANEA 79	MEXICO	7099	65	147	193	-	103	5	34	-	5
8	TASSILI 77	ALGERIA	7037	83	163	208	-	95	5	47	4	2
16	BOY"S"	MEXICO	6975	82	162	205	-	88	-	39	6	3
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	6481	79	156	199	-	103	5	45	2	2
12	WAHA"S"	MEXICO	6420	79	162	204	-	90	10	40	4	2
7	SAHEL 77	ALGERIA	6420	79	162	201	-	92	45	42	4	4
14	LA DULCE	ARGENTINA	6358	81	162	207	-	97	-	54	5	3
21	ERP"S"-RUSO	MEXICO	6296	80	165	203	-	85	-	43	3	2
17	CINC"S"	MEXICO	6234	77	159	202	-	108	23	46	4	2
2	D 681	USA	6111	82	167	214	-	122	45	45	2	2
15	ROK"S"	MEXICO	6049	78	163	201	-	90	9	40	3	2
10	DWL 5002	INDIA	5987	81	158	200	45	78	-	47	5	4
20	SCAR"S"-GDO VZ 579	MEXICO	5926	84	165	212	-	100	-	54	2	2
4	GEZIRA	SYRIA	5802	75	170	213	-	85	-	40	6	4
27	YAVAROS 79	MEXICO	5741	82	162	203	-	82	-	41	3	2
25	SHWA"S"-YAV"S"	MEXICO	5741	80	166	209	-	98	-	46	3	2
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	5617	83	163	206	-	108	-	49	3	2
1	CANDO	USA	5555	78	172	212	20	85	-	38	4	4
19	FULI"S"	MEXICO	5555	83	160	209	-	88	-	44	3	2
3	EDMORE	USA	5555	81	168	214	20	128	60	40	-	6
26	MEXICALI 75	MEXICO	5555	78	156	201	27	87	40	44	2	5
18	RABI"S" X WELLS-65150/S15-C	MEXICO	5494	79	174	215	15	82	-	39	3	-
23	BD1543-INRAT 69 X COOT"S"/Q	MEXICO	5370	80	163	210	-	105	18	44	2	2
6	KHROUB 76	ALGERIA	4938	80	164	203	-	83	30	52	7	4
5	AMAL 72	TUNISIA	4691	79	159	204	15	73	-	47	3	3
9	BOOHAI	ETHIOPIA	4691	76	162	205	-	110	90	38	-	5
22	CR"S"-USA 02299 X CR"S"-QS"	MEXICO	4630	80	164	206	-	92	10	42	7	5
	GRAND MEAN		6047 2	79 7	162 5	205 8	26 7	94.2	33 8	43 7	4 0	3 1
	STANDARD ERROR OF GRAND MEAN		79 5	0 0				0 5		0 3		
	COEFFICIENT OF VARIATION AS PC		12 5	0 5				4 8		5 7		
	LSD VARIETY MEANS 5 PC		1233 4	0 6				7 3		4 1		

CORRELATIONS

YIELD	KG/HA									
TEST	WT	0 07								
FLOW	DAYS	-0 34	0 36							
MAT	DAYS	-0 26	0 42	0 89						
LEAF	RUST	0 35	0 18	-0 77	-0 79					
PLNT	HT	-0 01	-0 05	0 00	0 20	-0 24				
LODG	%	-0 60	0 00	0 27	0 27	-0 27	0 51			
1000	G W	-0 08	0 57	0 08	0 19	0 44	-0 01	-0 14		
POW M	0-9	-0 05	-0 10	0 11	-0 07	0 50	-0 32	-0 10	-0 03	
SEP T	0-9	-0 18	-0 42	-0 12	-0 13	0 23	0 07	0 59	-0 39	0 49

TABLE 17 EUROPE ITALY ROME

INVIOLATELLA EXP. STN
CERAL STAFF

LATITUDE	041 53'N	DATE PLANTED	12/17/81	NITROGEN	--
LONGITUDE	012 29'E	DATE HARVESTED	--/--/--	PHOSPHORUS	--
ELEVATION	+00075 M ABOVE S L	AMOUNT OF MOISTURE	414 MM	POTASSIUM	--

SOIL MOISTURE CONDITION AT SOWING AND GERMINATION % NOT REPORTED
SOWING DATE AND GERMINATION % NOT REPORTED
INSECT, WEED AND BIRD PROBLEMS NOT REPORTED
LOCAL CHECK VALNOVA

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	PLNT HT	1000 G W
29	CANANEA 79	MEXICO	6111	103	40
28	CIANO 79	MEXICO	6055	83	41
17	CINC"S"	MEXICO	5388	105	48
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	5055	108	48
14	LA DULCE	ARGENTINA	4888	85	55
10	DWL 5002	INDIA	4368	65	50
22	CR"S"-USA 02299 X CR"S"-QS"	MEXICO	4355	82	45
12	WAHA"S"	MEXICO	4222	80	44
1	CANDO	USA	4166	78	44
15	ROK"S"	MEXICO	4111	78	46
6	KHROUB 76	ALGERIA	4000	78	53
11	DWL 5023	INDIA	3955	82	48
8	TASSILI 77	ALGERIA	3666	78	51
9	BOOHAI	ETHIOPIA	3500	112	48
7	SAHEL 77	ALGERIA	3389	85	41
20	SCAR"S"-GDO VZ 579	MEXICO	3277	83	53
25	SHWA"S"-YAV"S"	MEXICO	3222	78	43
26	MEXICALI 75	MEXICO	3222	78	49
2	D 681	USA	3055	118	42
16	BOY"S"	MEXICO	3000	80	48
19	FULI"S"	MEXICO	2866	77	58
4	GEZIRA	SYRIA	2622	65	42
18	RABI"S" X WELLS-65150/S15-C	MEXICO	2611	75	40
3	EDMORE	USA	2522	122	46
21	ERP"S"-RUSO	MEXICO	2500	73	49
5	AMAL 72	TUNISIA	2500	67	46
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	2222	93	51
30	LOCAL CHECK		2166	67	49
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	1778	100	45
27	YAVAROS 79	MEXICO	889	73	49
		GRAND MEAN	3523.4	85 1	47 0
		STANDARD ERROR OF GRAND MEAN	82 4	0 6	0 3
		COEFFICIENT OF VARIATION AS PC	22 2	6 3	5 6
		LSD VARIETY MEANS 5 PC	1277 0	8 8	4 3

CORRELATIONS

	YIELD KG/HA
PLNT HT	0 21
1000 G W	-0 15 -0 16

TABLE 18 EUROPE PORTUGAL ELVAS

PBS ALENTEJO
M. T BARRADAS ET AL
LATITUDE 038 54'N
LONGITUDE 007 09'W
ELEVATION 0208 M ABOVE S L

DATE PLANTED 11/18/81
DATE HARVESTED 6/17/82
AMOUNT OF MOISTURE 366 MM

NITROGEN APPLIED
PHOSPHORUS APPLIED
POTASSIUM APPLIED

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

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	LODG %
29	CANANEA 79	MEXICO	4177	72	126	188	99	17
10	DWL 5002	INDIA	3915	85	132	186	71	10
1	CANDO	USA	3559	77	152	193	60	15
12	WAHA"S"	MEXICO	3511	84	136	187	81	17
30	LOCAL CHECK		3233	83	146	190	86	8
11	DWL 5023	INDIA	3205	84	135	187	81	18
14	LA DULCE	ARGENTINA	3071	82	142	188	89	23
15	ROK"S"	MEXICO	3044	81	142	188	83	20
5	AMAL 72	TUNISIA	2959	83	129	189	71	15
28	CIANO 79	MEXICO	2947	84	132	191	84	10
17	CINC"S"	MEXICO	2874	82	138	189	89	15
26	MEXICALI 75	MEXICO	2852	81	131	186	82	15
21	ERP"S"-RUSO	MEXICO	2849	81	146	191	80	15
2	D 681	USA	2839	82	149	193	109	17
16	BOY"S"	MEXICO	2834	83	138	189	85	17
6	KHROUB 76	ALGERIA	2768	82	142	190	78	15
4	GEZIRA	SYRIA	2755	76	151	193	80	15
23	BD1543-INRAT 69 X COOT"S"/G .	MEXICO	2699	82	141	188	94	23
8	TASSILI 77	ALGERIA	2662	84	141	189	83	20
7	SAHEL 77	ALGERIA	2580	84	138	188	87	20
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	2564	84	142	189	96	18
20	SCAR"S"-GDO VZ 579	MEXICO	2506	83	146	193	85	18
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	2429	80	148	191	84	17
18	RABI"S" X WELLS-65150/815-C .	MEXICO	2402	74	157	193	88	18
3	EDMORE	USA	2380	80	154	193	123	18
19	FULI"S"	MEXICO	2171	83	139	193	80	15
25	SHWA"S"-YAV"S"	MEXICO	2079	79	150	193	87	17
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	1905	85	131	186	92	33
9	BOOHAI	ETHIOPIA	1798	82	137	187	108	45
27	YAVAROS 79	MEXICO	1794	82	141	190	80	22
		GRAND MEAN	2778 6	81 4	141 1	189 8	87 1	18 2
		STANDARD ERROR OF GRAND MEAN	64 8	0 1			0 7	
		COEFFICIENT OF VARIATION AS PC	22 1	1 0			7 5	
		LSD VARIETY MEANS 5 PC	1005 4	1 3			10 7	

CORRELATIONS

YIELD	KG/HA					
TEST	WT	-0 19				
FLOW	DAYS	-0 29	-0 38			
MAT	DAYS	-0 21	-0 40	0 78		
PLNT	HT	-0 26	-0 18	0 25	0 14	
LODG	%	-0 54	0 08	-0. 11	-0 38	0. 44

TABLE 19 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 NAME NOT REPORTED

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	LODG %	1000 G W	POW M 0-9	SEP T 0-9
12	WAHA"S"	MEXICO	12110	84	115	103	-	52	-	-
26	MEXICALI 75	MEXICO	12110	82	107	107	-	61	1	-
14	LA DULCE	ARGENTINA	11888	82	117	105	80	61	6	-
15	ROK"S"	MEXICO	11777	81	119	102	90	51	-	-
30	LOCAL CHECK		11666	83	117	97	-	41	-	4
10	DWL 5002	INDIA	11554	82	113	83	-	62	1	1
11	DWL 5023	INDIA	11443	83	115	94	-	57	6	-
27	YAVAROS 79	MEXICO	10999	83	114	95	30	58	-	-
16	BOY"S"	MEXICO	10888	81	117	102	-	51	4	-
1	CANDO	USA	10666	80	125	101	-	37	1	5
5	AMAL 72	TUNISIA	10666	81	112	95	-	55	1	-
8	TASSILI 77	ALGERIA	10666	84	117	105	5	56	4	1
28	CIANO 79	MEXICO	10332	83	115	107	-	43	1	-
19	FULI"S"	MEXICO	10221	85	116	101	-	69	3	-
29	CANANEA 79	MEXICO	10110	71	105	127	-	48	-	-
7	SAHEL 77	ALGERIA	9999	83	115	111	-	49	4	-
4	GEZIRA	SYRIA	9999	76	125	87	-	34	-	2
18	RABI"S" X WELLS-65150/S15-C	MEXICO	9999	82	128	99	10	39	1	-
17	CINC"S"	MEXICO	9888	81	117	128	-	52	6	-
25	SHWA"S"-YAV"S"	MEXICO	9777	82	123	109	-	47	1	-
6	KHROUB 76	ALGERIA	9777	82	116	98	-	57	5	2
20	SCAR"S"-GDO VZ 579	MEXICO	9777	84	119	106	40	55	-	-
21	ERP"S"-RUSO	MEXICO	9666	82	123	96	-	53	2	-
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	9332	85	116	127	28	55	3	-
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	9221	84	111	124	5	61	1	-
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	8999	80	122	103	45	44	4	-
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	8555	80	115	107	97	51	-	-
2	D 681	USA	8333	83	123	126	80	41	4	-
3	EDMORE	USA	7999	82	124	147	92	47	3	-
9	BOOHAI	ETHIOPIA	6111	79	114	132	100	46	-	-
		GRAND MEAN	10151	82	117	107	61	51	3	2
		STANDARD ERROR OF GRAND MEAN	112	0		0		0		
		COEFFICIENT OF VARIATION AS PC	10	1		2		4		
		LSD VARIETY MEANS 5 PC	1732	1		3		4		

CORRELATIONS

YIELD KG/HA								
TEST	WT	0 16						
FLOW	DAYS	-0 23	0 13					
PLNT	HT	-0 63	-0 09	-0 09				
LODG	%	-0 40	-0 44	0 05	0 37			
1000	G W	0 30	0 42	-0 58	-0 10	-0 24		
POW M	0-9	0 00	0 02	0 00	0 17	0 49	0 19	
SEP T	0-9	0 10	-0 16	0 56	0 19	-	-1 08	-0 55

TABLE 20 EUROPE SPAIN LLEIDA

LA PUJADA
CEREAL STAFF

LATITUDE	041 31'N	DATE PLANTED	11/11/81	NITROGEN	APPLIED
LONGITUDE	000 52'E	DATE HARVESTED	--/--/--	PHOSPHORUS	APPLIED
ELEVATION	+00290 M ABOVE S L	AMOUNT OF MOISTURE	230 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL DRY AT SOWING GERMINATION GOOD
SERIOUS DISEASE INCIDENCE SERIOUS INSECT DAMAGE SERIOUS WEED PROBLEM
NO YIELD REPORTED DUE TO HAVY INFECTION OF BYDV
WEATHER VERY DRY FROM GERMINATION TILL CHRISTMAS

VAR NO	VARIETY OR CROSS	ORIGIN	FLOW DAYS	MAT DAYS	STRP RT L	PLNT HT	LODG %	SHTR %	POW M 0-9	SEP T 0-9	SEP N 0-9	BYDV 0-9
1	CANDO	USA	109	155	0	91	-	-	5	3	0	8
2	D 681	USA	108	159	0	107	11	-	2	1	0	9
3	EDMORE	USA	110	156	0	132	26	44	5	1	0	8
4	GEZIRA	SYRIA	106	164	0	86	-	0	4	4	0	9
5	AMAL 72	TUNISIA	99	152	0	78	11	-	5	3	0	9
6	KHROUB 76	ALGERIA	104	158	0	93	-	-	6	5	0	9
7	SAHEL 77	ALGERIA	100	151	0	91	-	-	6	2	0	8
8	TASSILI 77	ALGERIA	108	157	0	90	11	-	6	5	0	9
9	BOOHAI	ETHIOPIA	103	157	0	117	22	22	6	5	0	9
10	DWL 5002	INDIA	103	150	0	76	-	-	4	3	0	9
11	DWL 5023	INDIA	107	156	0	37	-	-	6	0	2	9
12	WAHA"S"	MEXICO	96	148	20S	69	-	-	5	5	0	9
13	CYUS"S"-SINCAPE 9 X YEL"S"/. .	MEXICO	103	159	0	107	33	-	3	3	0	9
14	LA DULCE	ARGENTINA	109	158	0	100	-	-	2	3	0	8
15	ROK"S"	MEXICO	106	157	0	94	33	-	4	2	0	9
16	BOY"S"	MEXICO	98	154	0	93	-	-	7	3	0	8
17	CINC"S"	MEXICO	102	158	0	96	33	-	7	0	0	9
18	RABI"S" X WELLS-65150/S15-C	MEXICO	116	162	0	95	-	-	6	3	0	9
19	FULI"S"	MEXICO	103	158	0	89	-	-	4	4	0	9
20	SCAR"S'-GDO VZ 579	MEXICO	98	153	0	90	-	-	6	3	0	9
21	ERP"S"-RUSO	MEXICO	105	157	0	84	-	-	5	0	0	9
22	CR"S"-USA 02299 X CR"S"-QS"	MEXICO	101	154	5S	91	33	-	8	0	0	9
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	101	154	0	76	-	-	5	6	0	9
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	103	156	0	102	-	-	5	2	0	9
25	SHWA"S"-YAV"S"	MEXICO	104	159	0	94	11	-	6	0	0	9
26	MEXICALI 75	MEXICO	96	155	0	86	22	-	5	3	0	9
27	YAVAROS 79	MEXICO	101	155	0	78	22	-	3	3	0	9
28	CIANO 79	MEXICO	103	161	0	99	-	-	7	4	0	3
29	CANANEA 79	MEXICO	106	162	0	114	11	-	2	1	0	0
30	LOCAL CHECK		111	161	5S	102	-	-	7	5	0	3
		GRAND MEAN	103 9	156 4	1 1	94 9	22.5	22.0	5.1	2 7	0 1	8 1
	STANDARD ERROR OF GRAND MEAN					0 5						
	COEFFICIENT OF VARIATION AS PC					4 9						
	LSD VARIETY MEANS 5 PC					7 6						

CORRELATIONS

FLOW	DAYS										
MAT	DAYS	0 62									
STRP	RT L	0 03	-0 22								
PLNT	HT	0 37	0 37	0 08							
LODG	%	-0 15	-0 11	0 26	0 13						
SHTR	%	0 43	-1 08	0 43	1 92	0 48					
POW M	0-9	-0 16	-0 15	0 30	-0 11	0 37	0 33				
SEP T	0-9	-0 10	-0 06	0 22	-0 07	-0 18	-0 84	0 02			
SEP N	0-9	0 12	-0 03	-0 09	-0 12	0 00	0 00	0 12	-0 29		
BYDV	0-9	-0 22	-0 41	-0 03	-0 37	0 37	-0 24	0 05	-0 04	0 08	

TABLE 21 EUROPE SPAIN MADRID

EL ENCIN
MA LUISA GRANDA NOGUES
LATITUDE 040 33'N DATE PLANTED 11/12/81 NITROGEN APPLIED
LONGITUDE 003 19'W DATE HARVESTED 7/28/82 PHOSPHORUS APPLIED
ELEVATION +00600 M ABOVE S L AMOUNT OF MOISTURE 367 MM POTASSIUM APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION POOR
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS LOCAL CHECK CAMACHO
FROST DAMAGE AT FLOWERING STAGE

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	POW M 0-9	BYDV 0-9
14	LA DULCE	ARGENTINA	3686	82	175	221	74	0	3
12	WAHA"S"	MEXICO	3499	80	173	220	73	0	3
21	ERP"S"-RUSO	MEXICO	3488	80	176	220	68	2	3
11	DWL 5023	INDIA	3436	80	173	219	73	1	3
15	ROK"S"	MEXICO	3416	79	174	221	70	1	3
30	LOCAL CHECK		3408	81	176	220	75	0	3
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	3388	80	178	222	69	6	3
8	TASSILI 77	ALGERIA	3311	80	172	219	80	1	3
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	3203	81	174	221	95	1	2
4	GEZIRA	SYRIA	3174	74	176	217	65	0	4
29	CANANEA 79	MEXICO	3131	65	157	217	96	0	3
7	SAHEL 77	ALGERIA	3124	79	174	219	76	1	3
17	CINC"S"	MEXICO	3098	79	173	219	88	1	3
5	AMAL 72	TUNISIA	3097	78	168	216	71	0	3
10	DWL 5002	INDIA	2991	81	168	219	61	0	4
28	CIANO 79	MEXICO	2990	78	166	219	72	0	3
6	KHROUB 76	ALGERIA	2961	80	174	221	78	0	3
25	SHWA"S"-YAV"S"	MEXICO	2958	82	174	220	78	0	3
18	RABI"S" X WELLS-65150/S15-C	MEXICO	2911	80	179	222	60	1	2
23	BD1543-INRAT 69 X CNOT"S"/G	MEXICO	2907	79	173	221	89	0	3
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	2802	79	167	220	87	0	3
1	CANDO	USA	2783	78	176	216	62	0	4
9	BOOHAI	ETHIOPIA	2714	80	170	219	93	0	4
2	D 681	USA	2679	80	175	216	93	0	4
16	BOY"S"	MEXICO	2597	79	174	216	76	0	4
19	FULI"S"	MEXICO	2493	81	168	219	74	0	3
27	YAVAROS 79	MEXICO	2470	79	172	220	71	0	3
26	MEXICALI 75	MEXICO	2341	77	168	220	78	0	3
3	EDMORE	USA	2287	78	176	221	102	1	3
20	SCAR"S"-GDO VZ 579	MEXICO	1854	78	175	221	70	0	3
		GRAND MEAN	2973 2	78 9	172 5	219 4	77 3	0 5	3 1
		STANDARD ERROR OF GRAND MEAN	65 4	0 1			0 6		
		COEFFICIENT OF VARIATION AS PC	20 9	1 8			7 0		
		LSD VARIETY MEANS 5 PC	1013 8	2 3			8 9		

CORRELATIONS

YIELD	KG/HA						
TEST	WT	0 11					
FLOW	DAYS	0 11	0 61				
MAT	DAYS	0 08	0 42	0 37			
PLNT	HT	-0 19	-0 23	-0 29	-0 01		
POW M	0-9	0 32	0 13	0.38	0 41	-0 11	
BYDV	0-9	-0 18	-0 11	-0 06	-0 74	-0 09	-0 25

TABLE 22 EUROPE YUGOSLAVIA MACEDONIA

INST ZA POLJODELSTVO I GRADINARSTVO
I ANGELOV

LATITUDE	043 00'N	DATE PLANTED	11/ 1/81	NITROGEN	APPLIED
LONGITUDE	022 00'E	DATE HARVESTED	7/10/82	PHOSPHORUS	APPLIED
ELEVATION	0250 M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	APPLIED

NORMAL SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE MECHANICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK ILINDER

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	1000 G W
29	CANANEA 79	MEXICO	8555	64	177	230	113	42
28	CIANO 79	MEXICO	7444	78	185	230	84	42
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	7110	78	187	231	112	53
14	LA DULCE	ARGENTINA	6777	80	189	231	102	57
11	DWL 5023	INDIA	6666	79	188	231	84	50
15	ROK"S"	MEXICO	6555	78	189	231	99	51
8	TASSILI 77	ALGERIA	6222	81	189	234	95	50
7	SAHEL 77	ALGERIA	6111	81	189	232	99	48
30	LOCAL CHECK		6111	78	186	230	92	61
9	BOOHAI	ETHIOPIA	5777	81	191	234	116	53
1	CANDO	USA	5777	78	189	232	84	44
4	GEZIRA	SYRIA	5666	77	189	233	88	46
12	WAHA"S"	MEXICO	5555	80	188	231	89	48
17	CINC"S"	MEXICO	5444	77	191	232	100	48
3	EDMORE	USA	5333	79	190	233	135	51
16	BOY"S"	MEXICO	5333	79	189	232	93	50
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	5222	78	189	233	110	54
19	FULI"S"	MEXICO	5111	79	186	231	82	58
2	D 681	USA	5000	80	188	231	111	45
25	SHWA"S"-YAV"S"	MEXICO	4888	79	188	232	82	49
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	4888	81	189	232	109	56
10	DWL 5002	INDIA	4884	79	186	231	77	52
18	RABI"S" X WELLS-65150/S15-C	MEXICO	4777	80	192	237	73	51
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	4777	79	191	234	87	45
6	KHROUB 76	ALGERIA	4666	79	189	233	90	53
5	AMAL 72	TUNISIA	4555	77	186	232	87	51
21	ERP"S"-RUSO	MEXICO	4444	79	190	234	82	55
20	SCAR"S"-GDO VZ 579	MEXICO	4444	81	187	236	86	56
26	MEXICALI 75	MEXICO	4000	78	186	235	90	57
27	YAVAROS 79	MEXICO	3555	80	188	233	81	57
		GRAND MEAN	5521 5	78 6	188 0	232 4	94 3	51 1
		STANDARD ERROR OF GRAND MEAN	56 1	0 0				
		COEFFICIENT OF VARIATION AS PC	9 6	0 3				
		LSD VARIETY MEANS 5 PC	870 5	0 4				

CORRELATIONS

YIELD	KG/HA					
TEST	WT	-0 53				
FLOW	DAYS	-0 46	0 77			
MAT	DAYS	-0 59	0 36	0 50		
PLNT	HT	0 35	-0 18	-0 04	-0 18	
1000	G W	-0 42	0 39	0 15	0.21	-0 05

TABLE 23 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 LOCAL CHECK MESOCORIA D W
WEATHER EXTREMELY DRY

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	PLNT HT
29	CANANEA 79	MEXICO	4257	92	105
14	LA DULCE	ARGENTINA	4030	100	93
25	SHWA"S"-YAV"S"	MEXICO	3672	110	85
27	YAVAROS 79	MEXICO	3384	98	84
4	GEZIRA	SYRIA	3359	113	83
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	3253	110	75
21	ERP"S"-RUSO	MEXICO	3203	109	79
12	WAHA"S"	MEXICO	3176	95	78
11	DWL 5023	INDIA	3147	97	73
20	SCAR"S"-GDO VZ 579	MEXICO	3084	106	88
6	KHROUB 76	ALGERIA	3069	102	80
26	MEXICALI 75	MEXICO	3005	94	83
8	TASSILI 77	ALGERIA	2894	106	77
23	BD:543-INRAT 69 X COOT"S"/G	MEXICO	2888	95	98
15	ROK"S"	MEXICO	2877	106	87
18	RABI"S" X WELLS-65150/S15-C	MEXICO	2807	117	79
28	CIANO 79	MEXICO	2784	97	83
7	SAHEL 77	ALGERIA	2758	105	75
17	CINC"S"	MEXICO	2724	94	85
30	LOCAL CHECK		2666	90	67
16	BOY"S"	MEXICO	2655	95	74
19	FULI"S"	MEXICO	2567	101	78
5	AMAL 72	TUNISIA	2545	95	65
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	2538	104	95
10	DWL 5002	INDIA	298	94	65
1	CANDO	USA	2266	115	69
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	2224	91	85
2	D 681	USA	2124	109	98
3	EDMORE	USA	2117	115	100
9	BOOHAI	ETHIOPIA	1931	100	87

GRAND MEAN	2876 7	101 8	82 2
STANDARD ERROR OF GRAND MEAN	53 9		0 8
COEFFICIENT OF VARIATION AS PC	17 8		7 1
LSD VARIETY MEANS 5 PC	835 8		12 0

CORRELATIONS

YIELD KG/HA		
FLOW DAYS	-0 06	
PLNT HT	0 22	0 10

TABLE 24 MIDDLE EAST ISRAEL R D SDE-GAT

MIVHOR FARM
HAZERA SEEDS LTD

LATITUDE 031 37'N	DATE PLANTED	11/27/81	NITROGEN	APPLIED
LONGITUDE 034 47'E	DATE HARVESTED	6/ 6/82	PHOSPHORUS	--
ELEVATION 0120 M ABOVE S L	AMOUNT OF MOISTURE	426 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 LOCAL CHECK H870
DRY WHEATHER CONDITIONS IN DECEMBER AND JANUARY

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W
29	CANANEA 79	MEXICO	8000	68	89	133	41
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	7573	81	92	130	55
17	CINC"S"	MEXICO	7533	78	97	133	45
30	LOCAL CHECK		7205	79	87	108	51
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	7067	79	101	135	47
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	6758	84	103	130	54
15	ROK"S"	MEXICO	6673	80	103	110	49
14	LA DULCE	ARGENTINA	6653	81	101	110	59
26	MEXICALI 75	MEXICO	6588	78	94	108	45
28	CIANO 79	MEXICO	6463	79	101	105	30
16	BOY"S"	MEXICO	6443	79	103	105	48
27	YAVAROS 79	MEXICO	6286	82	104	105	48
5	AMAL 72	TUNISIA	6148	79	96	95	52
11	DWL 5023	INDIA	6135	81	98	105	54
8	TASSILI 77	ALGERIA	6049	82	103	112	51
20	SCAR"S"-GDO VZ 579	MEXICO	5905	82	118	112	47
21	ERP"S"-RUSO	MEXICO	5714	79	108	102	44
7	SAHEL 77	ALGERIA	5714	79	98	108	40
9	BOOHAI	ETHIOPIA	5642	79	100	140	50
19	FULI"S"	MEXICO	5537	83	102	105	65
12	WAHA"S"	MEXICO	5333	80	100	105	43
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	5084	80	111	110	41
10	DWL 5002	INDIA	4906	79	98	87	57
6	KHROUB 76	ALGERIA	4683	78	105	103	53
25	SHWA"S"-YAV"S"	MEXICO	3967	79	122	107	38
2	D 681	USA	3455	80	120	147	33
18	RABI"S" X WELLS-65150/S15-C	MEXICO	3159	74	132	93	32
4	GEZIRA	SYRIA	2844	73	126	90	35
3	EDMORE	USA	2621	80	122	153	37
1	CANDO	USA	1524	69	123	93	23
	GRAND MEAN		5588 7	78 8	105 2	112 7	45 6
	STANDARD ERROR OF GRAND MEAN		73 1	0 1		0 4	0 3
	COEFFICIENT OF VARIATION AS PC		12 4	0 9		3 0	5 5
	LSD VARIETY MEANS 5 PC		1133 8	1 2		5 5	4 1

CORRELATIONS

YIELD KG/HA					
TEST	WT	0 32			
FLOW	DAYS	-0 85	-0 21		
PLNT	HT	0 20	0 17	-0 10	
1000	G W	0 58	0 61	-0 60	-0 01

TABLE 25 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	6/22/82	PHOSPHORUS	APPLIED
ELEVATION	300 M ABOVE S L	AMOUNT OF MOISTURE	338 MM	POTASSIUM	--

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 WEATHER NORMAL
LOCAL CHECK SAHL = CR"S"LLT DIC V VER/GPP"S"

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	PLNT HT
21	ERP"S"-RUSO	MEXICO	4433	85
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	4388	85
12	WAHA"S"	MEXICO	4194	85
25	SHWA"S"-YAV"S"	MEXICO	4100	80
4	GEZIRA	SYRIA	3944	80
15	ROK"S"	MEXICO	3933	80
29	CANANEA 79	MEXICO	3933	95
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	3905	95
17	CINC"S"	MEXICO	3833	100
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	3794	90
18	RABI"S" X WELLS-65150/S15-C..	MEXICO	3789	85
14	LA DULCE	ARGENTINA	3772	80
7	SAHEL 77	ALGERIA	3761	80
1	CANDO	USA	3727	85
28	CIANO 79	MEXICO	3705	75
9	BOOHAI	ETHIOPIA	3700	105
10	DWL 5002	INDIA	3650	65
8	TASSILI 77	ALGERIA	3633	80
11	DWL 5023	INDIA	3577	70
6	KHROUB 76	ALGERIA	3539	80
23	BD1543-INRAT 69 X COOT"S"/G .	MEXICO	3527	90
2	D 681	USA	3511	105
3	EDMORE	USA	3416	120
16	BOY"S"	MEXICO	3361	75
26	MEXICALI 75	MEXICO	3211	80
5	AMAL 72	TUNISIA	2989	65
27	YAVAROS 79	MEXICO	2983	70
30	LOCAL CHECK		2955	75
19	FULI"S"	MEXICO	2855	75
20	SCAR"S"-GDJ VZ 579	MEXICO	2650	85

GRAND MEAN	3625 6 84 0
STANDARD ERROR OF GRAND MEAN	51 7
COEFFICIENT OF VARIATION AS PC	13 5
LSD VARIETY MEANS 5 PC	802 1

CORRELATIONS

	YIELD KG/HA
PLNT HT	0 23

TABLE 26 MIDDLE EAST TURKEY IZMIR

E B Z A ENST.
CEREAL STAFF

LATITUDE		DATE PLANTED	11/10/81	NITROGEN	--
LONGITUDE		DATE HARVESTED	6/18/82	PHOSPHORUS	--
ELEVATION	M ABOVE S L	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

SOWING DATE AND GERMINATION % NOT REPORTED
SOWING DATE NOT REPORTED MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE
MODERATE WEED PROBLEM NEGLIGIBLE BIRD DAMAGE
WEATHER NORMAL LOCAL CHECK GEDIZ-75

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA
12	WAHA"S"	MEXICO	5584
16	BOY"S"	MEXICO	5464
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	5414
25	SHWA"S"-YAV"S"	MEXICO	5335
14	LA DULCE	ARGENTINA	4967
22	CR"S"-USA 02299 X CR"S"-GS" .	MEXICO	4845
30	LOCAL CHECK		4732
21	ERP"S"-RUSO	MEXICO	4731
11	DWL 5023	INDIA	4675
15	RC"S"	MEXICO	4581
18	RABI"S" X WELLS-65150/S15-C .	MEXICO	4539
20	SCAR"S"-GDO VZ 579	MEXICO	4521
19	FULI"S"	MEXICO	4046
2	D 681	USA	3842
6	KHROUB 76	ALGERIA	3773
17	CINC"S"	MEXICO	3598
7	SAHEL 77	ALGERIA	3592
4	GEZIRA	SYRIA	3567
26	MEXICALI 75	MEXICO	3429
29	CANANEA 79	MEXICO	3422
10	DWL 5002	INDIA	3236
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	3191
23	BD1543-INRAT 69 X CCOT"S"/G	MEXICO	3181
28	CIANO 79	MEXICO	3152
8	TASSILI 77	ALGERIA	3024
3	EDMORE	USA	2952
9	BOOHAI	ETHIOPIA	2656
27	YAVAROS 79	MEXICO	1958
5	AMAL 72	TUNISIA	1824
1	CANDO'	USA	669

GRAND MEAN	3816 7
STANDARD ERROR OF GRAND MEAN	104. 6
COEFFICIENT OF VARIATION AS PC	26 0
LSD VARIETY MEANS 5 PC	1622 7

TABLE 27 NORTH AMERICA MEXICO EDO DE MEXICO

EL BATAN
CIMMYT

LATITUDE	019 31'N	DATE PLANTED	6/ 1/81	NITROGEN	APPLIED
LONGITUDE	098 50'W	DATE HARVESTED	10/18/81	PHOSPHORUS	APPLIED
ELEVATION	2249 M ABOVE S L	AMOUNT OF MOISTURE	463 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 WEEDS MECHANICAL CONTROL OF WEEDS
HAND WEEDING WEATHER NOT REPORTED LOCAL CHECK PAVON 76

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	STRP RT L	LEAF RUST	PLNT HT	1000 G.W.
29	CANANEA 79	MEXICO	8306	65	58	0	TMR	115	41
15	ROK"S"	MEXICO	7876	75	61	TMS	0	85	41
17	CINC"S"	MEXICO	7653	76	65	0	TMR-MS	112	45
30	LOCAL CHECK		7049	78	63	0	T-10S	98	32
26	MEXICALI 75	MEXICO	7035	77	58	0	60MS-10MR	85	44
23	BD1543-INRAT 69 X COOT"S"/G ..	MEXICO	6917	77	66	0	TR	112	47
13	CYUS"S"-SINCAPE 9 X YEL"S"/.	MEXICO	6785	79	67	0	TMR	113	46
11	DWL 5023	INDIA	6764	77	65	TMS	TMR-MS	85	42
27	YAVAROS 79	MEXICO	6007	77	65	0	TMR	92	44
24	RUSO X D67 2-GTA"S"/RUFF"S" .	MEXICO	5980	81	59	0	TMR	105	45
28	CIANO 79	MEXICO	5959	74	59	TMS	TR	78	28
19	FULI"S"	MEXICO	5862	74	66	0	TR	87	39
16	BOY"S"	MEXICO	5862	75	63	TR	0	88	41
2	D 681	USA	5862	79	68	50MS-S	TMR	120	33
14	LA DULCE	ARGENTINA	5848	75	65	TMS	TR	92	45
5	AMAL 72	TUNISIA	5702	73	61	5MR	TR	82	36
22	CR"S"-USA 02299 X CR"S"-GS".	MEXICO	5577	75	70	0	30MR-MS	87	36
8	TASSILI 77	ALGERIA	5521	78	69	0	TMR	93	41
9	BOOHAI	ETHIOPIA	5278	74	65	TMS	40MS-MR	115	39
20	SCAR"S"-GDO VZ 579	MEXICO	5216	75	74	0	TMR	100	37
12	WAHA"S"	MEXICO	4702	75	62	TR	TMR	85	37
6	KHROUB 76	ALGERIA	4653	73	65	TR	TMR-MS	85	41
10	DWL 5002	INDIA	4598	73	60	0	TR	72	35
21	ERP"S"-RUSO	MEXICO	4382	72	70	0	TR	80	39
25	SHWA"S"-YAV"S"	MEXICO	4348	72	76	0	TMR	98	34
3	EDMORE	USA	4181	73	76	60MS-S	20MR-MS	145	33
7	SAHEL 77	ALGERIA	3341	64	65	0	0	90	23
18	RABI"S" X WELLS-65150/S15-C .	MEXICO	2264	59	83	0	5MR-MS	85	21
1	CANDO	USA	1757	53	84	40MR-MS	40MS-S	87	15
4	GEZIRA	SYRIA	1493	53	81	10MS-MR	TR	80	20
		GRAND MEAN	5425 9	72 7	67 0	2 5	3 3	95.0	36 5
		STANDARD ERROR OF GRAND MEAN	89 7	0 2				0 4	0.3
		COEFFICIENT OF VARIATION AS PC	15 7	2 7				3 6	6.7
		LSD VARIETY MEANS 5 PC	1371.4	3.2				5 5	4 0

CORRELATIONS

YIELD	KG/HA						
TEST	WT	0 75					
FLOW	DAYS	-0 76	-0 65				
STRP	RT L	-0 26	-0 11	0 37			
LEAF	RUST	-0 33	-0 39	0 38	0 34		
PLNT	HT	0 26	0 25	0 08	0 62	0 10	
1000	G W	0 80	0 83	-0.65	-0 31	-0 39	0 22

TABLE 28 NORTH AMERICA MEXICO SONORA

CIANO (1ST DATE)
CIMMYT

LATITUDE	027 20'N	DATE PLANTED	11/19/81	NITROGEN	APPLIED
LONGITUDE	109 54'W	DATE HARVESTED	4/21/82	PHOSPHORUS	APPLIED
ELEVATION	0038 M ABOVE S L	AMOUNT OF MOISTURE	720 MM	POTASSIUM	--

EARLY 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.
MECHANICAL CONTROL OF WEEDS WEATHER NORMAL LOCAL CHECK PAVON 76

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	LEAF RUST	PLNT HT	1000 G W.
15	ROK"S"	MEXICO	8064	83	90	TR	98	53
27	YAVAROS 79	MEXICO	7828	85	90	0	93	58
30	LOCAL CHECK		6981	83	89	TS	108	42
21	ERP"S"-RUSO	MEXICO	6976	83	95	TR	92	59
12	WAHA"S"	MEXICO	6862	84	86	20MR-MS	92	55
22	CR"S"-USA 02299 X CR"S"-QS"	MEXICO	6312	84	97	TR	93	52
26	MEXICALI 75	MEXICO	6459	82	76	TMR	95	58
17	CINC"S"	MEXICO	6276	81	85	5MR-MS	117	55
14	LA DULCE	ARGENTINA	6159	84	93	TR	98	66
8	TASSILI 77	ALGERIA	6117	84	90	TMR-R	98	57
28	CIANO 79	MEXICO	6106	80	84	TMS-S	92	38
16	BOY"S"	MEXICO	6098	82	90	TR	88	57
11	DWL 5023	INDIA	6017	84	86	TMS	87	56
9	AMAL 72	TUNISIA	6017	78	82	TR	82	49
29	CANANEA 79	MEXICO	5956	69	82	5MR	110	45
10	DWL 5002	INDIA	5900	81	84	TR	72	56
20	SCAR"S"-QDO VI 579	MEXICO	5617	84	95	0	92	53
6	KHROUB 76	ALGERIA	5534	83	96	TMR-MS	88	60
25	SHWA"S"-YAV"S"	MEXICO	5448	84	105	TMR-MS	92	53
19	FULI"S"	MEXICO	5448	85	91	TR	95	60
23	BD1543-INRAT 69 X COOT"S"/Q	MEXICO	5245	81	86	TMS	108	52
24	RUSO X D67 2-OTA"S"/RUFF"S"	MEXICO	5020	84	85	TR	112	54
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	4967	82	84	TR	110	55
7	SAHEL 77	ALGERIA	4820	81	90	0	93	47
18	RABI"S" X WELLS-65150/S15-C .	MEXICO	4561	77	112	0	78	42
1	CANDO	USA	4542	77	110	10S	87	34
2	D 681	USA	4434	79	101	10R	120	36
3	EDMORE	USA	3764	76	105	10S-MS	138	39
9	BOOHAI	ETHIOPIA	3742	79	84	5S	113	54
4	GEZIRA	SYRIA	3675	76	112	TR	73	44
		GRAND MEAN	5705.5	81 1	91 8	1.7	97 2	51 3
		STANDARD ERROR OF GRAND MEAN	67.1	0 1			0.7	0 2
		COEFFICIENT OF VARIATION AS PC	11.2	1 1			6.8	3 4
		LSD VARIETY MEANS 5 PC	1041 1	1 4			10 8	2 9

CORRELATIONS

YIELD	KG/HA					
TEST	WT	0 49				
FLOW	DAYS	-0 45	-0 20			
LEAF	RUST	-0 24	-0 27	0 19		
PLNT	HT	-0 19	-0 15	-0 16	0 31	
1000	G W	0 43	0 64	-0 43	-0 36	-0 17

TABLE 29 NORTH AMERICA U S A ARIZONA

MESA EXP FARM
R. K THOMPSON

LATITUDE	033 24'N	DATE PLANTED	11/16/81	NITROGEN	APPLIED
LONGITUDE	111 40'W	DATE HARVESTED	5/26/82	PHOSPHORUS	APPLIED
ELEVATION	+00366 M ABOVE S L	AMOUNT OF MOISTURE	621 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 NAME NOT REPORTED

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	LODG %
30	LOCAL CHECK		9[illegible]8	84	115	175	92	1
15	ROK"S"	MEXICO	9434	84	125	181	104	17
21	ERP"S"-RUSO	MEXICO	9316	84	127	182	94	0
12	WAHA"S"	MEXICO	9147	84	118	177	96	8
16	BOY"S"	MEXICO	8848	83	120	179	96	1
27	AVAROS 79	MEXICO	8774	85	126	183	96	4
11	DWL 5023	INDIA	8651	84	118	178	94	4
10	DWL 5002	INDIA	8591	84	116	177	79	0
22	CR"S"-USA 02299 X CR"S"-QS"	MEXICO	8576	84	135	183	101	0
14	LA DULCE	ARGENTINA	8391	83	121	181	102	22
25	SHWA"S"-YAV"S"	MEXICO	8380	84	143	185	103	0
7	SAHEL 77	ALGERIA	8297	83	118	175	100	11
8	TASSILI 77	ALGERIA	8283	86	125	181	103	0
23	BD1543-INRAT 69 X COOT"S"/Q .	MEXICO	8218	82	120	181	111	33
29	CANANEA 79	MEXICO	8164	68	112	170	112	0
26	MEXICALI 75	MEXICO	8080	82	116	173	100	3
17	CINC"S"	MEXICO	8038	82	116	174	111	0
1	CANDO	USA	7791	81	137	188	96	0
5	AMAL 72	TUNISIA	7616	81	113	170	84	0
28	CIANO 79	MEXICO	7569	82	118	176	98	32
20	SCAR"S"-GDO VZ 579	MEXICO	7324	84	134	185	102	3
19	FULI"S"	MEXICO	7170	87	122	181	100	0
6	KHROUB 76	ALGERIA	7070	82	127	182	89	32
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	6979	84	114	170	109	10
24	RUSO X D67 2-QTA"S"/RUFF"S"	MEXICO	6946	85	126	180	114	3
18	RABI"S" X WELLS-65130/S15-C	MEXICO	6900	77	136	191	103	0
4	GEZIRA	SYRIA	6765	77	142	189	89	0
3	EDMORE	USA	5867	81	143	189	145	28
2	D 681	USA	5594	83	145	190	143	29
9	BOOHAI	ETHIOPIA	3498	81	116	177	106	45
		GRAND MEAN	7861 2	82 3	124 9	180 1	102 4	9 5
		STANDARD ERROR OF GRAND MEAN	70 1	0 1			0.4	
		COEFFICIENT OF VARIATION AS PC	8 5	0 6			3 6	
		LSD VARIETY MEANS 5 PC	1087 3	0 9			6 1	

CORRELATIONS

YIELD	KG/HA					
TEST	WT	0 21				
FLOW	DAYS	-0 37	0 02			
MAT	DAYS	-0 32	0 07	0 91		
PLNT	HT	-0 54	-0 11	0.40	0 31	
LODG	%	-0 48	-0.01	0 01	0 09	0 41

TABLE 30 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 MODOC

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	LODG %	1000 G W
1	CANDO	USA	5821	78	181	88	20	40
27	YAVAROS 79	MEXICO	5687	81	159	84	90	60
18	RABI"S" X WELLS-65150/S15-C	MEXICO	5457	79	184	87	40	41
25	SHWA"S"-YAV"S"	MEXICO	4778	81	181	96	70	48
11	DWL 5023	INDIA	4350	82	151	79	90	62
29	CANANEA 79	MEXICO	4012	66	135	68	90	42
4	GEZIRA	SYRIA	3992	73	182	85	22	41
3	EDMORE	USA	3806	77	180	120	100	41
16	BOY"S"	MEXICO	3551	79	148	79	97	63
7	SAHEL 77	ALGERIA	3434	78	157	84	100	53
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	3268	77	159	93	100	50
12	WAHA"S"	MEXICO	3232	78	154	75	90	58
2	D 681	USA	2977	79	178	108	100	38
15	ROK"S"	MEXICO	2903	75	164	80	87	62
21	ERP"S"-RUSO	MEXICO	2851	78	165	81	40	60
14	LA DULCE	ARGENTINA	2742	78	156	87	93	67
26	MEXICALI 75	MEXICO	2738	74	146	84	80	60
24	RUSO X D67 2-GTA"S"/RUFF"S" .	MEXICO	2734	79	157	88	50	59
20	SCAR"S"-GDO VZ 579	MEXICO	2674	81	175	88	67	60
9	BOOKAI	ETHIOPIA	2516	78	152	100	100	52
13	CYUS"S"-SINCAPE 9 X YEL"3"/	MEXICO	2332	77	144	88	100	53
6	KHROUB 76	ALGERIA	2303	77	148	75	83	57
28	CIANO 79	MEXICO	2263	78	145	76	80	32
30	LOCAL CHECK		1915	79	146	73	100	32
17	CINC"S"	MEXICO	1912	74	148	93	100	54
8	TASSILI 77	ALGERIA	1838	78	160	88	90	58
5	AMAL 72	TUNISIA	1560	72	145	76	83	49
10	DWL 5002	INDIA	1373	79	144	74	83	65
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	1347	79	167	84	90	49
19	FULI"S"	MEXICO	879	75	159	87	42	21
		GRAND MEAN	3040 9	77 3	159 0	86 2	79 2	50 8
	STANDARD ERROR OF GRAND MEAN		61 0			0 6	1 7	
	COEFFICIENT OF VARIATION AS PC		19.0			6 2	19 8	
	LSD VARIETY MEANS 5 PC		945 5			8 7	25 7	

CORRELATIONS

YIELD KG/HA					
TEST WT	0 18				
FLOW DAYS	0 48	0 34			
PLNT HT	0 22	0 00	0 50		
LODG %	-0 28	0 04	-0 51	0 12	
1000 G W	0 03	0 25	-0.23	-0 24	0 27

TABLE 31 NORTH AMERICA U S A NORTH DAKOTA

LANGDON, FARGO
J S. QUICK

LATITUDE	046 51'N	DATE PLANTED	5/22/82	NITROGEN	--
LONGITUDE	096 44'W	DATE HARVESTED	9/ 7/82	PHOSPHORUS	--
ELEVATION	M ABOVE S L	AMOUNT OF MOISTURE	295 MM	POTASSIUM	--

LATE SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE SLIGHT WEED PROBLEM.
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK DZ85

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W
29	CANANEA 79	MEXICO	5355	52	54	89	40
17	CINC"S"	MEXICO	4954	60	56	81	43
28	CIANO 79	MEXICO	4798	58	58	71	32
1	CANDO	USA	4793	61	58	72	41
15	ROK"S"	MEXICO	4733	59	56	70	43
30	LOCAL CHECK		4629	61	53	90	41
23	BD1543-INRAT 69 X COOT"S"/G ..	MEXICO	4603	60	57	84	44
8	TASSILI 77	ALGERIA	4561	60	56	72	44
14	LA DULCE	ARGENTINA	4488	59	57	77	48
12	WAHA"S"	MEXICO	4483	60	56	68	40
9	BOOHAI	ETHIOPIA	4282	60	57	86	45
21	ERP"S"-RUSO	MEXICO	4272	58	58	66	44
7	SAHEL 77	ALGERIA	4256	60	57	76	38
16	BOY"S"	MEXICO	4243	60	57	71	46
5	AMAL 72	TUNISIA	4238	57	58	70	40
2	D 681	USA	4061	62	55	84	38
22	CR"S"-USA 02299 X CR"S"-GS".	MEXICO	4027	58	57	70	42
11	DWL 5023	INDIA	4020	60	56	68	43
13	CYUS"S"-SINCAPE 9 X YEL"S"/ .	MEXICO	3996	60	56	80	51
19	FULI"S"	MEXICO	3949	61	57	71	44
24	RUSO X D67 2-GTA"S"/RUFF"S".	MEXICO	3871	61	56	79	46
6	KHROUB 76	ALGERIA	3835	59	57	70	46
3	EDMORE	USA	3767	62	57	96	46
26	MEXICALI 75	MEXICO	3647	58	56	70	41
10	DWL 5002	INDIA	3500	59	56	61	39
25	SHWA"S"-YAV"S"	MEXICO	3494	57	58	70	39
20	SCAR"S"-GDO VZ 579	MEXICO	3382	61	57	74	44
18	RABI"S" X WELLS-65150/S15-C .	MEXICO	3353	55	59	71	30
4	GEZIRA	SYRIA	2903	54	57	75	32
27	YAVAROS 79	MEXICO	2866	58	58	65	41
		GRAND MEAN	4114 8	58 8	56 7	74 9	41 7
		STANDARD ERROR OF GRAND MEAN			0 1		
		COEFFICIENT OF VARIATION AS PC			1 2		
		LSD VARIETY MEANS 5 PC			1.1		

CORRELATIONS

YIELD	KG/HA				
TEST	WT	0 09			
FLOW	DAYS	-0 40	-0 15		
PLNT	HT	0.33	0 17	-0 49	
1000	G W	0.19	0 52	-0 22	0 22

TABLE 32 NORTH AMERICA U S A WASHINGTON

ROYAL SLOPE
C F KONZAK

LATITUDE	046 57'N	DATE PLANTED	3/19/82	NITROGEN	APPLIED
LONGITUDE	119 20'W	DATE HARVESTED	8/13/82	PHOSPHORUS	APPLIED
ELEVATION	M ABOVE S L	AMOUNT OF MOISTURE	711 MM	POTASSIUM	APPLIED

EARLY SOWING DATE SOIL MOIST AT SOWING GERMINATION POOR
SLIGHT DISEASE INCIDENCE NEGLIGIBLE INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS VERY COLD SPRING
LOCAL CHECK WAID

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	POW M 0-9
30	LOCAL CHECK		6852	62	159	80	6
29	CANANEA 79	MEXICO	6737	54	154	100	1
28	CIANO 79	MEXICO	6655	61	155	75	1
1	CANDO	USA	6541	63	161	75	1
11	DWL 5023	INDIA	6472	63	158	70	6
16	BOY"S"	MEXICO	6205	62	159	75	1
14	LA DULCE	ARGENTINA	6061	64	158	85	4
21	ERP"S"-RUSO	MEXICO	5991	62	158	70	1
8	TASSILI 77	ALGERIA	5828	63	158	75	4
9	BOOHAI	ETHIOPIA	5771	63	158	90	1
22	CR"S"-USA 02299 X CR"S"-OS" ..	MEXICO	5693	63	162	70	6
7	SAHEL 77	ALGERIA	5454	63	157	80	4
10	DWL 5002	INDIA	5363	61	158	65	1
13	CYUS"S"-SINCAPE 9 X YEL"S"/ .	MEXICO	5222	62	156	95	1
15	ROK"S"	MEXICO	5140	59	158	75	1
18	RABI"S" X WELLS-65150/S15-C	MEXICO	5087	60	161	70	1
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	5076	62	155	85	9
17	CINC"S"	MEXICO	5071	60	158	85	1
2	D 681	USA	4929	63	154	85	1
4	GEZIRA	SYRIA	4924	57	159	70	1
3	EDMORE	USA	4922	62	156	110	4
19	FULI"S"	MEXICO	4768	62	154	70	6
12	WAHA"S"	MEXICO	4729	61	158	75	1
6	KHROUB 76	ALGERIA	4704	62	158	75	6
25	SHWA"S"-YAV"S"	MEXICO	4661	61	158	75	9
20	SCAR"S"-GDO VZ 579	MEXICO	4437	63	156	75	4
23	BD1543-INRAT 69 X COOT"S"/O...	MEXICO	4321	59	158	85	1
5	AMAL 72	TUNISIA	3746	57	158	65	1
26	MEXICALI 75	MEXICO	3707	61	155	75	1
27	YAVAROS 79	MEXICO	3202	59	156	65	1
		GRAND MEAN	5275 6	61 1	157 4	78 2	2.9
		STANDARD ERROR OF GRAND MEAN	45.4	0 1			
		COEFFICIENT OF VARIATION AS PC	8 2	2 0			
		LSD VARIETY MEANS 5 PC	704 5	2 0			

CORRELATIONS

YIELD KG/HA					
TEST	WT	0 23			
FLOW	DAYS	0 23	0 14		
PLNT	HT	0 21	0 00	-0 37	
POW M	0-9	0 07	0.39	-0 01	0 00

TABLE 33 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
LOCAL CHECK VERUM GLABROUS

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	PLNT HT	BYDV 0-9
29	CANANEA 79	MEXICO	7500	58	100	4
1	CANDO	USA	7099	63	83	3
30	LOCAL CHECK		6740	61	85	3
16	BOY"S"	MEXICO	5677	60	80	4
17	CINC"S"	MEXICO	5600	60	88	5
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	5513	60	92	4
2	D 681	USA	5395	60	95	4
3	EDMORE	USA	5191	62	112	4
9	BOOHAI	ETHIOPIA	4940	60	93	5
21	ERP"S"-RUSO	MEXICO	4892	62	78	4
25	SHWA"S"-YAV"S"	MEXICO	4853	62	80	4
19	FULI"S"	MEXICO	4811	60	73	4
10	DWL 5002	INDIA	4778	58	68	3
12	WAHA"S"	MEXICO	4774	59	75	4
11	DWL 5023	INDIA	4749	60	73	4
15	ROK"S"	MEXICO	4657	60	78	4
4	GEZIRA	SYRIA	4574	63	78	5
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	4545	59	95	5
14	LA DULCE	ARGENTINA	4514	62	87	4
8	TASSILI 77	ALGERIA	4475	60	78	3
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	4463	64	78	5
18	RABI"S" X WELLS-65150/S15-C	MEXICO	4435	65	77	5
5	AMAL 72	TUNISIA	4414	61	77	4
7	SAHEL 77	ALGERIA	4384	59	82	4
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	3761	62	95	5
20	SCAR"S"-GDO VZ 579	MEXICO	3679	61	83	4
6	KHROUB 76	ALGERIA	3614	60	78	3
27	YAVAROS 79	MEXICO	3492	61	73	2
26	MEXICALI 75	MEXICO	3310	59	80	5
28	CIANO 79	MEXICO	3065	61	83	4
		GRAND MEAN	4796 5	60 7	83 3	4 0
		STANDARD ERROR OF GRAND MEAN	70 2		0 3	
		COEFFICIENT OF VARIATION AS PC	13 9		4 0	
		LSD VARIETY MEANS 5 PC	1089 0		5 4	

CORRELATIONS

	YIELD KG/HA	FLOW DAYS	PLNT HT	BYDV 0-9
FLOW DAYS	-0 09			
PLNT HT	0 34	-0 03		
BYDV 0-9	-0 13	0 20	0 30	

TABLE 34 SOUTH AMERICA ARGENTINA BUENOS AIRES

LA DULCE
CRIADERO BUCK

LATITUDE	038 20'S	DATE PLANTED	8/ 8/82	NITROGEN	APPLIED
LONGITUDE	059 40'W	DATE HARVESTED	1/16/83	PHOSPHORUS	APPLIED
ELEVATION	0072 M ABOVE S L	AMOUNT OF MOISTURE	338 MM	POTASSIUM	--

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 BUCK MECHONGUE

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W
30	LOCAL CHECK		2320	77	89	93	57
8	TASSILI 77	ALGERIA	2210	79	91	90	50
29	CANANEA 79	MEXICO	2188	69	82	103	42
11	DWL 5023	INDIA	2150	77	88	78	52
15	ROK"S"	MEXICO	1926	74	92	83	46
19	FULI"S"	MEXICO	1913	78	89	85	53
16	BOY"S"	MEXICO	1824	75	90	89	50
24	RUSO X D67 2-GTA"S"/RUFF"S" ..	MEXICO	1803	76	89	90	56
14	LA DULCE	ARGENTINA	1783	77	90	90	53
7	SAHEL 77	ALGERIA	1772	76	91	84	40
20	SCAR"S"-GDO VZ 579	MEXICO	1766	78	91	82	49
1	CANDO	USA	1758	74	96	78	38
17	CINC"S"	MEXICO	1744	73	90	97	46
21	ERP"S"-RUSO	MEXICO	1737	74	94	72	47
10	DWL 5002	INDIA	1726	75	88	80	47
18	RABI"S" X WELLS-65150/S15-C .	MEXICO	1687	76	98	74	34
4	GEZIRA	SYRIA	1686	69	96	86	37
6	KHROUB 76	ALGERIA	1684	75	92	86	52
26	MEXICALI 75	MEXICO	1677	74	87	83	50
28	CIANO 79	MEXICO	1664	72	87	82	32
3	EDMORE	USA	1662	76	98	125	47
13	CYUS"S"-SINCAPE 9 X YEL"S"/ .	MEXICO	1609	74	88	90	48
9	BOOHAI	ETHIOPIA	1577	76	89	108	55
25	SHWA"S"-YAV"S"	MEXICO	1573	74	95	88	49
12	WAHA"S"	MEXICO	1548	75	89	80	42
22	CR"S"-USA 02299 X CR"S"-GS" .	MEXICO	1519	77	95	77	39
5	AMAL 72	TUNISIA	1514	72	94	76	42
2	D 681	USA	1474	75	96	106	37
23	BD1543-INRAT 69 X COOT"S"/G .	MEXICO	1326	75	95	96	48
27	YAVAROS 79	MEXICO	1289	77	92	78	49
	GRAND MEAN		1737 0	74.9	91 4	87 6	46.2
	STANDARD ERROR OF GRAND MEAN		17.8				
	COEFFICIENT OF VARIATION AS PC		9 7				
	LSD VARIETY MEANS 5 PC		275 3				

CORRELATIONS

YIELD KG/HA					
TEST	WT	0 11			
FLOW	DAYS	-0 46	0 10		
PLNT	HT	0 04	-0 04	0 00	
1000	G W	0 30	0 50	-0.35	0.21

TABLE 35 SOUTH AMERICA BOLIVIA COCHABAMBA

SAN BENITO
Q. SALAMANCA ET AL

LATITUDE	017 30'S	DATE PLANTED	12/30/82	NITROGEN	--
LONGITUDE	066 06'W	DATE HARVESTED	5/27/82	PHOSPHORUS	--
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 SACABA 81

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	SEP T 0-9
29	CANANEA 79	MEXICO	3350	56	129	88	0
2	D 681	USA	2998	63	133	100	0
11	DWL 5023	INDIA	2985	61	131	77	0
28	CIANO 79	MEXICO	2830	58	129	77	0
16	BOY"S"	MEXICO	2740	59	129	77	0
21	ERP"S"-RUSO	MEXICO	2722	67	136	77	0
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	2659	62	132	88	1
3	EDMORE	USA	2623	75	145	110	0
12	WAHA"S"	MEXICO	2591	58	130	70	1
8	TASSILI 77	ALGERIA	2580	62	133	82	1
7	SAHEL 77	ALGERIA	2495	63	132	78	0
9	BOOHAI	ETHIOPIA	2457	61	131	93	1
5	AMAL 72	TUNISIA	2369	62	131	68	1
14	LA DULCE	ARGENTINA	2282	64	132	80	1
22	CR"S"-USA 02299 X CR"S"-QS"...	MEXICO	2209	72	139	82	1
1	CANDO	USA	2070	78	148	80	0
20	SCAR"S"-CDO VZ 579	MEXICO	2063	65	134	80	0
17	CINC"S"	MEXICO	2056	59	130	78	0
24	RUSO X D67 2-QTA"S"/RUFF"S"	MEXICO	2037	60	131	83	0
30	LOCAL CHECK		2036	54	128	73	0
25	SHWA"S"-YAV"S"	MEXICO	2033	74	141	80	0
23	BD1543-INRAT 69 X COOT"S"/Q ..	MEXICO	2003	63	131	83	0
19	FULI"S"	MEXICO	1993	63	131	78	0
10	DWL 5002	INDIA	1969	57	130	55	0
6	KHROUB 76	ALGERIA	1907	65	133	77	0
27	YAVAROS 79	MEXICO	1820	65	134	73	0
18	RABI"S" X WELLS-65150/S15-C..	MEXICO	1711	77	146	83	0
15	ROK"S"	MEXICO	1595	62	130	73	1
26	MEXICALI 75	MEXICO	1520	59	129	72	1
4	GEZIRA	SYRIA	1022	74	140	73	1
		GRAND MEAN	2257 5	63 9	133 6	79 7	0.3
		STANDARD ERROR OF GRAND MEAN	47 9			0 5	
		COEFFICIENT OF VARIATION AS PC	20 1			6 5	
		LSD VARIETY MEANS 5 PC	742.2			8 5	

CORRELATIONS

YIELD	KG/HA				
FLOW	DAYS	-0 33			
MAT	DAYS	-0 24	0 95		
PLNT	HT	0.41	0 31	0.34	
SEP T	0-9	-0 21	-0 04	-0.13	-0 12

TABLE 36 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 GEPMINATION GOOD
NEGLIGIBLE INSECT DAMAGE MODERATE WEED PROBLEM NEGLIGIBLE BIRD DAMAGE
CHEMICAL CONTROL OF WEEDS HAND WEEDING WEATHER NORMAL
LOCAL CHECK GUILLEMOT"S"

'AR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	LEAF RUST	STEM RUST	PLNT HT	LODG %
30	LOCAL CHECK		2889	81	115	TMR	TMR	80	18
29	CANANEA 79	MEXICO	2644	60	101	10MR	5MR	73	7
28	CIANO 79	MEXICO	2550	72	108	5MS	10MS-MR	68	11
14	LA DULCE	ARGENTINA	2361	80	112	TMR	30S-MS	82	15
11	DWL 5023	INDIA	2266	77	110	10MS	20MS-S	68	4
15	ROK"S"	MEXICO	2244	78	107	10MS-MR	20MR-MS	73	4
16	BOY"S"	MEXICO	2233	78	111	20MS-S	30MS-S	73	22
26	MEXICALI 75	MEXICO	2022	72	103	TMR	20MS-MR	63	18
12	WAHA"S"	MEXICO	2000	76	102	20MS	50MS-S	68	22
10	DWL 5002	INDIA	1905	68	100	-	10MS	52	4
9	BOOHAI	ETHIOPIA	1800	75	109	20MR	10MR-MS	83	15
8	TASSILI 77	ALGERIA	1766	85	115	20MS	20MS-MR	75	4
19	FULI"S"	MEXICO	1722	83	113	10MS-MR	20MR-MS	73	4
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	1661	76	102	5MS	20MS	70	11
27	YAVAROS 79	MEXICO	1572	84	114	30MS	20MS	70	11
7	SAHEL 77	ALGERIA	1428	82	110	10S-MS	20MS	73	11
6	KHROUB 76	ALGERIA	1389	78	113	10S	50S	75	7
17	CINC"S"	MEXICO	1250	76	103	50S	30MS-MR	77	29
21	ERP"S"-RUSO	MEXICO	972	86	113	20MS-S	40MS-S	70	15
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	828	77	97	10MS	60S-MS	83	70
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	767	77	102	20MS	30S-MS	78	37
20	SCAR"S"-GDO VZ 579	MEXICO	744	111	132	10MS-MR	10MS-MR	72	0
5	AMAL 72	TUNISIA	700	75	93	10S-MS	50S-MS	65	37
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	383	90	113	30S	50S-MS	70	22
25	SHWA"S"-YAV"S"	MEXICO	-	112	-	20S-MS	5MS	67	-
18	RABI"S" X WELLS-65150/S15-C	MEXICO	-	119	-	5MS-MR	20MR	57	-
4	GEZIRA	SYRIA	-	118	-	5MR-MS	10MR-MS	65	-
3	EDMORE	USA	-	117	-	TMR-MS	0	83	-
2	D 681	USA	-	118	-	5MS	0	75	-
1	CANDO	USA	-	-	-	30S	0	62	-
		GRAND MEAN	1670 7	84 0	108 2	12 6	15.4	71 5	16 6
		STANDARD ERROR OF GRAND MEAN	41 6					0 4	
		COEFFICIENT OF VARIATION AS PC	21 1					5 9	
		LSD VARIETY MEANS 5 PC	580 6					6 9	

CORRELATIONS

YIELD	KG/HA						
FLOW	DAYS	-0 27					
MAT	DAYS	-0 01	0 44				
LEAF	RUST	-0 69	-0 12	-0 07			
STEM	RUST	-0 68	-0 33	-0 33	0 58		
PLNT	HT	-0 01	-0 06	0 19	0 15	0 22	
LODG	%	-0 42	-0 09	-0 54	0 49	0 72	0 31

TABLE 37 SOUTH AMERICA CHILE SANTIAGO

LA PLATINA
J RAMIREZ

LATITUDE	033 27'S	DATE PLANTED	8/10/82	NITROGEN	APPLIED
LONGITUDE	070 38'W	DATE HARVESTED	1/10/83	PHOSPHORUS	APPLIED
ELEVATION	0629 M ABOVE S L	AMOUNT OF MOISTURE	164 MM	POTASSIUM	--

LATE SOWING DATE SOIL MOIST AT SOWING GERMINATION GOOD
MODERATE DISEASE INCIDENCE SLIGHT INSECT DAMAGE NO WEED PROBLEM
NEGLIGIBLE BIRD DAMAGE CHEMICAL CONTROL OF WEEDS HAND WEEDING
LOCAL CHECK GUILAFEN

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	STRP RT L	LEAF RUST	STEM RUST	PLNT HT	POW M 0-9
11	DWL 5023	INDIA	7688	80	10S	TR-S	5MS-S	85	-
16	BOY"S"	MEXICO	7236	80	0	TR	TS	65	4
28	CIANO 79	MEXICO	6951	79	0	40S	10MR-MS	75	-
14	LA DULCE	ARGENTINA	6868	83	TMS	0	TMR	85	-
15	ROK"S"	MEXICO	6778	79	0	TR	10MR-MS	80	-
17	CINC"S"	MEXICO	6590	77	0	5S	20S	100	4
19	FULI"S"	MEXICO	6556	82	TMS	5S	5MR	75	-
20	SCAR"S"-GDO VZ 579	MEXICO	6472	83	0	TMR	5MR	90	-
29	CANANEA 79	MEXICO	6319	66	TMS	0	0	90	-
8	TASSILI 77	ALGERIA	6271	83	10MS-S	TR	TS	85	-
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	6174	80	0	TMR	10S	100	-
10	DWL 5002	INDIA	6056	82	20MS-S	TR	5MR-MS	65	-
12	WAHA"S"	MEXICO	6049	78	TMR	5S	10MS-S	75	-
2	D 681	USA	5972	80	20MR-MS	TR	0	80	-
6	KHROUB 76	ALGERIA	5938	79	TMS	TR	5S	85	5
25	SHWA"S"-YAV"S"	MEXICO	5896	81	0	TMR	10MS	90	2
7	SAHEL 77	ALGERIA	5833	81	10MS-S	0	TS	90	-
30	LOCAL CHECK		5799	80	0	5R	10S	85	5
3	EDMORE	USA	5722	82	30MS-S	10MR	0	125	-
1	CANDO	USA	5639	74	20MR	10MS	0	85	-
23	BD1543-INRAT 69 X COOT"S"/G.	MEXICO	5590	78	0	20MS	5S	100	-
27	YAVAROS 79	MEXICO	5569	81	0	TMS	5MR	80	-
22	CR"S"-USA 02299 X CR"S"-GS"..	MEXICO	5528	78	0	30MS	10MS-S	80	5
4	GEZIRA	SYRIA	5333	73	0	TMR	TR	85	-
5	AMAL 72	TUNISIA	5313	76	20S	10S	30S	75	-
26	MEXICALI 75	MEXICO	5306	77	10S	TMR	5MR	80	-
9	BOOHAI	ETHIOPIA	5069	79	20S	5S	5MR-MS	120	-
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	5049	81	0	TMR	30MS	105	-
21	ERP"S"-RUSO	MEXICO	4993	77	0	40S	5S	70	4
18	RABI"S" X WELLS-65150/S15-C	MEXICO	4986	75	0	0	5MR	80	-
		GRAND MEAN	5984 8	78 8	4 9	5.6	5 7	86 8	4 1
		STANDARD ERROR OF GRAND MEAN	76 7						
		COEFFICIENT OF VARIATION AS PC	12 2						
		LSD VARIETY MEANS 5 PC	1188 6						

CORRELATIONS

YIELD	KG/HA						
TEST	WT	0 25					
STRP	RT L	-0 18	0 15				
LEAF	RUST	-0 12	-0 13	-0.13			
STEM	RUST	-0 18	-0 02	-0 02	0 12		
PLNT	HT	-0 15	0 09	0.30	-0 24	0 05	
POW M	0-9	-0.12	-0 17	0 02	0 22	-0 01	-0 18

TABLE 38 SOUTH AMERICA ECUADOR QUITO, PICHINCHA

STA CATALINA
PROGRAMA CEREALES

LATITUDE	000 22'S	DATE PLANTED	1/21/82	NITROGEN	APPLIED
LONGITUDE	078 33'W	DATE HARVESTED	--/--/--	PHOSPHORUS	APPLIED
ELEVATION	3058 M ABOVE S L	AMOUNT OF MOISTURE	969 MM	POTASSIUM	APPLIED

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 CHEMICAL CONTROL OF WEEDS
NO YIELD DATA TAKEN DUE TO LACK OF ADAPTATION & SOIL PROBLEMS

VAR NO	VARIETY OR CROSS	ORIGIN	FLOW DAYS	STRP RT. L	STRP RT. H	FUS GRAM
1	CANDO	USA	-	TR	0	0
2	D 681	USA	-	TR	0	0
3	EDMORE	USA	-		0	0
4	GEZIRA	SYRIA	-		0	0
5	AMAL 72	TUNISIA	96		0	0
6	KHROUB 76	ALGERIA	98		0	0
7	SAHEL 77	ALGERIA	100		0	0
8	TASSILI 77	ALGERIA	98		0	0
9	BOOHAI	ETHIOPIA	-		0	0
10	DWL 5002	INDIA	96		0	0
11	DWL 5023	INDIA	96		0	0
12	WAHA"S"	MEXICO	96		0	0
13	CYUS"S"-SINCAPE 9 X YEL"S"/. .	MEXICO	90		0	0
14	LA DULCE	ARGENTINA	96		0	0
15	ROK"S"	MEXICO	92		0	0
16	BOY"S"	MEXICO	96	TR	-	1
17	CINC"S"	MEXICO	94	TR	-	1
18	RABI"S" X WELLS-65150/S15-C	MEXICO	77	0	-	0
19	FULI"S"	MEXICO	86	TR	-	1
20	SCAR"S"-GDO VZ 579	MEXICO	87	0	-	1
21	ERP"S"-RUSO	MEXICO	98		-	0
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	100		-	0
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	80		-	1
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	84		-	1
25	SHWA"S"-YAV"S"	MEXICO	98	TR	-	0
26	MEXICALI 75	MEXICO	78		0	5
27	YAVAROS 79	MEXICO	84		0	5
28	CIANO 79	MEXICO	84	60S	90	5
29	CANANEA 79	MEXICO	77	0	0	-
30	LOCAL CHECK		77	TR	0	0
		GRAND MEAN	90.3	5.6	0.0	0.7

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

CORRELATIONS

FLOW	DAYS			
STRP	RT L	-0 15		
STRP	RT H	-	-	
FUS	GRAM	-0 52	0.99	-

LOCATIONS. U S. A. --NORTH DAKOTA U S A --WASHINGTON.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	PLNT HT	1000 G W	POW M 0-9
29	CANANEA 79	MEXICO	6046	53	104	95	40	1
30	LOCAL CHECK		5741	62	106	85	41	6
28	CIANJ 79	MEXICO	5727	60	107	73	32	1
1	CANDO	USA	5667	62	110	74	41	1
14	LA DULCE	ARGENTINA	5275	62	108	81	48	4
11	DWL 5023	INDIA	5246	62	107	69	43	6
16	BOY"S"	MEXICO	5224	61	108	73	46	1
8	TABSILI 77	ALGERIA	5195	62	107	74	44	4
21	ERP"S"-RUSO	MEXICO	5132	60	108	68	44	1
9	BOOHAI	ETHIOPIA	5027	62	108	88	45	1
17	CINC"S"	MEXICO	5013	60	107	83	43	1
15	ROK"S"	MEXICO	4937	59	107	73	43	1
22	CR"S"-USA 02299 X CR"S"-QS" ..	MEXICO	4860	61	110	70	42	6
7	SAHEL 77	ALGERIA	4855	62	107	78	38	4
13	CYUS"S"-SINCAPE 9 X YFL"S"/...	MEXICO	4609	61	106	88	51	1
12	WAHA"S"	MEXICO	4506	61	107	72	40	1
2	D 681	USA	4495	63	105	85	38	1
24	RUSO X D67 2-QTA"S"/RUFF"S" .	MEXICO	4474	62	106	82	46	9
10	DWL 5002	INDIA	4472	60	107	63	39	1
23	BD1543-INRAT 69 X COOT"S"/Q.	MEXICO	4462	60	108	85	44	1
19	FULI"S"	MEXICO	4359	62	106	71	44	6
3	EDMORE	USA	4345	62	107	103	46	4
6	KHRGUB 76	ALGERIA	4270	61	108	73	46	6
18	RABI"S" X WELLS-65150/S15-C ..	MEXICO	4220	58	110	71	30	1
25	SHWA"S"-YAV"S"	MEXICO	4078	59	108	73	39	9
5	AMAL 72	TUNISIA	3992	57	108	68	40	1
4	GEZIRA	SYRIA	3916	56	108	73	32	1
20	SCAR"S"-GDO VZ 579	MEXICO	3910	62	107	75	44	4
26	MEXICALI 75	MEXICO	3677	60	106	73	41	1
27	YAVAROS 79	MEXICO	3034	59	107	65	41	1
	SUMMARY MEANS OVER VARIETIES		4695.2	60.1	107 1	76 5	41 7	2.9
	NUMBER OF LOCATIONS FOR EACH VARIABLE		2	2	2	2	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		6	4	4	4	1	1

Summary for 13th IDYN - 0413 Regional Report

Region II

LOCATIONS MEXICO--EDO DE MEXICO MEXICO--SONORA U S A --ARIZONA U S. A. --CALIFORNIA.

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
15	ROK"S"	MEXICO	7074	79	110	181	0	0	92	52	52
27	YAVAROS 79	MEXICO	7074	82	110	183	0	0	91	47	54
29	CANANEA 79	MEXICO	6610	67	97	170	0	1	106	45	43
11	DWL 5023	INDIA	6446	82	105	178	1	1	86	47	53
30	LOCAL CHECK		6376	81	103	175	0	2	93	51	35
16	BOY"S"	MEXICO	6090	80	105	179	0	0	88	49	54
26	MEXICALI 75	MEXICO	6078	79	99	173	2	7	91	42	54
12	WAHA"S"	MEXICO	5986	80	105	177	0	6	87	49	50
17	CINC"S"	MEXICO	5970	78	104	174	1	2	108	50	51
23	BD1543-INRAT 69 X COOT"S"/Q. .	MEXICO	5912	79	108	181	0	1	106	67	48
21	ERP"S"-RUSO	MEXICO	5881	79	114	182	0	0	87	20	53
14	LA DULCE	ARGENTINA	5785	80	109	181	0	0	95	58	59
25	SHWA"S"-YAV"S"	MEXICO	5739	80	126	185	0	1	97	35	45
22	CR"S"-USA. 02299 X CR"S"-QS"...	MEXICO	5503	81	117	183	0	6	91	43	46
28	CIANO 79	MEXICO	5474	79	102	176	0	1	86	56	33
8	TASSILI 77	ALGERIA	5440	82	111	181	0	0	96	45	52
13	CYUS"S"-SINCAPE 9 X YEL"S"/...	MEXICO	5266	81	102	170	0	1	105	55	51
5	AMAL 72	TUNISIA	5224	76	100	170	1	0	81	42	45
20	SCAR"S"-GDO VZ 579	MEXICO	5208	81	120	185	1	0	96	35	50
24	RUSO X D67. 2-QTA"S"/RUFF"S"...	MEXICO	5170	82	107	180	0	0	105	27	53
10	DWL 5002	INDIA	5116	79	101	177	0	0	74	42	52
1	CANDO	USA	4978	72	128	188	10	23	90	10	30
7	SAHEL 77	ALGERIA	4973	77	108	175	1	0	92	56	41
6	KHROUB 76	ALGERIA	4890	79	109	182	0	1	84	58	53
19	FULI"S"	MEXICO	4840	80	110	181	0	0	92	21	40
18	RABI"S" X WELLS-65150/S15-C...	MEXICO	4796	73	129	191	0	1	88	20	35
2	D 681	USA	4717	80	123	190	21	1	123	65	36
3	EDHORE	USA	4425	77	126	189	27	9	137	64	38
9	BOOHAI	ETHIOPIA	4259	78	104	177	4	12	109	73	48
4	QEZIRA	SYRIA	3956	70	129	189	5	0	82	11	35
	SUMMARY MEANS OVER VARIETIES		5508. 4	78. 4	110 7	180 1	2. 5	2. 4	95 2	44. 4	46. 2
	NUMBER OF LOCATIONS FOR EACH VARIABLE		4	4	4	1	1	2	4	2	3
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		12	10	10	3	3	3	12	6	7

LOCATIONS. ARGENTINA --BUENOS AIRES BOLIVIA --COCHABAMBA CHILE --SANTIAGO ECUADOR --QUITO,PICHINCHA
BOLIVIA --SANTA CRUZ

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT L	STRP RT.H	LEAF RUST	STEM RUST	PLNT HT	LODG %	1000 G W	FUS GRAM	POW M 0-9	SEP T 0-9
11	DWL 5023	INDIA	3772	79	81	121	10	0	7	9	77	4	52	0	-	0
29	CANANEA 79	MEXICO	3625	68	69	115	1	0	1	1	89	7	42	-	-	0
16	BOY"S"	MEXICO	3508	78	81	120	0	-	9	10	81	22	50	1	4	0
28	CIANO 79	MEXICO	3499	76	75	119	30	-	21	6	76	11	32	5	-	0
2	D 681	USA	3481	78	92	133	6	0	1	0	90	-	37	0	-	0
3	EDMORE	USA	3336	79	97	145	27	0	3	0	111	-	47	0	-	0
14	LA DULCE	ARGENTINA	3324	80	83	122	1	0	1	8	84	15	53	0	-	1
30	LOCAL CHECK		3261	79	75	122	0	0	1	5	83	18	57	0	5	0
8	TASSILI 77	ALGERIA	3207	81	84	124	9	0	12	8	83	4	50	0	-	1
25	SHWA"S"-YAV"S"	MEXICO	3167	78	95	141	0	-	9	6	81	-	49	0	2	0
1	CANDO	USA	3156	74	87	148	4	0	12	0	76	-	38	0	-	0
15	ROK"S"	MEXICO	3136	77	81	119	0	0	4	7	77	4	46	0	-	1
12	WAHA"S"	MEXICO	3047	77	80	116	0	0	8	21	73	22	42	0	-	1
19	FULI"S"	MEXICO	3046	80	80	122	1	-	6	6	78	4	53	1	-	0
10	DWL 5002	INDIA	2914	79	77	115	18	0	1	4	63	4	47	0	-	0
17	CINC"S"	MEXICO	2910	75	80	117	0	-	25	22	88	29	46	1	4	0
7	SAHEL 77	ALGERIA	2882	79	84	121	9	0	5	8	81	11	40	0	-	0
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	2818	77	79	115	0	0	12	35	90	70	48	0	-	1
18	RABI"S" X WELLS-65150/S15-C	MEXICO	2795	76	93	146	0	-	3	4	74	-	34	0	-	0
20	SCAR"S"-GDO VZ 579	MEXICO	2761	81	89	133	0	-	5	4	81	0	49	1	-	0
6	KHROUB 76	ALGERIA	2730	77	83	123	1	0	4	23	81	7	52	0	5	0
9	BOOHAI	ETHIOPIA	2726	78	75	120	20	0	12	6	101	15	55	0	-	1
4	GEZIRA	SYRIA	2680	71	96	140	0	0	3	3	77	-	37	0	-	1
24	RUSO X D67 2-GTA"S"/RUFF"S"	MEXICO	2638	79	77	117	0	-	3	23	87	11	56	1	-	0
26	MEXICALI 75	MEXICO	2631	76	74	116	10	0	1	5	75	18	50	5	-	1
21	ERP"S"-RUSO	MEXICO	2606	76	86	125	0	-	32	19	72	15	47	0	4	0
27	YAVAROS 79	MEXICO	2563	79	81	124	0	0	8	7	75	11	49	5	-	0
5	AMAL 72	TUNISIA	2474	74	82	112	0	0	15	33	71	37	42	0	-	1
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	2422	77	79	117	0	-	18	16	89	37	48	1	-	0
22	CR"S"-USA 02299 X CR"S"-GS"	MEXICO	2410	78	89	126	0	-	32	25	77	22	39	0	5	1
	SUMMARY MEANS OVER VARIETIES		2984.1	76.9	82.8	124.3	5.5	0.0	9.0	10.6	81.4	16.6	46.2	0.7	4.1	0.3
	NUMBER OF LOCATIONS FOR EACH VARIABLE		4	2	4	2	2	1	2	2	4	1	1	1	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		12	2	8	6	2	1	3	3	8	3	1	1	1	3

Summary for 13th IDYN - 0413 Regional Report Region IV

LOCATIONS: GREECE--THESSALONIKI PORTUGAL--ELVAS SPAIN --MADRID YUGOSLAVIA--MACEDONIA . ITALY --ROME.
SPAIN --CORDOVA ITALY --CASACCIA GREECE-- SPAIN --LLEIDA ITALY --ROME.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	PLNT HT	LODG %	SHTR %	1000 G W	POW M 0-9	SEP T 0-9	SEP N 0-9	BYDV 0-9
29	CANANEA 79	MEXICO	6011	68	139	198	0	0	110	11	-	41	0	3	0	2
28	CIANO 79	MEXICO	6010	80	145	199	0	2	91	14	-	42	2	5	0	3
30	LOCAL CHECK		3601	80	151	204	5	2	87	7	-	48	3	5	0	3
15	ROK"S"	MEXICO	5534	79	150	200	0	14	89	37	-	47	2	4	0	6
14	LA DULCE	ARGENTINA	5527	81	151	201	0	8	95	52	-	56	3	5	0	6
11	DWL 5023	INDIA	5510	81	148	199	0	5	86	18	-	48	4	3	2	6
12	WAHA"S"	MEXICO	5322	80	147	198	10	4	88	14	-	45	3	5	0	6
8	TASSILI 77	ALGERIA	5283	81	150	201	0	5	91	10	-	50	3	4	0	6
10	DWL 5002	INDIA	5135	80	146	197	0	26	75	10	-	52	2	4	0	7
13	CYUS"S"-SINCAPE 9 X YEL"S"/...	MEXICO	5048	80	145	199	0	10	106	19	-	51	2	4	0	6
17	CINC"S"	MEXICO	5044	78	149	200	0	7	103	24	-	47	4	3	0	6
1	CANDO	USA	4807	78	155	202	3	19	86	15	-	42	2	4	0	6
7	SAHEL 77	ALGERIA	4804	80	149	198	0	5	92	33	-	44	4	5	0	6
16	BOY"S"	MEXICO	4779	80	148	199	0	8	88	17	-	47	3	4	0	6
4	GEZIRA	SYRIA	4592	75	154	204	0	0	81	15	0	41	3	4	0	7
6	KHROUB 76	ALGERIA	4558	79	149	201	0	3	87	23	-	52	4	5	0	6
25	SHWA"S"-YAV"S"	MEXICO	4495	79	152	203	0	15	89	14	-	45	3	3	0	6
19	FULI"S"	MEXICO	4460	82	148	202	0	2	85	15	-	56	2	5	0	6
22	CR"S"-USA. 02299 X CR"S"-GS".	MEXICO	4444	78	153	201	5	55	88	26	-	44	6	3	0	6
24	RUSO X D67 2-GTA"S"/RUFF"S"...	MEXICO	4371	82	150	201	0	3	106	23	-	53	2	4	0	6
26	MEXICALI 75	MEXICO	4325	79	143	199	2	25	87	26	-	53	2	5	0	6
21	ERP"S"-RUSO	MEXICO	4299	79	153	201	0	5	83	15	-	49	3	3	0	6
9	BOOHAI	ETHIOPIA	4286	79	148	200	3	7	115	64	22	46	3	6	0	7
3	EDMORE	USA	4279	80	155	203	2	13	128	49	44	47	3	4	0	6
20	SCAR"S"-GDO VZ 579	MEXICO	4247	81	150	203	0	25	90	29	-	53	3	4	0	6
5	AMAL 72	TUNISIA	4212	79	145	199	0	14	80	13	-	49	2	4	0	6
2	D 681	USA	4211	81	153	203	0	6	111	38	-	45	2	3	0	7
18	RABI"S" X WELLS-65150/S15-C	MEXICO	4113	78	158	206	5	9	83	14	-	42	2	6	0	6
23	BD1543-INRAT 69 X COOT"S"/G	MEXICO	3805	78	149	201	0	6	103	46	-	48	2	5	0	6
27	YAVAROS 79	MEXICO	3563	80	149	200	0	8	81	25	-	51	1	4	0	6
	SUMMARY MEANS OVER VARIETIES		4756.5	79.1	149.3	200.8	1.2	10.4	92.7	23.8	22.0	47.8	2.6	4.1	0.1	5.6
	NUMBER OF LOCATIONS FOR EACH VARIABLE		9	7	8	5	1	2	10	4	1	5	7	4	1	2
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		26	20	24	15	2	6	27	12	1	13	20	12	1	6

LOCATIONS: MOROCCO --RABAT . TUNISIA --TUNIS ALGERIA --CONSTANTINE . EGYPT --BENI-SUEF

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	LODG %	1000 G.W	SEP T 0-9
29	CANANEA 79	MEXICO	5570	109	83	1	105	0	44	0
28	CIANO 79	MEXICO	5564	113	91	0	85	0	42	0
14	LA DULCE	ARGENTINA	5299	120	93	0	90	0	64	0
30	LOCAL CHECK		5286	110	96	48	100	89	58	0
17	CINC"S"	MEXICO	5075	116	94	4	105	0	51	1
15	ROK"S"	MEXICO	5052	120	93	0	85	0	57	6
16	BOY"S"	MEXICO	4987	119	94	15	85	0	56	4
13	CYUB"S"-SINCAPE 9 X YEL"S"/...	MEXICO	4984	110	91	10	103	22	53	6
11	DWL 5023	INDIA	4895	117	90	0	78	0	60	2
8	TASSILI 77	ALGERIA	4843	121	92	5	86	0	64	6
12	WAHA"S"	MEXICO	4763	118	92	0	80	0	51	0
21	ERP"S"-RUSO	MEXICO	4687	131	-	1	83	0	60	2
22	CR"S"-USA 02299 X CR"S"-OS" .	MEXICO	4574	131	96	20	88	0	55	5
23	BD1543-INRAT 69 X COOT"S"/O ..	MEXICO	4565	124	91	30	100	0	53	3
27	YAVAROS 79	MEXICO	4494	118	93	2	80	0	59	0
26	MEXICALI 75	MEXICO	4483	113	91	50	85	0	61	3
25	SHWA"S"-YAV"S"	MEXICO	4467	133	99	2	85	0	56	5
24	RUSO X D67 2-OTA"S"/RUFF"S"...	MEXICO	4437	122	93	0	103	0	56	0
6	KHROUB 76	ALGERIA	4366	121	93	0	85	0	59	5
7	SAHEL 77	ALGERIA	4313	122	91	0	88	0	51	0
19	FULI"S"	MEXICO	4277	117	94	1	93	0	65	5
5	AMAL 72	TUNISIA	4270	113	90	10	75	0	58	3
1	CANDO	USA	4179	133	101	60	85	0	42	0
20	SCAR"S"-ODO VZ 579	MEXICO	4014	123	96	5	90	0	59	3
3	EDMORE	USA	3902	132	102	56	128	0	47	0
10	DWL 5002	INDIA	3847	115	90	30	70	0	58	0
2	D 681	USA	3796	131	98	1	110	0	41	0
18	RABI"S" X WELLS-65150/S15-C .	MEXICO	3780	142	110	0	88	0	43	0
9	BOOHAI	ETHIOPIA	3733	116	91	48	108	44	56	0
4	GEZIRA	SYRIA	3659	133	100	4	83	0	47	5
	SUMMARY MEANS OVER VARIETIES		4538 6	121.4	94.1	13 4	90.8	5.2	54.2	2.1
	NUMBER OF LOCATIONS FOR EACH VARIABLE		4	3	1	1	2	1	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		12	3	1	1	2	1	3	1

Summary for 13th IDYN - 0413 Regional Report Region VI

LOCATIONS. KENYA --RIFT VALLEY SOUTH AFRICA--CAPE PROVINCE

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	STRP RT L	LEAF RUST	STEM RUST	PLNT HT
29	CANANEA 79	MEXICO	3498	64	0	8	0	75
9	BOOHAI	ETHIOPIA	3422	77	2	90	0	75
30	LOCAL CHECK		3368	80	0	15	1	95
28	CIANO 79	MEXICO	3311	78	0	8	0	55
15	ROK"S"	MEXICO	3012	78	1	1	5	70
12	WAHA"S"	MEXICO	2926	79	0	10	12	55
21	ERP"S"-RUSO	MEXICO	2845	78	4	10	60	70
14	LA DULCE	ARGENTINA	2799	79	2	1	5	65
17	CINC"S"	MEXICO	2766	78	0	10	5	60
2	D 681	USA	2697	78	4	8	10	80
3	EDMORE	USA	2688	78	4	5	40	95
7	SAHEL 77	ALGERIA	2669	78	0	4	10	65
25	SHWA"S"-YAV"S"	MEXICO	2647	80	0	8	20	75
10	DWL 5002	INDIA	2644	78	0	4	3	45
24	RUSO X D67 2-GTA"S"/RUFF"S"..	MEXICO	2608	81	0	4	1	60
8	TASSILI 77	ALGERIA	2536	79	2	-	40	60
4	GEZIRA	SYRIA	2447	72	0	4	0	70
18	RABI"S" X WELLS-65150/S15-C...	MEXICO	2426	76	0	1	10	60
16	BOY"S"	MEXICO	2388	79	0	40	0	65
26	MEXICALI 75	MEXICO	2235	75	4	60	10	60
6	KHROUB 76	ALGERIA	2195	78	0	8	5	65
20	SCAR"S"-GDO VZ 579	MEXICO	2142	80	0	0	20	65
13	CYUS"S"-SINCAPE 9 X YEL"S"/. .	MEXICO	2106	79	0	0	1	60
19	FULI"S"	MEXICO	2101	82	0	0	20	70
11	DWL 5023	INDIA	2074	80	0	1	8	60
22	CR"S"-USA 02299 X CR"S"-GS"...	MEXICO	1964	77	0	10	60	60
5	AMAL 72	TUNISIA	1946	77	2	8	5	55
1	CANDO	USA	1775	69	30	15	20	65
27	YAVAROS 79	MEXICO	1754	79	0	1	5	55
23	BD1543-INRAT 69 X COOT"S"/G ..	MEXICO	1714	75	0	5	24	65
	SUMMARY MEANS OVER VARIETIES		2523 2	77.1	1.8	11.7	13.3	64.5
	NUMBER OF LOCATIONS FOR EACH VARIABLE		2	2	1	1	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		6	2	1	1	1	1

LOCATIONS NIGERIA --KANO. ANGOLA--HUAMBO

VAR NO	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT	SHTR %	1000 G W.	MOIST %
28	CIANO 79	MEXICO	4195	80	66	119	74	6	40	12
30	LOCAL CHECK		3501	80	62	113	85	2	45	11
29	CANANEA 79	MEXICO	3342	73	62	118	79	8	45	10
20	SCAR"S"-GDO VZ 579	MEXICO	2751	81	76	128	79	5	50	13
27	YAVAROS 79	MEXICO	2748	84	74	128	67	8	52	12
24	RUSO X D67 2-GTA"S"/RUFF"B"...	MEXICO	2618	82	71	120	63	4	52	13
8	TASSILI 77	ALGERIA	2443	83	75	126	67	8	53	13
6	KHROUB 76	ALGERIA	2202	84	77	129	69	5	52	12
10	DWL 5002	INDIA	2058	83	65	122	60	7	53	12
3	EDMORE	USA	2034	78	96	138	85	0	43	13
22	CR"S"-USA 02299 X CR"S"-GS"...	MEXICO	2027	81	83	132	71	3	44	13
15	ROK"S"	MEXICO	1998	82	75	125	58	3	49	12
4	GEZIRA	SYRIA	1951	77	91	134	72	0	41	13
17	CINC"S"	MEXICO	1944	80	67	122	72	6	51	12
23	BD1543-INRAT 69 X COOT"S"/G..	MEXICO	1942	80	67	127	70	2	50	13
16	BOY"S"	MEXICO	1937	82	68	122	65	7	52	15
11	DWL 5023	INDIA	1930	81	69	129	60	9	51	13
19	FULI"S"	MEXICO	1927	81	75	125	70	4	53	12
1	CANDO	USA	1919	79	97	137	64	0	35	12
21	ERP"S"-RUSO	MEXICO	1900	81	80	129	74	6	48	13
12	WAHA"S"	MEXICO	1886	81	68	122	62	6	48	12
13	CYUS"S"-SINCAPE 9 X YEL"S"/	MEXICO	1837	80	68	122	70	6	51	13
2	D 681	USA	1813	80	87	131	71	0	37	12
9	BOOHAI	ETHIOPIA	1757	79	71	124	74	6	50	12
14	LA DULCE	ARGENTINA	1751	81	75	125	65	2	52	12
25	SHWA"S"-YAV"S"	MEXICO	1747	82	85	131	74	6	47	13
7	SAHEL 77	ALGERIA	1743	83	73	125	72	8	46	13
5	AMAL 72	TUNISIA	1532	80	69	129	67	1	48	13
26	MEXICALI 75	MEXICO	1328	79	65	123	65	8	52	13
18	RABI"S" X WELLS-65130/S15-C .	MEXICO	1279	80	95	137	65	0	43	12
	SUMMARY MEANS OVER VARIETIES		2134.4	80.6	75.1	126.4	69.4	4.6	47.5	12.5
	NUMBER OF LOCATIONS FOR EACH VARIABLE		2	1	1	1	2	1	2	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		6	3	3	3	6	3	6	3

Summary for 13th IDYN - 0413 Regional Report Region VIII

LOCATIONS: PAKISTAN--PUNJAB. THAILAND--. AFGHANISTAN --BALKH

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT. L	LEAF RUST	PLNT HT	LODG %	1000 G.W
30	LOCAL CHECK		5091	126	149	1	0	97	0	43
13	CYUS"S"-SINCAPE 9 X YEL"S"/...	MEXICO	4430	127	149	0	0	103	100	44
17	CINC"S"	MEXICO	4375	127	148	0	0	100	0	43
29	CANANEA 79	MEXICO	4220	123	149	0	0	111	0	35
10	DWL 5002	INDIA	4024	128	150	0	0	73	0	44
3	EDMORE	USA	4019	138	172	2	4	123	100	30
12	WAHA"S"	MEXICO	4014	128	150	0	0	90	100	41
28	CIANO 79	MEXICO	3981	129	151	33	0	91	60	27
14	LA DULCE	ARGENTINA	3979	130	151	1	0	98	100	47
11	DWL 5023	INDIA	3926	129	151	2	0	82	10	42
27	YAVAROS 79	MEXICO	3918	131	152	0	0	84	30	43
8	TASSILI 77	ALGERIA	3911	129	151	0	0	91	10	37
9	BOOHAI	ETHIOPIA	3857	128	149	1	4	111	30	45
15	ROK"S"	MEXICO	3836	130	152	0	0	88	10	41
16	BOY"S"	MEXICO	3803	129	150	1	0	86	100	46
21	ERP"S"-RUSO	MEXICO	3795	134	153	0	0	86	0	42
4	GEZIRA	SYRIA	3773	137	153	0	0	82	0	37
25	SHWA"S"-YAV"S"	MEXICO	3708	135	170	0	0	90	100	38
23	BD1543-INRAT 69 X COOT"S"/G...	MEXICO	3704	130	149	0	0	103	100	45
24	RUSO X D67.2-GTA"S"/RUFF"S" ..	MEXICO	3662	131	150	0	0	109	30	44
5	AMAL 72	TUNISIA	3620	125	150	3	0	85	10	46
6	KHROUB 76	ALGERIA	3550	130	151	0	0	85	20	45
18	RABI"S" X WELLS-65150/S15-C...	MEXICO	3534	140	154	0	0	84	0	38
26	MEXICALI 75	MEXICO	3482	127	149	1	4	86	100	48
19	FULI"S"	MEXICO	3311	128	150	0	0	84	0	46
2	D 681	USA	3266	138	151	2	0	124	100	38
22	CR"S"-USA 02299 X CR"S"-GS"...	MEXICO	3208	135	152	0	4	86	0	41
20	SCAR"S"-GDO VZ 57[illegible]	MEXICO	3168	132	152	0	0	92	0	42
7	SAHEL 77	ALGERIA	3165	131	151	1	0	91	20	40
1	CANDO	USA	3047	138	151	33	2	84	0	36
	SUMMARY MEANS OVER VARIETIES		3779.2	130.6	152.0	2.5	0.6	93.1	37.7	41.0
	NUMBER OF LOCATIONS FOR EACH VARIABLE		3	2	3	2	1	2	1	2
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		9	4	7	3	1	4	1	5