BIBLIOGRAPHIC DATA SHEET

1. CONTROL NUMBER: PN-AAH-483

2. SUBJECT CLASSIFICATION (695): AF00-0110-0000

3. TITLE AND SUBTITLE (240)

Results of the Third Elite Barley Yield Trial, Hulled Lines (EBYT) 1977-1978

4. PERSONAL AUTHORS (100)

5. CORPORATE AUTHORS (101)

CIMMYT

6. DOCUMENT DATE (110): 1978

7. NUMBER OF PAGES (120): 47p.

8. ARC NUMBER (170): 633.16.C397a

9. REFERENCE ORGANIZATION (130)

CIMMYT

10. SUPPLEMENTARY NOTES (500)

(In Information bulletin no. 53)

11. ABSTRACT (950)

12. DESCRIPTORS (920)

Plant breeding
Plant diseases
Fungicides
Yield

High yield
Barley

13. PROJECT NUMBER (150)

931084000

14. CONTRACT NO.(140)

AID/ta-G-1493

15. CONTRACT TYPE (140)

16. TYPE OF DOCUMENT (160)

AID 590-7 (10-79)

633.16

INFORMATION BULLETIN No.53

RESULTS OF THE THIRD

ELITE BARLEY YIELD TRIAL

HULLED LINES

(EBYT) 1977–78

CIMMYT

CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO
INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER
Londres 40 Apartado Postal 6-641 México 6, D. F., México

CONTENTS

	Page
GLOSSARY	1
INTRODUCTION	2
MATERIALS AND METHODS	2
DATA SUMMARY	2
RESULTS AND DISCUSSION	2
VARIETY LIST	4
FIGURES	5
TABLES	7

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 (echelle 0–9)
ANT DMGE	Ant damage percentage	Porcentaje de daño de hormigas	Dégâts dus aux fourmis en pourcentage
APHD DMGE	Aphid damage percentage	Porcentaje de daño de áfidos	Dégâts dus 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)	Rayee bacterienne (echelle 0–9)
BIRD DMGE	Bird damage percentage	Porcentaje de daño de pájaros	Dégâts dus aux oiseaux en pourcentage
BYDV	Barley yellow dwarf virus (0–9 scale)	Enanismo amarillo de la cebada (escala 0–9)	Virose jaune de l'orge (echelle 0–9)
COVD SMUT	Covered smut percentage	Porcentaje de carbón cubierto	Charbon couvert en pourcentage
EARS /M^2	Ears per square meter	Espigas o mazorcas por metro cuadrado	Epis par metre^2
FALL NO	Falling number (seconds)	Actividad alfa amilasa (segundos)	Activité de α amylase (eu secondes)
FERT %	Fertility percentage	Porcentaje de fertilidad	Fertilité en pourcentage
FLOW DAYS	Number days to flower	Días a floración	Nombre de jours a la floraisón
FRST DMGE	Frost damage percentage	Porcentaje de daño por heladas	Dégâts par la gelée en pourcentage
FUS WILT	Fusarium wilt percentage	Porcentaje de marchitez por Fusarium	Fusarium en pourcentage
GERM %	Germination percentage	Porcentaje de germinación	Germination en pourcentage
HAIL DMGE	Hail damage percentage	Porcentaje de daño por granizo	Dégâts dûs á la grêle en pourcentage
HELM	Helminthosporium (0–9 scale)	Helminthosporium (escala 0–9)	Helminthosporium (echelle 0–9)
KERN APP	Kernel appearance	Apariencia del grano	Apparence du grain
LEAF FIRE	Leaf fire (0–9 scale)	Tizón foliar (escala 0–9)	Jaunissement des feuilles (echelle 0–9)
LEAF RUST	Leaf rust (Cobb scale)	Roya de la hoja (escala de Cobb)	Rouille brune (echelle de Cobb)
LODG %	Lodging percentage	Porcentaje de acame	Verse 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 a la maturation
MST %	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 (echelle 0–9)
PLNT DENS	Plant density (stems/square meter)	Densidad de plantas (tallos/metro cuadrado)	Population des plantes (talles/metre^2)
PLNT HT	Height (cm)	Altura (cm)	Hauteur (cm)
PLNT WT	Plant weight (grams)	Peso de la planta (gramos)	Poids de la planté (grames)
POWD %	Powdery mildew percentage	Porcentaje de mildiú polvoriento	Oidium en pourcentage
PROT %	Protein percentage	Porcentaje de proteína	Protein en pourcentage
ROOT ROT	Root rot percentage	Porcentaje de pudrición de maíz	Piétin verse en pourcentage
SCAB %	Scab percentage	Porcentaje de roña	Fusarium de l'epi en pourcentage
SCLD %	Scald percentage	Porcentaje de escaldadura	Rhyncosporium en pourcentage
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=paqueño)	Type de grain (L=large, M=moyen: S=petit)
SEPT NODO	Septoria nodorum (0–9 scale)	Septoria nodorum (escala 0–9)	Septoria nodorum (echelle 0–9)
SEPT SPP.	Septoria spp. (0–9 scale)	Septoria spp. (escala 0–9)	Septoria spp. (echelle 0–9)
SEPT TRIT	Septoria tritici (0–9 scale)	Septoria tritici (escala 0–9)	Septoria tritici (echelle 0–9)
SHTR %	Shattering percentage	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 feuilles (echelle 0–9)
STEM RUST	Stem rust (Cobb scale)	Roya del tallo (escala de Cobb)	Rouille noire (echelle de Cobb)
STRP RT.H	Stripe rust (head) percentage	Porcentaje de roya lineal (espiga)	Rouille jaune sur l'epi en pourcentage
STRP RT.L	Stripe rust (leaf) (Cobb scale)	Roya lineal (hoja) (escala de Cobb)	Rouille jaune sur feuilles (echelle de Cobb)
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 THIRD ELITE BARLEY YIELD TRIAL HULLED LINES (EBYT)

1977 –1978

INTRODUCTION

The Barley Breeding Program at CIMMYT has continued its effort towards the improvement of lines that can be used as human food. The generation and subsequent distribution of new materials to cooperators around the world has become more systematic. The present results are data from 27 sites around the world, of outstanding lines carrying the hulled i.e. normal grain character which were selected from yield trials grown in Cd. Obregon, Sonora, Mexico during the winter cycle of 1977–78.

MATERIALS AND METHODS

The seed of outstanding hulled types was multiplied in four row plots each 11 meters long, during the 1976–1977 cycle at Cd. Obregon, Sonora, Mexico. The plots were rogued, and the harvested seed was cleaned and disinfected with Vitavax fungicide before packing in small envelopes. The experimental plots, generally consisted of four replications of six rows, each 2.5 m in length. The instructions for sowing, general management of the trial and the recording of data were included in instruction sheets sent to cooperators with the seed shipment. The trial contained 25 entries of which 24 were lines bred by the CIMMYT Barley Program, and one was a local check. The entries are listed in table A. Figures 1 and 2 show the locations where the experiments were grown as well as their approximate growing periods and locations above sea level.

DATA SUMMARY

There was a total of 17 variables recorded. The yield data are recorded in kg/ha. The degree of rust infection, lodging, shattering, powdery mildew and scald are expressed as percentages. For other foliar diseases, a 0–9 scoring scale was used. The test weight is reported in kilograms per hectoliter, 1000 grain weights in grams and plant height in centimeters.

The cooperators were requested to report the yield of the four center rows from each plot. These yields were converted into kg/ha. Statistical analyses were made for each location and the varieties were ranked in descending order, according to their yield.

RESULTS AND DISCUSSION

Reliable data were received from 27 locations around the world. These results are presented in tables 1–27. It can be seen from these tables that in 20 out of 27 places from where data were reported, the CIMMYT lines were in first place. In table 38, the local checks were the highest yielders in the overall ranking in terms of total kg/ha, but only in seven out of the 27 locations were in first place.

When the yields of lines are analyzed on an individual basis, some of them show a certain degree of adaptation. For example, varieties 13 and 18 were among the top five yielders in 10 and 11 out of 27 places, respectively.

With respect to some other characters, there was no significant difference in the range of maturity among the different lines (table 38). The CIMMYT lines showed in general certain resistance to stripe rust, stem rust, net blotch and scald, but they were somewhat susceptible to leaf rust, powdery mildew, spot blotch and BYDV.

Tables 28–37 show the performance of the lines by regions. In the North African and Mediterranean region (Group I), the local varieties always outyielded the CIMMYT lines; in the East African region (Group II), the CIMMYT lines were at the top and in the South West African region (Group III), the CIMMYT lines outyielded the local variety. In the Indian sub-continent region (Group IV), the CIMMYT lines were the top yielders. In the Western Europe region (Group V), which included Portugal and Spain, the CIMMYT lines were the best yielders. In the Middle East region (Group VI), which was the largest in terms of the number of countries tested, the local checks outyielded the CIMMYT lines. Within Group VII (Northern region), one CIMMYT line outyielded the local check. In Group VII (which covered

six locations in Mexico), one CIMMYT line also outyielded the local check. In the Andean Region (Group V), which covered only one location, again one CIMMYT line outyielded the local variety, and finally within Group X (two countries included), the local checks outyielded the CIMMYT lines.

It should be pointed out that the area where this last group was tested (Southern Cone), the growing cycle of the crop is different than in temperate zones. The growing cycle there becomes shorter because of the amount of light hours. Under these conditions, the CIMMYT lines (which are to a certain extent light insensitive) require less days to harvest and consequently a relatively shorter period to produce grain. (See tables 25 and 26). The light sensitive types (so called facultative types) can do better in these areas.

In summary, the CIMMYT lines tested in this EBYT showed a certain degree of adaptation but their resistance to some diseases has to be improved. These results will permit CIMMYT to select valuable genotypes that can be used in future crosses in order to exploit thoroughly their yield potential as well as any other outstanding characters.

Table A. Varieties included in the 3rd Elite Barley Yield Trial (EBYT -NORMAL) with variety name and pedigree.

Entry No.	Variety or Cross and Pedigree
1	11012.2-Bco. Mr CMB-73A-99-2B-4Y-0B
2	CM67 x Ds-Apro CMB-72A-32-5B-3Y-1B-1Y-1B-0Y
3	Nepal 842-Apam x CM67-U. Sask 1800 CMB-72A-234-C-2B-2Y-3B-1Y-1B-0Y
4	Ds^2-Apro x CM67 (CM67/Apro x SV.02109-Mari) CMB-72A-190-G-2B-3Y-1B-2Y-1B-0Y
5	CM67-U. Sask 1800 x Pro-CM67 CMB-72A-160-I-2B-4Y-2B-1Y-1B-0Y
6	CM67-U. Sask 1800 x Pro-CM67 CMB-72A-160-I-1B-4Y-2B-1Y-1B-0Y
7	Mezquite-DL.71 CMB-74A-67-3B-1Y-0B
8	Api-CM67 x Manchuria CMB-74A-977-9M-1Y-0B
9	CM67-M66.05 CMB-74A-182-4B-2Y-0B
10	Por-U. Sask 1766 CMB-72-76-6Y-3B-1Y-0B
11	Api-CM67 x Minn 907 CMB-74-406-1Y-1B-1Y-0B
12	Apam-IB65 x 11012.2/Api-CM67 x Ds-Apro CMB-74-1173-A-1Y-3B-1Y-0B
13	CR115-Por x Beecher/Api-CM67 CMB-74-932-A-6Y-1B-2Y-0B
14	Bal.16-Mzq/M67.18-M14 x Ds-Apro CMB-74-1057-I-2Y-3B-1Y-0B
15	Bal.16-Pro x Apam-Dwarf II-1Y/Api-CM67 CMB-74-996-A-11Y-1B-2Y-0B
16	Numar-Mezquite CMB-73A-594-1B-1Y-1B-1Y-0B
17	Apro x $Pallas^5$-j5/CM67-M65.220 x CR115-Por CMB-73A-1352-D-1B-1Y-1B-2Y-0B
18	CM67-Bussell CMB-73-37-8Y-3B-1Y-1B-1Y-0B
19	BDGC-Gaines CMB-73-537-1Y-3B-1Y-1B-1Y-0B
20	Pro-DZ02.391 x Cal. Mr-Beacon CMB-73-451-C-4Y-6B-1Y-1B-1Y-0B
21	P12871-Mezquite CMB-73-534-24Y-2B-1Y-2B-1Y-0B
22	Candelilla"S" CMB-73-340-2Y-1B-1Y-1B-1Y-0B
23	Tequila
24	Dwg 1-Api3 x SV. Mari CMB-73-521-7Y-1B-1Y-1B-1Y-0B
25	Local Check

Figure 1 Growing season and elevation of locations reported in the 3rd EBYT-Normal 1977-78.

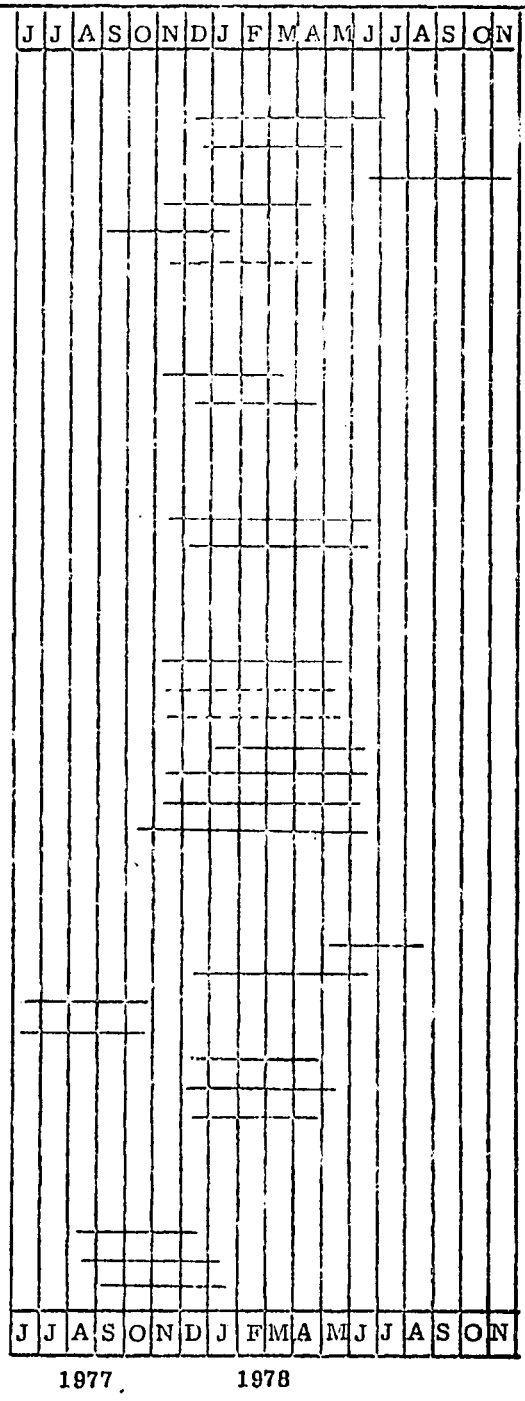
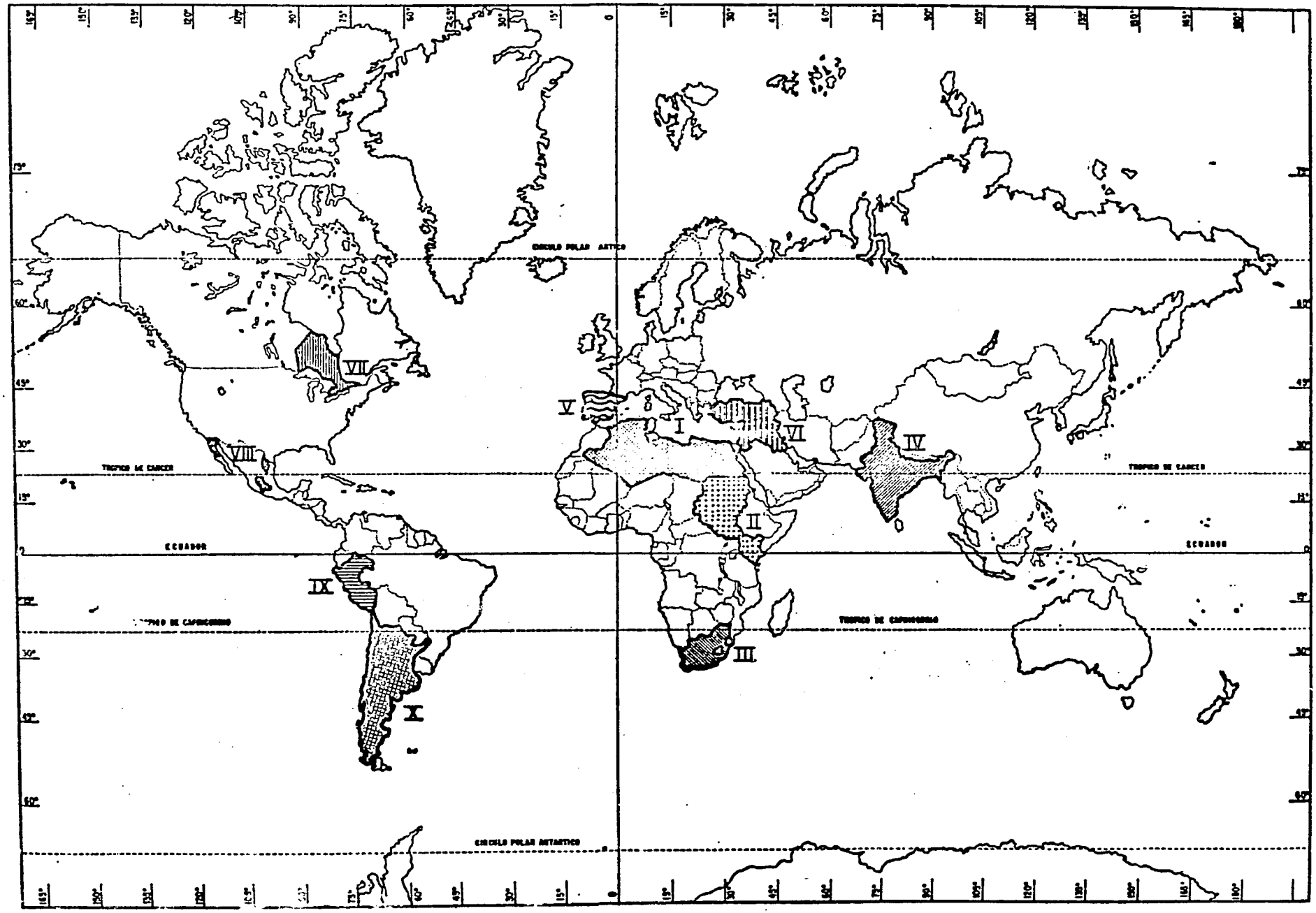


Table No.		ELEVATION (meters)
	AFRICA	
1	ALGERIA, Constantine	0640
2	EGYPT, Kafr el Sheik	----
3	KENYA, Rift Valley, Njoro	2165
4	LIBYA, Tripoli	0011
5	SOUTH AFRICA, Orange Free	1631
6	SUDAN, Khartoum*	0375
	ASIA	
7	BANGLADESH, Dacca	0009
8	INDIA, Delhi	0022
	EUROPE	
9	PORTUGAL, Alentejo	0208
10	SPAIN, Zaragoza	0202
	MIDDLE EAST	
11	CYPRUS, Larnia	0150
12	IRAN, Gorgan*	0132
13	ISRAEL, Bet Dagan*	0030
14	JORDAN, Irbed	0555
15	LEBANON, Beka'a Valley	0950
16	SYRIA, Aleppo	0300
17	TURKEY, Edirne	0040
	NORTH AMERICA	
18	CANADA, Ontario	0333
19	MEXICO, Baja California	0025
20	MEXICO, Edo. Mex, Atizapan	2640
21	MEXICO, Edo. Mex, Batan	2249
22	MEXICO, Guanajuato, Cortazar	1700
23	MEXICO, Guanajuato, Bajio	1765
24	MEXICO, Nuevo León	0537
	SOUTH AMERICA	
25	ARGENTINA, Buenos Aires	0212
26	CHILE, Santiago, Huelquen	0039
27	PERU, Lima, La Molina	0251

* Date harvested not reported.

FIGURE 2. REGIONAL SUMMARY (GROUP I-X) FOR THE 3rd EBYT-NORMAL 1977-78



3TH EBYT (NORMAL) TABLE 1 AFRICA ALGERIA CONSTANTINE

EL KHROUB
INRAA CEREAL PROJECT

LATITUDE	036 16'N	DATE PLANTED	12/11/77	NITROGEN	APPLIED
LONGITUDE	006 42'E	DATE HARVESTED	7/ 1/78	PHOSPHORUS	APPLIED
ELEVATION	0640 M.ABOVE S.L.	AMOUNT OF MOISTURE	306 MM	POTASSIUM	--

LATE SOWING DATE. SOIL MOIST AT SOWING. GERMINATION GOOD.
COLD WINTER AND LOW RAIN BUT GOOD DISTRIBUTION.
NEGLIGIBLE DISEASE DEVELOPMENT. NEMATODE PROBLEMS
LOCAL CHECK: SAIDA

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA
25	LOCAL CHECK		4445
24	DWG1-API(3) X SV.MARI	MEXICO	4254
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	4125
18	CM67-BUSSELL	MEXICO	4114
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	4051
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	4031
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	4017
22	CANDELILLA"S"	MEXICO	4000
1	11012.2-BCO.MR	MEXICO	3997
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	3945
10	POR-U.SASK1766	MEXICO	3900
7	MEZQUITE-DL.71	MEXICO	3888
11	API-CM67 X MINN907	MEXICO	3885
8	API-CM67 X MANCHURIA	MEXICO	3851
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3845
2	CM67 X DS-APRO	MEXICO	3831
19	BDGC-GAINES	MEXICO	3648
23	TEQUILA	MEXICO	3648
9	CM67-M66.85	MEXICO	3625
16	NUMAR-MEZQUITE	MEXICO	3594
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	3571
13	CR115-POR X BEECHER/API-CM67	MEXICO	3562
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3534
21	PI2871-MEZQUITE	MEXICO	3482
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3297

GRAND MEAN 3845.6
STANDARD ERROR OF GRAND MEAN
COEFFICIENT OF VARIATION AS PC
LSD VARIETY MEANS 5 PC

3TH EBYT (NORMAL) TABLE 2 AFRICA EGYPT KAFR EL SHEIK

SAKHA
CEREAL STAFF
LATITUDE 030 49'N
LONGITUDE 030 51'E
ELEVATION 0000 M.ABOVE S.L.

DATE PLANTED 12/25/77
DATE HARVESTED 5/15/78
AMOUNT OF MOISTURE 150 MM

NITROGEN APPLIED
PHOSPHORUS APPLIED
POTASSIUM --

LATE SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. NO INSECT, WEED OR BIRD PROBLEMS.
LOCAL CHECK: GIZA119

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	LEAF RUST	STEM RUST	PLNT HT	POWD %
25	LOCAL CHECK		4757	86	20	-	65	40
9	CM67-M66.85	MEXICO	4133	89	-	-	55	30
16	NUMAR-MEZQUITE	MEXICO	3783	79	-	-	63	-
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3624	79	-	-	85	-
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3525	77	10	10	55	30
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3458	78	20	-	70	60
8	API-CM67 X MANCHURIA	MEXICO	3366	77	10	-	55	10
13	CR115-POR X BEECHER/API-CM67	MEXICO	3350	82	10	-	65	-
23	TEQUILA	MEXICO	3333	85	30	10	55	40
7	MEZQUITE-DL.71	MEXICO	3275	80	20	-	65	50
22	CANDELILLA"S"	MEXICO	3250	79	30	10	75	40
24	DWG1-API(3) X SV.MARI	MEXICO ***	3200	75	20	-	90	20
18	CM67-BUSSELL	MEXICO	3027	80	20	-	65	40
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	3000	80	20	10	85	40
10	POR-U.SASK1766	MEXICO	2975	87	20	-	55	60
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	2922	80	10	10	60	30
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2700	79	-	-	60	-
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2650	76	20	10	35	-
1	11012.2-BCO.MR	MEXICO	2475	80	40	10	65	40
21	PI2871-MEZQUITE	MEXICO	2400	83	30	10	65	40
11	API-CM67 X MINN907	MEXICO	2383	90	10	10	35	30
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2375	80	30	10	60	30
19	BDGC-GAINES	MEXICO	2350	85	20	10	60	-
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2256	81	-	10	55	50
2	CM67 X DS-APRO	MEXICO	2125	86	-	-	65	40
	GRAND MEAN		3068.2	81.5	20.5	10.0	62.5	37.9
	STANDARD ERROR OF GRAND MEAN		90.3	0.2				
	COEFFICIENT OF VARIATION AS PC		29.4	3.0				
	LSD VARIETY MEANS 5 PC		1275.5	2.5				

CORRELATIONS

YIELD	KG/HA					
FLOW	DAYS	-0.02				
LEAF	RUST	-0.24	-0.00			
STEM	RUST	0.00	0.00	0.00		
PLNT	HT	0.24	-0.36	0.27	0.00	
POWD	%	-0.09	0.23	0.35	0.00	0.04

3TH EBYT (NORMAL) TABLE 3 AFRICA KENYA RIFT VALLEY

NJORO
NATIONAL P.B.S.

LATITUDE	000 00'S	DATE PLANTED	5/23/78	NITROGEN	APPLIED
LONGITUDE	036 00'E	DATE HARVESTED	11/ 9/78	PHOSPHORUS	APPLIED
ELEVATION	2165 M.ABOVE S.L.	AMOUNT OF MOISTURE	539 MM	POTASSIUM	--

VERY DRY IN FIRST HALF OF JUNE, BETTER CONDITIONS IN JULY AND AUGUST.
INSECT, WEED AND BIRD PROBLEMS NOT REPORTED.
LOCAL CHECK: PROCTOR

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	STRP RT.H	LEAF RUST	STEM RUST	PLNT HT
9	CM67-M66.85	MEXICO	4075	TMS	40S	5S	88
2	CM67 X DS-APRO	MEXICO	4020	TMS	TS	0	65
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3970	TMS	5S	0	85
25	LOCAL CHECK		3920	TMS	TS	0	91
13	CR115-POR X BEECHER/API-CM67	MEXICO	3758	TMS	30S	10MS	90
18	CM67-BUSSELL	MEXICO	3745	TS	10S	0	87
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3695	TMS	TS	0	80
5	CM67-U.SASK1800 X PRO-CM67	MEXICO ***	3229	5MS	5MR	0	84
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3129	0	20S	TMS	102
10	POR-U.SASK1766	MEXICO	3125	TMR	5S	5MS	86
16	RUMAR-MEZQUITE	MEXICO	3166	20MS	5MR	0	78
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3108	0	50S	TMS	92
8	API-CM67 X MANCHURIA	MEXICO	2983	TMS	80S	0	100
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2616	TMS	10S	0	105
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2412	TS	40S	0	73
22	CANDELILLA"S"	MEXICO	2296	5MR	20S	TMS	85
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2246	30S	30S	0	56
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2141	TMS	50S	TMS	90
23	TEQUILA	MEXICO	2054	5MS	TMS	TMS	85
1	11012.2-BCO.MR	MEXICO	2037	TMR	10S	TMS	63
24	DWG1-API(3) X SV.MARI	MEXICO	1987	0	10S	TS	78
7	MEZQUITE-DL.71	MEXICO	1904	TMS	60S	0	87
19	BDGC-GAINES	MEXICO	1746	10S	60S	5S	33
11	API-CM67 X MINN907	MEXICO	1408	60S	40S	TMS	65
21	PI2871-MEZQUITE	MEXICO	1087	TS	60S	TMS	81
		GRAND MEAN	2792.1	5.7	21.7	1.8	83.1
		STANDARD ERROR OF GRAND MEAN	48.4				
		COEFFICIENT OF VARIATION AS PC	17.3				
		LSD VARIETY MEANS 5 PC	681.7				

CORRELATIONS

YIELD	KG/HA				
STRP	RT.H	-0.33			
LEAF	RUST	-0.59	0.18		
STEM	RUST	0.03	-0.03	0.13	
PLNT	HT	0.27	-0.51	0.16	0.13

3TH EBYT (NORMAL) TABLE 4 AFRICA LIBYA TRIPOLI

TAJOURA
S.U.EL SEBOI

LATITUDE	032 53'N	DATE PLANTED	11/ 7/77	NITROGEN	APPLIED
LONGITUDE	013 24'E	DATE HARVESTED	4/15/78	PHOSPHORUS	APPLIED
ELEVATION	0011 M.ABOVE S.L.	AMOUNT OF MOISTURE	750 MM	POTASSIUM	--

WEATHER NORMAL. DISEASE DEVELOPMENT NOT REPORTED.
NO INSECT, WEED OR BIRD PROBLEMS.
LOCAL CHECK: CALIFORNIA MARIOUT.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	STEM RUST	PLNT HT	POWD %	NET BLOT
13	CR115-POR X BEECHER/API-CM67	MEXICO	2550	54	96	139	50S	TRR	62	19	11
25	LOCAL CHECK	***	2157	55	104	140	10MS	TRR	60	22	3
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	2078	56	90	128	70S	40MR	52	30	6
9	CM67-M66.85	MEXICO	1936	50	107	143	00S	60MR	60	28	0
10	POR-U.SASK1766	MEXICO	1907	54	91	139	60MS	20MR	59	30	6
18	CM67-BUSSELL	MEXICO	1864	59	98	144	70S	40MS	64	19	6
8	API-CM67 X MANCHURIA	MEXICO	1850	56	90	140	70S	40MR	69	25	8
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	1807	52	87	130	70S	70MS	66	28	14
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	1793	52	83	140	70MR	70S	52	19	19
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	1786	57	90	139	70MS	60S	68	33	17
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	1736	53	87	138	30MS	TRR	58	19	3
2	CM67 X DS-APRO	MEXICO	1736	50	94	138	50MS	40MS	49	25	0
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1728	57	88	137	50MS	70S	61	33	22
16	NUHAR-MEZQUITE	MEXICO	1686	48	96	140	10MR	30MS	48	22	6
24	DWG1-API(3) X SV.MARI	MEXICO	1643	59	96	143	TRR	TRR	53	14	28
7	MEZQUITE-DL.71	MEXICO	1593	46	92	138	60MS	10MR	54	28	30
11	API-CM67 X MINN907	MEXICO	1528	51	106	142	90S	60MS	49	30	17
12	APAM-I865 X 11012.2/API-CM67..	MEXICO	1436	51	87	138	80S	TRR	48	28	28
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1400	53	92	140	70S	TRR	56	33	30
23	TEQUILA	MEXICO	1343	53	104	143	60MS	10MR	56	14	8
21	PI2871-MEZQUITE	MEXICO	1336	52	94	140	60MS	30MS	59	17	3
1	11012.2-BCO.MR	MEXICO	1314	49	96	142	60MS	10MR	58	22	8
19	BDGC-GAINES	MEXICO	1236	53	94	141	50MR	60MS	57	14	3
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	1229	54	89	138	30MR	R	63	30	17
22	CANDELILLA"S"	MEXICO	1186	57	96	139	80S	30S	54	17	30
	GRAND MEAN		1674.2	53.2	93.8	138.9	45.1	30.0	57.3	23.9	12.8
	STANDARD ERROR OF GRAND MEAN		27.6	0.3					0.5		
	COEFFICIENT OF VARIATION AS PC		16.5	4.8					7.9		
	LSD VARIETY MEANS 5 PC		389.7	3.6					6.4		

CORRELATIONS

YIELD	KG/HA							
TEST	WT	0.18						
FLOW	DAYS	0.04	-0.08					
MAT	DAYS	-0.24	0.00	0.54				
LEAF	RUST	0.07	0.02	0.31	-0.12			
STEM	RUST	0.06	-0.18	0.10	-0.04	0.45		
PLNT	HT	0.26	0.43	-0.11	-0.03	0.13	-0.20	
POWD	%	0.14	-0.11	-0.23	-0.41	0.34	0.06	0.14
NET	BLOT	-0.32	0.10	-0.30	-0.05	-0.21	-0.31	-0.20	0.23

3TH EBYT (NORMAL) TABLE 5 AFRICA SOUTH AFRICA ORANGE FREE STATE

BETHLEHEM
SMALL GRAIN CENTRE
LATITUDE 028 10'S
LONGITUDE 028 18'E
ELEVATION 1631 M.ABOVE S.L.

DATE PLANTED 9/ 7/77
DATE HARVESTED 1/10/78
AMOUNT OF MOISTURE -- MM

NITROGEN APPLIED
PHOSPHORUS APPLIED
POTASSIUM --

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
YIELDS PROBABLY AFFECTED BY DRIER THAN AVERAGE NOVEMBER AND DECEMBER,
AND HIGH TEMPERATURES. NO INSECT WEED OR PEST PROBLEMS.
LOCAL CHECK: CLIPPER

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	STEM RUST	PLNT HT
7	MEZQUITE-DL.71	MEXICO	4417	58	67	5S	59
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	4010	56	65	20S	72
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3870	58	65	10S	71
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3784	57	66	20S	70
24	DWG1-API(3) X SV.MARI	MEXICO ***	3619	59	66	TS	50
19	BDGC-GAINES	MEXICO	3588	61	67	TS	67
10	POR-U.SASK1766	MEXICO	3559	56	71	30S	63
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3463	54	66	5S	75
21	PI2871-MEZQUITE	MEXICO	3361	62	67	5S	66
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3336	52	62	TS	52
9	CM67-M66.85	MEXICO	3264	57	62	10S	69
22	CANDELILLA*S*	MEXICO	3148	57	62	5S	58
2	CM67 X DS-APRO	MEXICO	3036	50	68	20S	49
23	TEQUILA	MEXICO	2937	59	64	5S	58
25	LOCAL CHECK		2890	64	65	30S	67
11	API-CM67 X MINN907	MEXICO	2855	52	71	30S	45
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	2786	51	61	TS	56
13	CR115-POR X BEECHER/API-CM67	MEXICO	2736	51	67	10S	69
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2719	62	63	TS	69
16	NUMAR-MEZQUITE	MEXICO	2585	49	60	20S	46
8	API-CM67 X MANCHURIA	MEXICO	2434	54	58	5S	60
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2343	58	59	20S	56
18	CM67-BUSWELL	MEXICO	2301	59	54	30S	58
1	11012.2-BCO.MR	MEXICO	1658	52	60	TS	44
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	1312	52	61	0	40
	GRAND MEAN		3042.5	55.6	63.6	11.4	59.7
	STANDARD ERROR OF GRAND MEAN		44.8	0.3			0.5
	COEFFICIENT OF VARIATION AS PC		14.7	4.7			0.8
	LSD VARIETY MEANS 5 PC		631.0	3.7			7.4

CORRELATIONS

YIELD	KG/HA				
TEST	WT	0.40			
FLOW	DAYS	0.58	0.16		
STEM	RUST	0.05	-0.03	0.15	
PLNT	HT	0.62	0.58	0.25	0.02

SHAMBAT
A.G.IMAM

LATITUDE	015 37'N	DATE PLANTED	11/ 6/77	NITROGEN	APPLIED
LONGITUDE	032 32'E	DATE HARVESTED	--/--/--	PHOSPHORUS	--
ELEVATION	0375 M.ABOVE S.L.	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. NEGLIGIBLE DISEASE DEVELOPMENT.
CHEMICAL CONTROL OF WEEDS.
LOCAL CHECK: BALADI LOCAL 46

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3937	67	103	75
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3896	61	95	76
3	API-CM67 X MANCHURIA	MEXICO	3854	64	99	77
22	CANDELILLA"S"	MEXICO	3754	63	98	69
16	NUMAR-MEZQUITE	MEXICO	3754	64	99	73
13	CR115-POR X BEECHER/API-CM67	MEXICO	3750	67	102	76
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3746	73	102	73
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3667	62	97	69
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	3642	61	94	56
9	CM67-M66.85	MEXICO	3567	67	100	67
1	11012.2-BCO.MR	MEXICO	3487	70	106	67
10	POR-U.SASK1766	MEXICO	3462	70	106	63
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	3362	62	93	73
3	NEPAL842-[illegible]PAM X CM67-U.SASK...	MEXICO	3354	65	102	76
24	DWG1-API(5) X SV.MARI	MEXICO	3292	70	106	70
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3233	69	104	76
23	TEQUILA	MEXICO	3221	73	108	71
18	CM67-BUSSELL	MEXICO	3146	73	107	74
11	API-CM67 X MINN907	MEXICO	3071	72	107	74
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2871	64	99	70
7	MEZQUITE-DL.71	MEXICO	2858	72	106	69
19	BDGC-GAINES	MEXICO	2833	71	104	64
25	LOCAL CHECK		2667	71	107	66
2	CM67 X DS-APRO	MEXICO	2612	73	107	61
21	PI2871-MEZQUITE	MEXICO	2542	75	108	73
	GRAND MEAN		3343.1	67.9	102.1	70.2
	STANDARD ERROR OF GRAND MEAN		93.9			0.9
	COEFFICIENT OF VARIATION AS PC		28.1			12.8
	LSD VARIETY MEANS 5 PC		1323.3			12.6

CORRELATIONS

YIELD	KG/HA			
FLOW	DAYS	-0.64		
MAT	DAYS	-0.63	0.98	
PLNT	HT	0.29	-0.06	-0.04

3TH EDYT (NORMAL) TABLE 7 ASIA BANGLADESH DACCA

JOYDEBPUR
CEREAL STAFF
LATITUDE 023 46'N DATE PLANTED 11/19/77 NITROGEN APPLIED
LONGITUDE 090 23'E DATE HARVESTED 3/18/78 PHOSPHORUS APPLIED
ELEVATION 0009 M.ABOVE S.L. AMOUNT OF MOISTURE 324 MM POTASSIUM APPLIED

NORMAL SOWING DATE. SOIL MOIST AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. INSECT AND WEED PROBLEMS.
LOCAL CHECK: CONQUIST.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	NET BLOT	SPOT BLOT
13	CP115-POR X BEECHER/API-CM67	MEXICO	5787	82	110	86	22	59
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	5693	74	108	69	25	63
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	5692	81	111	87	28	67
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	5669	72	109	79	22	63
10	POR-U.SASK1766	MEXICO	5669	80	113	68	25	63
22	CANDELILLA*S*	MEXICO	5573	73	109	72	28	74
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	5526	76	111	80	14	71
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	5479	78	109	80	22	60
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	5372	69	105	64	22	71
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	5361	65	114	56	36	71
23	TEQUILA	MEXICO	5338	91	116	74	33	52
8	API-CM67 X MANCHURIA	MEXICO	5169	84	111	90	22	60
19	BDGC-GAINES	MEXICO	4629	85	115	75	19	59
7	MEZQUITE-DL.71	MEXICO	4558	72	111	70	28	71
21	PI2871-MEZQUITE	MEXICO	4535	84	113	76	22	45
9	CM67-M66.85	MEXICO	4250	96	118	90	17	33
2	CM67 X DS-APRO	MEXICO ***	3966	87	112	67	25	56
11	API-CM67 X MINN987	MEXICO	3870	85	113	73	25	56
18	CM67-BUSSELL	MEXICO	3684	93	117	83	22	44
20	PRO-DZ82.391 X CAL.MR-BEACON	MEXICO	3520	81	111	72	22	56
24	DWG1-API(3) X SV.MARI	MEXICO	3496	81	115	66	28	67
16	NUMAR-MEZQUITE	MEXICO	3094	83	111	61	30	63
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2883	84	110	67	22	52
1	11012.2-BCO.MR	MEXICO	2551	87	116	72	33	71
25	LOCAL CHECK		2126	78	111	98	26	71
	GRAND MEAN		4539.5	80.7	112.0	74.8	24.6	60.6
	STANDARD ERROR OF GRAND MEAN		90.1			0.7		
	COEFFICIENT OF VARIATION AS PC		19.8			9.9		
	LSD VARIETY MEANS 5 PC		1269.7			10.4		

CORRELATIONS

YIELD	KG/HA					
FLOW	DAYS	-0.43				
MAT	DAYS	-0.33	0.69			
PLNT	HT	-0.00	0.32	0.11		
NET	BLOT	-0.14	-0.14	0.15	-0.45	
SPOT	BLOT	0.14	-0.71	-0.40	-0.26	0.40

NEW DELHI IARS
CEREAL STAFF

LATITUDE	028 38'N	DATE PLANTED	12/10/77	NITROGEN	APPLIED
LONGITUDE	077 16'E	DATE HARVESTED	4/18/78	PHOSPHORUS	APPLIED
ELEVATION	0022 M.ABOVE S.L.	AMOUNT OF MOISTURE	58 MM	POTASSIUM	APPLIED

LATE SOWING DATE. SOIL MOIST AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. NEGLIGIBLE DISEASE DEVELOPMENT.
CHEMICAL CONTROL OF INSECTS.
LOCAL CHECK: RANJIT

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT.H	PLNT HT	LODG %	1000 G.W.
10	POR-U.SASK1766	MEXICO	3947	91	129	10S	80	0	39
13	CR115-POR X BEECHER/API-CM67	MEXICO	3838	85	119	30S	103	0	40
22	CANDELILLA"S"	MEXICO	3801	83	121	20S	100	0	34
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3770	84	120	60S	104	5	38
7	MEZQUITE-DL.71	MEXICO	3749	84	117	10S	94	3	37
16	NUMAR-MEZQUITE	MEXICO	3718	86	121	60S	91	0	37
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3671	80	120	TR	81	20	32
12	APAM-IB55 X 11012.2/API-CM67..	MEXICO	3640	81	112	80S	78	0	31
19	BDGC-GAINES	MEXICO	3609	88	121	80S	95	0	30
25	LOCAL CHECK		3604	80	112	TR	96	3	34
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3541	86	121	50S	106	3	46
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3494	81	118	40S	115	5	38
8	API-CM67 X MANCHURIA	MEXICO	3400	82	119	70S	105	0	40
23	TEQUILA	MEXICO	3395	90	127	60S	94	0	31
21	PI2871-MEZQUITE	MEXICO	3380	89	122	100S	91	0	34
18	CM67-BUSSELL	MEXICO	3380	82	120	20S	103	20	49
9	CM67-M66.85	MEXICO	3343	91	122	30S	109	10	36
1	11012.2-BCO.MR	MEXICO	3213	93	120	70S	71	0	26
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	3182	82	117	60S	102	43	43
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3161	81	117	70S	92	10	35
2	CM67 X DS-APRO	MEXICO ***	3031	89	121	70S	82	10	34
24	DWG1-API(3) X SV.MARI	MEXICO	2947	84	121	TR	80	0	41
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2812	81	118	5R	104	43	41
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2770	83	115	30S	108	0	35
11	API-CM67 X MINN907	MEXICO	1797	94	126	100S	70	0	27
		GRAND MEAN	3367.0	85.2	119.8	47.7	94.2	7.2	36.3

STANDARD ERROR OF GRAND MEAN	52.7
COEFFICIENT OF VARIATION AS PC	15.7
LSD VARIETY MEANS 5 PC	743.3

CORRELATIONS

YIELD	KG/HA						
FLOW	DAYS	-0.27					
MAT	DAYS	-0.10	0.73				
STRP	RT.H	-0.26	0.51	0.18			
PLNT	HT	0.26	-0.44	-0.27	-0.16		
LODG	%	-0.17	-0.40	-0.19	-0.28	0.20	
1000	G.W.	0.21	-0.43	-0.08	-0.40	0.58	0.37

3TH EBYT(NORMAL) TABLE 9 EUROPE PORTUGAL ALENTEJO

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

DATE PLANTED 11/24/77
DATE HARVESTED 6/26/78
AMOUNT OF MOISTURE 553 MM

NITROGEN --
PHOSPHORUS --
POTASSIUM --

NORMAL SOWING DATE. SOIL MOIST AT SOWING. GERMINATION GOOD.
PERSISTENT LIGHT RAINFALL FROM NOVEMBER TO FIRST WEEK OF MARCH.
NO INSECT, WEED OR BIRD PROBLEMS.
LOCAL CHECK: RIBERA

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT.H	LEAF RUST	PLNT HT	LODG %	POWD %	SCLD %
18	CM67-BUSSELL	MEXICO	3070	124	176	10MS	5MR	93	16	11	78
7	MEZQUITE-DL.71	MEXICO	2985	123	174	20S	80S	74	0	78	44
13	CR115-POR X BEECHER/API-CM67	MEXICO	2971	127	176	0	20MS	83	12	22	0
25	LOCAL CHECK		2690	135	184	0	50S	81	6	0	78
10	POR-U.SASK1766	MEXICO	2683	128	178	0	60S	79	6	78	67
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2429	123	173	0	20MS	85	20	67	44
2	CM67 X DS-APRO	MEXICO	2383	127	176	30S	10S	70	0	56	0
24	DWG1-API(3) X SV.MARI	MEXICO	2231	117	179	---	---	69	0	0	89
9	CM67-M66.85	MEXICO	2196	130	176	10S	20S	66	19	67	89
16	NUMAR-MEZQUITE	MEXICO	2041	125	175	---	---	63	9	89	78
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	1964	122	171	---	---	82	29	33	67
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1946	123	175	10S	60S	81	12	89	56
8	API-CM67 X MANCHURIA	MEXICO	1931	122	173	10S	30S	95	12	67	67
19	BDGC-GAINES	MEXICO	1737	124	176	0	60S	80	6	11	89
14	BAL.16-M70/M67.18-M14 X DS...	MEXICO	1730	120	171	---	---	90	19	56	56
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	1712	124	175	20S	80S	81	6	67	78
23	TEQUILA	MEXICO ***	1621	129	177	0	30S	75	9	11	89
21	PI2871-MEZQUITE	MEXICO	1516	124	175	---	---	75	9	22	89
17	APRO X PALLAS(5)-35/CM67...	MEXICO	1487	125	176	---	---	66	3	56	89
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	1479	123	170	---	---	77	9	67	33
22	CANDELILLA"S"	MEXICO	1350	127	175	0	20S	76	16	22	89
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1283	123	174	10MR	10MR	84	12	67	11
1	11012.2-BCO.MR	MEXICO	1237	124	177	10S	60S	72	3	78	11
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	1094	117	168	10S	20S	59	0	22	0
11	API-CM67 X MINN987	MEXICO	725	132	177	80S	20S	62	3	78	67
	GRAND MEAN		1939.5	124.6	175.0	11.8	35.4	77.4	9.4	48.6	58.3
	STANDARD ERROR OF GRAND MEAN		83.3					0.2			
	COEFFICIENT OF VARIATION AS PC		43.0					2.7			
	LSD VARIETY MEANS 5 PC		1174.8					2.9			

CORRELATIONS

YIELD	KG/HA							
FLOW	DAYS	0.13						
MAT	DAYS	0.33	0.66					
STRP	RT.H	-0.43	0.23	-0.00				
LEAF	RUST	0.09	-0.04	0.21	-0.06			
PLNT	HT	0.43	0.00	-0.03	-0.50	-0.09		
LODG	%	0.13	-0.02	-0.32	-0.36	-0.38	0.67	
POWD	%	-0.14	0.01	-0.25	0.41	0.29	-0.05	-0.02
SCLD	%	0.00	0.23	0.37	-0.06	0.26	0.12	0.19 -0.24

COGULLADA
J.COMENGE ET AL

LATITUDE	041 38'N	DATE PLANTED	12/ 9/77	NITROGEN	APPLIED
LONGITUDE	000 54'W	DATE HARVESTED	6/27/78	PHOSPHORUS	APPLIED
ELEVATION	0202 M.ABOVE S.L.	AMOUNT OF MOISTURE	542 MM	POTASSIUM	APPLIED

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. INSECT, WEED AND BIRD PROBLEMS NOT REPORTED.
LOCAL CHECK: BERTA

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	POWD %	BYDV
2	CM67 X DS-APRO	MEXICO	6222	38	130	182	45S	70	86	10
10	POR-U.SASK1766	MEXICO ***	5305	39	140	190	50S	90	89	-
18	CM67-BUSSELL	MEXICO	5194	41	131	166	60S	85	81	-
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	5166	44	128	180	45S	85	84	5
9	CM67-M66.85	MEXICO	5166	43	141	192	60S	100	86	-
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	5138	38	127	184	25MS	85	84	5
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	4972	43	129	183	65S	105	78	-
13	CR115-POR X BEECHER/API-CM67	MEXICO	4777	40	140	192	40S	95	81	5
23	TEQUILA	MEXICO	4777	42	139	190	40S	90	89	5
8	API-CM67 X MANCHURIA	MEXICO	4638	42	126	178	60S	105	86	10
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	4500	37	139	190	40S	100	89	-
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	4500	38	127	182	60S	75	89	-
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	4444	44	137	189	40S	100	97	-
24	DWG1-API(3) X SV.MARI	MEXICO	4444	45	137	192	40S	90	89	-
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	4416	38	124	174	60S	80	81	5
16	NUMAR-MEZQUITE	MEXICO	4111	42	134	186	5MR	70	89	10
7	MEZQUITE-DL.71	MEXICO	4111	34	138	191	60S	90	89	6
11	API-CM67 X MINN907	MEXICO	4111	36	140	192	60S	85	89	5
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	4000	42	124	175	60S	85	89	5
25	LOCAL CHECK		3833	42	148	197	70S	100	89	-
21	PI2871-MEZQUITE	MEXICO	3583	36	138	188	60S	90	89	5
19	BDGC-GAINES	MEXICO	3416	35	141	194	60S	90	89	6
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3333	42	128	182	60S	105	67	-
22	CANDELILLA°S°	MEXICO	3305	37	137	189	40S	90	70	5
1	11012.2-BCO.MR	MEXICO	2972	38	139	192	60S	80	89	9
	GRAND MEAN		4417.3	39.8	134.4	186.7	49.0	89.6	85.5	6.4
	STANDARD ERROR OF GRAND MEAN		43.2					0.0		
	COEFFICIENT OF VARIATION AS PC		9.8					0.0		
	LSD VARIETY MEANS 5 PC		609.2					0.1		

CORRELATIONS

YIELD KG/HA							
TEST	WT	0.28					
FLOW	DAYS	-0.25	-0.18				
MAT	DAYS	-0.25	-0.19	0.96			
LEAF	RUST	-0.13	-0.11	0.05	-0.02		
PLNT	HT	-0.13	0.31	0.24	0.22	0.41	
POWD	%	0.12	-0.03	0.32	0.28	-0.11	-0.21
BYDV		0.16	0.18	-0.11	-0.11	-0.19	-0.27	0.22

3TH EBYT (NORMAL) TABLE 11 MIDDLE EAST CYPRUS LAXIA

A. HADJICHRISTODOULOU

LATITUDE	35 34'N	DATE PLANTED	11/15/77	NITROGEN	APPLIED
LONGITUDE	33 20'E	DATE HARVESTED	5/19/78	PHOSPHORUS	APPLIED
ELEVATION	150 M.ABOVE S.L.	AMOUNT OF MOISTURE	272 MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. CHEMICAL CONTROL OF WEEDS.
LOCAL CHECK: ATHENAIS

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	LEAF RUST	PLNT HT	SHTR %	POWD %	LEAF FIRE	NET BLOT
18	CM67-BUSSELL	MEXICO	4030	75	MS2	83	48	22	S5	MS3
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3920	73	MRTR	87	30	22	0	S10
24	DWG1-API(3) X SV.MARI	MEXICO	3870	80	MRTR	80	39	33	0	S10
16	NUMAR-MEZQUITE	MEXICO	3800	77	RTR	73	28	22	0	S20
23	TEQUILA	MEXICO	3745	87	MRTR	85	35	44	0	MS5
25	LOCAL CHECK		3225	78	RTR	75	42	0	0	S25
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	3195	74	MRTR	95	28	11	MRTR	MR2
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	3140	75	MRTR	93	27	22	0	MS5
2	CM67 X DS-APRO	MEXICO	3105	79	MRTR	70	31	0	0	MS5
22	CANDELILLA*S*	MEXICO	3070	78	MRTR	85	27	33	0	S10
19	BDGC-GAINES	MEXICO	3060	79	RTR	75	29	22	0	MR3
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	2900	75	MRTR	90	35	33	0	MS5
7	MEZQUITE-DL.71	MEXICO	2875	79	MS2	75	29	33	0	MS5
21	PI2871-MEZQUITE	MEXICO	2870	80	MRTR	83	30	22	0	MS5
10	POR-U.SASK1766	MEXICO	2855	86	MR2	63	32	11	0	S15
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2805	77	MRTR	85	35	33	0	MS5
8	API-CM67 X MANCHURIA	MEXICO	2705	74	MS5	85	37	33	MRTR	MS5
9	CM67-M66.85	MEXICO	2665	85	MRTR	80	33	22	S5	MS3
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2660	75	MS3	80	33	22	0	MS5
1	11012.2-BCO.MR	MEXICO	2650	77	MRTR	70	28	33	0	RTR
13	CR115-POR X BEECHER/API-CM67	MEXICO	2650	78	MRTR	85	28	11	MRTR	MS5
11	API-CM67 X MINN907	MEXICO	2420	89	MSTR	95	30	33	0	MS5
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2385	75	RTR	85	33	11	S5	MS10
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	2145	75	RTR	60	31	33	0	MS5
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1895	80	MRTR	85	40	22	0	MS5
	GRAND MEAN		2985.6	78.4		80.9	32.5	23.3		

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

CORRELATIONS

YIELD	KG/HA				
FLOW	DAYS	-0.11			
PLNT	HT	0.10	-0.08		
SHTR	%	0.19	-0.02	0.02	
POWD	%	0.02	0.15	0.16	-0.03

ARAGHI MOHALLE
P.IRANI
LATITUDE 036 51'N
LONGITUDE 054 25'E
ELEVATION 0132 M.ABOVE S.L.

DATE PLANTED 11/24/77
DATE HARVESTED --/--/--
AMOUNT OF MOISTURE 770 MM

NITROGEN APPLIED
PHOSPHORUS APPLIED
POTASSIUM --

NORMAL SOWING DATE.
WEATHER NOT REPORTED. DISEASE DEVELOPMENT NOT REPORTED.
NO INSECT, WEED OR BIRD PROBLEMS. LOCAL CHECK NAME NOT REPORTED.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	LEAF RUST	STEM RUST	PLNT HT	LODG %
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	4966	120	173	50VS	20MR-MS	97	80
16	NUMAR-MEZQUITE	MEXICO	4850	120	173	50VS	0	85	0
13	CR115-POR X BEECHER/API-CM67	MEXICO	4533	121	173	40MR-MS	0	102	20
18	CM67-BUSSELL	MEXICO	4500	120	173	10MR-MS	0	93	40
19	BDGC-GAINES	MEXICO	4308	124	173	60VS	0	90	0
2	CM67 X DS-APRO	MEXICO	4283	122	173	80VS	0	93	80
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	4275	117	173	80VS	0	65	0
25	LOCAL CHECK		4258	132	173	10MR-MS	0	110	0
23	TEQUILA	MEXICO ***	4008	124	173	80VS	0	97	0
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3941	116	173	60VS	0	105	0
8	API-CM67 X MANCHURIA	MEXICO	3933	116	173	80VS	0	105	20
9	CM67-M66.85	MEXICO	3841	124	173	80VS	0	95	30
7	MEZQUITE-DL.71	MEXICO	3841	122	173	80VS	10MR-MS	96	0
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3766	120	173	40MR-MS	0	87	0
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3741	117	173	80VS	0	86	0
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3658	117	173	60VS	10MR-MS	102	80
24	DWG1-API(3) X SV.MARI	MEXICO	3383	125	173	80VS	0	82	0
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3316	120	173	80VS	10MR-MS	90	0
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	3300	122	173	60VS	0	95	20
11	API-CM67 X MINM987	MEXICO	3275	129	173	60VS	0	70	0
22	CANDELILLA"S"	MEXICO	3183	124	173	80VS	0	90	20
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3125	116	173	80VS	40MR-MS	95	0
21	PI2871-MEZQUITE	MEXICO	3075	125	173	80VS	0	94	0
10	POR-U.SASK1766	MEXICO	3016	125	173	60VS	0	87	0
1	11012.2-BCO.MR	MEXICO	2000	121	173	80VS	0	90	0
		GRAND MEAN	3807.3	121.6	173.0	62.4	2.2	92.0	15.6

STANDARD ERROR OF GRAND MEAN 54.1
COEFFICIENT OF VARIATION AS PC 14.2
LSD VARIETY MEANS 5 PC 762.0

CORRELATIONS

YIELD	KG/HA						
FLOW	DAYS	-0.14					
MAT	DAYS	0.00	0.00				
LEAF	RUST	-0.48	-0.22	0.00			
STEM	RUST	-0.08	-0.35	0.00	0.15		
PLNT	HT	0.17	-0.06	0.00	-0.27	0.15	
LODG	%	0.37	-0.20	0.00	-0.11	0.17	0.29

3TH EBYT (NORMAL) TABLE 13 MIDDLE EAST ISRAEL BET DAGAN

VOLCANI CENTRE
A.R.O.

LATITUDE	029 30'N	DATE PLANTED	11/28/77	NITROGEN	APPLIED
LONGITUDE	034 17'E	DATE HARVESTED	--/--/--	PHOSPHORUS	APPLIED
ELEVATION	0036 M.ABOVE S.L.	AMOUNT OF MOISTURE	485 MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. LOCAL CHECK: ESPERAN EL VOLLA.

VAR NO.	VARIETY OR CROSS	ORIGIN	FLOW DAYS	STRP RT.H	LEAF RUST	STEM RUST	PLNT HT	LODG %	POWD %
1	11012.2-BCO.MR	MEXICO	88	----	50VS	70VS	81	-	90VS
2	CM67 X DS-APRO	MEXICO	92	----	----	----	86	50	70VS
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	84	----	10S	----	105	23	90VS
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	82	----	----	----	100	96	30VS
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	86	----	----	----	104	73	50VS
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	86	----	----	----	103	53	90VS
7	MEZQUITE-DL.71	MEXICO	86	50VS	----	----	88	57	70VS
8	API-CM67 X MANCHURIA	MEXICO	82	30VS	50VS	----	110	55	70VS
9	CM67-M66.85	MEXICO	94	30VS	30VS	30VS	113	40	90VS
10	POR-U.SASK1766	MEXICO	92	----	----	----	88	0	90VS
11	API-CM67 X MINN907	MEXICO	95	----	----	----	81	-	70VS
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	84	----	----	----	73	-	70VS
13	CR115-POR X BEECHER/API-CM67	MEXICO	85	----	----	----	98	55	50VS
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	81	----	30VS	----	101	68	70VS
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	81	----	----	----	95	80	70VS
16	NUMAR-MEZQUITE	MEXICO	86	----	----	----	91	30	90VS
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	82	----	----	----	85	70	50VS
18	CM67-BUSSELL	MEXICO	85	----	----	----	93	73	90VS
19	BDGC-GAINES	MEXICO	93	----	10S	----	91	-	90VS
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	85	----	----	----	103	68	90VS
21	PI2871-MEZQUITE	MEXICO	91	----	30VS	----	93	-	70VS
22	CANDELILLA"S"	MEXICO	87	----	----	----	91	43	70VS
23	TEQUILA	MEXICO	93	----	10S	----	91	-	90VS
24	DWG1-API(3) X SV.MARI	MEXICO	100	----	----	----	86	-	50VS
25	LOCAL CHECK		93	----	----	----	96	70	10VS
	GRAND MEAN		88.0	36.7	30.2	24.0	93.8	59.4	68.8
	STANDARD ERROR OF GRAND MEAN		0.0				0.4		
	COEFFICIENT OF VARIATION AS PC		1.1				4.1		
	LSD VARIETY MEANS 5 PC		1.3				5.4		

CORRELATIONS

FLOW	DAYS						
STRP	RT.H	-0.22					
LEAF	RUST	0.14	-0.45				
STEM	RUST	0.39	-	0.41			
PLNT	HT	-0.26	-1.43	-0.10	-0.62		
LODG	%	-0.39	0.24	-0.06	-0.40	0.09	
POWD	%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

IRBED
N. KATKHUNDA ET AL

LATITUDE	35 51'N	DATE PLANTED	1/ 2/78	NITROGEN	APPLIED
LONGITUDE	32 32'E	DATE HARVESTED	6/22/78	PHOSPHORUS	APPLIED
ELEVATION	555 M.ABOVE S.L.	AMOUNT OF MOISTURE	429 MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
VERY STRONG, HOT WINDS DURING APRIL AND MAY
NEGLIGIBLE DISEASE DEVELOPMENT. SOME BIRD DAMAGE
LOCAL CHECK: DEIR ALLA 106

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	PLNT HT
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3316	56	81	123	71
25	LOCAL CHECK		3058	58	85	126	83
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	2983	59	82	123	81
8	API-CM67 X MANCHURIA	MEXICO	2933	59	81	122	74
18	CM67-DUSSELL	MEXICO	2541	63	82	124	66
24	DWG1-API(3) X SV.MARI	MEXICO ***	2433	62	69	115	71
7	MEZQUITE-DL.71	MEXICO	2408	56	84	125	70
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2400	60	84	125	75
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	2375	58	84	124	80
23	TEQUILA	MEXICO	2366	60	85	126	63
13	CR115-POR X BEECHER/API-CM67	MEXICO	2316	54	85	125	71
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	2291	58	80	121	71
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2258	58	82	123	91
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2250	54	79	119	58
9	CM67-M66.85	MEXICO	2200	58	84	124	80
10	POR-U.SASK1766	MEXICO	2100	54	87	127	70
19	BDGC-GAINES	MEXICO	2091	59	84	125	63
21	PI2871-MEZQUITE	MEXICO	2008	60	85	125	71
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	1991	54	87	127	51
22	CANDELILLA"S"	MEXICO	1975	54	84	124	71
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	1966	58	83	123	83
1	11012.2-BCO.MR	MEXICO	1908	53	85	126	65
2	CM67 X DS-APRO	MEXICO	1808	56	84	125	64
11	API-CM67 X MINN907	MEXICO	1716	55	91	131	54
16	NUMAR-MEZQUITE	MEXICO	1700	55	83	124	61
	GRAND MEAN		2295.8	57.2	83.1	123.9	70.3
	STANDARD ERROR OF GRAND MEAN		51.6				0.3
	COEFFICIENT OF VARIATION AS PC		22.5				4.2
	LSD VARIETY MEANS 5 PC		727.7				4.1

CORRELATIONS

YIELD	KG/HA				
TEST	WT	0.38			
FLOW	DAYS	-0.34	-0.45		
MAT	DAYS	-0.31	-0.36	0.98	
PLNT	HT	0.44	0.36	-0.22	-0.27

3TH EBYT (NORMAL) TABLE 15 MIDDLE EAST LEBANON BEKA'A VALLEY

TEL AMARA
LEBANESE R.I.
LATITUDE 033 55'N
LONGITUDE 035 28'E
ELEVATION 0950 M.ABOVE S.L.

DATE PLANTED 11/14/77
DATE HARVESTED 6/19/78
AMOUNT OF MOISTURE 750 MM

NITROGEN APPLIED
PHOSPHORUS --
POTASSIUM APPLIED

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD. WEATHER NORMAL.
DISEASE DEVELOPMENT NOT REPORTED. BIRD AND WEED PROBLEMS.
LOCAL CHECK: ORGE PAYS 25

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	MAT DAYS	PLNT HT
25	LOCAL CHECK		2112	154	85
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	1617	156	65
16	NUMAR-MEZQUITE	MEXICO ***	1504	154	65
24	DWG1-API(3) X SV.MARI	MEXICO	1392	155	80
18	CM67-BUSSELL	MEXICO	1392	158	80
10	POR-U.SASK1766	MEXICO	1367	158	65
9	CM67-M66.85	MEXICO	1300	155	70
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	1208	150	85
11	API-CM67 X MINN907	MEXICO	1142	158	55
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	1046	147	75
22	CANDELILLA"S"	MEXICO	908	160	70
2	CM67 X DS-APRO	MEXICO	892	153	55
7	MEZQUITE-DL.71	MEXICO	867	150	60
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	862	148	75
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	800	154	65
8	API-CM67 X MANCHURIA	MEXICO	787	155	80
19	BDGC-GAINES	MEXICO	783	157	70
20	PRO-DZ32.391 X CAL.MR-BEACON	MEXICO	767	157	75
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	696	157	60
13	CR115-POR X DEECHER/API-CM67	MEXICO	683	161	70
1	11012.2-BCO.MR	MEXICO	621	155	60
23	TEQUILA	MEXICO	596	161	75
21	PI2871-MEZQUITE	MEXICO	583	160	60
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	525	155	70
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	492	150	55
	GRAND MEAN		997.6	155.4	68.6
	STANDARD ERROR OF GRAND MEAN		36.7		
	COEFFICIENT OF VARIATION AS PC		36.8		
	LSD VARIETY MEANS 5 PC		517.5		

CORRELATIONS

	YIELD KG/HA	MAT DAYS	PLNT HT
MAT DAYS	-0.21		
PLNT HT	0.37	-0.17	

ALEPPO
CEREAL STAFF

LATITUDE	36 09'N	DATE PLANTED	11/16/77	NITROGEN	APPLIED
LONGITUDE	36 04'E	DATE HARVESTED	6/15/78	PHOSPHORUS	APPLIED
ELEVATION	300 M.ABOVE S.L.	AMOUNT OF MOISTURE	350 MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION POOR.
RAINS CAME EARLY. VERY LITTLE RAINFALL AFTERWARDS.
NEGLIGIBLE DISEASE DEVELOPMENT. INSECT, WEED AND BIRD PROBLEMS NOT REPORTED.
LOCAL CHECK NAME NOT REPORTED.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	MAT DAYS
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2754	149
9	CM67-M66.85	MEXICO	2254	152
23	TEQUILA	MEXICO	2171	151
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2171	148
13	CR115-POR X BEECHER/API-CM67	MEXICO	2154	151
2	CM67 X DS-APRO	MEXICO	2105	152
25	LOCAL CHECK		2069	148
18	CM67-BUSSELL	MEXICO	1819	150
8	API-CM67 X MANCHURIA	MEXICO	1782	149
10	POR-U.SASK1766	MEXICO	1716	150
7	MEZQUITE-DL.71	MEXICO	1602	148
21	PI2871-MEZQUITE	MEXICO	1560	150
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1551	145
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	1532	149
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	1509	148
16	NUMAR-MEZQUITE	MEXICO	1477	150
1	11012.2-BCO.MR	MEXICO	1458	151
22	CANDELILLA*S*	MEXICO	1426	152
24	DWG1-API(3) X SV.MARI	MEXICO	1352	151
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	1305	148
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	1241	148
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1234	149
19	BDGC-GAINES	MEXICO	1217	148
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	1092	145
11	API-CM67 X MINN987	MEXICO	1069	151
	GRAND MEAN		1676.5	149.1

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

CORRELATIONS

	YIELD KG/HA
MAT DAYS	0.28

3TH EBYT (NORMAL) TABLE 17 MIDDLE EAST TURKEY EDIRNE

EDIRNE A.R.I.
N.HAZAR ET AL

LATITUDE	41 40'N	DATE PLANTED	10/20/77	NITROGEN	APPLIED
LONGITUDE	26 34'E	DATE HARVESTED	6/23/78	PHOSPHORUS	APPLIED
ELEVATION	40 M.ABOVE S.L.	AMOUNT OF MOISTURE	402 MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION POOR.
WEATHER NORMAL. BIRD PROBLEMS.
LOCAL CHECK: CUMHURIYET 50

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	LEAF RUST	PLNT HT	POWD %	SPOT BLOT
25	LOCAL CHECK		3600	69	126	80S	85	44	33
10	POP-U.SASK1766	MEXICO	3019	64	115	70S	70	89	22
24	DWG1-API(3) X SV.MARI	MEXICO ***	2566	66	119	70S	70	11	67
8	API-CM67 X MANCHURIA	MEXICO	2531	60	108	80S	100	44	67
23	TEQUILA	MEXICO	2522	57	115	70S	65	33	56
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2516	63	110	60S	80	11	44
18	CM67-BUSSELL	MEXICO	2513	60	115	80S	60	33	22
13	CR115-POR X BEECHER/API-CM67	MEXICO	2491	60	108	60S	75	33	33
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2491	58	113	60S	55	33	78
19	BDGC-GAINES	MEXICO	2491	54	109	80S	70	56	56
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2488	57	110	60S	80	78	22
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2422	58	109	80S	55	33	22
22	CANDELILLA"S"	MEXICO	2394	62	115	70S	70	-	56
9	CM67-M66.85	MEXICO	2388	59	116	80S	75	56	44
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	2281	59	106	60S	75	11	56
7	MEZQUITE-DL.71	MEXICO	2203	56	113	80S	70	89	22
21	PI2871-MEZQUITE	MEXICO	2144	54	108	60S	75	44	22
2	CM67 X DS-APRO	MEXICO	2100	60	119	70S	65	44	33
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	2044	56	109	70S	60	33	22
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2025	58	111	60S	85	44	56
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1928	58	109	70S	75	89	22
16	NUMAR-MEZQUITE	MEXICO	1853	67	109	80S	55	33	22
11	API-CM67 X MINN987	MEXICO	1734	60	115	60S	55	78	44
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	1719	55	111	60S	75	11	56
1	11012.2-BCO.MR	MEXICO	1656	57	109	60S	80	78	22
		GRAND MEAN	2324.6	59.5	112.3	69.2	71.2	46.2	40.0

STANDARD ERROR OF GRAND MEAN	62.1
COEFFICIENT OF VARIATION AS PC	26.7
LSD VARIETY MEANS 5 PC	874.9

CORRELATIONS

YIELD KG/HA					
TEST WT	0.59				
FLOW DAYS	0.53	0.56			
LEAF RUST	0.36	0.26	0.30		
PLNT HT	0.23	0.02	-0.08	-0.10	
POWD %	-0.08	-0.18	0.04	0.12	0.07

LATITUDE 043 00'N
LONGITUDE 080 25'W
ELEVATION 0333 M.ABOVE S.L.

DATE PLANTED 5/ 3/78
DATE HARVESTED 8/10/78
AMOUNT OF MOISTURE 172 MM

NITROGEN APPLIED
PHOSPHORUS APPLIED
POTASSIUM APPLIED

NORMAL SOWING DATE. SOIL MOIST AT SOWING. GERMINATION GOOD.
WEATHER NORMAL.
NO INSECT, WEED OR BIRD PROBLEMS.
LOCAL CHECK: PERTH BARLEY

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	LODG %	POWD %
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3397	54	83	60	0	80
25	LOCAL CHECK		3397	56	86	77	0	0
8	API-CM67 X MANCHURIA	MEXICO	3229	53	85	70	15	80
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3201	53	84	68	5	80
19	BDGC-GAINES	MEXICO	3172	54	84	63	0	80
24	DWG1-API(3) X SV.MARI	MEXICO	3144	55	89	53	0	40
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3116	52	84	64	5	80
22	CANDELILLA"S"	MEXICO	3060	53	84	61	10	70
21	PI2871-MEZQUITE	MEXICO	3004	55	87	63	0	80
2	CM67 X DS-APRO	MEXICO	2976	54	84	55	40	80
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2948	54	85	62	15	80
23	TEQUILA	MEXICO	2892	53	85	57	0	80
6	CM67-U.SASK1660 X PRO-CM67	MEXICO	2892	54	85	67	15	80
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2892	52	84	69	0	80
12	APAM-IG65 X 11012.2/API-CM67..	MEXICO	2836	53	82	52	5	80
18	CM67-BUSSELL	MEXICO	2751	54	86	52	15	70
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2695	54	85	52	10	80
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2667	54	83	73	60	80
13	CR115-POR X BEECHER/API-CM67	MEXICO	2639	55	84	64	0	30
10	POR-U.SASK1766	MEXICO	2639	56	86	60	0	80
9	CM67-M66.85	MEXICO	2639	53	83	64	10	80
7	MEZQUITE-DL.71	MEXICO	2527	54	84	60	5	80
16	NUMAR-MEZQUITE	MEXICO	2190	52	84	45	15	80
11	API-CM67 X MINN907	MEXICO	1993	56	84	46	0	80
1	11012.2-BCO.MR	MEXICO	1320	52	85	49	0	80
	GRAND MEAN		2808.6	53.6	84.5	60.1	9.0	72.4
	STANDARD ERROR OF GRAND MEAN					0.5		
	COEFFICIENT OF VARIATION AS PC					5.5		
	LSD VARIETY MEANS 5 PC					6.0		

CORRELATIONS

YIELD	KG/HA					
FLOW	DAYS	0.16				
MAT	DAYS	0.11	0.46			
PLNT	HT	0.59	0.09	-0.05		
LODG	%	-0.00	-0.10	-0.27	0.16	
POWD	%	-0.25	-0.51	-0.39	-0.30	0.22

3TH EBYT (NORMAL) TABLE 19 NORTH AMERICA MEXICO BAJA CALIFORNIA

MEXICALI
E.V. HERNANDEZ

LATITUDE	31 40'N	DATE PLANTED	12/23/77	NITROGEN	APPLIED
LONGITUDE	114 45'W	DATE HARVESTED	6/15/78	PHOSPHORUS	APPLIED
ELEVATION	25 M.ABOVE S.L.	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
ABNORMAL WEATHER CONDITIONS DURING THE TEST.
INSECT, WEED AND BIRD PROBLEMS NOT REPORTED.
LOCAL CHECK: TLAXCALA.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	LODG %	SHTR %	POWD %	SCLD %
13	CR115-POR X BEECHER/API-CM67	MEXICO	4406	88	125	69	0	0	70	--
18	CM67-BUSSELL	MEXICO	4010	86	126	69	0	0	78	--
16	NUMAR-MEZQUITE	MEXICO	3906	87	125	54	0	0	75	--
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3792	81	120	64	0	30	76	--
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	3719	81	117	54	0	0	73	--
9	CM67-M66.85	MEXICO	3677	98	132	65	0	0	100	--
2	CM67 X DS-APRO	MEXICO	3635	88	125	54	20	0	80	--
8	API-CM67 X MANCHURIA	MEXICO	3625	84	124	71	0	0	93	--
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3531	84	125	73	20	10	88	--
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3510	82	120	64	60	10	95	--
19	BDGC-GAINES	MEXICO	3479	90	134	64	0	0	90	--
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3469	93	117	69	30	0	99	--
22	CANDELILLA"S"	MEXICO	3469	87	123	56	0	0	55	70
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3417	85	122	74	0	0	28	--
7	MEZQUITE-DL.71	MEXICO	3417	86	120	61	0	0	70	--
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO ***	3083	82	121	71	0	0	75	--
23	TEQUILA	MEXICO	3062	90	131	66	0	0	90	80
21	PI2871-MEZQUITE	MEXICO	3052	88	131	63	0	0	75	--
10	POR-U.SASK1766	MEXICO	3031	87	129	58	0	0	88	--
11	API-CM67 X MINN907	MEXICO	3021	93	134	50	0	0	94	--
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2958	85	118	61	40	5	100	--
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2885	82	120	49	40	0	58	--
24	DWG1-API(3) X SV.MARI	MEXICO	2823	87	127	56	0	0	55	--
1	11012.2-BCO.MR	MEXICO	2708	88	127	59	0	0	93	--
25	LOCAL CHECK		2489	88	122	69	20	0	68	--
	GRAND MEAN		3366.9	86.3	124.6	62.4	9.2	2.2	78.5	
	STANDARD ERROR OF GRAND MEAN		61.8		0.4	0.5				
	COEFFICIENT OF VARIATION AS PC		10.4		3.4	7.6				
	LSD VARIETY MEANS 5 PC		871.0		6.0	6.7				

CORRELATIONS

YIELD KG/HA						
FLOW DAYS	-0.07					
MAT DAYS	-0.09	0.81				
PLNT HT	0.22	-0.12	-0.10			
LODG %	-0.18	-0.37	-0.48	-0.05		
SHTR %	0.10	-0.39	-0.27	0.14	0.19	
POWD %	0.11	0.25	0.24	0.03	0.23	0.11

ATIZAPAN
CIMMYT
LATITUDE 019 16'N
LONGITUDE 099 51'W
ELEVATION 2640 M.ABOVE S.L.

DATE PLANTED 6/ 7/77
DATE HARVESTED 10/28/77
AMOUNT OF MOISTURE -- MM

NITROGEN --
PHOSPHORUS --
POTASSIUM --

SOWING DATE AND SOIL MOISTURE CONDITION AT SOWING NOT REPORTED.
WEATHER NOT REPORTED.
INSECT, WEED AND BIRD PROBLEMS NOT REPORTED.
LOCAL CHECK NAME NOT REPORTED.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	MAT DAYS	STRP RT.H	LEAF RUST	PLNT HT	LODG %	POWD %	SCLD %
11	API-CM67 X MINN907	MEXICO	4536	130	40MS-MR	TMR	75	0	50	10
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	4499	115	30MS-MR	80MS-S	90	90	10	10
7	MEZQUITE-DL.71	MEXICO	4386	115	----	20MS	65	15	20	-
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	4322	130	30MS-MR	TMR	80	60	50	-
24	DWG1-API(3) X SV.MARI	MEXICO	4270	115	20MS	20MS	85	50	-	5
9	CM67-M66.85	MEXICO	4231	120	50MS-MR	TMR	95	70	-	20
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	4161	115	5MR	30MR	105	80	20	5
23	TEQUILA	MEXICO	3968	115	20MS	70MS-S	80	5	-	20
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3942	115	10MS	10MR	85	90	-	10
22	CANDELILLA"S"	MEXICO	3921	115	40MS	30MS-MR	95	90	-	5
8	API-CM67 X MANCHURIA	MEXICO	3906	120	20MR-MS	20MR	90	100	20	-
13	CR115-POR X BEECHER/API-CM67	MEXICO	3880	120	----	5MR	90	20	10	10
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	3838	120	50S	10MR	65	0	-	20
19	BDGC-GAINES	MEXICO	3838	120	10MS	60MS-S	50	0	10	10
25	LOCAL CHECK		3729	125	20MS	20MS-MR	95	25	-	10
16	NUMAR-MEZQUITE	MEXICO	3729	115	10MR	10MR	85	100	30	50
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3723	120	----	10MR	90	40	-	60
2	CM67 X DS-APRO	MEXICO	3708	130	30MR	----	75	85	-	-
18	CM67-BUSSELL	MEXICO	3520	120	----	5MR	95	100	-	90
21	PI2871-MEZQUITE	MEXICO	3505	115	10MS	20MS-MR	85	0	-	10
10	POR-U.SASK1766	MEXICO	3480	120	20MS	5MR	85	30	10	40
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	3458	125	30MS	TMS	85	80	-	-
1	11012.2-BCO.MR	MEXICO	3291	120	40KR-MS	10MS-MR	70	10	-	1
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3281	130	20MS	60MS-S	95	40	-	30
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO ***	2973	115	15MR	TR	100	100	-	50
	GRAND MEAN		3843.8	120.0	17.1	15.3	86.0	51.0	23.0	23.3

STANDARD ERROR OF GRAND MEAN 84.7
COEFFICIENT OF VARIATION AS PC 22.0
LSD VARIETY MEANS 5 PC 1193.9

CORRELATIONS

YIELD	KG/HA							
MAT	DAYS	-0.05						
STRP	RT.H	0.17	0.22					
LEAF	RUST	0.16	-0.12	-0.14				
PLNT	HT	-0.20	-0.17	-0.47	0.09			
LODG	%	-0.07	-0.14	-0.33	-0.18	0.50		
POWD	%	0.42	0.79	0.25	-0.58	-0.43	-0.02	
SCLD	%	-0.45	0.04	-0.16	-0.26	0.21	0.40	0.08

3TH EBYT (NORMAL) TABLE 21 NORTH AMERICA MEXICO EDO.DE MEXICO

EL BATAN
CIMMYT

LATITUDE	019 31'N	DATE PLANTED	6/ 6/77	NITROGEN	APPLIED
LONGITUDE	098 50'W	DATE HARVESTED	10/25/77	PHOSPHORUS	APPLIED
ELEVATION	2249 M.ABOVE S.L.	AMOUNT OF MOISTURE	719 MM	POTASSIUM	--

SOWING DATE AND SOIL MOISTURE CONDITION AT SOWING NOT REPORTED. WEATHER NOT REPORTED.
INSECT, WEED AND BIRD PROBLEMS NOT REPORTED.
LOCAL CHECK NAME NOT REPORTED.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT
25	LOCAL CHECK		5270	56	93	90
19	BDGC-GAINES	MEXICO	5161	68	114	80
7	MEZQUITE-DL.71	MEXICO	4895	68	105	75
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	4728	65	113	70
24	DWG1-API(3) X SV.MARI	MEXICO	4661	58	90	80
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	4525	62	95	95
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	4510	56	90	80
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	4504	59	90	85
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	4494	54	85	65
9	CM67-M66.85	MEXICO	4395	58	115	95
1	11012.2-BCO.MR	MEXICO	4307	52	90	60
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	4260	54	85	55
23	TEQUILA	MEXICO	4260	57	110	70
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	3994	68	105	95
11	API-CM67 X MINN907	MEXICO	3932	69	115	55
13	CR115-POR X BEECHER/API-CM67	MEXICO	3796	61	105	85
18	CM67-BUSSELL	MEXICO	3775	54	90	80
8	API-CM67 X MANCHURIA	MEXICO	3708	57	105	80
2	CM67 X DS-APRO	MEXICO	3697	67	120	75
21	PI2871-MEZQUITE	MEXICO ***	3541	67	105	70
22	CANDELILLA"6"	MEXICO	3510	51	90	75
10	POR-U.SASK1766	MEXICO	3463	66	125	75
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3458	67	110	90
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3302	50	110	65
16	NUMAR-MEZQUITE	MEXICO	3109	49	90	65
	GRAND MEAN		4130.2	60.0	101.0	76.4
	STANDARD ERROR OF GRAND MEAN		96.3			
	COEFFICIENT OF VARIATION AS PC		23.3			
	LSD VARIETY MEANS 5 PC		1350.0			

CORRELATIONS

YIELD	KG/HA			
FLOW	DAYS	0.09		
MAT	DAYS	-0.19	0.73	
PLNT	HT	0.22	0.21	0.10

3TH EBYT (NORMAL) TABLE 22 NORTH AMERICA MEXICO GUANAJUATO

CORTAZAR GTO.
IMP. AGR. S.A.

LATITUDE	20 00'N	DATE PLANTED	12/15/77	NITROGEN	APPLIED
LONGITUDE	100 00'W	DATE HARVESTED	4/28/78	PHOSPHORUS	APPLIED
ELEVATION	1700 M.ABOVE S.L.	AMOUNT OF MOISTURE	10 MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. CHEMICAL CONTROL OF INSECTS.
LOCAL CHECK: TLAXCALA

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	LODG %	POWD %	SPOT BLOT
16	NUMAR-MEZQUITE	MEXICO	5430	80	130	85	11	-	-
2	CM67 X DS-APRO	MEXICO	5339	86	128	85	19	-	-
8	API-CM67 X MANCHURIA	MEXICO	4840	76	127	114	11	-	-
7	MEZQUITE-DL.71	MEXICO	4798	86	133	93	4		-
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	4770	81	126	76	14	-	-
13	CR115-POR X BEECHER/API-CM67	MEXICO	4715	82	127	103	13	-	20
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	4687	82	130	100	10	10	-
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	4676	84	127	109	28	-	-
23	TEQUILA	MEXICO	4555	91	138	90	0	11	13
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	4437	82	127	103	8	-	15
10	POR-U.SASK1766	MEXICO	4409	88	138	88	0	-	-
19	BDGC-GAINES	MEXICO	4117	93	141	91	0	-	-
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	4097	76	128	91	41	-	-
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	4062	78	124	86	28	-	-
24	DWG1-API(3) X SV.MARI	MEXICO ***	3958	57	134	89	0	-	22
9	CM67-M66.85	MEXICO	3944	91	134	107	8	-	-
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	3944	80	126	104	11	-	-
25	LOCAL CHECK		3916	87	133	110	5	-	-
18	CM67-BUSSELL	MEXICO	3874	77	127	91	26	-	-
21	PI2871-MEZQUITE	MEXICO	3805	92	141	91	0	-	-
22	CANDELILLA"S"	MEXICO	3722	83	130	91	4	-	-
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	3715	81	121	79	0	5	-
1	11012.2-BCO.MR	MEXICO	3277	82	126	82	29	5	-
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	3194	83	123	90	33	-	40
11	API-CM67 X MINN907	MEXICO	3131	95	138	74	0	50	-
	GRAND MEAN		4216.4	82.0	130.1	92.7	12.0	22.5	19.6
	STANDARD ERROR OF GRAND MEAN		82.5			0.5			
	COEFFICIENT OF VARIATION AS PC		17.0			5.7			
	LSD VARIETY MEANS 5 PC		1174.4			7.4			

CORRELATIONS

YIELD	KG/HA					
FLOW	DAYS	-0.08				
MAT	DAYS	-0.03	0.47			
PLNT	HT	0.22	-0.05	-0.04		
LODG	%	-0.06	-0.28	-0.62	0.03	
POWD	%	-0.54	0.78	0.07	-0.47	-0.42
SPOT	BLOT	-0.91	-0.20	-0.71	-0.25	0.97

3TH ERYT (NORMAL) TABLE 23 NORTH AMERICA MEXICO GUANAJUATO

EL BAJIO
R. URBINA

LATITUDE	020 32'N	DATE PLANTED	12/ 8/77	NITROGEN	APPLIED
LONGITUDE	100 49'W	DATE HARVESTED	5/16/78	PHOSPHORUS	APPLIED
ELEVATION	1765 M.ABOVE S.L.	AMOUNT OF MOISTURE	1015 MM	POTASSIUM	--

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. DISEASE DEVELOPMENT NOT REPORTED.
INSECT, WEED AND BIRD PROBLEMS NOT REPORTED.
LOCAL CHECK: TLAXCALA

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	5567	75	119	70
18	CM67-BUSSELL	MEXICO	5421	71	117	90
2	CM67 X DS-APRO	MEXICO	5359	82	119	80
10	POR-U.SASK1766	MEXICO	5280	85	126	80
13	CR115-POR X BEECHER/API-CM67	MEXICO	5260	76	118	90
25	LOCAL CHECK		5234	75	123	105
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	5223	68	112	90
9	CM67-M66.85	MEXICO	5213	79	121	105
19	BDGC-GAINES	MEXICO	5171	76	120	85
11	API-CM67 X MINN907	MEXICO	5140	89	125	65
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	5124	74	118	95
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	5093	74	114	95
21	PI2871-MEZQUITE	MEXICO	5083	79	125	80
23	TEQUILA	MEXICO	5077	81	129	80
8	API-CM67 X MANCHURIA	MEXICO	4817	73	116	100
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	4775	70	115	80
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	4700	71	114	95
7	MEZQUITE-DL.71	MEXICO	4697	75	120	80
22	CANDELILLA"S"	MEXICO	4666	74	119	90
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	4656	73	216	70
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	4583	75	120	85
24	DWG1-API(3) X SV.MARI	MEXICO	4525	70	120	85
16	NUMAR-MEZQUITE	MEXICO	4510	74	118	70
1	11012.2-BCO.MR	MEXICO	4249	76	121	80
5	CM67-U.SASK1800 X PRO-CM67	MEXICO ***	4182	74	115	85
		GRAND MEAN	4944.4	75.6	123.2	85.2
		STANDARD ERROR OF GRAND MEAN	76.0			
		COEFFICIENT OF VARIATION AS PC	15.4			
		LSD VARIETY MEANS 5 PC	1072.1			

CORRELATIONS

YIELD	KG/HA			
FLOW	DAYS	0.31		
MAT	DAYS	-0.12	0.85	
PLNT	HT	0.13	-0.34	-0.35

MONTERREY
APODACA C.A.E.
LATITUDE 025 05'N
LONGITUDE 100 36'W
ELEVATION 0537 M.ABOVE S.L.

DATE PLANTED 12/17/77
DATE HARVESTED 4/28/78
AMOUNT OF MOISTURE 35 MM

NITROGEN --
PHOSPHORUS --
POTASSIUM --

NORMAL SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
FIRST 3 MONTHS VERY DRY, WITH MODERATE TEMPERATURES,
INCREASING TOWARDS HARVEST TIME. HEAVY APHID ATTACK.
LOCAL CHECK: CALIFORNIA

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT
25	LOCAL CHECK		2954	90	130	10R	80
18	CM67-BUSSELL	MEXICO ***	2500	88	126	40MS	66
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2175	87	123	15R	59
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2018	90	122	10R	57
13	CR115-POR X BEECHER/API-CM67	MEXICO	1983	91	124	15MR	58
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	1943	88	122	40MS	58
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1860	91	123	15R	50
2	CM67 X DS-APRO	MEXICO	1748	95	125	15R	40
9	CM67-M66.85	MEXICO	1665	96	129	45MS	63
8	API-CM67 X MANCHURIA	MEXICO	1658	89	124	80S	63
16	NUMAR-MEZQUITE	MEXICO	1537	94	128	30MR	41
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	1521	90	121	70S	51
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	1518	90	125	25MS	60
24	DWG1-API(3) X SV.MARI	MEXICO	1498	92	127	35MR	46
12	APAM-I865 X 11012.2/API-CM67..	MEXICO	1464	91	121	35MR	39
7	MEZQUITE-DL.71	MEXICO	1342	94	126	35MS	43
1	11012.2-BCO.MR	MEXICO	1303	92	127	25MR	45
17	APRO X PALLAS(5)-JS/CM67...	MEXICO	1205	90	120	50MS	48
22	CANDELILLA"S"	MEXICO	1032	94	125	50MS	44
11	API-CM67 X MINN907	MEXICO	915	99	125	70MS	42
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	874	86	122	45S	60
23	TEQUILA	MEXICO	857	95	127	90S	58
10	POR-U.SASK1766	MEXICO	747	100	128	45S	56
21	PI2871-MEZQUITE	MEXICO	658	97	126	45S	57
19	BDGC-GAINES	MEXICO	562	98	127	70S	56
	GRAND MEAN		1501.5	92.0	124.9	34.9	53.2
	STANDARD ERROR OF GRAND MEAN		29.9				0.3
	COEFFICIENT OF VARIATION AS PC		19.9				4.9
	LSD VARIETY MEANS 5 PC		422.0				3.7

CORRELATIONS

YIELD	KG/HA				
FLOW	DAYS	-0.59			
MAT	DAYS	0.00	0.54		
LEAF	RUST	-0.71	0.29	-0.01	
PLNT	HT	0.41	-0.30	0.25	0.12

3TH EBYT (NORMAL) TABLE 25 SOUTH AMERICA ARGENTINA BUENOS AIRES

BORDENAVE
S.GARBINI

LATITUDE	037 55'S	DATE PLANTED	8/15/77	NITROGEN	--
LONGITUDE	063 01'W	DATE HARVESTED	12/12/77	PHOSPHORUS	--
ELEVATION	0212 M.ABOVE S.L.	AMOUNT OF MOISTURE	-- MM	POTASSIUM	--

LATE SOWING DATE. SOIL MOIST AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. INSECT, WEED AND BIRD PROBLEMS NOT REPORTED.
LOCAL CHECK: CANUMIL INTA

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	PLNT HT	STRP DIS
25	LOCAL CHECK		2241	69	74	107	10MR	79	44
9	CM67-M66.85	MEXICO	2141	59	76	112	30S	73	40
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	2133	60	78	110	40MS	73	32
16	NUMAR-MEZQUITE	MEXICO	2008	57	75	109	30S	59	37
21	PI2871-MEZQUITE	MEXICO	1991	63	79	113	80MS	71	31
22	CANDELILLA"S"	MEXICO	1975	60	77	112	70S	65	30
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	1975	57	72	106	40S	54	33
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1900	62	78	113	20MS	69	39
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	1883	57	74	110	10MS	68	37
8	API-CM67 X MANCHURIA	MEXICO	1866	59	73	109	40MS	71	35
19	BDGC-GAINES	MEXICO	1858	63	78	111	80MS	69	29
2	CM67 X DS-APRO	MEXICO	1816	59	81	112	20S	50	36
11	API-CM67 X MINN907	MEXICO ***	1783	57	80	111	70S	51	35
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1783	63	75	111	20MS	66	43
13	CR115-POR X BEECHER/API-CM67	MEXICO	1750	57	79	113	30S	71	32
23	TEQUILA	MEXICO	1733	59	76	109	80MS	61	32
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	1733	52	72	108	50MS	55	29
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	1716	59	76	110	30MR	75	32
7	MEZQUITE-DL.71	MEXICO	1575	56	81	115	70S	64	32
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	1525	58	73	109	40MS	56	29
18	CM67-BUSSELL	MEXICO	1475	62	68	110	40MS	59	49
24	DMG1-API(3) X SV.MARI	MEXICO	1442	60	77	114	60S	61	37
10	POR-U.SASK1766	MEXICO	1283	60	82	113	80S	69	35
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	1183	61	79	113	70MS	69	36
1	11012.2-BCO.MR	MEXICO	1150	56	73	112	40S	58	31
	GRAND MEAN		1756.8	59.4	76.1	110.7	40.7	64.6	34.9
	STANDARD ERROR OF GRAND MEAN		26.8	0.1				0.6	
	COEFFICIENT OF VARIATION AS PC		15.3	2.4				8.6	
	LSD VARIETY MEANS 5 PC		370.4	2.0				7.9	

CORRELATIONS

YIELD	KG/HA						
TEST	WT	0.27					
FLOW	DAYS	-0.05	0.06				
MAT	DAYS	-0.42	0.00	0.68			
LEAF	RUST	-0.43	-0.16	0.20	0.37		
PLNT	HT	0.30	0.57	0.15	0.14	-0.23	
STRP	DIS	0.09	0.52	-0.30	-0.06	-0.52	0.15

LAS VEGAS
J.MAYORGA

LATITUDE	033 51'S	DATE PLANTED	8/25/77	NITROGEN	APPLIED
LONGITUDE	070 41'W	DATE HARVESTED	1/ 5/78	PHOSPHORUS	APPLIED
ELEVATION	0039 M.ABOVE S.L.	AMOUNT OF MOISTURE	156 MM	POTASSIUM	--

LATE SOWING DATE. SOIL MOIST AT SOWING. GERMINATION GOOD.
RAINY WEATHER FROM APRIL TO AUGUST. CLOUDY DURING THE SPRING.
SOME INSECT PROBLEMS.
LOCAL CHECK: HAGER 1.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	LEAF RUST	STEM RUST	PLNT HT	POWD %	SPOT BLOT	BYDV
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1102	64	59	56	30	75	90	60	80
25	LOCAL CHECK		1026	68	71	31	30	80	25	65	80
2	CM67 X DS-APRO	MEXICO	966	59	53	94	-	60	75	65	80
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	957	63	59	63	40	76	95	85	75
16	NUMAR-MEZQUITE	MEXICO ***	889	62	52	63	20	58	75	85	80
9	CM67-M66.85	MEXICO	886	63	62	75	-	68	85	85	105
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	850	61	52	50	25	69	90	85	85
8	API-CM67 X MANCHURIA	MEXICO	849	59	57	81	0	73	65	65	95
18	CM67-BUSSELL	MEXICO	796	68	58	63	-	72	65	75	70
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	789	60	56	31	40	77	80	95	90
7	MEZQUITE-DL.71	MEXICO	780	56	63	94	20	64	75	90	80
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	755	59	54	94	20	61	55	100	90
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	717	63	55	75	33	80	80	70	95
13	CR115-POR X BEECHER/API-CM67	MEXICO	711	61	61	44	-	79	55	90	90
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	692	61	60	94	47	86	60	100	115
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	677	59	59	88	25	62	80	95	105
24	DWG1-API(3) X SV.MARI	MEXICO	652	68	57	69	25	61	35	90	95
10	FOR-U.SASK1766	MEXICO	603	57	62	88	20	66	85	90	95
19	BDGC-GAINES	MEXICO	579	58	63	100	50	70	50	90	90
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	555	56	55	75	20	50	50	70	90
11	API-CM67 X MINN907	MEXICO	549	55	63	75	-	62	90	85	100
23	TEQUILA	MEXICO	529	58	57	94	30	62	35	85	80
21	PI2871-MEZQUITE	MEXICO	457	59	63	100	20	66	50	75	95
22	CANDELILLA"S"	MEXICO	379	57	58	94	20	60	20	80	90
1	11012.2-BCO.MR	MEXICO	293	58	56	100	50	70	80	80	95
		GRAND MEAN	721.4	60.3	58.5	75.5	31.3	68.4	65.0	82.2	89.8
		STANDARD ERROR OF GRAND MEAN	10.2	0.1				0.2			
		COEFFICIENT OF VARIATION AS PC	14.2	2.0				2.4			
		LSD VARIETY MEANS 5 PC	144.5	1.7				2.3			

CORRELATIONS

YIELD	KG/HA								
TEST	WT	0.55							
FLOW	DAYS	0.01	0.11						
LEAF	RUST	-0.58	-0.57	-0.09					
STEM	RUST	-0.15	0.13	0.14	-0.02				
PLNT	HT	0.24	0.41	0.31	-0.34	0.58			
POWD	%	0.33	-0.11	-0.24	-0.12	0.15	0.18		
SPOT	BLOT	-0.29	-0.22	-0.03	0.16	0.30	-0.02	0.05	
BYDV		-0.40	-0.27	0.12	0.33	0.11	0.12	0.05	0.39

3TH EBYT (NORMAL) TABLE 27 SOUTH AMERICA PERU LIMA

LA MOLINA
C.LLOSA
LATITUDE 012 05'S
LONGITUDE 076 57'W
ELEVATION 2251 M.ABOVE S.L.

DATE PLANTED 9/ 2/77
DATE HARVESTED 1/10/78
AMOUNT OF MOISTURE -- MM

NITROGEN --
PHOSPHORUS --
POTASSIUM --

LATE SOWING DATE. SOIL DRY AT SOWING. GERMINATION GOOD.
WEATHER NORMAL. NEGLIGIBLE DISEASE DEVELOPMENT.
NO INSECT, WEED OR BIRD PROBLEMS. LOCAL CHECK: PARTICIPACION

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	LODG %
18	CM67-BUSSELL	MEXICO	2510	55	94	72	40
25	LOCAL CHECK		2508	72	104	53	0
21	PI2871-MEZQUITE	MEXICO	2230	64	94	75	20
19	BDGC-GAINES	MEXICO	2214	64	92	70	40
24	DWG1-API(3) X SV.MARI	MEXICO	2159	59	100	57	0
13	CR115-POR X BEECHER/API-CM67	MEXICO	2150	68	100	65	0
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2080	65	102	73	30
8	API-CM67 X MANCHURIA	MEXICO	1963	60	94	59	0
22	CANDELILLA"S"	MEXICO	1863	61	96	68	0
7	MEZQUITE-DL.71	MEXICO	1810	64	97	64	0
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	1761	62	95	69	10
2	CM67 X DS-APRO	MEXICO ***	1723	69	98	54	0
9	CM67-M66.85	MEXICO	1713	66	93	68	30
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	1628	55	92	61	75
23	TEQUILA	MEXICO	1544	58	96	65	30
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	1505	62	94	74	0
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1491	59	94	71	0
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1439	63	94	65	5
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	1433	57	95	68	0
10	POR-U.SASK1766	MEXICO	1411	69	93	57	20
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	1379	63	94	67	25
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	1284	54	95	50	0
1	11012.2-BCO.MR	MEXICO	1157	57	96	58	30
11	API-CM67 X MINN987	MEXICO	1037	70	95	45	0
16	NUMAR-MEZQUITE	MEXICO	933	55	95	54	0
	GRAND MEAN		1717.1	61.9	95.7	63.0	14.2
	STANDARD ERROR OF GRAND MEAN		45.4			0.8	
	COEFFICIENT OF VARIATION AS PC		26.4			8.4	
	LSD VARIETY MEANS 5 PC		640.0			11.0	

CORRELATIONS

YIELD	KG/HA				
FLOW	DAYS	0.25			
MAT	DAYS	0.40	0.38		
PLNT	HT	0.40	-0.14	-0.21	
LODG	%	0.14	-0.25	-0.36	0.28

Table 28. REGION I. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Locations: Constantine, ALGERIA; Kafr el Sheikh, EGYPT; Tripoli, LIBYA .)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	STEM RUST	PLNT HT	POWD %	NET BLOT
25	LOCAL CHECK		3786	55	95	140	34	42	63	31	3
9	CM67-M66.85	MEXICO	3231	50	98	143	68	43	58	29	0
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3184	56	84	128	44	35	61	45	6
13	CR115-POR X BEECHER/API-CM67	MEXICO	3154	54	89	139	23	12	64	19	11
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3123	52	80	140	17	39	54	25	19
24	DWG1-API(3) X SV.MARI	MEXICO	3035	59	86	143	15	0	72	17	28
8	API-CM67 X MANCHURIA	MEXICO	3022	56	84	146	34	22	62	18	8
16	NUMAR-MEZQUITE	MEXICO	3021	48	88	140	22	20	56	22	6
18	CM67-BUSSELL	MEXICO	3002	59	89	144	31	14	65	30	6
10	POR-U.SASK1766	MEXICO	2927	54	89	139	40	47	57	45	6
7	MEZQUITE-DL.71	MEXICO	2919	46	86	138	26	11	60	39	30
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	2909	52	83	130	47	35	76	28	14
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	2816	53	86	140	29	13	58	32	30
22	CANDELILLA"S"	MEXICO	2812	57	88	139	45	17	65	29	30
23	TEQUILA	MEXICO	2775	53	95	143	42	27	56	27	8
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2753	54	85	138	17	5	74	35	17
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2669	57	85	139	42	22	64	32	17
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2659	53	83	138	38	16	59	19	3
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2643	57	85	137	56	25	58	42	22
11	API-CM67 X MINN907	MEXICO	2599	51	98	142	39	32	62	30	17
1	11012.2-BCO.MR	MEXICO	2595	49	88	142	54	16	62	31	8
2	CM67 X DS-APRO	MEXICO	2564	50	90	138	40	42	57	33	0
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2552	51	82	138	34	22	42	28	28
19	BDGC-GAINES	MEXICO	2411	53	90	141	32	26	59	14	3
21	PI2871-MEZQUITE	MEXICO	2406	52	89	140	34	27	62	29	3
	SUMMARY MEANS OVER VARIETIES		2862.7	53.2	87.6	139.2	35.9	24.3	60.0	29.0	12.9
	NUMBER OF LOCATIONS FOR EACH VARIABLE		3	1	2	1	2	2	2	2	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		9	4	8	4	5	5	5	5	4

Table 29. REGION II. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Locations: Rift Valley, KENYA; Khartoum, SUDAN .)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT.H	LEAF RUST	STEM RUST	PLNT HT
9	CM67-M66.85	MEXICO	3821	67	100	10	15	8	78
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3819	62	97	3	.	0	77
13	CR115-POR X BEECHER/API-CM67	MEXICO	3754	67	101	1	18	8	83
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3721	73	102	1	2	0	77
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3523	67	103	2	45	1	84
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3513	61	95	1	16	1	89
18	CM67-BUSSELL	MEXICO	3446	73	107	3	3	0	81
16	NUMAR-MEZQUITE	MEXICO	3431	64	99	5	3	0	76
8	API-CM67 X MANCHURIA	MEXICO	3419	64	99	3	63	0	89
2	CM67 X DS-APRO	MEXICO	3316	73	107	9	3	0	63
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	3296	62	93	3	3	0	79
10	POR-U.SASK1766	MEXICO	3294	70	106	2	5	4	75
25	LOCAL CHECK		3294	71	107	1	6	0	79
22	CANDELILLA"S"	MEXICO	3025	63	98	5	28	10	77
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2944	61	94	20	18	0	56
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2823	69	104	1	33	0	75
1	11012.2-BCO.MR	MEXICO	2762	70	106	6	15	1	65
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2748	65	102	8	42	1	83
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2744	64	99	6	20	0	88
24	DWG1-API(3) X SV.MARI	MEXICO	2640	70	106	1	8	1	74
23	TEQUILA	MEXICO	2638	73	108	5	6	1	78
7	MEZQUITE-DL.71	MEXICO	2381	72	106	3	48	0	78
19	BDGC-GAINES	MEXICO	2290	71	104	5	53	7	74
11	API-CM67 X MINN907	MEXICO	2240	72	107	40	43	1	70
21	PI2871-MEZQUITE	MEXICO	1815	75	108	2	48	1	77
	SUMMARY MEANS OVER VARIETIES		3067.5	68.0	102.3	5.8	21.9	1.8	76.7
	NUMBER OF LOCATIONS FOR EACH VARIABLE		2	1	1	1	1	1	2
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		8	4	4	4	4	2	8

Table 30. REGION III. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Location: Orange Free State, SOUTH AFRICA.)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	STEM RUST	PLNT HT
7	MEZQUITE-DL.71	MEXICO	4417	58	67	5	59
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	4010	56	65	20	72
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3870	58	65	10	71
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3784	57	66	20	70
24	DWG1-API(3) X SV.MARI	MEXICO	3619	59	66	1	58
19	BDGC-GAINES	MEXICO	3588	61	67	1	67
10	POR-U.SASK1766	MEXICO	3559	56	71	30	63
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3463	54	66	5	75
21	PI2871-MEZQUITE	MEXICO	3361	62	67	5	66
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3336	52	62	1	52
9	CM67-M66.85	MEXICO	3264	57	62	10	69
22	CANDELILLA"S"	MEXICO	3148	57	62	5	58
2	CM67 X DS-APRO	MEXICO	3036	50	68	20	49
23	TEQUILA	MEXICO	2937	59	64	5	58
25	LOCAL CHECK		2890	64	65	30	67
11	API-CM67 X MINN907	MEXICO	2855	52	71	30	45
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	2786	51	61	1	56
13	CR115-POR X BEECHER/API-CM67	MEXICO	2736	51	67	10	69
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2719	62	63	1	69
16	NUMAR-MEZQUITE	MEXICO	2585	49	60	20	46
8	API-CM67 X MANCHURIA	MEXICO	2434	54	58	5	60
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2343	50	59	20	56
18	CM67-BUSSELL	MEXICO	2301	59	54	30	58
1	11012.2-BCO.MR	MEXICO	1658	52	60	1	44
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	1312	52	61	0	40
	SUMMARY MEANS OVER VARIETIES		3042.4	55.7	63.9	11.4	59.9
	NUMBER OF LOCATIONS FOR EACH VARIABLE		1	1	1	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		4	4	4	1	4

Table 31. REGION IV. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Locations: Dacca, BANGLADESH; Delhi, INDIA.)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT.H	PLNT HT	LODG %	1000 G.W.	NET BLOT	SPOT BLOT
13	CR115-POR X BEECHER/API-CM67	MEXICO	4813	84	115	30	95	0	40	22	59
10	POR-U.SASK1766	MEXICO	4808	86	121	10	74	0	39	25	63
22	CANDELILLA"S"	MEXICO	4687	78	115	[illegible]	86	0	34	28	74
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	4648	80	116	60	92	5	38	14	71
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	4617	84	116	50	97	3	46	28	67
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	4501	73	113	80	67	0	31	36	71
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	4487	76	114	40	98	5	38	22	60
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	4427	78	113	70	81	10	35	25	63
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	4426	77	113	60	91	43	43	22	63
23	TEQUILA	MEXICO	4367	91	122	60	84	0	31	33	52
8	API-CM67 X MANCHURIA	MEXICO	4285	83	115	70	98	0	40	22	60
7	MEZQUITE-DL.71	MEXICO	4154	82	114	10	82	3	37	28	71
19	BDGC-GAINES	MEXICO	4119	87	118	80	85	0	30	19	59
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	4092	75	112	1	84	43	41	22	71
21	PI2871-MEZQUITE	MEXICO	3958	87	118	100	84	0	34	22	45
9	CM67-M66.85	MEXICO	3797	94	120	80	100	10	36	17	33
18	CM67-BUSSELL	MEXICO	3532	88	119	20	93	20	49	22	44
2	CM67 X DS-APRO	MEXICO	3499	88	117	70	75	10	34	25	56
16	NUMAR-MEZQUITE	MEXICO	3406	85	116	80	76	0	37	30	63
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3277	82	115	0	74	28	32	22	52
24	DWG1-API(3) X SV.MARI	MEXICO	3222	83	118	0	73	0	41	28	67
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	3145	82	113	30	90	0	35	22	56
1	11012.2-BCO.MR	MEXICO	2882	90	118	70	72	0	26	33	71
25	LOCAL CHECK		2865	79	112	0	97	3	34	26	71
11	API-CM67 X MINN907	MEXICO	2834	90	120	100	72	0	27	25	56
	SUMMARY MEANS OVER VARIETIES		3953.7	83.0	115.9	47.6	84.6	7.3	36.3	24.7	60.7
	NUMBER OF LOCATIONS FOR EACH VARIABLE		2	2	2	1	2	1	1	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		8	5	5	1	5	4	1	4	3

Table 32. REGION V. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Locations: Zaragoza, SPAIN; Alentejo, PORTUGAL.)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT.H	LEAF RUST	PLNT HT	LODG %	POWD %	SCLD %	BYDV
2	CM67 X DS-APRO	MEXICO	4303	38	129	179	30	30	70	0	71	0	10
18	CM67-BUSSELL	MEXICO	4132	41	128	181	0	28	89	16	46	78	-
10	POR-U.SASK1766	MEXICO	3994	39	134	184	0	57	85	6	84	67	-
13	CR115-POR X BEECHER/API-CM67	MEXICO	3874	40	134	184	0	30	89	12	52	0	5
9	CM67-M66.85	MEXICO	3681	43	136	184	10	37	93	19	77	89	-
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3551	38	125	178	-	17	84	29	59	67	5
7	MEZQUITE-DL.71	MEXICO	3547	34	131	183	20	69	82	0	84	44	6
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	3465	37	131	182	0	31	93	20	78	44	-
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3342	43	127	179	20	72	93	6	73	78	-
24	DWG1-API(3) X SV.MARI	MEXICO	3338	45	127	186	-	41	80	0	45	89	-
8	API-CM67 X MANCHURIA	MEXICO	3235	42	124	176	10	45	100	12	77	67	10
25	LOCAL CHECK		3262	42	142	191	0	60	91	6	45	78	-
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	3225	44	126	177	4	25	85	12	76	11	5
23	TEQUILA	MEXICO	3199	42	134	184	0	36	83	9	50	89	5
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3195	44	130	182	10	52	91	12	93	56	-
16	NUMAR-MEZQUITE	MEXICO	3076	42	130	181	-	3	67	9	89	78	10
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2952	38	125	175	-	58	73	3	69	89	5
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2797	38	122	175	10	40	67	0	56	0	-
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	2740	42	124	173	-	53	81	9	78	33	5
19	BDGC-GAINES	MEXICO	2577	35	133	185	0	58	85	6	50	89	6
21	PI2871-MEZQUITE	MEXICO	2550	36	131	182	-	58	83	9	56	89	5
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	2532	42	124	177	-	60	98	19	62	56	-
11	API-CM67 X MINN907	MEXICO	2418	36	136	185	80	36	74	3	84	67	5
22	CANDELILLA"S"	MEXICO	2328	37	132	182	0	31	83	16	46	89	5
1	11012.2-BCO.MR	MEXICO	2105	38	132	185	10	57	76	3	84	11	9
	SUMMARY MEANS OVER VARIETIES		3178.5	39.8	129.6	180.9	11.8	43.1	83.6	9.4	67.0	58.3	6.4
	NUMBER OF LOCATIONS FOR EACH VARIABLE		2	1	2	2	1	2	2	1	2	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		8	4	8	8	1	5	8	4	5	1	4

Table 33. REGION VI. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Locations: Gorgan, IRAN; Beka'a Valley, LEBANON; Bet Dagan, ISRAEL; Laxia, CYPRUS; Irbed, JORDAN; Aleppo, SYRIA; Edirne, TURKEY.)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT.R	LEAF RUST	STEM RUST	PLNT HT	LODG %	SHTR %	POWD %	SPOT BLOT
25	LOCAL CHECK		3054	64	103	150	-	30	1	89	35	42	21	33
18	CM67-BUSSELL	MEXICO	2801	62	95	151	-	39	0	79	57	48	42	22
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	2617	60	93	159	-	43	4	83	89	33	21	44
23	TEQUILA	MEXICO	2568	59	101	153	-	57	5	79	0	35	51	56
16	NUMAR-MEZQUITE	MEXICO	2531	61	95	150	-	53	0	72	15	28	47	22
24	DWG1-API(3) X SV.MARI	MEXICO	2499	64	99	149	-	64	0	78	0	39	28	67
13	CR115-POR X BEECHER/API-CM67	MEXICO	2471	57	95	153	-	45	0	84	38	26	28	33
8	API-CM67 X MANCHURIA	MEXICO	2445	60	92	150	30	68	0	92	38	37	52	67
9	CM67-M66.85	MEXICO	2441	59	101	151	30	62	15	86	35	33	51	44
2	CM67 X DS-APRO	MEXICO	2382	58	99	151	-	70	0	71	65	31	38	33
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	2371	57	92	150	-	75	0	77	40	30	40	22
10	POR-U.SASK1766	MEXICO	2346	59	101	152	-	47	0	74	0	32	63	22
19	BDGC-GAINES	MEXICO	2325	57	98	151	-	59	0	77	0	29	54	56
7	MEZQUITE-DL.71	MEXICO	2299	56	97	149	50	80	6	77	29	29	62	22
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2299	56	93	149	-	70	0	67	0	28	40	78
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	2257	59	94	147	-	57	6	86	27	35	71	22
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2248	56	95	151	-	52	0	71	35	33	31	22
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	2243	59	92	149	-	47	0	84	34	31	38	56
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2187	57	94	148	-	59	15	88	12	35	41	56
5	CM67-U.SASK1820 X PRO-CM67	MEXICO	2174	59	96	151	-	53	12	86	77	40	42	56
22	CANDELILLA"S"	MEXICO	2159	58	98	152	-	53	0	80	32	27	49	56
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2150	58	95	150	-	40	0	88	44	27	63	22
21	PI2871-MEZQUITE	MEXICO	2040	57	98	152	-	57	5	79	0	30	47	22
11	API-CM67 X MINN907	MEXICO	1893	58	104	153	-	54	25	68	0	30	65	44
1	11012.2-BCO.MR	MEXICO	1849	55	96	151	-	55	25	74	0	28	67	22
	SUMMARY MEANS OVER VARIETIES		2346.0	58.4	96.6	150.5	36.7	55.6	4.7	79.5	27.9	32.7	46.1	40.0
	NUMBER OF LOCATIONS FOR EACH VARIABLE		6	2	5	4	1	3	2	6	2	1	3	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		21	2	11	9	1	6	5	12	5	1	6	1

Table 34. REGION VII. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Location: Ontario, CANADA .)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	LODG %	POWD %
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3397	54	83	60	0	80
25	LOCAL CHECK		3397	56	86	77	0	0
8	API-CM67 X MANCHURIA	MEXICO	3229	53	85	70	15	80
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3201	53	84	68	5	80
19	BDGC-GAINES	MEXICO	3172	54	84	63	0	80
24	DWG1-API(3) X SV.MARI	MEXICO	3144	55	89	53	0	40
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3116	52	84	64	5	80
22	CANDELILLA"S"	MEXICO	3060	53	84	61	10	70
21	PI2871-MEZQUITE	MEXICO	3004	55	87	63	0	80
2	CM67 X DS-APRO	MEXICO	2976	54	84	55	40	80
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2948	54	85	62	15	80
23	TEQUILA	MEXICO	2892	53	85	57	0	80
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	2892	54	85	67	15	80
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2892	52	84	69	0	80
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	2836	53	82	52	5	80
18	CM67-BUSSELL	MEXICO	2751	54	86	52	15	70
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2695	54	85	52	10	80
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2667	54	83	73	60	80
13	CR115-POR X BEECHER/API-CM67	MEXICO	2639	55	84	64	0	30
10	POR-U.SASK1766	MEXICO	2639	56	86	60	0	80
9	CM67-M66.85	MEXICO	2639	53	83	64	10	80
7	MEZQUITE-DL.71	MEXICO	2527	54	84	60	5	80
16	NUMAR-MEZQUITE	MEXICO	2190	52	84	45	15	80
11	API-CM67 X MINN907	MEXICO	1993	56	84	46	0	80
1	11012.2-BCO.MR	MEXICO	1320	52	85	49	0	80
	SUMMARY MEANS OVER VARIETIES		2808.6	53.8	84.6	60.2	9.0	72.4
	NUMBER OF LOCATIONS FOR EACH VARIABLE		1	1	1	1	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		2	2	2	2	2	2

Table 35. REGION VIII. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL

(Location: Baja California, MEXICO; Atizapan and El Batan, MEXICO; Celaya and El Bajio, GUANAJUATO.)
Nuevo León, MEXICO.)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT.H	LEAF RUST	PLNT HT	LODG %	SHTR %	POWD %	SPOT BLOT	SCLD %
13	CR115-POR X BEECHER/API-CM67	MEXICO	4067	80	120	-	4	83	11	0	40	20	10
25	LOCAL CHECK		3932	79	121	16	7	92	17	0	68	-	10
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3932	74	113	18	74	74	39	30	43	-	10
7	MEZQUITE-DL.71	MEXICO	3922	82	120	-	17	70	6	0	45	-	-
2	CM67 X DS-APRO	MEXICO	3914	84	125	12	2	68	41	0	80	-	-
9	CM67-M66.85	MEXICO	3854	84	125	30	10	88	26	0	100	-	20
18	CM67-BUSSELL	MEXICO	3850	75	118	-	9	81	42	0	78	-	90
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	3789	77	116	-	8	84	16	0	28	15	60
8	API-CM67 X MANCHURIA	MEXICO	3759	76	119	12	38	86	37	0	57	-	-
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3730	80	122	18	2	79	33	0	53	-	-
19	BDGC-GAINES	MEXICO	3721	85	126	8	63	78	0	0	50	-	10
16	NUMAR-MEZQUITE	MEXICO	3704	77	118	4	5	67	37	0	53	-	50
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3673	74	115	6	4	79	67	10	95	-	50
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	3669	78	120	16	70	88	29	10	88	-	30
20	PRO-D202.391 X CAL.MR-BEACON	MEXICO	3632	79	118	2	12	88	30	0	48	-	5
23	TEQUILA	MEXICO	3630	83	125	16	79	74	0	0	51	13	20
24	DWG1-API(3) X SV.MARI	MEXICO	3623	73	119	16	14	74	17	0	55	22	5
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	3612	77	118	8	21	66	48	0	58	-	10
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	3609	76	130	50	12	60	0	0	39	-	20
11	API-CM67 X MINN907	MEXICO	3446	89	128	24	20	60	0	0	65	-	10
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	3423	79	119	24	2	75	51	5	100	40	-
10	POR-U.SASK1766	MEXICO	3403	85	128	16	44	74	10	0	49	-	40
22	CANDELILLA"S"	MEXICO	3387	78	117	32	25	75	31	0	55	-	5
21	PI2871-MEZQUITE	MEXICO	3274	85	124	8	40	74	0	0	75	-	10
1	11012.2-DCO.MR	MEXICO	3189	78	119	24	18	66	13	0	49	-	1
	SUMMARY MEANS OVER VARIETIES		3667.3	79.4	120.8	17.1	23.8	76.1	24.1	2.2	60.8	22.0	23.3
	NUMBER OF LOCATIONS FOR EACH VARIABLE		6	5	6	1	2	6	3	1	3	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		23	14	15	1	5	15	6	1	9	3	1

Table 36. REGION IX. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Locations: Lima, PERU .)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	PLNT HT	LODG %
18	CM67-BUSSELL	MEXICO	2510	55	94	72	40
25	LOCAL CHECK		2508	72	104	53	0
21	PI2871-MEZQUITE	MEXICO	2230	64	94	75	20
19	BDGC-GAINES	MEXICO	2214	64	92	70	40
24	DWG1-API(3) X SV.MARI	MEXICO	2159	59	100	57	0
13	CR115-POR X BEECHER/API-CM67	MEXICO	2150	68	100	65	0
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2080	65	102	73	30
8	API-CM67 X MANCHURIA	MEXICO	1963	60	94	59	0
22	CANDELILLA"S"	MEXICO	1863	61	96	68	0
7	MEZQUITE-DL.71	MEXICO	1810	64	97	64	0
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	1761	62	95	69	10
2	CM67 X DS-APRO	MEXICO	1723	69	98	54	0
9	CM67-M66.85	MEXICO	1713	66	93	68	30
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	1628	55	92	61	75
23	TEQUILA	MEXICO	1544	58	96	65	30
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	1505	62	94	74	0
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1491	59	94	71	0
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1439	63	94	65	5
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	1433	57	95	68	0
10	POR-U.SASK1766	MEXICO	1411	69	93	57	20
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	1379	63	94	67	25
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	1284	54	95	50	0
1	11012.2-BCO.MR	MEXICO	1157	57	96	58	30
11	API-CM67 X MINN907	MEXICO	1037	70	95	45	0
16	NUMAR-MEZQUITE	MEXICO	933	55	95	54	0
	SUMMARY MEANS OVER VARIETIES		1717.0	62.0	95.7	63.3	14.2
	NUMBER OF LOCATIONS FOR EACH VARIABLE		1	1	1	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		4	4	2	2	2

Table 37. REGION X. Summary for yield, agronomic and disease data for the 3rd EBYT-NORMAL.

(Locations: Buenos Aires, ARGENTINA; Santiago, Huelquen, CHILE.)

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	LEAF RUST	STEM RUST	PLNT HT	POWD %	STRP DIS	SPOT BLOT	BYDV
25	LOCAL CHECK		1634	69	73	107	18	32	80	25	44	65	80
9	CM67-M66.85	MEXICO	1514	61	69	112	52	-	71	85	40	85	105
16	NUMAR-MEZQUITE	MEXICO	1449	60	64	109	38	20	59	75	37	85	80
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	1443	64	67	111	35	30	71	90	43	60	80
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	1429	63	69	113	41	40	73	95	39	85	75
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	1425	62	67	110	54	33	77	80	32	70	95
2	CM67 X DS-APRO	MEXICO	1391	59	67	112	61	-	55	75	36	65	80
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	1367	59	63	110	28	25	69	90	37	85	85
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	1365	58	63	106	76	20	58	55	33	100	90
8	API-CM67 X MANCHURIA	MEXICO	1358	59	65	109	64	0	72	65	35	65	95
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	1253	60	66	110	23	40	76	80	32	95	90
13	CR115-POR X BEECHER/API-CM67	MEXICO	1231	59	70	113	35	-	75	55	32	90	90
21	PI2871-MEZQUITE	MEXICO	1224	61	71	113	82	20	69	50	31	75	95
19	BDGC-GAINES	MEXICO	1219	61	71	111	89	50	70	50	29	90	90
7	MEZQUITE-DL.71	MEXICO	1178	56	72	115	87	20	64	75	32	90	80
22	CANDELILLA"S"	MEXICO	1177	59	68	112	76	20	63	20	30	80	90
11	API-CM67 X MINN907	MEXICO	1166	56	72	111	62	-	57	90	35	85	100
12	APAM-IB65 X 11012.2/API-CM67..	MEXICO	1144	54	64	108	55	20	53	50	29	70	90
18	CM67-BUSSELL	MEXICO	1136	65	63	110	49	-	66	65	49	75	70
23	TEQUILA	MEXICO	1131	59	67	109	78	30	62	35	32	85	80
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	1101	59	66	109	65	25	59	80	29	95	105
24	DWG1-API(3) X SV.MARI	MEXICO	1047	64	67	114	66	25	61	35	37	90	9[illegible]
10	POR-U.SASK1766	MEXICO	943	59	72	113	74	20	68	85	35	90	[illegible]
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	938	61	70	113	75	47	78	60	36	100	1[illegible]
1	11012.2-BCO.MR	MEXICO	722	57	65	112	82	50	68	80	31	80	95
	SUMMARY MEANS OVER VARIETIES		1239.1	59.9	67.4	110.9	58.3	28.3	66.6	65.8	35.0	82.2	89.8
	NUMBER OF LOCATIONS FOR EACH VARIABLE		2	2	2	1	2	1	2	1	1	1	1
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		8	8	8	4	8	4	8	4	4	4	4

Table 38.

MEAN OVER ALL LOCATIONS FOR YIELD, AGRONOMIC AND DISEASE DATA FOR THE THIRD ELITE BARLEY YIELD TRIAL-NORMAL.

VAR NO.	VARIETY OR CROSS	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT.H	LEAF RUST	STEM RUST	PLNT HT	LODG %	SHTR %	1000 G.W.	POWD %	NET BLOT	STRP DIS	SPOT BLOT	SCLD %	BYDV
25	LOCAL CHECK		3238	61	89	130	4	28	17	84	14	21	34	31	15	44	56	44	80
13	CR115-POR X BEECHER/API-CM67	MEXICO	3200	54	86	130	10	28	8	80	13	14	40	37	17	32	51	5	48
18	CM67-BUSSELL	MEXICO	3114	59	83	129	10	29	11	77	37	24	49	49	14	49	47	84	70
9	CM67-M66.85	MEXICO	3104	56	89	131	32	42	10	82	24	17	36	63	9	40	54	55	105
15	BAL.16-PRO X APAM-DWARF II...	MEXICO	3063	56	80	124	39	59	11	72	27	30	35	53	16	33	62	22	48
8	API-CM67 X MANCHURIA	MEXICO	3023	56	81	128	25	52	5	84	24	19	40	55	15	35	64	67	53
2	CM67 X DS-APRO	MEXICO	3009	53	88	131	30	44	16	65	34	16	34	56	13	36	51	0	45
4	DS(2)-APRO X CM67(CM67/APRO...	MEXICO	3003	54	80	126	3	25	11	76	51	22	41	52	13	37	67	59	45
6	CM67-U.SASK1800 X PRO-CM67	MEXICO	3003	57	84	129	23	38	14	79	21	18	38	66	22	39	59	56	75
14	BAL.16-MZQ/M67.18-M14 X DS...	MEXICO	2987	56	81	125	21	39	16	84	17	16	38	50	18	32	50	58	95
7	MEZQUITE-DL.71	MEXICO	2975	52	86	129	21	55	8	72	9	15	37	62	29	32	61	44	43
10	POR-U.SASK1766	MEXICO	2960	55	89	133	7	40	20	71	6	16	39	65	16	35	58	54	95
23	TEQUILA	MEXICO	2908	55	88	132	20	54	14	73	5	18	31	47	21	32	52	55	43
24	DWG1-API(3) X SV.MARI	MEXICO	2894	60	83	130	6	39	5	72	6	20	41	34	28	37	62	47	95
16	NUMAP-MEZQUITE	MEXICO	2881	54	83	128	30	27	12	66	18	14	37	60	18	37	57	64	45
3	NEPAL842-APAM X CM67-U.SASK...	MEXICO	2871	56	84	120	24	61	18	84	23	23	46	56	23	36	74	54	115
5	CM67-U.SASK1800 X PRO-CM67	MEXICO	2825	58	83	127	23	31	16	77	42	23	43	63	22	43	55	11	43
19	BDGC-GAINES	MEXICO	2804	55	83	131	23	59	18	75	6	15	30	51	11	29	69	50	48
20	PRO-DZ02.391 X CAL.MR-BEACON	MEXICO	2791	54	84	127	10	25	12	85	22	14	35	61	20	32	58	25	90
17	APRO X PALLAS(5)-J5/CM67...	MEXICO	2788	53	82	128	3	40	17	66	37	17	32	50	21	29	55	50	55
22	CANDELILLA"S"	MEXICO	2778	55	84	128	14	45	11	74	20	14	34	44	29	30	70	47	48
12	APAM-I865 X 11012.2/API-CM67..	MEXICO	2743	52	80	130	40	40	11	59	1	14	31	47	32	29	73	10	90
21	PI2671-MEZQUITE	MEXICO	2569	55	88	131	37	53	13	75	4	15	34	51	13	31	47	50	50
11	API-CM67 X MINN907	MEXICO	2421	52	92	133	61	43	24	61	0	15	27	66	21	35	62	39	53
1	11012.2-BCO.MR	MEXICO	2273	52	84	130	28	50	19	67	9	14	26	63	21	31	58	6	52
	SUMMARY MEANS OVER VARIETIES		2089.0	55.1	84.7	129.1	21.3	42.2	13.8	74.4	18.8	17.5	36.3	53.2	18.0	35.0	58.8	42.0	65.0
	NUMBER OF LOCATIONS FOR EACH VARIABLE		26	7	22	19	5	12	7	25	9	2	1	12	2	1	4	2	2
	NUMBER OF OBSERVATIONS FOR EACH VARIABLE		95	22	68	52	8	33	17	69	23	2	1	31	8	4	11	2	8