

INTERNATIONAL NURSERY REPORT

CEREALS NURSERIES 1980 - 81

Regional Yield Trials and
Preliminary Observation Nurseries



International Center for Agricultural Research in the Dry Areas
ICARDA

**International Nurseries Report
Cereals Nurseries
1980/81**

**REGIONAL YIELD TRIALS
and
PRELIMINARY OBSERVATION NURSERIES
(April 1981)**

**International Center for Agricultural Research in the Dry Areas
P.O.Box 5466
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REGIONAL YIELD TRIALS AND PRELIMINARY OBSERVATION

NURSERIES REPORT, 1980-81.

The Preliminary Report for 1980/81 was distributed in January 1982, and contained the results of the nurseries that we received before Oct. 10, 1981. After that date more data were received, and are included in this Final Report of the Regional Yield Trials and Preliminary Observation Nurseries, 1980-81.

The results are presented and discussed in more detail than in the Preliminary Report, and we hope that this will provide useful information to the cooperators.

I am thankful to Dr. R.E. Nix, who in spite of his commitments to the durum wheat improvement program worked very hard to interpret the results and prepare and check the manuscript. The hard work of Miss Sonia Sultan in analysis and compilation of the data, and of Miss Rita Nalbandian for typing the manuscript, is acknowledged.

We like to thank the cooperating scientists, who not only selected material for use in their own breeding programs, but also made the effort to report their data. Because of this, many other cooperators can profit from their results.

J.P. Srivastava
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Key to abbreviations used in the tables:

D	:	Durum wheat	
B	:	Barley	
Bw	:	Breadwheat	
Tcl	:	Triticale	
DH	:	Days to heading	
DM	:	Days to maturity	
Pl.Ht	:	Plant height in cm	
Wt 1000K	:	1000 Kernel Weight	
Prot. %	:	Protein content in percentage	
YR	:	Yellow Rust	: Puccinia striiformis
LR	:	Leaf Rust	: Puccinia recondita
SR	:	Stem Rust	: Puccinia graminis
PM	:	Powdery Mildew	: Erysiphe graminis
St	:	Septoria	: Septoria tritici
NB	:	Net Blotch	: Pyrenophora teres
Sc	:	Scald	: Rhynchosporium secalis
SB	:	Spot Blotch	: Cochliobolus sativus
A.C.I.	:	Average Coefficient of Infection	
R	:	Rank number of the entry's average yield over the locations.	
FR	:	(Frequency), in the Regional Yield Trials it means number of locations where the line was among the ten highest yielding entries; in the Observation Nurseries it means number of locations where the line was considered promising.	

n.a. : Information not available
CV : Coefficient of Variation as Percentage
LSD : Least Significant Difference (at 5% level)

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LOCATIONS OF THE DIFFERENT NURSERIES FROM WHICH DISEASE
DATA WERE UTILIZED.

1. Regional Wheat Yield Trial:

- Yellow Rust : AFGHANISTAN, Darul-Aman, Shisham-Bagh; AUSTRALIA, Castle Hill; EGYPT, Gemmeiza; FRANCE, Le Rheu; IRAN, Gorgan; KENYA, Njoro; LEBANON, Kfardan; PAKISTAN, Faisalabad, Pirsabak.
- Leaf Rust : AUSTRALIA, Castle Hill; BANGLADESH, Jessore, Joydebpur; EGYPT, Gemmeiza, Sakha; FRANCE, Le Rheu; GREECE, Thessaloniki; LEBANON, Terbol; MEXICO, Ciano; PAKISTAN, Faisalabad, Pirsabak; YEMEN, Taiz.
- Stem Rust : AUSTRALIA, Castle Hill; BANGLADESH, Joydebpur; EGYPT, Bahtim, Gemmeiza, Sakha; GREECE, Thessaloniki; KENYA, Njoro; SUDAN, New Halfa; YEMEN, Taiz.
- Powdery Mildew : FRANCE, Le Rheu; GREECE, Thessaloniki; IRAN, Gorgan; SPAIN, Cogullada, Borjas Blancas, Madrid.
- Septoria : Spain, Madrid.

2. Regional Barley Yield Trial:

- Yellow Rust : CYPRUS, Athalassa; KENYA, Nakuru.
- Leaf Rust : CYPRUS, Athalassa; GREECE, Thessaloniki; LEBANON, Kfardan; MEXICO, Sta. Maria; SPAIN, Cogullada; YEMEN, Taiz.

- Stem Rust : YEMEN, Taiz.
- Powdery Mildew : CYPRUS, Athalassa; FRANCE, Montpellier; GREECE, Thessaloniki; LEBANON, Kfardan; SPAIN, Cogullada; SYRIA, Tel Hadya.
- Scald : CYPRUS, Athalassa; GREECE, Thessaloniki; KENYA, Nakuru; MEXICO, Sta. Maria.
- Net Blotch : BANGLADESH, Rajbari; CYPRUS, Athalassa; KENYA, Nakuru.
- Spot Blotch : BANGLADESH, Rajbari; KENYA, Nakuru.

3. Regional Rainfed Wheat Yield Trial:

- Yellow Rust : LEBANON, Kfardan; PAKISTAN, Islamabad; TURKEY, Diyarbakir.
- Leaf Rust : BANGLADESH, Ishurdi, Jamalpur; GREECE, Thessaloniki; IRAQ, Arbil; LEBANON, Kfardan, Terbol; NEPAL, Bhairahwa; TURKEY, Diyarbakir.
- Stem Rust : BANGLADESH, Jamalpur; GREECE, Thessaloniki; NEPAL, Bhairahwa.
- Powdery Mildew : GREECE, Thessaloniki; SPAIN, Cogullada.
- Septoria : SYRIA, Tel Hadya.

LOCATIONS FOR THE REGIONAL YIELD TRIALS

1980-81

<u>No.</u>	<u>Country</u>	<u>Location</u>
1	AFGHANISTAN	Bulkh
2	AFGHANISTAN	Darul-Aman
3	AFGHANISTAN	Shisham-Bagh
4	ALGERIA	Khroub
5	ALGERIA	Setif
6	AUSTRALIA	Castle Hill
7	BANGLADESH	Ishurdi
8	BANGLADESH	Rajbari
9	BANGLADESH	Jessore
10	BANGLADESH	Jamalpur
11	BANGLADESH	Jodebpur
12	CYPRUS	Athalassa
13	CYPRUS	Laxia
14	ETIOPIA	Nazareth
15	EGYPT	Bahtim
16	EGYPT	Gemmeiza
17	EGYPT	Sakha
18	EGYPT	Sids
19	FRANCE	Le Rheu
20	FRANCE	Montpellier
21	GREECE	Thessaloniki
22	IRAN	Gorgan
23	IRAN	Karaj
24	IRAQ	Arbil
25	IRAQ	Dohuk
26	IRAQ	Hammam Al-Alile
27	ITALY	Casaccia
28	JORDAN	Marrow
29	JORDAN	Mshakar
30	JORDAN	Rabbah

Cont'd:

<u>No.</u>	<u>Country</u>	<u>Location</u>
31	JORDAN	Ramtha
32	KENYA	Nakuru
33	KENYA	Njoro
34	S. KOREA	Jeonnon
35	S. KOREA	Muan
36	LEBANON	Beka'a
37	LEBANON	Kfardan
38	LEBANON	Tel Amara
39	LEBANON	Terbol
40	LIBYA	Al-Marj
41	LIBYA	El-Sarir
42	LIBYA	Tajoura
43	MEXICO	Ciano
44	MEXICO	Sta. Maria
45	NEPAL	Bhairahwa
46	PAKISTAN	Faisalabad
47	PAKISTAN	Islamabad
48	PAKISTAN	Pirsabak
49	PORTUGAL	Elvas
50	QATAR	Rabat El Faras
51	SAUDI ARABIA	Dirab
52	SAUDI ARABIA	Riyadh
53	SAUDI ARABIA	Taif
54	SPAIN	Borjas Blancas
55	SPAIN	Cogullada
56	SPAIN	Madrid
57	SUDAN	New Halfa
58	SUDAN	Gezira
59	SYRIA	Aleppo-Tel Hadya
60	SYRIA	Izraa
61	TANZANIA	Anusha
62	TUNISIA	Beja
63	TUNISIA	Hindi Zitoun
64	TURKEY	Diyarbakir
65	YEMEN ARAB REPUBLIC	Taiz

ELEVENTH REGIONAL BARLEY YIELD TRIAL

The Eleventh Regional Barley Yield Trial (11th RBYT) consisted of 20 barley lines, 2 triticales lines and a durum line included for comparison as well as the national check of each location. The data were received from 26 locations.

Entry no. 3 ER/Apm had the highest mean yield over locations, and ranked among the top ten lines in 20 out of 26 locations. The line Ky63-1294 ranked second and was among the ten highest yielding lines in 18 out of 26 locations.

Agronomic Traits

There was a large genetic diversity for most of the agronomic characters under study. The average days to head varied from 103 for entry no.9 CN42/3/CI 7772...to 123 for entry no.20, SV66344/Inis, while the days to mature varied from 144 for entry no.9 to 153 for entry no.19, Emir/Nordgard 265. Entry no.7, CI 8887/CI 5761 and entry no.19, Emir/Nordgard 265 had the shortest post anthesis period (33 days) while entry no.15, Fun/H 45//PI36... had the longest period between heading and maturity. The average plant height varied from 67 cm (entry no.10) to 93 (entry nos.1 and 14).

The protein percentage varied from 12.52 for ER/Apm (entry no.3) to 15.5 for CN42/3/CI 17772... (entry no.9) while the 1000 Kernel weight varied from 19.1 for M67.18/M14/516 (entry no.18) to 45.4 for Minn 126/CM67 (entry no.2). Only entry no.2, Minn 126/CM67 had both a high protein percentage and a high Kernel weight.

Disease Resistance

All entries included in the 11th RBYT were each resistant or moderately resistant to two or more diseases.

Resistant to five diseases : entry nos. 4 and 9.

Resistant to four diseases : entry nos. 3, 6, 8, 12, 13 and 17.

Resistant to three diseases : entry nos. 2, 5, 14, 15, 16 and 18.

Eleventh Regional Barley Yield Trial (1980-81)
Overall Performance of Varieties (26 locations*)

Table 1:

Entry No.	Variety or Cross and Pedigree	Yield kg/ha	R	FR	DH	DM	Pl.Ht	Prot. %	Wt1000 Kernels
1	Beecher	3849	9	13	109	151	93	12.78	36.5
2	Minn 126/CM67	3940	5	12	107	149	77	14.34	45.4
3	ER/Apm	4345	1	21	106	147	68	12.52	39.8
4	Api/CM67 CMB 72-60-500Y-502B-503Y-502B-0Y	3506	19	5	110	148	71	14.29	25.1
5	WI 2198	3682	15	10	105	145	71	13.00	38.2
6	CI 8887/CI 5761 SEA 13-20S-1S-0S	3848	10	10	114	152	78	14.48	35.1
7	CI 8887/CI 5761 SEA 13-34S-5S-0S	3423	20	6	120	153	82	15.28	38.7
8	CARINA	3960	4	12	118	153	78	14.30	29.5
9	CN42/3/CI 7772/Run//Fun/Tch/4/Fun/5/Ki 11-11694-2B-Bulk-7N-4N	3692	14	8	103	144	73	15.54	26.1
10	M69.69/Apm-RL	3882	7	8	110	148	67	11.88	29.3
11	Ky63-1294	4090	2	18	106	145	82	15.08	27.2
12	Api/CM67//Mzq CMB 73A-367-13B-1Y-0B	3695	13	10	106	146	68	13.23	26.5

Table 1: (Cont'd)

Entry No.	Variety or Cross and Pedigree	Yield kg/ha	R	FR	DH	DM	Pl.Ht	Prot. %	Wt1000 Kernels
13	Menuet	3867	8	12	116	152	76	13.78	32.9
14	CI 7207/011i (10Cr.268-21-2)	3632	17	11	107	149	93	13.09	28.1
15	Fun/H45//P136/Fun/3/Avt//Nor/92Winn/4/Cer/2*Pro-6L	3421	22	8	105	148	87	13.56	31.1
16	Arizona 5908/Aths CYB 8-16A-1A-2A-2A-0A	3602	18	12	105	146	74	14.41	37.0
17	Masurka	3786	11	7	116	154	82	15.05	31.2
18	M67.18/M14//5106 CMB 73A-448-1B-1Y-1B-1Y-0B	3423	21	8	111	150	69	13.25	18.1
19	Emir/Nordgard 265, Ca 3239	3924	6	13	122	155	76	14.29	33.3
20	SV 66344/Inis, Ca 12551	3654	16	8	123	153	75	13.72	31.5
21	Beagle (TCL)	3705	12	12	114	156	110	-	-
22	Navajoa (TCL)	3415	23	7	112	155	89	-	-
23	Cimarron//Sari Bursa/7113 (Durum)	3001	24	4	125	153	73	-	-
24	National check	3980	3	16	117	154	83	-	-

Grand Mean: 3573

CV : 19.2

LSD 5%: 939

*: Yield data out of (24 locations); FR out of (25 locations); DH out of (26 locations);
DM out of (20 locations); Pl.Ht out of (23 locations).

Table 2: Diseases for the Regional Barley Yield Trial.

Entry No.	Variety or Cross and Pedigree	A.C.I			PM 6Loc.	Sc 4Loc.	NB 3Loc.	SB 2Loc.
		YR 2Loc.	LR 6Loc.	SR 1Loc.				
1	Beecher	16	22	30	4	1	1	2
2	Minn 126/CM67	33	24	70	2	6	1	1
3	ER/Apm	13	44	70	4	2	1	1
4	Api/CM67 CMB 72-60-500Y-502B-503Y-502B-0Y	8	19	70	2	3	1	1
5	WI 2198	9	26	90	3	2	1	2
6	CI 8887/CI 5761 SEA 13-20S-1S-0S	6	12	60	2	2	1	2
7	CI 8887/CI 761 SEA 13-34S-5S-0S	15	13	90	2	3	3	2
8	CARINA	25	5	70	2	3	2	1
9	CN42/3/CI7772/Fun//Fun/Tch/4/Fun/5/Ki 11-11694-2B-Bulk-7N-4N	11	6	4	3	2	1	1
10	M69.69/Apm-RL	16	25	10	5	3	0	1
11	Ky63-1294	19	11	80	3	1	1	2
12	Api/CM67//Mzq CMB 73A-367-13B-1Y-0B	18	3	60	7	1	0	1

Table 2: (Cont'd)

Entry No.	Variety or Cross and Pedigree	A.C.I			PM 6Loc.	Sc 4Loc.	NB 3Loc.	SB 2Loc.
		YR 2Loc.	LR 6Loc.	SR 1Loc.				
13	Menuet	0	3	50	3	3	2	1
14	CI 7207/011i (10Cr 268-21-2)	8	47	80	5	1	1	3
15	Fun/H45//P136/Fun/3/Avt//Nor/92Winn /4/Cer/2*Pro-6L	6	15	80	3	2	2	2
16	Arizona 5908/Aths CYB 8-16A-1A-2A-2A-0A	20	13	60	2	3	1	1
17	Masurka	4	3	60	2	3	1	2
18	M67.18/M14//5106 CMB 73A-448-1B-1Y-1B-1Y-0B	6	7	10	8	2	1	1
19	Emir/Nordgard 265, Ca3239	2	14	8	2	3	3	2
20	SV 66344/Inis, Ca12551	12	9	10	3	3	3	1
21	Beagle (TCL)	0	0	1	1	0	1	-
22	Navajoa (TCL)	1	1	8	0	0	1	-
23	Cimarron//Sari Bursa/7113 (Durum)	0	24	90	0	0	1	-
24	National check	7	8	40	3	4	3	1

REGIONAL BARLEY YIELD TRIAL 1980-81

ASIA

AFGHANISTAN

BULKH

Dr. M.Nasir Mohib

Bulkh Agricultural Research Station

Date Planted Nov./11/1980

Date Harvested May/31/1981

Rainfall 162 mm

Latitude 36.42 N

Longitude 76.0 E

Elevation 378 m

Local check AS-54

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR	PM
1	5523 4	141	236	100	0	0	0	0
2	5080 8	146	235	90	0	0	0	0
3	5680 2	140	228	75	0	0	0	0
4	4716 11	139	230	80	0	0	0	0
5	4663 13	145	224	75	0	0	0	0
6	3113 24	145	228	60	0	0	0	0
7	3695 21	155	224	95	0	0	0	0
8	4229 18	143	227	80	0	0	0	0
9	4529 16	131	236	75	0	0	0	0
10	4531 15	139	238	76	0	0	0	0
11	4735 10	140	228	75	0	0	0	0
12	4614 14	140	228	60	0	0	0	0
13	3438 22	147	232	85	0	0	0	0
14	5369 5	131	243	100	0	0	0	0
15	5210 6	134	239	85	0	0	0	0
16	5574 3	140	234	80	0	0	0	0
17	4320 17	143	232	85	0	0	0	0
18	3430 23	137	238	60	0	0	0	0
19	3868 19	142	234	65	0	0	0	0
20	3701 20	145	234	75	0	0	0	0
21	5166 7	141	240	120	0	0	0	0
22	4830 9	141	241	95	0	0	0	0
23	4705 12	155	233	60	0	0	0	0
24	5919 1	140	236	85	0	0	0	0

Grand Mean : 4609

Co-efficient of variation : 17.7

LSD Variety means : 1152

REGIONAL BARLEY YIELD TRIAL 1980-81

AFRICA

ALGERIA

SETIF

IDGC

Agricultural Research Station

Date Planted Dec./13/1980

Date Harvested June/26/1981

Rainfall 342 mm

Latitude 36.9 N

Longitude 5.21 E

Elevation 1000 m

Local check Tichedrett

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	658 20	-	-	-
2	879 12	-	-	-
3	642 21	-	-	-
4	733 18	-	-	-
5	750 17	-	-	-
6	1450 1	-	-	-
7	1167 4	-	-	-
8	1375 2	-	-	-
9	800 15	-	-	-
10	925 10	-	-	-
11	717 19	-	-	-
12	758 16	-	-	-
13	983 7	-	-	-
14	917 11	-	-	-
15	600 22	-	-	-
16	550 23	-	-	-
17	1004 6	-	-	-
18	867 14	-	-	-
19	1200 3	-	-	-
20	958 8	-	-	-
21	875 13	-	-	-
22	933 9	-	-	-
23	458 24	-	-	-
24	1042 5	-	-	-

Grand Mean : 885

Co-efficient of variation : 36.3

LSD Variety means : 452

REGIONAL BARLEY YIELD TRIAL 1980-81

ASIA BANGLADESH RAJBARI

Dr. Abu Hena Talukder
Rajbari, Agricultural Research Station

Date Planted	Dec./6/1980	Date Harvested	March/24/1981	Rainfall	184 mm
Latitude	25.9 N	Longitude	88.5 E	Elevation	8 m
Local check	Pairst				

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	SB
1	4568 11	77	121	92	3
2	7252 2	65	113	86	2
3	4455 12	72	110	72	1
4	4145 14	68	109	76	2
5	3068 17	69	110	72	2
6	5272 9	79	116	78	1
7	1533 23	87	123	79	2
8	4822 10	84	125	59	2
9	7828 1	58	105	71	1
10	5608 8	69	110	68	1
11	5633 7	70	113	82	2
12	2898 20	72	116	62	1
13	5880 6	85	121	74	2
14	0 24	82	124	81	3
15	2567 21	72	121	90	2
16	4347 13	76	118	69	2
17	6932 3	80	117	89	2
18	3020 18	83	121	80	1
19	3993 15	84	116	79	2
20	2094 22	87	123	73	2
21	6595 4	77	113	117	2
22	6297 5	67	111	95	2
23	2953 19	108	131	79	2
24	3587 16	66	95	87	2

Grand Mean : 4389
Co-efficient of variation : 26.4
LSD Variety means : 1632

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

CYPRUS

ATHALASSA

Dr. A.Hadjichristodoulou
Agricultural Research Institute

Date Planted Jan./1/1981

Date Harvested May/15/1981

Rainfall 335 mm

Latitude 35.8 N

Longitude 33.24 E

Elevation 150 m

Local check Roho

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	PM	Sc	NB
1	6344 2	92	-	125	0	35 S	TR	3/15	TR
2	4581 20	94	-	110	5 S	10 S	2/ 5	8/80	3/TR
3	5745 7	89	-	95	5 S	10 S	2/ 5	6/70	2/TR
4	5331 12	99	-	100	0	20 S	TR	7/60	TR
5	5512 10	89	-	100	5 S	5 MS	TR	6/50	2/TR
6	5008 16	104	-	110	0	20 S	TR	4/ 5	TR
7	4373 21	109	-	110	0	20 S	TR	7/80	3/10
8	4239 22	107	-	105	0	5 MS	2/ 5	7/80	TR
9	5278 13	89	-	95	5 S	15 S	TR	5/ 3	2/ 5
10	4660 19	100	-	85	0	30 S	TR	4/45	TR
11	5882 5	99	-	115	5 S	20 S	TR	4/45	TR
12	5213 14	99	-	105	20 S	5 MS	5/20	TR	TR
13	4825 17	107	-	110	0	10 MS	TR	6/50	TR
14	5845 6	96	-	140	0	60 S	9/15	4/35	TR
15	6199 3	88	-	120	0	40 S	2/TR	4/20	2/ 5
16	5574 9	88	-	100	0	35 S	TR	6/60	TR
17	3921 24	106	-	115	0	10 MS	2/ 5	7/65	TR
18	6766 1	91	-	100	0	20 S	9/30	3/ 5	TR
19	5179 15	108	-	120	0	25 S	2/ 5	6/30	3/TR
20	4701 18	108	-	120	0	20 S	2/ 5	6/30	3/ 5
21	6009 4	93	-	145	0	0	0	0	0
22	5427 11	93	-	115	0	0	0	0	0
23	4176 23	115	-	90	0	5 MS	0	0	0
24	5599 8	88	-	105	5 S	10 MR	TR	6/20	TR

Grand Mean : 5266
Co-efficient of variation : 13.6
LSD Variety means : 1012

REGIONAL BARLEY YIELD TRIAL 1980-81

AFRICA

ETHIOPIA

NAZARETH

Dr. F.Alemayehu

Holetta, Agricultural Research Station

Date Planted Oct./7/1980

Date Harvested n.a

Rainfall 316 mm

Latitude 8.22 N

Longitude 39.06 E

Elevation 1550 m

Local check EH 11/F3.A.1.B.L

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	1000gr. Wt
1	n.a	59	95	90	28
2	-	57	83	60	43
3	-	45	75	45	43
4	-	57	83	45	25
5	-	45	75	40	49
6	-	68	93	70	34
7	-	68	93	75	32
8	-	65	93	80	30
9	-	56	82	55	27
10	-	57	82	50	24
11	-	57	82	70	32
12	-	55	82	50	31
13	-	68	93	65	27
14	-	61	89	50	25
15	-	59	85	55	26
16	-	55	77	50	33
17	-	68	91	80	30
18	-	68	87	50	25
19	-	74	95	50	30
20	-	74	98	60	27
21	-	63	95	95	27
22	-	50	91	70	29
23	-	59	98	55	20
24	-	-	-	-	-

Grand Mean :

Co-efficient of variation :

LSD Variety means :

REGIONAL BARLEY YIELD TRIAL 1980-81

EUROPE

FRANCE

MONTPELLIER

Dr. J.Chery

Plant Breeding - Lavalette

Date Planted Nov./ 4/1980

Date Harvested June/25/1981

Rainfall 574 mm

Latitude 43.37 N

Longitude 1.33 E

Elevation 49 m

Local check Alpha

Variety
No.

Yield
kg/ha

DH

DM

Pl.Ht

PM

1	n.a	166	n.a	100	7
2	-	172	-	80	1
3	-	167	-	80	8
4	-	174	-	80	3
5	-	166	-	80	7
6	-	172	-	90	2
7	-	183	-	100	3
8	-	182	-	95	3
9	-	169	-	80	7
10	-	171	-	70	8
11	-	170	-	95	7
12	-	168	-	65	9
13	-	180	-	90	4
14	-	164	-	105	7
15	-	166	-	95	5
16	-	179	-	80	1
17	-	171	-	100	1
18	-	185	-	80	9
19	-	185	-	95	1
20	-	168	-	95	1
21	-	168	-	120	1
22	-	180	-	95	1
23	-	171	-	75	1
24	-	167	-	85	5

Grand Mean :

Co-efficient of variation :

LSD Variety means :

REGIONAL BARLEY YIELD TRIAL 1980-81

EUROPE

GREECE

THESSALONIKI

Dr. Elpis Skorda

Cereal Institute

Date Planted Nov./27/1980

Date Harvested June/26/1981

Rainfall 180 mm

Latitude 40.38 N

Longitude 22.57 E

Elevation 10 m

Local check Georgi

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	PM	Sc
1	6308 13	135	n.a	125	25 MR	83	0
2	6904 10	139	-	110	60 MR	21	76
3	8654 1	139	-	90	70 MR	72	0
4	5827 17	142	-	95	20 MR	31	0
5	6019 16	135	-	90	40 MR	31	0
6	7019 9	144	-	100	5 MR	21	0
7	7038 8	146	-	90	0	41	0
8	7577 5	148	-	90	5 MR	21	0
9	7173 6	134	-	90	20 MR	52	0
10	5654 18	142	-	85	40 MR	75	41
11	7135 7	138	-	110	15 MR	41	0
12	6173 14	133	-	80	5 MR	85	0
13	8538 2	148	-	100	5 MR	21	51
14	6577 12	137	-	120	70 MR	52	0
15	4231 23	134	-	120	10 MR	53	0
16	5462 19	133	-	105	50 MR	0	0
17	6788 11	144	-	110	10 MR	31	0
18	5269 20	140	-	100	5 MR	86	0
19	6135 15	148	-	105	40 MR	31	0
20	8115 3	151	-	95	20 MR	52	0
21	4442 22	145	-	135	0	0	0
22	4596 21	142	-	105	0	0	0
23	3558 24	157	-	80	0	0	0
24	8000 4	151	-	100	0	41	76

Grand Mean : 6383

Co-efficient of variation : 14.1

LSD Variety means : 1270

REGIONAL BARLEY YIELD TRIAL 1980-81

ASIA IRAN KARAJ

Dr. Nasser Banisadr
Karaj, Central Research Station

Date Planted	Oct./14/1980	Date Harvested	June/30/1981	Rainfall	250 mm
Latitude	50.35 N	Longitude	58.50 E	Elevation	1300 m
Local check	n.a				

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	PM
1	6558 15	101	165	85	-
2	6275 20	102	165	70	-
3	8075 8	101	165	65	-
4	6425 17	105	165	70	-
5	9133 2	99	165	70	-
6	7100 12	101	165	85	-
7	6150 21	108	165	100	-
8	7158 10	110	171	95	-
9	6917 13	103	172	90	-
10	8150 5	109	169	85	3-5
11	8142 7	103	165	85	-
12	6675 14	101	165	70	3
13	7150 11	109	167	90	-
14	5992 22	101	169	85	TR
15	6283 19	101	166	85	-
16	4792 24	101	165	70	-
17	8317 4	101	169	90	-
18	7242 9	103	165	70	7
19	10258 1	110	167	95	-
20	8150 6	109	165	85	-
21	4967 23	110	174	120	-
22	6533 16	109	174	95	-
23	6333 18	112	173	85	-
24	9133 3	108	165	80	-

Grand Mean : 7162
Co-efficient of variation : 15.0
LSD Variety means : 1517

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

IRAQ

ARBIL

Dr. A.H. Ismaeel

Arbil, Applied Agricultural Research Section

Date Planted Nov./9/1980

Date Harvested May/25/1981

Rainfall 454 mm

Latitude 36.11 N

Longitude 44.0 E

Elevation 414 m

Local check Arrivat

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	Sc	NB
1	1833 19	146	185	95	R	1	-
2	2208 10	139	178	75	O	9	9
3	2792 4	142	180	70	R	9	3
4	1875 17	150	183	60	R	9	5
5	1583 22	144	181	70	O	7	7
6	1350 23	156	191	65	MR	5	3
7	2017 12	157	194	70	R	5	-
8	2575 5	158	192	65	R	7	-
9	1058 24	140	178	65	R	9	-
10	2050 11	147	185	60	MR	5	9
11	1967 13	139	178	70	O	3	3
12	4058 1	147	184	75	R	9	-
13	1858 18	153	187	65	R	3	3
14	1808 20	146	181	105	MR	7	3
15	1958 14	142	181	95	R	9	3
16	2333 8	142	181	85	R	9	7
17	1650 21	156	181	70	R	3	9
18	3142 2	147	181	60	MR	5	-
19	2500 6	160	192	65	R	7	3
20	1917 15	157	195	65	R	-	3
21	2350 7	156	202	110	3 MR	-	-
22	1917 16	157	199	90	3 MR	-	-
23	2283 9	167	189	75	3 MS	-	-
24	2892 3	154	199	90	1 MR	-	-

Grand Mean : 2212

Co-efficient of variation : 22.1

LSD Variety means : 691

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

IRAQ

DOHUK

Dr. Y.E.Warda

Dohuk, Applied Agricultural Research Station

Date Planted Nov./21/1980

Date Harvested June/27/1981

Rainfall 704 mm

Latitude 33 N

Longitude 47 E

Elevation 480 m

Local check Arrivat

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3583 4	144	179	88
2	2806 19	144	179	78
3	3356 7	143	178	62
4	2889 15	150	185	65
5	2861 16	144	179	67
6	2944 12	154	189	67
7	2333 24	154	189	75
8	3989 1	151	186	70
9	3194 9	143	178	71
10	2944 13	155	190	53
11	3428 5	146	181	82
12	3167 10	143	178	67
13	2339 23	154	189	65
14	3667 3	139	175	85
15	3222 8	139	175	102
16	3867 2	139	175	72
17	2633 21	154	189	74
18	2939 14	144	179	70
19	2850 17	155	190	66
20	2789 20	151	186	75
21	3156 11	144	179	105
22	2589 22	148	183	83
23	2839 18	155	190	77
24	3378 6	143	178	86

Grand Mean : 3073

Co-efficient of variation : 15.7

LSD Variety means : 682

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

JORDAN

RABBAH

Dr. N. Katkhuda

Rabbah Agricultural Station

Date Planted Nov./16/1980

Date Harvested June/15/1981

Rainfall 381 mm

Latitude 35.16 N

Longitude 35.45 E

Elevation 920 m

Local check Deir Alla 106

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3879 1	102	140	110
2	2613 17	101	140	75
3	3354 3	101	138	60
4	2921 13	106	138	60
5	3758 2	100	138	75
6	2642 16	113	138	75
7	2500 20	113	140	65
8	2533 19	114	140	65
9	3017 8	100	138	75
10	2563 18	114	141	60
11	3196 6	102	138	95
12	2796 14	100	139	75
13	2983 9	115	140	70
14	2938 12	101	139	115
15	2983 10	100	138	105
16	3208 5	99	138	85
17	2733 15	113	142	75
18	2237 23	102	158	70
19	3350 4	113	143	60
20	2979 11	108	143	65
21	2250 22	110	141	70
22	1842 24	110	141	70
23	2329 21	108	141	70
24	3158 7	108	139	85

Grand Mean : 2865

Co-efficient of variation : 17.9

LSD Variety means : 722

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

JORDAN

RAMTHA

Dr. N. Katkhuda

Ramtha Agricultural Station

Date Planted Nov./4/1980

Date Harvested May/30/1981

Rainfall 181 mm

Latitude 34 N

Longitude 36.01 E

Elevation 650 m

Local check Deir Alla 106

Variety No.	Yield kg/ha	DH	DM	Pl. Ht
1	2717 2	105	139	60
2	2308 7	105	142	55
3	2958 1	102	137	45
4	2092 13	110	140	45
5	2608 5	105	139	45
6	1325 20	112	155	55
7	1508 18	112	150	55
8	1800 17	112	150	55
9	2450 6	100	133	40
10	2125 11	110	140	55
11	2708 4	102	135	55
12	2275 9	105	135	40
13	2192 10	110	150	40
14	2300 8	105	139	55
15	2058 15	107	139	50
16	2075 14	95	137	55
17	1925 16	110	155	40
18	2108 12	112	140	35
19	1417 19	112	155	15
20	1108 21	112	155	15
21	817 22	105	155	75
22	700 23	105	155	65
23	667 24	110	155	55
24	2717 3	105	134	60

Grand Mean : 1856

Co-efficient of variation : 19.4

LSD Variety means : 535

REGIONAL BARLEY YIELD TRIAL 1980-81

AFRICA

KENYA

NAKURU

Dr. O.Nyachae

Kenya Breweries Limited

Date Planted Nov./18/1980

Date Harvested April/13/1981

Rainfall 703 mm

Latitude

Longitude

Elevation

Local check Proctor

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	Sc	BR	SB	NB
1	1809 1	63	121	53	40 MS	2	5 S	1	T
2	1309 9	71	120	45	60 S	1	0	T	1
3	1287 10	59	115	40	20 S	1	5 MS	T	0
4	1231 12	74	121	44	20 MS	0	5 MS	T	T
5	1433 5	59	112	45	15 MS	1	T MS	2	0
6	1425 6	79	135	56	15 MS	0	0	3	1
7	546 21	94	138	54	30 S	1	0	1	3
8	892 15	92	141	58	50 S	0	0	T	3
9	1237 11	67	111	44	20 MS	T	0	T	0
10	794 17	74	120	42	40 MS	3	5 MS	T	0
11	703 19	74	116	54	40 MS	0	0	1	T
12	1423 7	62	109	42	20 MS	3	5 MR	T	T
13	824 16	92	138	48	0	0	0	T	5
14	1705 2	68	119	60	20 MS	T	10 MS	2	0
15	1605 4	64	115	58	15 MS	2	0	1	2
16	1207 13	58	108	53	40 MS	2	T MS	T	T
17	793 18	87	168	55	10 MS	T	5 MS	1	0
18	1631 3	67	109	46	15 MS	2	0	1	1
19	1333 8	92	139	56	5 MS	1	5 MR	1	3
20	553 20	102	141	48	30 MS	0	0	T	5
21	0 24	76	175	76	0	-	0	-	-
22	31 23	76	172	64	T MS	-	0	-	-
23	174 22	76	162	63	0	-	0	-	-
24	924 14	92	143	53	10 MS	-	5 MS	0	6

Grand Mean : 1036

Co-efficient of variation : 37.0

LSD Variety means : 541

REGIONAL BARLEY YIELD TRIAL 1980-81

ASIA KOREA JAPAN

Dr. E.Sup Lee
Wheat and Barley Research Institute

Date Planted	Oct./20/1980	Date Harvested	June/10/1981	Rainfall	317 mm
Latitude	34.47 N	Longitude	126.23 E	Elevation	53 m
Local check	n.a				

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	SR	PM
1	2005 17	184	225	89	3	-
2	1776 23	184	225	78	2	-
3	2188 8	182	225	77	2	-
4	2193 7	186	224	84	2	-
5	1823 22	179	224	85	2	-
6	2047 15	188	225	96	1	-
7	1983 18	191	228	82	1	-
8	2040 16	188	227	92	1	-
9	2132 9	177	220	81	2	-
10	1913 19	184	228	76	2	-
11	2253 6	181	219	86	2	-
12	1903 20	179	218	69	2	-
13	2469 3	190	228	91	1	-
14	1829 21	182	225	103	2	2
15	2127 10	181	220	97	2	-
16	1515 24	182	224	85	5	-
17	2478 2	190	229	99	2	-
18	2333 4	182	224	82	2	-
19	2309 5	192	229	95	2	-
20	2048 14	192	228	102	1	-
21	2525 1	192	-	114	0	-
22	2082 12	190	-	90	0	-
23	2069 13	198	-	81	2	-
24	2123 11	185	222	95	0	-

Grand Mean : 2090
Co-efficient of variation : 14.3
LSD Variety means : 421

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

KFARDAN

Cereal Staff

International Center for Agricultural Research in the Dry Areas

Date Planted

n.a

Date Harvested

n.a

Rainfall

-

Latitude

33.52 N

Longitude

35.58 E

Elevation 1080 m

Local check

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3333 13	n.a	n.a	n.a
2	3367 11	-	-	-
3	4408 1	-	-	-
4	3017 17	-	-	-
5	3375 10	-	-	-
6	3383 9	-	-	-
7	3142 14	-	-	-
8	3442 8	-	-	-
9	2525 23	-	-	-
10	3675 6	-	-	-
11	3725 4	-	-	-
12	2917 19	-	-	-
13	3983 2	-	-	-
14	3700 5	-	-	-
15	3358 12	-	-	-
16	2758 21	-	-	-
17	3042 16	-	-	-
18	2967 18	-	-	-
19	3058 15	-	-	-
20	3467 7	-	-	-
21	2783 20	-	-	-
22	2342 24	-	-	-
23	2700 22	-	-	-
24	3750 3	-	-	-

Grand Mean

:

Co-efficient of variation

:

LSD Variety means

:

REGIONAL BARLEY YIELD TRIAL 1980-81

NORTH AMERICA

MEXICO

ST.MARIA

Cereal Staff
CIMMYT

Date Planted March/4/1981

Date Harvested Oct./5/1981

Rainfall 530 mm

Latitude 18.31 N

Longitude 98.11 E

Elevation n.a

Local check Puebla

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	Sc
1	4333 14	57	115	95	50 MS/ S	0
2	4583 9	55	117	45	20 MR/ R	7
3	3508 23	51	113	40	80 S/MS	2
4	3517 22	63	112	45	10 MS/MR	3
5	4100 17	50	103	70	20 MS/MR	2
6	4783 6	67	120	80	10 MS/ S	4
7	4333 13	77	125	75	10 MS/ S	4
8	5225 3	75	125	75	5 S/MS	5
9	3567 21	58	115	50	5 MS/MR	3
10	4283 15	64	112	45	20 S/MS	3
11	5525 2	62	113	75	5 S/MS	0
12	4142 16	56	111	40	5 MS/MR	0
13	4417 10	67	125	55	5 MR/ R	6
14	4375 12	60	120	100	60 S	0
15	4417 11	56	117	65	5 R/MR	0
16	4967 5	55	115	70	TR/MR	4
17	4700 8	68	123	80	5 R/MR	5
18	5692 1	60	114	60	10 R/MR	0
19	5058 4		125	70	20 S/MS	5
20	4708 7		-	65	TR/MR	7
21	3783 19	68	-	-	0	0
22	3671 20	65	-	-	0	0
23	1370 24		-	-	0	0
24	3825 18	59	112	85	5 MS/ S	4

Grand Mean : 4286

Co-efficient of variation : 15.2

LSD Variety means : 917

REGIONAL BARLEY YIELD TRIAL 1980-81

ASIA

PAKISTAN

FAISALABAD

Dr. M.A. Bajwa

Wheat Research Institute

Date Planted Nov./30/1980

Latitude 31.30 N

Local check Nil

Date Harvested June/15/1981

Longitude 73.10 E

Rainfall 126 mm

Elevation 213 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR
1	6017 3	n.a	130	n.a	25 MS
2	5733 6	-	126	-	40 S
3	5600 8	-	126	-	10 MR
4	4267 23	-	124	-	10 MR
5	4500 19	-	127	-	5 MR
6	5483 9	-	127	-	5 MR
7	5167 13	-	128	-	5 MR
8	5342 11	-	128	-	0
9	5708 7	-	122	-	10 MS
10	7483 1	-	130	-	-
11	5950 4	-	127	-	5 MR
12	5183 12	-	126	-	40 S
13	6550 2	-	130	-	-
14	4667 18	-	128	-	10 MR
15	4833 16	-	126	-	10 MS
16	5933 5	-	125	-	5 MR
17	4858 15	-	130	-	-
18	3483 24	-	130	-	-
19	5467 10	-	130	-	-
20	4683 17	-	130	-	-
21	4367 21	-	135	-	-
22	5050 14	-	132	-	-
23	4300 22	-	137	-	-
24	4483 20	-	124	-	20 S

Grand Mean : 5212

Co-efficient of variation : 18.1

LSD Variety means : 1329

REGIONAL BARLEY YIELD TRIAL 1980-81

ASIA

PAKISTAN

ISLAMABAD

Dr. M.Noorullah

National Agricultural Research Council

Date Planted Nov./6/1980

Date Harvested May/12/1981

Rainfall 50 mm

Latitude 33.39 N

Longitude 73.5 E

Elevation 683 m

Local check n.a

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	BR
1	2083 19	134	170	120	S	-
2	2417 14	122	169	100	S	-
3	4208 1	124	169	95	S	-
4	1833 23	129	166	95	S	-
5	2000 20	126	169	100	S	-
6	3208 4	132	175	110	-	-
7	2750 10	138	175	118	S	-
8	3667 3	138	173	115	S	-
9	2125 18	136	169	110	S	-
10	2250 16	122	171	100	VS	-
11	4042 2	115	169	90	-	-
12	3000 8	127	170	90	S	-
13	3083 6	139	173	100	S	-
14	2250 17	127	173	100	S	-
15	2000 21	122	169	115	S	-
16	1625 24	124	173	100	-	-
17	2333 15	139	171	110	S	-
18	3083 7	134	168	85	S	-
19	2792 9	140	174	100	S	-
20	2667 11	144	175	100	S	-
21	3208 5	139	151	140	-	S
22	2667 12	137	149	100	-	VS
23	1917 22	140	149	185	-	VS
24	2500 13	137	175	100	-	VS

Grand Mean : 2654

Co-efficient of variation : 29.6

LSD Variety means : 1107

REGIONAL BARLEY YIELD TRIAL 1980-81

EUROPE

PORTUGAL

ELVAS

Dr. M.T.Barradas

National Plant Breeding Station

Date Planted Nov./26/1980

Date Harvested June/25/1981

Rainfall 220 mm

Latitude 38.53 N

Longitude 7.9 W

Elevation 208 m

Local check Ribeka

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	2515 10	125	189	80
2	3397 2	120	189	66
3	3198 5	122	193	65
4	2279 16	123	189	66
5	2963 7	126	189	70
6	2467 11	127	191	75
7	2138 20	134	189	86
8	2381 14	132	191	89
9	2112 21	119	192	67
10	2402 13	123	191	59
11	2620 9	121	191	74
12	1741 22	125	189	56
13	2184 19	128	189	79
14	3086 6	125	191	80
15	2328 15	119	191	77
16	2278 17	119	189	50
17	3228 4	126	189	82
18	2220 18	128	191	66
19	3298 3	132	191	80
20	3560 1	132	189	85
21	2436 12	126	198	98
22	1395 24	126	199	82
23	1704 23	146	198	69
24	2862 8	128	189	81

Grand Mean : 2615

Co-efficient of variation : 19.4

LSD Variety means : 714

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

QATAR

RABAT AL FARAS

Dr. O. Shehata Khalil

Department of Agriculture and Water Resources

Date Planted Nov./12/1980

Date Harvested April/14/1981

Rainfall 110 mm

Latitude 25.48 N

Longitude 51.18 E

Elevation 50 m

Local check Arrivat * Athenais = Gulf: Barley

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	n.a	-	-	0
2	-	-	-	60
3	-	-	-	35
4	-	79	133	65
5	-	87	132	70
6	-	100	148	70
7	-	100	148	75
8	-	94	149	75
9	-	65	122	80
10	-	76	129	75
11	-	69	123	80
12	-	78	130	85
13	-	82	135	75
14	-	77	129	75
15	-	77	131	70
16	-	77	130	70
17	-	93	139	55
18	-	99	134	65
19	-	102	149	60
20	-	105	150	65
21	-	-	-	40
22	-	-	-	0
23	-	-	-	0
24	-	-	-	0

Grand Mean :

Co-efficient of variation :

LSD Variety means :

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

SAUDI ARABIA

RIYADH

Dr. H.Ibrahim Sayed

College of Agriculture Research Station

Date Planted Nov./29/1980

Date Harvested n.a

Rainfall n.a

Latitude 24.42 N

Longitude 46 E

Elevation 420 m

Local check Giza 5

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	2186 11	84	122	90
2	3867 1	74	121	80
3	2324 9	77	123	72
4	2868 6	77	124	88
5	2153 12	77	126	74
6	1922 17	84	123	86
7	1689 20	88	122	75
8	1940 16	88	125	82
9	1974 15	72	121	67
10	2032 14	76	122	61
11	2965 5	76	121	82
12	2413 7	87	125	70
13	1758 18	88	123	75
14	2275 10	85	125	87
15	1597 23	77	124	86
16	3045 4	76	126	71
17	2033 13	94	134	81
18	1612 22	88	124	79
19	1753 19	93	132	88
20	1217 24	96	132	81
21	3318 2	83	126	124
22	2387 8	82	127	99
23	1618 21	97	134	75
24	3300 3	80	122	75

Grand Mean : 2260

Co-efficient of variation : 26.5

LSD Variety means : 844

REGIONAL BARLEY YIELD TRIAL 1980-81

EUROPE

SPAIN

COGULLADA

Dr. Jesus Comenge

Monasterio de Cogullada - AGRAR

Date Planted Dec./24/1980

Date Harvested Aug/20/1981

Rainfall 320 mm

Latitude 41.41 N

Longitude 2.50 E

Elevation 208 m

Local check Berta

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR
1	1379 24	127	n.a	90	10 S
2	2750 16	130	-	85	15 MS
3	2725 17	130	-	75	40 S
4	5521 2	134	-	80	T MR
5	2850 14	128	-	70	40 S
6	4988 4	141	-	90	10 S
7	4625 6	141	-	90	15 S
8	5325 3	142	-	80	5 MS
9	2892 13	131	-	80	T MS
10	4125 8	134	-	75	50 S
11	2542 18	133	-	85	5 MS
12	1625 21	129	-	70	0
13	3556 11	143	-	75	T MR/MS
14	1428 22	127	-	85	5 MS/ S
15	1381 23	126	-	90	5 S
16	2198 19	125	-	70	T MR
17	4196 7	145	-	85	T
18	2762 15	130	-	70	0
19	5783 1	145	-	80	5 MS
20	4900 5	137	-	75	15 S
21	4017 9	133	-	95	-
22	1729 20	144	-	65	-
23	3175 12	135	-	80	-
24	3725 10	139	-	75	T MR

Grand Mean : 3341

Co-efficient of variation : 25.8

LSD Variety means : 1217

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

SYRIA

IZRA'A

ACSAD Staff

Field Crops Section

Date Planted Dec./23/1980

Latitude 32.51 N

Local check Arabic Abied

Date Harvested May/26/1981

Longitude 36.15 E

Rainfall 329 mm

Elevation 575 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	2943 7	85	n.a	100
2	3751 1	81	-	80
3	3592 2	81	-	75
4	1657 23	88	-	80
5	3182 5	80	-	70
6	2928 8	90	-	80
7	2907 9	98	-	80
8	2293 22	97	-	75
9	2324 21	85	-	85
10	2827 12	89	-	75
11	2426 20	88	-	90
12	3119 6	83	-	80
13	2469 19	90	-	75
14	2564 16	84	-	100
15	2767 13	82	-	95
16	3340 3	81	-	85
17	2537 17	90	-	75
18	1412 24	85	-	75
19	2613 15	97	-	80
20	2886 11	98	-	70
21	2901 10	89	-	115
22	2679 14	88	-	95
23	2487 18	102	-	65
24	3248 4	87	-	75

Grand Mean : 2743

Co-efficient of variation : 17.7

LSD Variety means : 686

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

SYRIA

TEL HADYA

Cereal Staff

International Center for Agricultural Research in the Dry Areas

Date Planted Dec./10/1980

Date Harvested June/1/1981

Rainfall 372 mm

Latitude 37.00 N

Longitude 9.00 E

Elevation 282 m

Local check Arabic Abied

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	4242 10	113	153	120
2	3925 13	111	153	100
3	5692 1	112	151	95
4	4600 5	119	145	90
5	4621 4	111	146	95
6	2983 24	121	152	100
7	3025 23	127	155	105
8	3758 17	126	156	95
9	3742 19	109	145	95
10	4354 8	119	153	80
11	4188 11	114	149	105
12	4954 2	101	145	85
13	3892 15	120	153	90
14	3745 18	112	154	120
15	4275 9	109	147	105
16	3908 14	107	145	100
17	3504 21	120	154	100
18	3500 22	118	152	85
19	3525 20	127	156	90
20	3788 16	127	156	90
21	4100 12	112	Late	130
22	4538 6	111	Late	110
23	4621 3	131	Late	70
24	4421 7	115	162	85

Grand Mean : 4079

Co-efficient of variation : 10.1

LSD Variety means : 580

REGIONAL BARLEY YIELD TRIAL 1980-81

AFRICA

TUNISIA

BEJA

Cereal Staff
INRAT, Ariana

Date Planted Nov./15/1980

Date Harvested June/3/1981

Rainfall 590 mm

Latitude 37 N

Longitude 9. E

Elevation 165 m

Local check Ceres

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	Sc	NB	PM
1	5755 4	133	n.a	n.a	-	-	-	-
2	4783 12	121	-	-	S	-	-	-
3	5790 3	131	-	-	-	-	-	-
4	3838 21	129	-	-	-	S	-	-
5	4819 9	129	-	-	-	-	-	-
6	3964 19	129	-	-	-	-	-	-
7	4307 17	147	-	-	-	-	-	-
8	5136 5	139	-	-	-	-	-	-
9	4584 13	129	-	-	-	-	-	-
10	4419 16	129	-	-	VS	S	-	VS
11	4795 10	129	-	-	-	-	-	-
12	4786 11	129	-	-	-	-	-	-
13	3903 20	136	-	-	-	-	-	-
14	4854 7	133	-	-	-	-	-	-
15	4490 15	129	-	-	-	-	-	-
16	4828 8	129	-	-	-	-	-	-
17	4531 14	138	-	-	-	-	-	-
18	3370 24	131	-	-	-	-	VR	-
19	4244 18	147	-	-	-	-	-	-
20	3453 23	147	-	-	-	-	-	-
21	5962 1	131	-	-	-	-	-	-
22	5019 6	129	-	-	-	-	-	-
23	5855 2	149	-	-	-	-	-	-
24	3654 22	138	-	-	VS	-	-	-

Grand Mean : 4630

Co-efficient of variation : 9.8

LSD Variety means : 642

REGIONAL BARLEY YIELD TRIAL 1980-81

AFRICA

TUNISIA

HINDI ZITOUN

Cereal Staff
INRAT

Date Planted Nov./20/1980

Date Harvested May/25/1981

Rainfall 170 mm

Latitude 35.42 N

Longitude 10.01 E

Elevation n.a

Local check Ceres

Variety No.	Yield kg/ha	DH	DM	P1.Ht	LR	NB
1	3966 3	94	n.a	n.a	-	-
2	3271 19	91	-	-	S	-
3	3632 10	91	-	-	-	-
4	4052 1	88	-	-	-	-
5	3517 13	91	-	-	-	-
6	3243 20	108	-	-	-	-
7	3053 24	113	-	-	-	-
8	3164 22	108	-	-	-	-
9	3535 11	91	-	-	-	-
10	3517 14	101	-	-	VS	-
11	3390 16	99	-	-	-	-
12	3462 15	90	-	-	-	-
13	3680 9	109	-	-	-	-
14	3885 4	98	-	-	-	-
15	3699 8	98	-	-	-	-
16	3788 6	98	-	-	-	-
17	3371 17	94	-	-	-	-
18	3325 18	107	-	-	-	TR
19	3802 5	108	-	-	-	-
20	4024 2	109	-	-	-	-
21	3067 23	109	-	-	-	-
22	3525 12	99	-	-	-	-
23	3784 7	102	-	-	-	-
24	3171 21	114	-	-	VS	-

Grand Mean : 3533

Co-efficient of variation : 17.6

LSD Variety means : 880

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

TURKEY

DIYARBAKIR

Dr. Ertug Firat

Regional Agricultural Research Institute

Date Planted Oct./28/1980

Date Harvested July/6/1981

Rainfall 588 mm

Latitude 37.55 N

Longitude 40.12 E

Elevation 660 m

Local check Tokak

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	5875 20	154	194	90
2	7271 13	154	191	75
3	8500 4	152	192	60
4	5958 18	159	194	70
5	5833 22	148	181	75
6	7188 15	155	190	80
7	8958 1	157	193	85
8	8646 3	158	195	80
9	6688 16	144	182	75
10	7188 14	149	186	75
11	7750 8	145	182	85
12	8042 7	149	189	80
13	8688 2	156	195	85
14	6354 17	146	191	120
15	7354 12	142	184	105
16	5688 23	142	185	80
17	7396 11	154	191	90
18	7438 10	150	190	70
19	8188 6	158	195	70
20	8354 5	157	190	75
21	5854 21	157	203	115
22	5958 19	157	200	90
23	5458 24	175	-	75
24	7708 9	162	200	110

Grand Mean : 7180

Co-efficient of variation : 19.1

LSD Variety means : 1938

REGIONAL BARLEY YIELD TRIAL 1980-81

MIDDLE EAST

YEMEN ARAB REPUBLIC

TAIZ

Dr. J. Fuad

Central Agriculture Research Service

Date Planted Nov./20/1980

Date Harvested March/15/1981

Rainfall n.a

Latitude 13.42 N

Longitude 44.0 E

Elevation 1350 m

Local check Sagla'a

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	SR	LR	YR
1	3952 2	40	70	n.a	30 S	10 S	0
2	2774 8	32	73	-	70 S	70 S	0
3	3195 5	32	73	-	70 S	70 S	0
4	1520 21	31	73	-	70 S	60 S	0
5	2258 14	29	62	-	90 S	60 S	0
6	2037 16	34	68	-	60 S	20 S	0
7	1764 19	56	70	-	90 S	20 S	0
8	2390 12	56	70	-	70 S	20 MR	0
9	2464 10	19	51	-	20 R	10 MR	0
10	3491 3	31	57	-	10 S	10 S	0
11	2439 11	27	56	-	80 S	20 S	0
12	2770 9	32	62	-	60 S	20 MR	0
13	1996 17	38	70	-	50 S	5 S	0
14	3114 6	35	64	-	80 S	80 S	0
15	2158 15	34	65	-	80 S	60 MR	0
16	2793 7	31	65	-	60 S	20 MR	0
17	2376 13	42	73	-	60 S	0 R	0
18	1933 18	42	70	-	10 S	10 S	0
19	1547 20	56	74	-	20 MR	20 MR	0
20	1424 22	56	75	-	10 S	5 R	0
21	3981 1	38	73	-	5 R	0 R	0
22	3300 4	20	58	-	20 MR	10 MR	0
23	656 24	56	75	-	90 S	90 S	0
24	1320 23	22	45	-	40 S	40 S	0

Grand Mean : 2402

Co-efficient of variation : 31.2

LSD Variety means : 1055

TWELFTH REGIONAL WHEAT YIELD TRIAL

The Twelfth Regional Wheat Yield Trial (12th RWYT) consisted of 11 breadwheat lines, 11 durum wheat lines, one triticales line and the national check of each location. Data from 40 locations were available.

Durum entry 2, Bittern'S', ranked first in overall yield. This line was in 23 out of 40 locations among the 10 highest yielding lines. The second highest yielding durum entry was Fg'S'-Palestinian 20C-606xMexi'S'/Rabi'S' (entry 10), which had an overall rank number 4.

The highest yielding breadwheat lines were entries 7 (Nacozari'S') and 3(HD2172) which ranked second and third in this yield trial. Breadwheat line 9, Hugo 1 should be mentioned for its high adaptability: in 24 of the locations it ranked among the top ten yielding lines. Its rank number is 8.

Agronomic Traits

The range in average days to heading was 109 (triticales entry 23, Beaver - Tob'S') to 124 (Durum line Valgerardo, entry 17). The latter entry was also the latest maturing one (170 days). Nacozari, the best yielding breadwheat line, was early maturing with 154 days.

It is noteworthy, that the national program checks were in general earlier heading and maturing than the tested lines in the trial.

The highest protein content was reached by entry 6, a durum line: 16.2%. Breadwheat entries 5 and 16 had the highest protein contents in that crop: 15.1%

Durum entry Valnova (no: 15) had the highest 1000 Kernel weight of all entries, 49.6 in combination with a good protein content (15.7%).

Breadwheat entry 16 (Pato-OnxMaya'S'), which had the high protein content (15.1%) was also the breadwheat line with the highest 1000 Kernel weight (38.2gr).

Disease Resistance

Disease data were available for 5 diseases. The triticales entry Beaver-Tob'S' (no: 23) was resistant for all 5 diseases and also the high yielding breadwheat entry 3 (HD2172) scored remarkably well. Breadwheat entry no: 20 was resistant to leaf rust, powdery mildew and Septoria.

The following durum entries had low infection levels for at least three of the diseases entry nos: 6, 8, 13, 17 and 21.

Twelfth Regional Wheat Yield Trial (1980-81)
Overall Performance of Varieties (40 locations*)

Table 3:

Entry No.	Variety or Cross and Pedigree	Yield kg/ha	R	FR	DH	DM	Pl.Ht	Prot. %	Wt1000 Kernels
1 Bw	Mexipak 65	3803	16	20	114	156	86	12.4	33.9
2 D	Bittern'S'=21563-AA'S'xFg'S' CM 9799-126M-1M-5Y-0Y	4110	1	23	115	158	81	14.8	42.4
3 Bw	HD 2172	4038	3	23	116	157	86	13.1	34.6
4 D	Cr'S'-USA-S02229 CM 18882-2Y-0Y	3871	12	21	112	157	76	14.5	40.7
5 Bw	7CxTob-Cno'S'/Kal CM 8865-D-4M-1Y-1M-2Y-0M	3754	18	14	116	157	82	15.1	29.4
6 D	(D.Col1.124(Cr'S'(21563/61-130xLds)))Fg'S' CD 13570-E-2Y-5M-0Y	3809	15	14	115	157	96	16.2	39.0
7 Bw	Nacozari'S'	4080	2	23	111	154	84	12.9	33.2
8 D	Cit'S'-Fg'S' CD 3568-8Y-0M-OKE	3990	5	20	116	159	85	13.0	37.8
9 Bw	Hugo 1	3930	8	24	115	156	85	12.6	30.9
10 D	Fg'S'-Palestinian 20C-606xMexi'S'/Rabi'S' CD 10438-4M-1Y-0M	4026	4	19	114	158	80	13.3	35.0
11 Bw	Solsort'S' CM 10712-1Y-1M-6Y-1M-1Y-0Y	3940	7	20	116	158	86	12.9	33.6
12 D	Jori (Durum check)	3523	23	7	116	159	79	14.6	45.6

Table 3: (Cont'd)

Entry No.	Variety or Cross and Pedigree	Yield kg/ha	R	FR	DH	DM	Pl.Ht	Prot. %	Wt1000 Kernels
13 D	(Vz-CpxVz156/Haurani-AD-5-77)Rabi'S'xD.dwarf S-15-Cr'S' CD 4775-N-9Y-8M-0Y-0KE	3951	6	22	112	156	78	15.3	43.9
14 Bw	NPO-Cd1xZbz CM 8935-D-5M-3Y-1M-2Y-0M	3619	20	7	115	158	84	14.7	27.1
15 D	Valnova	3741	19	11	121	163	82	15.7	49.6
16 Bw	Pato-0nxMaya'S' CM 16216-41M-1Y-10M-1Y-1Y-0M	3860	13	18	116	159	92	15.1	38.2
17 D	Valgerardo	3281	24	3	124	170	83	15.3	42.0
18 Bw	Bb-GalloxY50E-Ka13/LfnxHD 832-Bb CM 34574-F-1M-14Y-0M	3798	17	15	112	156	81	12.7	37.0
19 D	Misri-Mexi'S' (Plc'S'-Cr'S'/2B-LKx60-120/G11'S') CD 10662-N-14M-3Y-4M-0Y	3591	21	13	114	158	72	15.9	33.3
20 Bw	Ron-ChaxBb-Nor67 (R) CM 5484-F-5Y-4M-3Y-3M-1Y-0M	3923	9	18	113	157	88	12.5	41.8
21 D	Snipe'S'/Jo'S'-Cr'S'xGs'S'-AA'S' ICD 74119-2L-OAP	3838	14	15	117	161	81	13.3	43.7
22 Bw	Bb-CnoxJar/Cno-7CxCc-Tob CM 5546-A-5Y-3M-2Y-3M-0Y	3589	22	12	115	156	84	14.2	47.3
23 Tcl	Beaver-Tob'S' 2778-2N-1Y-4N-1M-1Y-0M	3909	10	18	109	156	94	12.4	42.6
24	National check	3893	11	19	111	154	94	-	-

Grand Mean: 3722

CV : 15.1

LSD : 788

*: Yield data out of (37 locations); FR out of (40 locations); DH out of (37 locations); DM out of (29 locations); Pl.Ht out of (35 locations).

Table 4: Diseases for the Regional Wheat Yield Trial.

Entry No.	Variety or Cross and Pedigree	A.C.I				
		YR 10Loc.	LR 12Loc.	SR 9Loc.	PM 6Loc.	ST 1Loc.
1 Bw	Mexipak 65	32	36	9	2	6
2 D	Bittern'S'=21563-AA'S'xFg'S' CM 9799-126M-1M-5Y-0Y	5	5	11	2	3
3 Bw	HD 2172	2	4	2	2	5
4 D	Cr'S'-USA-S02229 CM 18882-2Y-0Y	0	7	28	5	3
5 Bw	7CXTob-Cno'S'/Kal CM 8865-D-4M-1Y-1M-2Y-0M	32	9	4	3	8
6 D	(D.Coll.124(Cr'S'(21563/61-130xLds)))Fg'S' CD 13570-E-2Y-5M-0Y	1	8	12	2	2
7 Bw	Nacozari'S'	11	12	11	3	7
8 D	Cit'S'-Fg'S' CD 3568-8Y-0M-0KE	1	9	11	2	2
9 Bw	Hugo 1	31	26	15	1	7
10 D	Fg'S'-Palestinian 20C-606xMexi'S'/Rabi'S' CD 10438-4M-1Y-0M	5	13	17	2	5
11 Bw	Solsort'S' CM 10712-1Y-1M-6Y-1M-1Y-0Y	10	1	14	3	3
12 D	Jori (Durum check)	1	8	12	4	3

Table 4: (Cont'd)

Entry No.	Variety or Cross and Pedigree	A.C.I				
		YR 10Loc.	LR 12Loc.	SR 9Loc.	PM 6Loc.	ST 1Loc.
13 D	(Vz-CpxVz156/Haurani-AD-5-77)Rabi'S'xD.dwarf S-15-Cr'S' CD 4775-N-9Y-8M-0Y-0KE	1	9	16	2	4
14 Bw	NPO-CdlxZbz CM 8935-D-5M-3Y-1M-2Y-0M	15	12	9	3	7
15 D	Valnova	5	4	11	2	5
16 Bw	Pato-OnxMaya'S' CM 16216-41M-1Y-10M-1Y-1Y-0M	4	1	19	3	6
17 D	Valgerardo	2	3	7	2	7
18 Bw	Bb-GalloxY50E-Kal ³ /LfnxHD 832-Bb CM 34574-F-1M-14Y-0M	5	2	5	3	6
19 D	Misri-Mexi'S'(Plc'S'-Cr'S'/2B-LKx60-120/G11'S')) CD 10662-N-14M-3Y-4M-0Y	5	8	14	6	3
20 Bw	Ron-ChaxBb-Nor67(R) CM 5484-F-5Y-4M-3Y-3M-1Y-0M	8	4	5	2	3
21 D	Snipe'S'/Jo'S'-Cr'S'xGs'S'-AA'S' ICD 74119-2L-0AP	4	9	13	2	3
22 Bw	Bb-CnoxJar/Cno-7CxCC-Tob CM 5546-A-5Y-3M-2Y-3M-0Y	6	4	7	3	6
23 Tcl	Beaver-Tob'S' 2778-2N-1Y-4N-1M-1Y-0M	1	2	1	1	5
24	National check	21	14	14	3	5

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA AFGHANISTAN DARUL-AMAN

Dr. M. Sha-Shaw
Darul-Aman Agricultural Research Station

Date Planted Oct./10/1980
Latitude 34.37 N
Local check HB-102-100

Date Harvested July/20/1981
Longitude 69.7 E

Rainfall 312 mm
Elevation 1825 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	5375 21	215	248	98	65 S	0	0
2	7125 10	207	250	80	25 S	0	0
3	7575 5	208	247	94	25 MR	0	0
4	7425 6	209	256	85	0	0	0
5	6638 14	211	256	95	100 S	0	0
6	7788 3	210	252	112	5 MS	0	0
7	5325 22	207	248	95	25 S	0	0
8	8050 2	212	257	90	5 S	0	0
9	5438 20	210	248	95	65 S	0	0
10	7650 4	210	257	90	5 MS	0	0
11	8250 1	211	250	95	25 MS	0	0
12	5650 18	212	248	90	5 S	0	0
13	7188 8	211	254	85	5 MS	0	0
14	5900 17	211	253	100	65 S	0	0
15	7163 9	208	247	85	25 S	0	0
16	7263 7	208	249	105	25 MS	0	0
17	4850 23	217	260	90	5 MS	0	0
18	6000 16	209	252	100	5 MS	0	0
19	5525 19	219	258	70	25 MS	0	0
20	6875 11	206	250	98	65 S	0	0
21	6863 12	207	254	75	25 MS	0	0
22	4613 24	216	247	95	40 S	0	0
23	6800 13	201	245	110	0	0	0
24	6575 15	215	247	105	25 S	0	0

Grand Mean: 6579
LSD : 1435
CV : 15.5

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA

AFGHANISTAN

SHISHAM-BAGH

Mr. A.Baqi Afzali, Mr. H.Ul-Haq
Shisham Bagh Research Station

Date Planted Dec./6/1980

Date Harvested May/18/1981

Rainfall 132 mm

Latitude 34.25 N

Longitude 70.27 E

Elevation 552 m

Local check Mexipak 69

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	3808 23	120	152	105	80 S	0	0
2	5175 1	114	153	90	20 MR	0	0
3	4733 4	117	156	105	0	0	0
4	4842 3	114	155	85	0	0	0
5	3908 20	120	157	100	80 MS/S	0	0
6	4508 7	115	151	120	0	0	0
7	4483 8	114	151	95	0	0	0
8	4525 6	117	157	93	0	0	0
9	3850 22	121	157	95	80 MS/S	0	0
10	4642 5	114	156	90	5 R	0	0
11	4175 16	118	157	100	0	0	0
12	3975 17	119	158	93	0	0	0
13	4975 2	115	156	90	0	0	0
14	3933 19	121	157	100	40 MS	0	0
15	4208 15	121	158	100	0	0	0
16	4275 13	115	153	110	0	0	0
17	3708 24	129	161	95	0	0	0
18	3833 21	117	155	105	0	0	0
19	4292 12	116	154	80	TR MR	0	0
20	4383 10	114	154	115	10 R	0	0
21	4300 11	116	154	85	0	0	0
22	3942 18	116	152	100	5 R	0	0
23	4258 14	112	153	115	0	0	0
24	4417 9	111	153	100	60 S	0	0

Grand Mean: 4300

LSD : 593

CV : 9.8

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA

ALGERIA

KHROUB

IDGC

Station Experimentale du Khroub

Date Planted Dec./14/1980

Date Harvested July/4/1981

Rainfall 380 m

Latitude 36.25 N

Longitude 6.67 E

Elevation 640 m

Local check Red Head's '3

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	PR
1	6413 4	138	n.a	90	-
2	5875 13	128	-	85	-
3	6608 1	129	-	90	-
4	6058 9	128	-	80	10 MS
5	5050 23	137	-	80	-
6	5650 18	128	-	105	10 MS
7	6438 3	128	-	95	-
8	6458 2	129	-	90	-
9	6104 8	137	-	95	-
10	5758 16	129	-	85	-
11	6054 10	136	-	90	-
12	5804 14	136	-	90	-
13	6325 5	128	-	90	-
14	5463 21	129	-	100	-
15	6162 7	129	-	90	-
16	5746 17	136	-	100	-
17	5983 11	138	-	90	-
18	5046 24	129	-	95	-
19	5888 12	132	-	75	-
20	5525 20	129	-	95	-
21	6325 6	136	-	90	-
22	5638 19	130	-	105	-
23	5767 15	131	-	80	-
24	5442 22	144	-	140	-

Grand Mean: 5899

LSD : 1358

CV : 16.3

REGIONAL WHEAT YIELD TRIAL 1980-81

AFRICA

ALGERIA

SETIF

IDGC

Setif Agricultural Research Station

Date Planted Dec./13/1980

Date Harvested July/4/1981

Rainfall 342 mm

Latitude 36.9 N

Longitude 5.21 E

Elevation 1000 m

Local check D.B.Bachir

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	708 5	n.a	n.a	n.a
2	446 24	-	-	-
3	542 18	-	-	-
4	600 14	-	-	-
5	800 3	-	-	-
6	525 20	-	-	-
7	617 13	-	-	-
8	629 10	-	-	-
9	554 17	-	-	-
10	650 9	-	-	-
11	692 6	-	-	-
12	596 15	-	-	-
13	592 16	-	-	-
14	967 1	-	-	-
15	617 12	-	-	-
16	621 11	-	-	-
17	500 21	-	-	-
18	671 8	-	-	-
19	467 22	-	-	-
20	688 7	-	-	-
21	542 19	-	-	-
22	458 23	-	-	-
23	742 4	-	-	-
24	892 2	-	-	-

Grand Mean: 629
LSD : 210
CV : 23.6

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA

BANGLADESH

JESSORE

Dr. A.Samad, Dr. A.B.Siddique

Regional Agricultural Research Station

Date Planted Dec./4/1980

Date Harvested March/28/1981

Rainfall 230 mm

Latitude 23.13 N

Longitude 89.13 E

Elevation 8 m

Local check Sonalika

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	SR
1	3563 15	62	103	86	30 S	0
2	4708 2	70	108	89	0	0
3	2708 23	72	107	102	0	0
4	4521 7	67	105	90	0	0
5	4563 6	68	102	92	0	0
6	3479 17	67	105	104	0	0
7	4792 1	58	99	88	0	0
8	4208 10	73	110	97	0	0
9	4479 8	64	102	88	10 S	0
10	4688 3	65	106	98	0	0
11	4042 13	74	112	92	0	0
12	2917 21	69	105	101	0	0
13	3938 14	64	104	83	0	0
14	3167 18	64	102	82	0	0
15	3479 16	81	116	97	0	0
16	4063 12	70	107	112	0	0
17	1396 24	82	122	96	0	0
18	3000 20	61	100	90	0	0
19	4146 11	68	106	79	0	0
20	4604 4	69	107	100	0	0
21	3042 19	73	108	91	0	0
22	4583 5	71	104	97	0	0
23	4458 9	58	102	92	0	0
24	2711 22	55	98	94	30 S	0

Grand Mean: 3804

LSD : 943

CV : 17.6

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA

BANGLADESH

JOYDEBPUR

Dr. A.B.S.Hassain, Dr. S.M.Ahmed
Central Research Station

Date Planted Dec./7/1980

Date Harvested April/4/1981

Rainfall 148 mm

Latitude 24 N

Longitude 92.25 E

Elevation 8 m

Local check Sonalika

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	SR
1	2569 5	59	103	79	20 S	0
2	2710 4	65	107	80	0	0
3	2179 12	66	106	86	T MS	0
4	2543 6	63	110	82	0	5 MS
5	1441 20	63	105	77	0	0
6	2508 8	64	100	98	T MR	0
7	3284 1	58	101	80	T MS	0
8	2883 3	68	106	79	0	0
9	2295 11	59	101	87	20 S	0
10	1811 16	68	108	72	20 S	0
11	3008 2	74	109	88	5 MR	0
12	1488 19	68	106	71	T MR	0
13	2028 14	60	106	68	T MR	0
14	1737 17	57	99	73	0	0
15	0 23	100	-	62	0	0
16	844 22	74	110	74	0	0
17	0 24	95	-	75	0	0
18	2296 10	58	100	78	0	0
19	2362 9	66	106	76	0	0
20	1073 21	66	110	83	10 S	0
21	1897 15	90	-	72	0	0
22	2521 7	68	106	91	T MS	0
23	1700 18	60	106	93	0	0
24	2032 13	55	100	89	20 S	0

Grand Mean: 2009
LSD : 912
CV : 32.2

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA EGYPT BAHTIM

Dr. M.M.El Hadidy, Dr. F.F.El Sayed
Bahtim Agricultural Research Station

Date Planted Dec./18/1980 Date Harvested June/12/1981 Rainfall n.a
Latitude Longitude Elevation n.a
Local check

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	5113 6	103	147	90	0	0	20 MR-MS
2	4892 9	96	144	95	0	0	10 MR
3	4675 17	103	149	90	0	0	10 MR-MS
4	4892 10	95	140	80	0	0	T R
5	4221 20	107	145	85	0	0	20 S
6	6171 1	102	146	100	0	0	10 MR
7	5258 3	97	136	95	0	0	10 R-MR
8	5233 5	100	146	95	0	0	T R
9	5342 2	102	144	100	0	0	10 MR-MS
10	4775 13	98	145	75	0	0	10 S
11	4342 18	106	146	100	0	0	10 MR-MS
12	4108 21	98	145	85	0	0	T R
13	5004 8	97	146	85	0	0	T R
14	4867 11	102	147	100	0	0	20 S
15	3950 22	106	150	90	0	0	30 VS
16	4750 15	101	138	100	0	0	40 S
17	3433 24	111	154	95	0	0	30 S
18	5246 4	104	141	95	0	0	10 S
19	4754 14	99	146	80	0	0	0
20	4325 19	101	142	100	0	0	20 S
21	4817 12	103	148	90	0	0	20 MS-MS
22	3679 23	103	147	95	0	0	0
23	5063 7	94	148	110	0	0	10 MR
24	4708 16	97	141	100	0	0	0

Grand Mean: 4734
LSD : 865
CV : 13.0

REGIONAL WHEAT YIELD TRIAL 1980-1981

AFRICA

EGYPT

GEMMEIZA

Dr. F.F.El Sayed, Dr. A.Aziz and Dr. M.A.Mousa
Gemmeiza Agricultural Research Station

Date Planted Dec./6/1980

Date Harvested June/15/1981

Rainfall n.a

Latitude 31.07 N

Longitude 30.48 N

Elevation 8.9 m

Local check Sakha 61

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	3208 23	114	158	n.a	20 S	60 S	30 S
2	5208 4	109	161	-	T MS-S	0	T MS
3	4533 13	118	162	-	T MS-S	5-10S	T MS
4	4283 17	109	164	-	0	T MS-S	5 S
5	4192 18	120	159	-	0	0	10 S
6	3967 20	113	156	-	0	0	0
7	4708 10	112	156	-	50 S	0	40 S
8	5725 1	110	161	-	0	0	5 S
9	2783 24	118	157	-	20 S	60 S	0
10	4933 7	108	160	-	0	40 S	0
11	4500 14	112	156	-	T S	0	10 S
12	4458 15	108	156	-	0	10 S	0
13	4400 16	103	155	-	0	0	5 S
14	4550 12	112	159	-	T MS	10 S	0
15	4175 19	113	161	-	0	0	0
16	5092 5	113	167	-	0	0	30 S
17	3617 22	121	162	-	0	5 MR-MS	0
18	3925 21	113	161	-	0	0	0
19	4842 8	108	160	-	10 R-MR	5 MR-MS	0
20	5633 2	108	160	-	0	0	0
21	5067 6	107	159	-	0	0	T S
22	5217 3	112	156	-	0	0	0
23	4683 11	107	155	-	0	0	0
24	4792 9	104	148	-	0	0	0

Grand Mean: 4520

LSD : 1017

CV : 16.0

REGIONAL WHEAT YIELD TRIAL 1980-81

AFRICA

EGYPT

SAKHA

Mr. M.N.Hamdi, Mr. M.El Ahami

Sakha Agricultural Research Station

Date Planted Dec./27/1980

Date Harvested June/16/1981

Rainfall n.a

Latitude 30.45 N

Longitude 31 E

Elevation 6 m

Local check Sakha 8

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	3192 12	95	138	100	0	80 S	0
2	3317 10	94	137	90	0	10 MS	0
3	4158 1	97	138	100	0	0	0
4	3642 4	92	137	90	0	20 MR	TR S
5	3525 5	102	144	95	0	10 MR	0
6	3433 7	94	132	105	0	0	0
7	2992 18	96	138	80	0	10 S	0
8	3225 11	93	136	90	0	0	0
9	3067 15	98	141	90	0	60 S	0
10	3167 14	94	138	85	0	TR MR	0
11	2958 20	97	139	80	0	0	0
12	2417 24	91	136	85	0	0	0
13	3000 17	91	135	85	0	0	0
14	2917 21	100	144	90	0	10 S	0
15	3175 13	101	142	85	0	0	0
16	3392 8	101	144	100	0	0	0
17	3367 9	109	144	85	0	5 MR	0
18	4058 2	95	141	95	0	0	0
19	2867 22	95	142	80	0	10 MR-MS	0
20	3050 16	96	142	105	0	0	0
21	3458 6	94	140	95	0	20 MR-MS	0
22	2992 19	95	136	90	0	0	0
23	2858 23	90	138	105	0	TR R	0
24	3892 3	89	136	100	0	20 S	20 S

Grand Mean: 3254

LSD : 1017

CV : 22.2

REGIONAL WHEAT YIELD TRIAL 1980-81

AFRICA

EGYPT

SIDS

Mr. H.A.Ghanem, Mr. N.S.Hanna, Mr. A.M.Abdel Ghani
Sids Research Station, Beni Suef

Date Planted Dec./3/1980

Date Harvested May/17/1981

Rainfall n.a

Latitude 29.04 N

Longitude 31.04 E

Elevation 30 m

Local check

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	6813 8	105	142	110
2	7042 6	104	143	105
3	6613 11	103	138	105
4	7121 4	97	139	95
5	6408 14	107	146	100
6	7112 5	106	146	135
7	7546 1	102	140	100
8	6179 18	103	138	110
9	7346 2	105	148	115
10	6488 12	99	142	100
11	6204 17	107	146	105
12	6217 16	106	147	90
13	6454 13	100	139	85
14	5742 19	107	149	100
15	6242 15	103	148	105
16	6829 7	103	148	115
17	5300 24	108	150	110
18	6796 9	101	140	105
19	6663 10	100	143	90
20	5654 20	101	143	105
21	5567 22	107	148	100
22	5592 21	107	148	105
23	5567 23	102	147	110
24	7208 3	98	140	115

Grand Mean: 6445

LSD : 957

CV : 10.5

REGIONAL WHEAT YIELD TRIAL 1980-81

EUROPE

FRANCE

LE RHEU

Dr. Maxime Trottet

INRA, Station d'Amelioration des Plantes

Date Planted March/19/1981

Date Harvested Aug./17/1981

Rainfall

Latitude 48.4 N

Longitude 1.43 W

Elevation 40 m

Local check Bastion

Variety No.	Yield kg/ha	DH	YR	LR	SR
1	4358 8	87	15 M	31	0
2	3982 12	83	0	21	0
3	4939 4	86	1 M	31	0
4	2524 22	82	0	53	0
5	3387 19	80	60 S	42	0
6	3708 16	83	0	21	0
7	5006 2	81	0	42	0
8	3318 20	87	0	31	0
9	4683 6	85	20 MS	31	0
10	3568 18	81	0	42	0
11	4510 7	90	0	43	0
12	2360 23	86	0	33	T MS
13	2880 21	83	0	31	0
14	3727 14	82	0	54	0
15	3606 17	81	1 MS	11	0
16	4713 5	85	0	53	0
17	3714 15	87	0	31	0
18	4108 11	80	0	54	0
19	1792 24	85	0	77	0
20	5105 1	83	0	31	0
21	3860 13	81	0	31	0
22	4157 10	85	0	86	0
23	4343 9	79	T MR	0	0
24	4952 3	88	0	32	0

Grand Mean: 3887

LSD : 368

CV : 6.7

REGIONAL WHEAT YIELD TRIAL 1980-81

EUROPE

GREECE

THESSALONIKI

Dr. Elpis A. Skorda
Cereal Institute

Date Planted Nov./17/1980
Latitude 40.38 N
Local check G-84865

Date Harvested June/18/1981
Longitude 22.57 E

Rainfall 167 mm
Elevation 10 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	8981 2	165	210	107	0	10 MS	0
2	8385 5	162	204	88	0	0	0
3	7673 11	163	204	94	0	15 MS	0
4	5923 23	162	204	31	5 MR	40 MS	34
5	6962 13	164	206	94	0	10 MS	0
6	6558 19	163	204	112	10 MR	30 MS	0
7	7913 7	160	204	98	0	10 MS	34
8	6856 16	164	204	85	0	20 MS	0
9	7731 9	168	205	94	0	10 MS	0
10	8433 4	163	204	88	0	20 MS	0
11	6615 18	164	204	90	5 MR	50 MS	0
12	7712 10	163	207	82	20 MR	40 MS	33
13	7769 8	162	206	84	10 MR	20 MS	32
14	6692 17	164	206	100	5 MR	50 MS	44
15	6365 21	164	208	89	0	30 MS	0
16	5837 24	163	206	107	0	40 MS	22
17	6154 22	168	208	94	0	30 MS	0
18	8692 3	162	204	98	0	0	0
19	6528 20	162	204	79	10 MR	20 MS	32
20	7519 12	159	205	99	0	20 MS	32
21	6913 14	163	205	88	0	40 MS	22
22	8077 6	161	205	89	0	10 MS	54
23	10712 1	155	205	109	0	0	0
24	6904 15	162	206	99	5 MR	70 MS	55

Grand Mean: 7412
LSD : 1317
CV : 12.6

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA IRAN GORGAN

Dr. Parviz Irani
Araghi - Mohalleh

Date Planted	Dec./7/1980	Date Harvested	June/13/1981	Rainfall	399 mm
Latitude	36.55 N	Longitude	54.20 E	Elevation	120 m
Local check					

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	3550 21	122	n.a	102	50 VS	-	-
2	4958 2	118	-	90	-	-	-
3	4367 9	123	-	100	-	-	-
4	4267 13	114	-	80	-	-	-
5	4025 18	112	-	85	5 MR	-	-
6	4333 12	119	-	105	-	-	-
7	3900 19	116	-	90	5 MR	-	-
8	4367 10	118	-	95	-	-	-
9	3000 24	122	-	97	30 MS- S	-	-
10	4233 14	113	-	87	30 MR-MS	-	-
11	4175 15	120	-	97	30 MR-MS	-	-
12	4950 3	119	-	87	-	-	-
13	4700 5	115	-	87	-	-	-
14	3417 23	119	-	95	10 MR-MS	-	-
15	4350 11	123	-	92	-	-	-
16	4058 17	120	-	98	-	-	-
17	3425 22	128	-	90	-	-	-
18	3758 20	118	-	95	10 MR	-	-
19	4117 16	118	-	80	-	-	-
20	4875 4	116	-	102	5 MR-MS	-	-
21	4550 7	119	-	90	5 MR	-	-
22	4650 6	118	-	97	5 MR	-	-
23	5317 1	110	-	103	-	-	-
24	4517 8	109	-	100	-	-	-

Grand Mean: 4244
LSD : 671
CV : 11.2

REGIONAL WHEAT YIELD TRIAL 1980-81

EUROPE

ITALY

CASACCIA

Dr. L.Rossi, Dr. C.Mosconi
Casaccia, Ancona

Date Planted Nov./17/1980
Latitude 43.50 N
Local check Creso

Date Harvested June/27/1981
Longitude 13.30 E

Rainfall 700 mm
Elevation 20 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	5233 10	n.a	n.a	n.a
2	5400 6	-	-	-
3	4683 17	-	-	-
4	4083 20	-	-	-
5	4833 16	-	-	-
6	5833 3	-	-	-
7	5816 4	-	-	-
8	6483 1	-	-	-
9	5266 9	-	-	-
10	5100 14	-	-	-
11	5050 15	-	-	-
12	3683 23	-	-	-
13	5233 11	-	-	-
14	4550 18	-	-	-
15	5350 8	-	-	-
16	5616 5	-	-	-
17	5216 12	-	-	-
18	5400 7	-	-	-
19	3866 22	-	-	-
20	4083 21	-	-	-
21	4383 19	-	-	-
22	0 24	-	-	-
23	6312 2	-	-	-
24	5133 13	-	-	-

Grand Mean: 4859
LSD : 1264
CV : 13.05

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

JORDAN

MARROW

Dr. N.Katkhuda, Mr. A.Yaghmour
Marrow Research Station

Date Planted Nov./16/1980
Latitude 32.33 N
Local check Deir Alla 2

Date Harvested June/5/1981
Longitude 35.51 E

Rainfall 386 mm
Elevation 618 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	4058 10	115	175	80
2	4225 5	112	173	75
3	4083 8	114	169	80
4	4050 11	110	176	80
5	3683 19	114	172	80
6	4058 9	115	171	95
7	3917 14	111	172	90
8	4292 2	114	173	80
9	4250 4	115	177	80
10	4700 1	112	173	80
11	3742 17	112	176	90
12	3792 16	118	173	70
13	4150 7	110	173	80
14	3967 13	112	169	85
15	3858 15	118	173	70
16	3392 22	114	172	90
17	3725 18	124	183	65
18	4033 12	114	175	85
19	4267 3	112	176	70
20	3442 21	110	176	90
21	4192 6	114	173	80
22	3083 24	110	169	80
23	3225 23	108	169	100
24	3608 20	115	171	120

Grand Mean: 3907
LSD : 559
CV : 10.1

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

BEKA'A

Dr. M.Solh, Dr. M.Abi Antoun
American University of Beirut

Date Planted Nov./18/1980

Date Harvested June/25/81

Rainfall 858 mm

Latitude 33.55 N

Longitude 36.4 E

Elevation 995 m

Local check Najah

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	732 14	163	209	55
2	469 24	164	212	60
3	814 10	164	213	62
4	877 7	163	213	63
5	933 2	163	213	59
6	832 9	166	212	67
7	927 3	164	212	60
8	550 21	165	212	59
9	659 18	166	212	53
10	552 20	165	212	61
11	947 1	164	212	67
12	757 13	166	212	50
13	482 22	165	212	49
14	915 4	168	213	55
15	885 5	166	213	49
16	585 19	165	212	62
17	724 15	165	212	55
18	716 16	165	212	64
19	877 8	165	212	49
20	795 11	165	212	62
21	880 6	163	212	50
22	472 23	163	212	53
23	707 17	161	212	71
24	788 12	159	210	89

Grand Mean: 744
LSD : 308
CV : 29.4

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

KFARDAN

Cereal Staff

ICARDA, Kfardan

Date Planted

n.a

Date Harvested

n.a

Rainfall

n.a

Latitude

33.52 N

Longitude

35.58 E

Elevation

1080 m

Local check

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	YR	SR
1	3358 20	152	192	70	TR/MS	-	-
2	3442 14	149	190	80	-	-	-
3	3300 23	150	188	60	5 MS	-	-
4	3358 19	152	193	75	TR/MS	-	-
5	3458 13	148	192	70	-	-	-
6	3267 24	152	192	80	5 MR	-	-
7	3733 8	148	187	70	-	-	-
8	3508 12	148	186	80	TR/MS	-	-
9	3617 10	149	190	75	-	-	-
10	3908 2	149	190	80	-	-	-
11	3858 3	150	194	75	-	-	-
12	3433 15	150	193	80	-	-	-
13	3708 9	152	193	75	TR/MS	-	-
14	3417 16	144	192	75	TR/MS	TR/MS	-
15	3792 6	146	185	75	-	5/MS	-
16	3808 4	155	193	95	-	10/MS	-
17	3392 18	148	193	80	-	-	-
18	3975 1	149	191	80	-	-	-
19	3317 21	148	191	85	-	-	-
20	3742 7	152	190	75	-	-	-
21	3583 11	147	189	75	-	-	-
22	3417 17	148	187	85	-	10 MS	-
23	3800 5	154	190	80	-	-	-
24	3317 22	148	188	85	-	-	-

Grand Mean: 3562

LSD : 570

CV : 11.4

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

TEL AMARA

Dr. A.Alemaddine

Agricultural Research Institute

Date Planted Nov./24/1980

Date Harvested July/2/1981

Rainfall n.a

Latitude 35.5 N

Longitude 35.28 E

Elevation 950 mm

Local check

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	1892 18	158	194	80	-	-	-
2	2267 4	160	194	75	-	-	-
3	2050 9	160	195	80	-	-	-
4	2008 11	161	195	70	-	-	-
5	2375 3	163	195	80	-	-	-
6	2008 12	162	195	90	-	-	-
7	2483 2	162	194	85	-	-	-
8	1908 17	163	196	80	-	-	-
9	1958 14	165	196	80	-	-	-
10	1725 22	162	196	70	-	-	-
11	1792 20	161	194	80	-	-	-
12	1758 21	164	196	75	-	-	-
13	1892 19	162	196	75	-	-	-
14	2008 13	162	196	75	5 MR	-	-
15	1683 24	162	195	75	-	-	-
16	2033 10	162	194	80	-	-	-
17	1703 23	166	196	70	-	-	-
18	2192 6	161	196	80	-	-	-
19	1958 15	163	195	70	-	-	-
20	2225 5	158	195	85	-	-	-
21	1942 16	163	196	80	-	-	-
22	2167 7	162	195	85	-	-	-
23	2108 8	156	195	105	-	-	-
24	2792 1	158	195	85	-	-	-

Grand Mean: 2016

LSD : 633

CV : 22.3

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

TERBOL

Cereal Staff
ICARDA

Date Planted	n.a	Date Harvested	n.a	Rainfall	n.a
Latitude	35.52 N	Longitude	36 E	Elevation	900 m
Local check					

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	5050 4	163	212	85	-	5 MR	-
2	3633 24	162	213	85	-	TR/Mr	-
3	4733 10	160	213	90	-	TR/MR	-
4	4792 8	158	212	75	-	-	-
5	5050 5	164	212	80	-	-	-
6	4525 13	165	214	100	-	TR/MS	-
7	4633 12	157	205	90	-	TR/MR	-
8	5200 3	166	216	85	-	TR/MR	-
9	5008 6	162	211	90	-	TR/MR	-
10	4742 9	162	215	80	-	-	-
11	4900 7	154	208	90	-	TR/MR	-
12	4092 21	161	215	75	-	TR/MR	-
13	4400 16	160	213	70	-	TR/MR	-
14	4692 11	160	211	80	-	-	-
15	4425 14	166	217	85	-	-	-
16	4425 15	159	211	95	-	-	-
17	3958 22	168	217	80	-	TR/MR	-
18	5325 1	155	211	80	-	-	-
19	4325 18	162	213	70	-	TR/MR	-
20	3750 23	155	208	75	-	-	-
21	4358 17	164	214	85	-	-	-
22	4183 20	154	204	85	-	-	-
23	4200 19	144	210	90	-	-	-
24	5292 2	161	213	75	-	-	-

Grand Mean: 4570

LSD : 746

CV : 11.6

REGIONAL WHEAT YIELD TRIAL 1980-81

AFRICA

LIBYA

EL SARIR

Mr. F.El Majbari, Mr. M.Bhutta, Mr. H.Ammar
El Sarir Agricultural Project

Date Planted Nov./11/1980

Date Harvested April/23/1981

Rainfall Nil

Latitude 26 E

Longitude 22 N

Elevation n.a

Local check Sedi Masri, Tanuri

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3487 6	101	149	90
2	2088 21	107	152	69
3	2437 15	102	150	74
4	1929 23	99	147	66
5	2754 11	99	148	69
6	1680 24	98	151	76
7	3673 2	99	143	75
8	2437 16	107	151	75
9	3451 8	107	150	70
10	2192 19	100	151	81
11	3302 10	112	150	70
12	2237 18	100	151	72
13	2011 22	99	146	66
14	2726 12	103	152	77
15	2523 14	113	156	78
16	3537 4	113	151	71
17	2600 13	121	158	75
18	3474 7	97	150	62
19	2323 17	101	147	79
20	3687 1	100	149	70
21	2178 20	112	168	70
22	3410 9	107	147	72
23	3668 3	99	150	71
24	3496 5	91	143	75

Grand Mean: 2804

LSD : 783

CV : 19.8

REGIONAL WHEAT YIELD TRIAL 1980-81

AFRICA

LIBYA

TAJOURA

Cereal Group

Agricultural Research Center

Date Planted Nov./23/1980

Latitude 32.53 N

Local check Mukhtar

Date Harvested May/7/1981

Longitude 13.17 E

Rainfall n.a

Elevation 11 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR	PM
1	1329 8	117	168	75	-	-	-	-
2	1375 7	124	167	55	-	-	-	-
3	1463 4	125	169	60	-	-	-	-
4	908 22	119	168	50	-	-	-	-
5	1296 10	119	162	75	-	-	-	-
6	1029 19	123	163	69	-	-	-	-
7	1404 6	116	162	79	-	-	-	-
8	1079 16	120	168	68	-	-	-	-
9	1479 3	119	163	63	-	-	-	-
10	1133 15	120	166	56	-	-	-	-
11	1425 5	122	164	63	-	-	-	-
12	921 21	126	164	51	-	-	-	-
13	1042 17	120	163	61	-	-	-	-
14	1033 18	117	158	55	-	-	-	-
15	592 23	136	171	49	-	-	-	-
16	1225 12	121	162	60	-	-	-	-
17	433 24	137	175	58	-	-	-	-
18	1321 9	120	162	73	-	-	-	-
19	1221 13	122	166	56	-	-	-	-
20	1568 2	121	166	68	-	-	-	-
21	1000 20	127	168	64	-	-	-	-
22	1263 11	119	162	63	-	-	-	-
23	1171 14	115	160	70	-	-	-	-
24	1621 1	122	166	93	-	-	-	-

Grand Mean: 1180

LSD : 436

CV : 26.2

REGIONAL WHEAT YIELD TRIAL 1980-81

NORTH AMERICA

MEXICO

CIANO

Cereal Group
CIMMYT

Date Planted Nov./30/1980

Date Harvested April/25/1981

Rainfall 130 mm

Latitude 27.29 N

Longitude 109.57 W

Elevation 40 m

Local check Nacozari 76

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR
1	5019 19	74	122	90	60 S
2	5478 7	77	126	90	T MS
3	5242 12	81	122	95	20 MS
4	5930 1	70	122	80	10 MS
5	5566 4	77	122	80	60 S
6	5169 17	76	122	100	5-20 S
7	5686 3	72	122	85	70 S
8	5292 10	77	128	90	5 MR
9	5172 16	75	122	90	60 S
10	5733 2	70	122	85	5-20 MS
11	5197 15	82	132	95	T-20 MS/5S
12	5230 14	78	132	85	20 MS/MR
13	5528 6	69	126	80	5 MR
14	4730 23	74	122	85	5 MS/MR
15	5234 13	91	-	85	T MS
16	5381 8	78	130	100	10 S
17	4347 24	93	-	95	T MS/40S
18	5013 20	73	126	90	T MS
19	5563 5	75	128	75	5 MS
20	5081 18	79	130	95	T R
21	5298 9	81	134	90	20 MS/MR
22	4886 22	80	130	90	20 MS
23	4959 21	73	122	105	20-50 S
24	5283 11	71	122	85	10 S

Grand Mean: 5250

LSD : 613

CV : 8.3

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA

PAKISTAN

FAISALABAD

Dr. M.A.Bajura, Dr. M.Shaffiqari
Wheat Research Institute

Date Planted Nov./6/1980

Date Harvested May/7/1981

Rainfall 144 mm

Latitude 31.30 N

Longitude 73.10 E

Elevation 213 m

Local check Lyallpur 73

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	3220 20	108	152	93	-	100 S	-
2	3360 15	106	154	82	TR/MR	0 R	-
3	3460 12	110	155	100	0	0 R	-
4	3500 11	103	155	85	0	10 R	-
5	3400 13	110	153	94	0	5 R	-
6	3300 17	105	151	115	-	0 R	-
7	4400 1	102	152	92	10 S	10 S	-
8	3140 21	111	153	90	0	5 R	-
9	3520 10	106	154	108	0	5 S	-
10	4080 2	114	-	100	-	0 R	-
11	3140 22	107	152	99	40 S	-	-
12	3360 16	99	151	84	-	0 R	-
13	4000 4	105	152	97	10 R	-	-
14	2940 23	107	153	98	TR/MS	65 S	-
15	3380 14	109	153	105	-	0 R	-
16	3780 9	102	150	92	-	0 R	-
17	2440 24	121	-	97	-	0 R	-
18	3300 18	106	151	99	0	0	-
19	4080 3	104	151	73	-	0 R	-
20	3840 7	106	154	110	0	25 S	-
21	3960 5	113	156	88	-	0 R	-
22	3960 6	111	153	104	0	0 R	-
23	3820 8	97	150	117	-	0 R	-
24	3280 19	103	152	110	-	25 MS	-

Grand Mean: 3527

LSD : 1045

CV : 21.0

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA

PAKISTAN

ISLAMABAD

Dr. N.Noorullah

Pakistan Agricultural Research Council

Date Planted Nov./3/1980

Date Harvested May/12/1981

Rainfall nil

Latitude 33.39 N

Longitude 73.5 E

Elevation n.a

Local check

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	SR	LR
1	2083 22	135	179	90	S	-	S
2	3042 3	142	180	95	-	-	-
3	3417 1	139	183	100	-	-	-
4	2208 21	125	180	80	-	-	MS
5	2833 7	135	179	95	-	-	MS
6	2375 16	139	185	105	-	-	MS
7	2958 5	126	176	100	-	-	MS
8	2375 17	135	181	90	-	-	MS
9	2417 14	132	178	95	S	-	S
10	2542 11	140	181	92	MS	-	MS
11	2917 6	129	178	100	-	-	MS
12	1833 23	142	181	95	MS	-	MS
13	2667 9	125	180	80	-	-	-
14	1708 24	126	206	90	MS	-	MS
15	2375 18	127	185	100	-	-	-
16	3000 4	127	207	100	-	-	MS
17	2250 20	135	180	105	-	-	MS
18	2500 13	125	177	100	MS	-	-
19	2667 10	127	176	80	S	-	-
20	2792 8	125	174	95	-	-	MS
21	2417 15	141	177	100	MS	-	-
22	3083 2	127	173	100	-	-	MS
23	2375 19	125	177	105	-	-	-
24	2542 12	127	174	100	MS	-	S

Grand Mean: 2557
LSD : 712
CV : 19.8

REGIONAL WHEAT YIELD TRIAL 1980-81

ASIA

PAKISTAN

PIRSABAK

Director,
Cereal Crop Research Institute

Date Planted Dec./16/1980

Date Harvested May/7/1981

Rainfall 323 mm

Latitude 34 N

Longitude 72 E

Elevation 905 m

Local check Blue Silver

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR
1	2625 18	107	134	85	5 MS	10 S
2	3313 9	103	134	80	-	-
3	3375 7	107	134	90	-	-
4	2625 19	100	134	80	-	-
5	2875 16	108	137	85	TR/MS	-
6	3188 11	104	135	110	-	-
7	4375 1	102	135	88	-	5 S
8	3000 13	108	134	85	-	-
9	2900 15	105	135	85	40 S	5 S
10	3000 14	104	135	80	5 MS	-
11	3188 12	108	135	82	-	-
12	2500 20	106	140	78	-	-
13	2438 21	104	139	75	-	-
14	2250 24	109	143	80	10 S	TR/MR
15	2375 22	116	141	83	-	-
16	4063 2	110	139	100	-	TR/MR
17	2313 23	-	144	80	-	-
18	3563 6	104	138	85	-	-
19	2813 17	105	-	70	TR/MS	-
20	3750 4	103	138	90	-	TR/ R
21	3250 10	109	135	80	-	-
22	3625 5	105	135	92	TR/ R	TR/MR
23	3350 8	102	135	100	-	-
24	3813 3	92	132	97	20 S	TR/MR

Grand Mean: 3106

LSD : 638

CV : 14.6

REGIONAL WHEAT YIELD TRIAL 1980-81

EUROPE

PORTUGAL

ELVAS

Dr. M.T.Barradas and co-workers
National Plant Breeding Station

Date Planted Nov./20/1980

Date Harvested June/26/1981

Rainfall 219 mm

Latitude 38.33 N

Longitude 7.9 W

Elevation 208 m

Local check Anxa

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	2187 6	138	200	85
2	2029 11	138	201	79
3	2224 4	140	201	84
4	1599 21	130	202	67
5	1778 17	137	201	83
6	1729 18	138	202	74
7	1713 20	131	202	83
8	2060 10	133	202	80
9	2342 3	138	200	85
10	1928 12	130	201	65
11	2472 2	130	203	79
12	1526 22	132	201	77
13	2195 5	129	202	77
14	2108 9	138	202	90
15	1827 16	133	201	80
16	1434 23	135	202	86
17	1725 19	134	201	80
18	1866 15	132	202	85
19	1412 24	130	199	65
20	1890 14	128	202	79
21	2476 1	134	202	72
22	1918 13	130	203	74
23	2114 8	128	204	95
24	2153 7	131	200	76

Grand Mean: 1846

LSD : 437

CV : 15.9

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

QATAR

DOHA

Dr. O.S.Khalil, Mr. H.El Saifi, Mr. M.E.Shaurrab
Department of Agriculture & Water Resources

Date Planted Nov./18/1980

Date Harvested April/13/1981

Rainfall 110 mm

Latitude 25.48 N

Longitude 51.18 E

Elevation 50 m

Local check Condor

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3322 9	68	123	95
2	4622 1	73	125	85
3	4092 5	72	126	90
4	4400 3	69	125	75
5	3056 13	70	125	80
6	2842 17	73	126	75
7	2233 23	70	121	65
8	2833 18	74	127	75
9	3117 12	69	123	80
10	4417 2	67	123	75
11	2300 20	79	128	95
12	3678 7	71	125	80
13	4332 4	68	122	75
14	3167 11	70	125	80
15	2267 22	87	143	90
16	2900 16	72	125	90
17	2723 19	94	141	80
18	1500 24	70	117	65
19	2283 21	70	120	55
20	2933 14	73	126	80
21	3933 6	76	127	90
22	3289 10	78	125	85
23	2933 14	65	123	90
24	3500 8	71	127	80

Grand Mean: 3194

LSD : 1180

CV : 11.0

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

SAUDI ARABIA

DIRAB

Dr. M.Sakr, Mr. F.Menisy, Mr. A.Rossayes
Ministry of Agriculture & Water Resources

Date Planted	Dec./15/1980	Date Harvested	April/25/1981	Rainfall	4 mm
Latitude	24.25 N	Longitude	46.36 E	Elevation	635 m
Local check	Arz				

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	2513 14	72	108	78
2	2449 16	75	109	80
3	4139 1	76	108	70
4	2475 15	69	105	72
5	3411 4	74	104	70
6	2304 17	71	106	86
7	2256 19	69	105	75
8	2820 12	76	107	85
9	2823 11	77	107	73
10	3100 8	77	108	72
11	3166 7	72	107	77
12	3453 3	76	109	75
13	2180 21	69	107	72
14	3202 5	77	109	82
15	2197 20	92	120	83
16	3924 2	79	111	77
17	2299 18	91	109	85
18	1770 24	69	106	72
19	2851 10	72	108	71
20	3082 9	71	105	70
21	1860 23	86	116	76
22	2520 13	77	109	67
23	2148 22	80	108	75
24	3180 6	78	111	70

Grand Mean: 2755
LSD : 477
CV : 12.3

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

SAUDI ARABIA

RIYADH

Dr. H.J.Sayed
Riyadh University

Date Planted Nov./29/1980
Latitude 24.42 N
Local check Arz

Date Harvested n.a
Longitude 46 E

Rainfall n.a
Elevation 420 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	4150 5	83	122	93
2	4356 3	81	129	87
3	3764 9	84	130	92
4	4778 1	76	129	77
5	3675 12	83	126	90
6	4606 2	80	126	92
7	3667 13	83	127	77
8	3388 19	82	127	78
9	4102 6	85	128	89
10	3571 17	80	132	60
11	3658 14	83	131	78
12	3865 8	81	132	73
13	4172 4	76	128	69
14	3148 21	83	130	80
15	3031 22	96	133	84
16	3163 20	89	129	87
17	2299 24	89	129	79
18	3580 16	77	129	76
19	4100 7	81	129	69
20	3614 15	84	129	86
21	3689 11	85	131	81
22	3469 18	83	129	76
23	2506 23	77	127	92
24	3749 10	81	129	86

Grand Mean: 3670
LSD : 1169
CV : 22.6

REGIONAL WHEAT YIELD TRIAL 1980-81

EUROPE

SPAIN

BORJAS BLANCAS

Dr. A.Martin Sanchez
Mahissa, Barcelona 13

Date Planted Nov./17/1980
Latitude 41.31 N
Local check Marca

Date Harvested Aug./6/1981
Longitude 0.49 W

Rainfall 300 mm
Elevation 280 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	PM
1	5086 8	169	212	103	2
2	4825 13	168	212	89	2
3	4908 12	168	212	99	0 E
4	5009 10	162	212	88	0
5	4394 20	168	212	100	0 E
6	4496 18	168	212	111	0 E
7	5707 3	164	212	100	0 E
8	4580 17	168	217	95	0 E
9	5744 2	171	217	101	0 E
10	4463 19	168	212	89	0
11	5652 4	164	212	93	2
12	4162 22	168	212	85	3
13	5073 9	162	212	86	0 E
14	4007 23	168	212	98	0 E
15	5237 6	171	212	88	0 E
16	4613 16	168	212	107	0 E
17	4797 14	176	217	95	0
18	4373 21	168	212	101	0 E
19	3883 24	168	212	87	7
20	5127 7	162	212	98	0 E
21	4630 15	168	212	92	0 E
22	4926 11	162	212	91	0
23	5970 1	162	212	108	0 E
24	5332 5	168	212	105	0 E

Grand Mean: 4874
LSD : 791
CV : 11.5

REGIONAL WHEAT YIELD TRIAL 1980-81

EUROPE

SPAIN

COGULLADA

Dr. Jesus Comenge

Monasterio de Cogullada AGRAR

Date Planted Dec./24/1980

Date Harvested July/20/1981

Rainfall 320 mm

Latitude 41.41 N

Longitude 2.50 W

Elevation 208 m

Local check Anza

Variety No.	Yield kg/ha	DH	Pl.Ht	LR	PM
1	2417 15	141	80	-	1-3
2	3100 3	137	70	-	1-3
3	2642 10	142	75	-	1
4	2750 7	138	60	-	5-7
5	2667 9	142	70	-	7
6	1983 19	143	85	-	3-5
7	2525 13	137	75	-	3-5
8	2375 16	142	70	-	1
9	2825 6	144	70	-	3-5
10	3075 5	143	65	-	3-5
11	2112 17	140	70	-	5
12	1908 21	140	60	-	5-7
13	3392 1	138	60	-	3-5
14	2700 8	139	70	-	3
15	2611 11	142	65	-	3
16	1433 23	141	75	-	3-5
17	3129 2	145	75	-	3
18	1950 20	139	75	-	3-5
19	2488 14	140	60	-	7
20	1179 24	138	70	-	1-3
21	3100 4	140	60	-	3
22	1475 22	137	55	-	3
23	2550 12	136	75	-	1
24	2067 18	139	85	-	3

Grand Mean: 2435

LSD : 716

CV : 20.9

REGIONAL WHEAT YIELD TRIAL 1980-81

EUROPE

SPAIN

MADRID

Dr. L.Silvela Sangro

Jemillas Agrícolas Aranjuez

Date Planted Dec./10/1980

Latitude 40 N

Local check Bellido

Date Harvested Aug./9/1981

Longitude 3.40 W

Rainfall n.a

Elevation 490 m

Variety No.	Yield kg/ha	DH	Pl.Ht	ST	PM
1	4250 6	158	95	6	3
2	4651 1	147	100	3	2
3	4271 5	159	105	5	2
4	4142 9	148	95	3	4
5	3269 18	160	90	8	4
6	4194 7	148	105	2	2
7	3919 11	152	95	7	2
8	4351 3	148	105	2	3
9	4325 4	156	95	7	1
10	4393 2	149	105	5	4
11	4169 8	150	100	3	1
12	2708 20	150	95	3	2
13	4021 10	148	90	4	2
14	3411 16	152	110	7	2
15	3879 12	150	95	5	2
16	3704 13	148	115	6	2
17	3479 15	159	105	7	1
18	2708 21	150	100	6	2
19	2403 23	147	85	3	5
20	3177 19	147	105	3	1
21	3395 17	147	100	3	1
22	2230 24	148	95	6	1
23	2673 22	146	100	5	1
24	3668 14	155	105	5	3

Grand Mean: 3641

LSD : 836

CV : 16.3

REGIONAL WHEAT YIELD TRIAL 1980-81

AFRICA

SUDAN

GEZIRA

Dr. A.B.El Ahmadi
Gezira Research Station

Date Planted Nov./3/1980
Latitude 14.24 N
Local check Mexicani

Date Harvested Feb./20/1981
Longitude 33.29 E

Rainfall n.a
Elevation 411 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	1419 8	45	85	55
2	1069 20	61	102	61
3	1144 18	56	97	60
4	1456 5	52	97	57
5	1431 7	48	93	57
6	1381 10	54	97	67
7	1381 11	45	92	55
8	981 22	51	102	69
9	1475 3	45	85	58
10	1138 19	52	100	61
11	1475 4	60	103	74
12	1250 16	62	101	61
13	1456 6	47	97	56
14	1900 1	48	85	58
15	1288 15	66	107	65
16	1200 17	59	99	68
17	419 24	80	125	66
18	1025 21	45	85	56
19	1844 2	54	97	67
20	1369 12	46	86	64
21	1313 14	68	107	58
22	1356 13	56	99	68
23	831 23	45	85	61
24	1406 9	47	85	53

Grand Mean: 1292
LSD : 389
CV : 21.4

REGIONAL WHEAT YIELD TRIAL 1980-81

AFRICA

SUDAN

NEW HALFA

Dr. M.S.Mohamed, Dr. M.S.Khalid
New Halfa Research Station

Date Planted	Jan./8/1981	Date Harvested	n.a	Rainfall	n.a
Latitude	15.8 N	Longitude	35.45 E	Elevation	4 m
Local check	Arz				

Variety No.	Yield kg/ha	DH	Pl.Ht	SR	
1	3197 2	52	52	T	S
2	1823 12	64	59	0	
3	1233 21	64	55	0	
4	2097 8	59	58	40	S
5	1723 16	56	56	0	
6	2087 9	64	64	0	
7	2217 7	52	52	0	
8	1363 20	64	60	10	S
9	2243 6	53	67	10	S
10	2017 11	59	61	20	S
11	1757 14	64	65	0	
12	1680 18	64	55	10	S
13	2620 3	59	45	20	S
14	1733 15	59	50	0	
15	970 22	78	57	5	S
16	1717 17	66	62	0	
17	393 24	78	50	T	MR
18	2330 5	52	53	0	
19	2437 4	59	58	10	S
20	2057 10	59	63	0	
21	720 23	69	54	10	S
22	1797 13	64	53	0	
23	1513 19	53	67	0	
24	3220 1	59	55	0	

Grand Mean: 1872
LSD : 639
CV : 24.2

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

SYRIA

IZRA'A

Dr. L.R.Morsi

ACSAD, Field Crops Section

Date Planted Dec./23/1980

Date Harvested June/18/1981

Rainfall 329 mm

Latitude 32.51 N

Longitude 36.15 E

Elevation 575 m

Local check Haurani

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
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1	2688 17	95	136	60
2	2747 15	92	130	70
3	3284 3	93	129	75
4	2900 7	94	131	61
5	2401 23	95	128	65
6	2754 13	93	134	85
7	3303 2	92	127	70
8	2889 8	94	136	69
9	3023 5	95	130	70
10	2667 18	93	132	71
11	2780 12	92	130	80
12	2810 10	93	136	75
13	3207 4	92	127	85
14	2455 22	93	132	80
15	2884 9	95	136	60
16	2937 6	93	135	80
17	2133 24	99	138	65
18	2583 19	92	130	70
19	2520 20	95	132	75
20	3365 1	92	128	85
21	2783 11	94	129	60
22	2749 14	92	130	65
23	2708 16	93	136	80
24	2465 21	96	133	81

Grand Mean: 2793

LSD : 674

CV : 17.1

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

SYRIA

TEL HADYA-RF

Cereal Staff

ICARDA, Rainfed Set

Date Planted Dec./9/1980

Date Harvested June/20/1981

Rainfall 372 mm

Latitude 36.05 N

Longitude 36.55 E

Elevation 282 m

Local check Jori

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3371 3	131	163	70
2	2925 20	131	167	70
3	3233 8	133	168	75
4	3171 12	130	171	65
5	3004 15	132	168	70
6	2908 21	133	172	80
7	3363 4	125	161	80
8	3388 2	131	167	75
9	3192 10	132	160	75
10	2983 17	130	167	75
11	3492 1	128	159	75
12	3000 16	130	171	70
13	3083 14	129	163	75
14	3138 13	130	167	75
15	3275 7	-	175	70
16	3342 5	128	170	90
17	2754 23	-	176	65
18	3188 11	126	165	70
19	2783 22	130	170	55
20	2646 24	128	164	70
21	3292 6	132	165	70
22	2971 18	128	162	75
23	3217 9	121	173	95
24	2963 19	126	168	110

Grand Mean: 3111

LSD : 450

CV : 10.3

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

SYRIA

TEL HADYA-IRR

Cereal Staff

ICARDA, Irrigated Set

Date Planted Nov./24/1980

Date Harvested June/27/1981

Rainfall 372 mm

Latitude 36.05 N

Longitude 36.55 E

Elevation 282 m

Local check Jori

Variety No.	Yield kg/ha	DH	Pl.Ht
1	4458 16	-	85
2	5442 2	143	80
3	4325 17	-	75
4	5225 4	142	85
5	4733 11	143	75
6	4908 10	145	105
7	4167 18	138	90
8	5279 3	144	90
9	4642 14	-	85
10	5050 6	144	90
11	4575 15	138	90
12	4713 12	145	85
13	4967 8	143	80
14	5146 5	144	80
15	5017 7	-	85
16	3875 20	143	100
17	4917 9	-	90
18	3992 19	143	90
19	4658 13	143	75
20	3533 22	138	85
21	5483 1	-	90
22	2904 24	139	85
23	3663 21	137	90
24	3208 23	143	120

Grand Mean: 4536

LSD : 848

CV : 13.3

REGIONAL WHEAT YIELD TRIAL 1980-81

AFRICA

TUNISIA

BEJA

Dr. Ali R.Maamouri, Mr. M.Deghais
INRAT

Date Planted Nov./24/1980

Date Harvested June/12/1981

Rainfall 571 mm

Latitude 37 N

Longitude 9 E

Elevation 165 m

Local check Dougga 74

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	6101 20	135	n.a	95
2	7472 1	135	-	80
3	6712 7	135	-	90
4	6680 8	135	-	70
5	6765 5	135	-	80
6	6069 21	136	-	100
7	6357 16	134	-	90
8	6857 4	134	-	85
9	6474 14	136	-	90
10	6977 3	134	-	85
11	6754 6	134	-	80
12	6587 11	135	-	75
13	6612 9	134	-	85
14	6247 18	134	-	90
15	6519 13	138	-	85
16	6472 15	134	-	100
17	5501 23	143	-	85
18	5516 22	134	-	90
19	6245 19	135	-	75
20	6260 17	133	-	90
21	7078 2	135	-	85
22	5370 24	134	-	80
23	6610 10	135	-	95
24	6542 12	135	-	85

Grand Mean: 6449

LSD : 504

CV : 5.5

REGIONAL WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

YEMEN ARAB REPUBLIC

TAIZ

Dr. I. Fuad

Central Agriculture Research Service

Date Planted Nov./19/1980

Date Harvested March/15/1981

Rainfall n.a

Latitude 13.42 N

Longitude 44.00 E

Elevation 1350 m

Local check Sonalika

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	1997 15	50	90	65	0	20 S	30 S
2	1952 17	60	97	60	0	40 S	60 S
3	2379 7	60	101	70	0	20 S	10 R
4	1869 20	52	91	55	0	50 S	90 S
5	2421 4	57	99	75	0	20 S	10 R
6	1849 21	59	93	80	0	60 S	60 S
7	1902 18	46	87	65	0	40 S	40 S
8	2598 2	62	104	90	0	80 S	60 S
9	2444 3	52	89	80	0	60 S	90 S
10	2297 9	53	98	65	0	60 S	90 S
11	1973 16	67	105	80	0	0 R	0 R
12	2379 8	59	101	80	0	60 S	60 S
13	2045 13	52	91	70	0	70 S	90 S
14	2013 14	54	99	70	0	40 S	40 S
15	2381 6	-	74VL	75	0	40 S	40 S
16	2893 1	62	98	85	0	0 R	0 R
17	1214 24	59	VL	70	0	5 S	5 S
18	1828 22	45	85	55	0	10 S	20 S
19	2183 10	56	95	55	0	70 S	70 S
20	1797 23	60	95	-	0	10 MR	20 MR
21	2172 11	66	101	70	0	80 S	60 S
22	1888 19	64	95	-	0	30 S	30 S
23	2389 5	47	91	-	0	20 MR	10 MR
24	2106 12	44	78	-	0	10 S	10 S

Grand Mean: 2123

LSD : 678

CV : 22.7

NINTH RAINFED WHEAT YIELD TRIAL

The Ninth Rainfed Wheat Yield Trial (9th RFWYT) consisted of 11 bread-wheat lines, 11 durum wheat lines, one triticale line and the national check of each location. Data from 26 locations were available.

Durum entry no: 13 Cr'S'(T.Pol.185.309xT.P.) had the highest mean over the locations and ranked among the top ten yielding lines in 19 out of the 26 locations. Also the second and third ranking lines were durums (entries 8 and 10). DS15/Geier, ranking second was in 15 locations among the 10 highest yielding entries.

The highest yielding breadwheat line was no: 14, Moncho'S'. It ranked fourth, and was in 15 locations among the ten best yielders. The second highest yielding breadwheat was the check Mexipak (ranking sixth).

Agronomic Traits

The average number of days to heading varied from 121 (triticale entry 23, Mapache) to 128 days (entry 21, durum Ch67-Jo'S'xCr'S'). The average days to maturity were between 157 (Breadwheat Cno'S'-Pj62xGal1/Pic, entry 18) and 163 days (Durum entries, nos: 4 and 17). The range for both characters was about one week only.

The tallest entry was Mapache (Tcl) with 93cm average plant height. Entry 15, a durum, was the shortest line, with 69cm.

Entries 4 and 19, both durums, had a high protein content (15.4%). (Cc-Inia/Tob-CfnxBb) 7C (entry 9) was with 13.9% to the breadwheat with the highest protein content.

Ruff'S'xJo-Cr (entry 17) was the durum with the highest thousand kernel weight (51.3gr). This line was fifth ranking in yield. As a group, the breadwheats had a lower thousand kernel weight, with 41.5gr as maximum (entry 18: Cno'S'-Pj62xGall/Pic, which was the earliest maturing entry).

Disease Resistance

Data were available on the occurrence of five diseases. Scores for yellow rust were low for all entries. The durum entry with the lowest scores to the four other diseases were entry no: 6 and also 17 and 19. The most resistant breadwheats were entries 14 (also the highest yielding breadwheat line), 16 and 22. The triticales entry had only some leaf rust.

Ninth Rainfed Wheat Yield Trial (1980-81)
Overall Performance of Varieties (26 locations*)

Table 5:

Entry No.	Variety or Cross and Pedigree	Yield kg/ha	R	FR	DH	DM	Pl.Ht	Prot. %	Wt1000 Kernels
1 Bw	Mexipak 65 (BW check)	3174	6	11	125	160	79	11.7	34.4
2 D	Fg'S'-B0'S' CM 17147-7M-10Y	3102	14	11	127	162	74	14.1	45.1
3 Bw	Bulbul'S' PK 2858-7A-3A-3A-0A	3123	13	9	124	159	85	11.2	34.5
4 D	Mexi'S'xGs'S'-Cr'S'/Ibis'S' CD 4504-G-3Y-5M-0Y	3058	17	11	127	163	80	15.4	42.9
5 Bw	Tob-8156xKa1 CM 8783-0L-5L-3L-2L-OKE-OSK-OAP	3051	18	9	124	160	79	12.6	34.4
6 D	Cit-Fg CM 9927-1S-2S	3041	21	8	126	161	76	13.7	39.9
7 Bw	Ka1-BbxSx CM 21586-7S-1S-0S	2954	23	9	122	159	84	13.5	33.7
8 D	D.S-15/Geier CD 523-3Y-1Y-2M-0Y	3346	2	15	124	161	77	13.3	45.4
9 Bw	(Cc-Inia/Tob-CfnxBb)7C CM 8287-G-1M-3Y-3M-0Y	2805	24	8	122	160	77	13.9	34.6
10 D	D 68-11/G11 ² xT.dic.V.Vernum CD 8642	3261	3	14	125	161	78	14.9	38.7
11 Bw	HL.41BxA267 CM 23271-5BJ-1AL-0G	3144	9	15	123	161	86	11.3	36.9
12 D	Cocorit (Durum check)	3095	15	9	123	160	82	14.6	40.6

Table 6: (Cont'd)

Entry No.	Variety or Cross and Pedigree	A.C.I				
		YR 3Loc.	LR 8Loc.	SR 3Loc.	PM 2Loc.	ST 1Loc.
13 D	Cr'S' (T.Pol.185.309xT.P)	0	2	11	2	0
14 Bw	Moncho'S' CM 8288-A-3M-6Y-5M-1Y-0M	0	0	3	3	0
15 D	S.15-Cr'S' (Cr'S' (21563/61-130xLds)) CD 7454-15Y-1M-1Y-2M-0Y	1	1	5	5	0
16 Bw	Inia-RL 4220x7C/Yr'S' CM 15430-2S-2S-1S-0AP	0	3	0	2	1
17 D	Ruff'S'xJo-Cr CM 18537-1Y-0Y	-	0	5	2	0
18 Bw	Cno'S'-Pj62xGall/Pic CM 35044-OL-1AP-0AP	-	1	16	4	1
19 D	Mexi'S'xChap-21563 CD 1894-18Y-0Y	-	1	0	4	0
20 Bw	RonxCe-Inia L 61-1679-0AP	0	3	5	5	0
21 D	Ch 67-Jo'S'xCr'S' CM 12857-10Y-2M-1Y-0Y	1	1	18	6	0
22 Bw	COMO'S'=Orizaba'S'xSD6485-8156 (R) CM 4756-12Y-1M-1Y-1M-0Y	1	0	0	3	1
23 Tcl	Mapache	-	2	0	0	0
24	National check	1	24	16	1	0

Table 6: Diseases for the Regional Rainfed Wheat Yield Trial.

Entry No.	Variety or Cross and Pedigree	A.C.I				
		YR 3Loc.	LR 8Loc.	SR 3Loc.	PM 2Loc.	ST 1Loc.
1 Bw	Mexipak 65 (BW check)	1	18	0	1	2
2 D	Fg'S'-Bo'S' CM 17147-7M-10Y	-	4	11	2	0
3 Bw	Bulbul'S' PK 2858-7A-3A-3A-0A	1	8	8	2	0
4 D	Mexi'S'xGs'S'-Cr'S'/Ibis'S' CD 4504-G-3Y-5M-0Y	-	4	13	2	0
5 Bw	Tob-8156xKal CM 8783-0L-5L-3L-2L-0KE-0SK-0AP	0	24	3	3	0
6 D	Cit'-Fg CM 9927-1S-2S	1	1	0	1	0
7 Bw	Kal-BbxSx CM 21586-7S-1S-0S	-	20	3	1	2
8 D	D.S-15/Geier CD 523-3Y-1Y-2M-0Y	-	2	33	1	0
9 Bw	(CC-Inia/Tob-Cfnx8b)7C CM 8287-G-1M-3Y-3M-0Y	-	0	16	2	0
10 D	D 68-11-/G11 ² xT.dic.V.Vernum CD 8642	-	1	5	1	0
11 Bw	HL.41BxA267 CM 23271-5BJ-1AL-0G	-	8	5	4	2
12 D	Cocorit (Durum check)	1	1	3	4	0

Table 5: (Cont'd)

Entry No.	Variety or Cross and Pedigree	Yield kg/ha	R	FR	DH	DM	Pl.Ht	Prot. %	Wt1000 Kernels
13 D	Cr'S' (T.Pol.185.309xT.P)	3372	1	19	124	159	81	13.0	41.8
14 Bw	Moncho'S' CM 8288-A-3M-6Y-5M-1Y-0M	3253	4	15	125	161	80	13.0	35.4
15 D	S.15-Cr'S' (Cr'S' (21563/61-130xLds)) CD 7454-15Y-1M-1Y-2M-0Y	3126	12	13	126	159	69	13.5	36.7
16 Bw	Inia-RL 4220x7C/Yr'S' CM 15430-2S-2S-1S-0AP	3036	22	9	123	160	83	12.1	35.6
17 D	Ruff'S'xJo-Cr CM 18537-1Y-0Y	3203	5	8	126	163	77	14.7	51.3
18 Bw	Cno'S'-Pj62xGall/Pic CM 35044-0L-1AP-0AP	3042	20	9	119	157	79	12.4	41.5
19 D	Mexi'S'xChap-21563 CD 1894-18Y-0Y	3068	16	7	125	161	74	15.4	37.4
20 Bw	RonxCe-Inia L 61-1679-0AP	3150	7	8	123	159	76	12.9	32.0
21 D	Ch67-Jo'S'xCr'S' CM 12857-10Y-2M-1Y-0Y	3127	11	13	128	161	78	13.6	36.5
22 Bw	COMO'S'=Orizaba'S'xSD6485-8156 (R) CM 4756-12Y-1M-1Y-1M-0Y	3147	8	9	125	161	79	12.8	34.3
23 Tcl	Mapache	3044	19	8	121	162	93	13.2	39.5
24	National check	3140	10	11	124	161	85	13.1	40.4

Grand Mean: 3127

CV : 14.3

LSD 5%: 607

*: Yield out of (23 locations); FR out of (26 locations); DH out of (26 locations);
DM out of (21 locations); Pl.Ht out of (26 locations).

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

ASIA AFGHANISTAN BULKH

Dr. M.Nasir Mohib
Bulkh Agricultural Research Station

Date Planted	Nov./26/1980	Date Harvested	June/22/1981	Rainfall	162 mm
Latitude	36.40 N	Longitude	67 E	Elevation	378 m
Local check	7C - On Inia Bman				

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	3894 21	152	187	97	0	0	0
2	5859 1	152	191	92	0	0	0
3	4245 20	149	183	115	0	0	0
4	5055 9	153	189	95	0	0	0
5	4625 17	153	184	100	0	0	0
6	4601 18	155	187	85	0	0	0
7	3879 22	148	186	95	0	0	0
8	5110 8	149	191	75	0	0	0
9	3341 24	149	184	85	0	0	0
10	4655 16	160	186	75	0	0	0
11	5185 7	149	186	100	0	0	0
12	4856 11	153	186	95	0	0	0
13	4756 13	153	186	90	0	0	0
14	4773 12	153	179	85	0	0	0
15	5530 2	147	181	80	0	0	0
16	4385 19	153	177	100	0	0	0
17	5213 6	153	186	90	0	0	0
18	3659 23	153	182	95	0	0	0
19	5488 4	153	188	94	0	0	0
20	5520 3	149	179	85	0	0	0
21	5270 5	154	188	90	0	0	0
22	4669 15	149	183	100	0	0	0
23	4673 14	151	182	115	0	0	0
24	4876 10	145	183	95	0	0	0

Grand Mean: 4754
CV : 16.7
LSD : 1119

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

AFRICA

ALGERIA

SETIF

IGC Staff

Setif Agricultural Research Station

Date Planted Dec./13/1980

Date Harvested July/4/1981

Rainfall 342 mm

Latitude 36.9 N

Longitude 5.21 E

Elevation 1000 m

Local check Nahm Demias

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	821 2	-	-	-
2	521 14	-	-	-
3	554 11	-	-	-
4	575 9	-	-	-
5	575 10	-	-	-
6	542 12	-	-	-
7	588 7	-	-	-
8	383 23	-	-	-
9	596 6	-	-	-
10	417 20	-	-	-
11	650 4	-	-	-
12	425 19	-	-	-
13	413 21	-	-	-
14	525 13	-	-	-
15	408 22	-	-	-
16	579 8	-	-	-
17	458 18	-	-	-
18	483 16	-	-	-
19	346 24	-	-	-
20	479 17	-	-	-
21	658 3	-	-	-
22	500 15	-	-	-
23	608 5	-	-	-
24	1213 1	-	-	-

Grand Mean: 554

CV : 30.3

LSD : 237

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

ASIA

BANGLADESH

ISHURDI

Dr. A. Sufiar

Ishurdi Agricultural Research Station

Date Planted Dec./17/1980

Date Harvested April/2/1981

Rainfall 136 mm

Latitude 24.25 N

Longitude 89.04 E

Elevation 3 m

Local check Sonalika

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	SR
1	2854 2	66	96	88	50 S	0
2	2750 5	70	95	77	T MR	0
3	3192 1	64	96	94	10 MS	0
4	2104 19	69	98	87	0	0
5	1688 22	64	93	78	50 S	0
6	1313 24	67	94	77	0	0
7	2625 7	61	91	88	40 S	0
8	2502 8	61	96	75	0	0
9	2271 17	64	95	82	0	0
10	2479 10	67	96	85	0	0
11	2458 13	64	95	96	10 MS	0
12	2479 11	66	95	81	0	0
13	2417 14	66	95	89	T MR	0
14	2792 4	67	100	92	0	0
15	2062 20	65	95	80	0	0
16	2823 3	63	95	90	20 MS	0
17	1917 21	70	99	78	0	0
18	2229 18	61	94	87	10 MS	0
19	1525 23	66	96	71	0	0
20	2462 12	63	94	83	T MR	0
21	2567 6	72	102	85	0	0
22	2417 15	67	95	80	T MS	0
23	2417 16	69	101	104	0/20 MS	0
24	2479 9	60	94	88	60 S	0

Grand Mean: 2479

CV : 11.7

LSD : 408

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

ASIA

BANGLADESH

JAMALPUR

Dr. N.K.Saha

Jamalpur Agricultural Research Station

Date Planted Nov./22/1980

Date Harvested March/26/1981

Rainfall 56 mm

Latitude 24.56 N

Longitude 89.55 E

Elevation 8 m

Local check Sonalika

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	SR
1	2367 6	56	112	88	30 S	0
2	2492 4	70	114	76	T MR	0
3	2325 8	54	106	96	0	0
4	2275 9	73	126	96	T MS	0
5	1733 19	55	104	76	20 S	0
6	1467 20	68	111	83	0	0
7	2533 3	53	106	92	60 S	0
8	1458 21	61	117	82	0	30 S
9	2167 13	61	108	81	0	0
10	2275 10	66	115	85	0	0
11	2333 7	61	115	97	20 S	0
12	1092 23	69	108	82	0	0
13	2375 5	65	125	82	10 R	0
14	3258 1	73	115	94	0	0
15	2071 16	61	117	71	0	0
16	2117 14	55	110	78	0	0
17	2092 15	72	128	76	T MR	0
18	2058 18	56	113	73	0	0
19	950 24	66	115	74	0	0
20	2225 11	55	110	72	T MS	0
21	1458 22	72	128	84	T MR	0
22	2182 12	61	113	80	T MR	0
23	2558 2	65	115	112	T MR	0
24	2067 17	50	106	88	40 S	0
Grand Mean:	2125					
CV :	19.6					
LSD :	586					

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

CYPRUS

LAXIA

Dr. A.Hadjichristodoulou
Agricultural Research Institute

Date Planted Jan./1/1981

Date Harvested May/20/1981

Rainfall 294 mm

Latitude 34.4 N

Longitude 33.20 E

Elevation 150 m

Local check Mesaoria

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3156 11	107	-	75
2	2661 22	107	-	75
3	2911 16	107	-	88
4	2912 15	107	-	84
5	3250 9	103	-	85
6	3049 12	106	-	84
7	2963 13	102	-	95
8	3987 1	103	-	86
9	3344 6	101	-	90
10	3585 3	104	-	90
11	3403 5	102	-	90
12	3317 7	101	-	85
13	3477 4	102	-	90
14	3177 10	105	-	84
15	3259 8	105	-	80
16	2909 17	102	-	100
17	2817 20	105	-	85
18	2893 18	100	-	85
19	2938 14	107	-	75
20	2734 21	106	-	80
21	2432 24	108	-	85
22	3605 2	108	-	90
23	2864 19	103	-	102
24	2586 23	106	-	67

Grand Mean: 3092
CV : 15.8
LSD : 797

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

EUROPE

GREECE

THESSALONIKI

Dr. Elpis A. Skorda

Cereal Institute

Date Planted Nov./17/1980

Date Harvested June/18/1981

Rainfall 167 mm

Latitude 40.38 N

Longitude 22.57 E

Elevation 10 m

Local check G 84865

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	SR	PM
1	7596 4	164	208	107	0	0	0
2	7250 6	164	208	88	0	40 MS	0
3	6077 19	161	204	98	10 MR	30 MS	0
4	5308 23	163	206	87	0	50 MS	0
5	6625 13	165	208	88	10 MR	10 MS	0
6	6288 17	163	207	91	0	0	0
7	7019 9	161	209	110	0	10 MS	0
8	5538 22	164	204	92	0	60 MS	0
9	4404 24	160	204	91	5 MR	60 MS	0
10	6231 18	164	204	95	0	20 MS	0
11	7721 3	161	209	111	0	20 MS	32
12	6462 14	162	204	103	10 MR	10 MS	56
13	7077 8	162	207	99	5 MR	40 MS	0
14	6327 16	161	209	92	0	10 MS	44
15	6635 12	162	204	89	10 MR	20 MS	44
16	7394 5	163	208	108	0	0	0
17	6019 20	162	206	92	0	20 MS	0
18	7000 10	159	204	103	0	60 MS	34
19	6788 11	163	204	94	0	0	44
20	7846 2	161	204	94	0	10 MS	33
21	5635 21	168	206	93	5 MR	40 MS	43
22	7173 7	165	205	104	0	0	0
23	9019 1	157	209	113	0	0	0
24	6462 15	164	204	102	5 MR	60 MS	21

Grand Mean: 6662

CV : 13.4

LSD : 1259

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

IRAQ

ARBIL

Mr. Al Hussaini Shaaban Ibrahim
Applied Agricultural Research

Date Planted Nov./9/1980

Date Harvested June/1/1981

Rainfall 455 mm

Latitude 36.11 N

Longitude 44. E

Elevation 414 m

Local check Nori - 70

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	Sept.
1	2079 7	142	190	94	0	3	0
2	1993 10	148	192	85	0	0	0
3	1821 13	142	190	92	0	0	3
4	2323 3	147	194	88	0	0	0
5	1773 16	139	190	87	3	0	0
6	2357 2	138	188	79	0	0	0
7	1429 22	134	188	85	0	0	0
8	2025 9	144	190	82	0	0	0
9	2185 5	134	188	88	0	0	0
10	1708 18	141	192	82	0	0	0
11	1812 14	134	187	96	0	0	0
12	1623 19	139	190	89	0	0	0
13	2266 4	140	194	91	0	0	0
14	1913 12	143	197	90	0	0	0
15	2123 6	139	194	70	0	0	0
16	1603 20	133	194	95	0	0	5
17	1808 15	144	197	90	0	0	0
18	1034 24	130	187	91	0	0	0
19	1916 11	134	187	83	0	0	0
20	1725 17	137	192	91	0	0	0
21	2025 8	143	194	91	0	2	0
22	1523 21	139	192	98	0	0	0
23	2358 1	135	196	106	0	0	0
24	1198 23	135	192	86	3	0	0

Grand Mean: 1859
CV : 18.5
LSD : 486

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

IRAQ

HAMMAM AL ALILE

Dr. Adnan H. Adary

College of Agriculture and Forestry Experimental Farm

Date Planted Dec./19/1980

Date Harvested June/8/1981

Rainfall n.a

Latitude 36.91 N

Longitude 42 E

Elevation 320 m

Local check Saberbeg

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	n.a	128	162	68
2	-	129	162	50
3	-	126	162	72
4	-	125	162	62
5	-	126	162	49
6	-	125	162	60
7	-	127	162	55
8	-	123	162	70
9	-	124	162	65
10	-	125	162	70
11	-	126	162	68
12	-	122	162	70
13	-	123	162	75
14	-	122	162	65
15	-	124	162	66
16	-	127	162	60
17	-	125	162	70
18	-	121	162	75
19	-	124	162	70
20	-	125	162	70
21	-	128	162	75
22	-	126	162	65
23	-	121	162	90
24	-	123	162	90

Grand Mean:

CV :

LSD :

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

EUROPE

ITALY

CASACCIA

Dr. L.Rossi, Dr. C.Mosconi

Date Planted Nov./17/1980

Date Harvested June/27/1981

Rainfall 700 mm

Latitude 13.50 N

Longitude 13.30 E

Elevation 20 m

Local check Crero

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	6483 2	n.a	n.a	n.a
2	4650 16	-	-	-
3	5583 8	-	-	-
4	4150 22	-	-	-
5	4600 17	-	-	-
6	5216 13	-	-	-
7	5283 12	-	-	-
8	7000 1	-	-	-
9	1150 24	-	-	-
10	6130 3	-	-	-
11	5066 14	-	-	-
12	4283 21	-	-	-
13	5716 5	-	-	-
14	5366 10	-	-	-
15	4066 23	-	-	-
16	5650 6	-	-	-
17	5733 4	-	-	-
18	4433 19	-	-	-
19	5350 11	-	-	-
20	4566 18	-	-	-
21	4416 20	-	-	-
22	5633 7	-	-	-
23	4950 15	-	-	-
24	5500 3	-	-	-

Grand Mean: 5041
CV : 7.32
LSD : 763

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

JORDAN

MSHAKAR

Dr. N.Katkhuda

Mshakar Agricultural Research Station

Date Planted Dec./1/1980

Date Harvested June/16/1981

Rainfall 493 mm

Latitude 31.43 N

Longitude 35.48 E

Elevation 785 m

Local check Deir Alla 2

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	1942 16	131	157	65
2	1808 18	130	157	60
3	1358 23	132	157	60
4	2100 9	132	157	70
5	1600 21	132	157	60
6	2450 1	127	152	70
7	1675 20	124	147	65
8	2283 4	126	150	70
9	2141 7	127	152	75
10	2108 8	129	152	70
11	2258 5	127	152	70
12	2067 10	125	152	70
13	1950 15	125	150	65
14	1767 19	132	157	55
15	2142 6	130	157	55
16	1567 22	130	157	70
17	1883 17	129	152	65
18	2019 14	122	147	70
19	2058 11	128	152	70
20	2042 12	126	150	60
21	2358 3	131	152	75
22	2400 2	131	152	65
23	1108 24	123	147	70
24	2033 13	129	152	90

Grand Mean: 2027

CV : 19.5

LSD : 556

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

JORDAN

RABBAH

Dr. N.Katkhuda

Rabbah Agricultural Research Station

Date Planted Nov./15/1980

Date Harvested June/13/1981

Rainfall 381 mm

Latitude 35.16 N

Longitude 35.45 E

Elevation 920 m

Local check Deir Alla 2

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3479 3	113	150	65
2	2738 22	112	148	60
3	3325 7	107	149	75
4	2813 21	110	149	75
5	2704 23	111	150	70
6	3346 6	111	150	70
7	3158 10	108	148	85
8	3129 13	112	150	65
9	2917 19	106	149	65
10	2967 17	110	150	60
11	2971 16	107	148	75
12	3158 11	107	149	75
13	3358 4	107	149	75
14	3129 14	108	150	75
15	3225 9	110	150	65
16	3079 15	110	151	85
17	3617 2	110	150	75
18	3708 1	105	148	85
19	3350 5	112	149	75
20	2938 18	109	148	80
21	3283 8	115	151	75
22	3142 12	113	148	75
23	2467 24	105	151	95
24	2846 20	111	151	100

Grand Mean: 3118

CV : 16.0

LSD : 703

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

BEKA'A

Dr. Mahmoud Solh
American University of Agriculture

Date Planted	Nov./18/1980	Date Harvested	June/24/1981	Rainfall	858 mm
Latitude	33.55 N	Longitude	36.4 E	Elevation	995 m
Local check	Najah				

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	1043 10	166	206	55
2	685 23	167	205	65
3	808 17	166	205	60
4	883 14	161	207	81
5	1141 4	165	208	59
6	1022 11	167	210	61
7	950 12	164	205	64
8	502 24	163	206	69
9	836 15	163	207	70
10	702 22	163	206	66
11	768 20	163	208	75
12	743 21	161	210	76
13	1056 9	163	205	66
14	1101 6	164	207	67
15	1098 8	164	207	60
16	1099 7	166	210	73
17	807 18	164	207	65
18	772 19	160	206	61
19	1144 3	163	210	60
20	1165 2	163	205	59
21	1258 1	162	210	68
22	1126 5	164	210	70
23	808 16	161	210	80
24	920 13	161	205	90

Grand Mean: 833
CV : 28.4
LSD : 373

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

KFARDAN

Cereal Staff

International Center for Agricultural Research in the Dry Areas

Date Planted n.a Date Harvested n.a Rainfall n.a
 Latitude 33.52 N Longitude 35.58 E Elevation 1080 m
 Local check

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	3058 23	152	185	80	-	-	-
2	3358 12	151	193	80	-	-	-
3	3567 7	150	191	90	TR MS	-	-
4	3150 19	150	193	75	-	-	-
5	3475 10	145	191	90	-	-	-
6	3167 18	151	193	80	-	-	-
7	3267 15	151	192	90	-	-	-
8	3700 2	150	193	85	-	TR MS	-
9	3558 8	148	192	80	-	-	-
10	3133 21	150	191	80	-	-	-
11	3650 4	149	192	90	-	-	-
12	3242 17	149	193	85	-	-	-
13	3592 6	149	190	90	-	-	-
14	3808 1	150	191	90	-	-	-
15	3292 14	153	193	75	-	-	-
16	3250 16	152	190	85	-	-	-
17	3550 9	150	193	80	-	-	-
18	3658 3	145	185	85	-	-	-
19	3367 11	150	191	80	-	-	-
20	3608 5	150	185	75	-	-	-
21	3067 22	153	193	70	-	TR MS	-
22	3050 24	151	185	85	-	-	-
23	3142 20	149	191	95	-	-	-
24	3333 13	150	192	80	-	-	-

Grand Mean: 3376
 CV : 9.9
 LSD : 469

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

TEL AMARA

Dr. A. Alameddine

Tel Amara Agricultural Research Institute

Date Planted Nov./24/1980

Date Harvested July/2/1981

Rainfall 810 mm

Latitude 33.55 N

Longitude 35.28 E

Elevation 950 m

Local check Baalbek

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	2575 7	158	195	80
2	1750 24	162	195	80
3	2225 17	158	196	90
4	2825 3	162	196	90
5	2792 4	163	196	90
6	2967 1	163	196	85
7	2708 5	162	195	95
8	2508 8	163	196	80
9	2383 13	157	194	80
10	1958 20	164	195	80
11	2217 18	160	195	95
12	2325 14	162	195	80
13	2842 2	162	195	85
14	2617 6	162	196	95
15	2108 19	164	196	75
16	2450 11	163	197	90
17	2508 9	162	196	80
18	2442 12	156	194	90
19	1808 22	164	195	80
20	2308 15	162	194	80
21	1792 23	165	195	80
22	1875 21	163	194	80
23	2508 10	156	195	105
24	2283 16	158	195	90

Grand Mean: 2365

CV : 17.7

LSD : 589

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

LEBANON

TERBOL

Cereal Staff
ICARDA

Date Planted

n.a

Date Harvested

n.a

Rainfall

n.a

Latitude

35.52 N

Longitude

36 E

Elevation

900 m

Local check

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR
1	3158 13	143	180	90	-	TR MS
2	2758 23	140	182	70	-	-
3	3108 16	140	179	90	-	-
4	2892 22	139	181	80	-	-
5	3075 19	141	179	85	-	-
6	3150 14	140	180	80	-	-
7	3100 18	140	179	95	-	-
8	3508 4	140	179	85	-	-
9	3333 7	137	178	70	-	-
10	3508 3	141	179	85	-	-
11	3300 8	139	179	90	-	-
12	3175 12	137	178	95	-	-
13	3533 2	138	181	95	-	-
14	3300 9	139	179	95	-	-
15	3508 5	141	180	75	-	-
16	3292 10	141	179	100	-	-
17	3217 11	140	179	80	-	-
18	3542 1	133	178	85	-	-
19	3042 21	143	180	85	-	-
20	3108 17	139	179	85	-	-
21	3050 20	144	179	90	-	-
22	3142 15	143	178	80	-	-
23	2617 24	131	183	85	-	-
24	3475 6	140	181	80	-	-

Grand Mean: 3203
CV : 12.3
LSD : 554

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

AFRICA

LIBYA

EL MARJ

Dr. M.A.Khalifa

El Marj Agricultural Research Station

Date Planted Nov./23/1980

Date Harvested May/20/1981

Rainfall 542 mm

Latitude 30.30 N

Longitude 20.52 E

Elevation 310 m

Local check Mexicali

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	2370 19	89	129	85
2	2395 17	86	133	80
3	2460 15	89	128	90
4	3011 1	87	125	85
5	2382 18	87	129	85
6	2775 5	90	133	75
7	2252 21	85	127	85
8	2815 3	84	129	80
9	2155 22	86	131	75
10	2543 11	84	134	80
11	2524 13	84	128	90
12	2639 8	83	133	85
13	2949 2	87	137	80
14	2804 4	89	129	85
15	2715 7	85	135	70
16	2749 6	87	129	90
17	2481 14	84	134	80
18	2584 9	79	119	80
19	2543 12	87	134	80
20	2568 10	85	130	80
21	2260 20	90	136	80
22	2420 16	87	131	75
23	1767 24	81	137	95
24	2149 23	87	137	85

Grand Mean: 2512

CV : 12.8

LSD : 454

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

AFRICA

LIBYA

TAJOURA

Mr. S.El Sebai

Agricultural Research Center

Date Planted Nov./29/1980

Date Harvested May/11/1981

Rainfall n.a

Latitude 32.53 N

Longitude 13.17 E

Elevation 11 m

Local check Fam 123 P13

Variety No.	Yield kg/ha	DH	DM	P1.Ht	LR	SR	PM	NB
1	n.a	126	162	80	0	0	0	0
2	-	127	165	65	0	0	0	0
3	-	126	160	80	0	0	0	0
4	-	127	166	65	0	0	0	0
5	-	125	164	70	0	0	TR 5%	TR 5%
6	-	123	164	55	0	0	0	0
7	-	119	158	65	0	0	0	0
8	-	123	163	45	0	0	0	0
9	-	119	162	50	0	0	0	0
10	-	121	163	50	0	0	0	0
11	-	123	164	60	0	0	0	0
12	-	122	160	55	0	0	0	0
13	-	123	162	50	0	0	0	0
14	-	122	159	55	0	0	0	0
15	-	124	158	50	0	0	0	0
16	-	119	159	65	0	0	0	0
17	-	129	167	40	0	0	0	0
18	-	120	159	50	0	0	0	0
19	-	126	162	35	0	0	0	0
20	-	121	159	65	0	0	0	0
21	-	131	162	30	0	0	0	0
22	-	123	160	70	0	0	0	0
23	-	119	162	60	0	0	0	0
24	-	135	165	40	0	0	0	0

Grand Mean:
CV :
LSD :

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

ASIA

NEPAL

BHAIRAHWA

Dr. Prachanda Man Sherestha
Bhairahwa Agricultural Farm

Date Planted Dec./25/1980
Latitude 27.6 N
Local check Sonalika

Date Harvested April/15/1981
Longitude 85.4 E

Rainfall 112 mm
Elevation 10.5 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	LR	SR
1	667 15	74	100	-	40 S	0
2	804 3	79	104	-	30 MS	0
3	483 24	76	103	-	40 MS	0
4	767 6	78	103	-	30 MS	0
5	533 22	72	101	-	60 S	0
6	758 7	76	102	-	10 MS	0
7	725 9	71	101	-	20 MS	0
8	583 20	76	102	-	10 S	20 S
9	683 12	72	102	-	0	0
10	742 8	78	103	-	10 MS	0
11	725 10	75	103	-	20 MS	0
12	717 11	74	101	-	5 MS	0
13	950 1	73	102	-	5 MR/MS	0
14	792 5	75	103	-	T MS	0
15	800 4	74	104	-	5 MS	0
16	650 16	72	101	-	0	0
17	500 23	79	105	-	T MS/S	0
18	608 18	69	102	-	0	0
19	650 17	74	101	-	5 S	0
20	560 21	71	100	-	10/20 S	0
21	683 13	79	103	-	10 MR/MS	20 S
22	683 14	72	102	-	T MS	0
23	600 19	72	102	-	10/20 MS/S	0
24	883 2	64	96	-	40 S	0

Grand Mean: 704
CV : 19.2
LSD : 191

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

ASIA PAKISTAN ISLAMABAD

Dr. M.Noorullah
National Agricultural Research Center

Date Planted	Nov./3/1980	Date Harvested	May/12/1981	Rainfall	n.a
Latitude	33.39 N	Longitude	73.5 E	Elevation	n.a
Local check					

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR	SR
1	2667 17	132	168	114	S	S	-
2	2667 18	141	183	90	-	MS	-
3	3000 4	125	168	116	-	S	-
4	2833 12	143	184	105	-	-	-
5	2667 19	129	178	100	MS	MS	-
6	2292 20	139	181	95	S	-	-
7	2750 16	125	176	115	-	S	-
8	1833 23	127	178	100	-	S	-
9	1333 24	125	177	105	-	-	-
10	2833 13	135	178	90	-	MS	-
11	3000 5	129	177	100	-	S	-
12	3000 6	125	177	105	MS	-	-
13	2875 9	132	179	100	-	MS	-
14	2875 10	127	177	105	-	MS	-
15	2167 22	142	181	85	S	-	-
16	2208 21	125	178	100	MS	-	-
17	2875 11	143	183	105	-	MS	-
18	3000 7	121	176	100	-	MS	-
19	2833 14	135	180	90	-	S	-
20	3500 2	125	177	100	MS	-	-
21	3333 3	129	181	105	S	-	-
22	2833 15	126	176	95	MS	MS	-
23	3667 1	125	177	115	-	-	-
24	3000 8	125	176	110	S	S	-

Grand Mean: 2751
CV : 9.4
LSD : 365

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

EUROPE

PORTUGAL

ELVAS

Dr. M.T.Barradas

National Plant Breeding Station

Date Planted Nov./20/1980

Date Harvested June/26/1981

Rainfall 220 mm

Latitude 38.53 N

Longitude 7.9 W

Elevation 208 m

Local check Anza

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	1872 13	138	200	90
2	1936 12	138	202	75
3	2009 6	133	200	94
4	1958 10	137	202	85
5	2017 5	138	203	91
6	1663 20	137	203	80
7	1233 23	133	203	84
8	2232 3	136	203	81
9	1940 11	133	203	85
10	1970 8	136	203	80
11	1703 19	135	203	94
12	1483 21	134	201	83
13	1959 9	132	202	80
14	1995 7	133	203	86
15	1765 17	131	202	68
16	1808 15	132	203	84
17	2843 1	139	203	83
18	928 24	128	203	76
19	1380 22	131	201	68
20	1753 18	132	203	82
21	1803 16	139	203	80
22	1818 14	132	202	75
23	2167 4	131	204	93
24	2529 2	132	201	79

Grand Mean: 1854

CV : 9.4

LSD : 246

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

EUROPE SPAIN

BORJAS BLANCAS

Dr. J.A.Martin Sanchez
Mahissa, Lerida

Date Planted	n.a	Date Harvested	n.a	Rainfall	300 mm
Latitude	41.31 N	Longitude	0.49 W	Elevation	280 m
Local check	Sane 247				

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	4345 2	175	219	82
2	3649 9	175	219	81
3	3512 12	175	219	91
4	3584 11	175	219	87
5	4057 5	175	219	87
6	3099 22	175	219	84
7	3943 8	175	219	94
8	3048 23	160	219	83
9	3348 15	169	219	76
10	3426 14	160	219	81
11	3646 10	175	219	88
12	3198 20	160	219	80
13	3254 18	169	219	87
14	3998 6	169	219	88
15	3186 21	175	219	72
16	4068 4	175	219	86
17	3347 17	169	219	82
18	3502 13	164	219	85
19	2734 24	175	219	77
20	3348 16	164	219	86
21	3208 19	175	219	83
22	3960 7	169	219	81
23	4586 1	164	219	96
24	4100 3	180	225	94

Grand Mean: 3589
CV : 13.1
LSD : 661

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

EUROPE

SPAIN

COGULLADA

Dr. Jesus Comenge

Monasterio de Cogullada, Zaragoza

Date Planted

n.a

Date Harvested

n.a

Rainfall

320 mm

Latitude

41.41 N

Longitude

2.50 W

Elevation

208 m

Local check

Anza

Variety
No.

Yield
kg/ha

DH

Pl.Ht

LR

PM

1	1354 24	133	65	-	1-3
2	2300 9	133	70	-	3-5
3	1608 22	135	80	-	3
4	2333 7	135	80	-	3-5
5	2375 6	135	70	-	5
6	1983 15	135	75	-	1-3
7	1987 14	137	75	-	1-3
8	1825 17	135	75	-	1-3
9	2629 1	136	80	-	3
10	2454 3	142	90	-	1-3
11	1638 21	140	70	-	5
12	2308 2	135	85	-	3-5
13	2008 13	137	75	-	3
14	2387 5	137	80	-	1-3
15	1933 16	141	80	-	5-7
16	1763 19	142	70	-	3
17	1738 20	140	75	-	3
18	2396 4	135	80	-	3-5
19	2296 10	138	85	-	3-5
20	1817 18	139	80	-	5-7
21	2504 2	139	80	-	7-9
22	1579 23	142	70	-	5
23	2100 12	135	80	-	-
24	2170 11	140	85	-	-

Grand Mean: 2061

CV : 31.4

LSD : 913

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

AFRICA

SUDAN

NEW HALFA

Dr. M.S.Muhammed

New Halfa Research Station

Date Planted Jan./8/1981

Date Harvested n.a

Rainfall n.a

Latitude 15.8 N

Longitude 35.45 E

Elevation 400 m

Local check Mexicani

Variety No.	Yield kg/ha	DH	Pl.Ht
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1	2403 9	52	54
2	1307 24	64	64
3	2683 3	53	55
4	1453 23	66	65
5	2130 14	53	64
6	2050 17	59	70
7	1957 18	48	55
8	2607 5	54	60
9	2127 15	53	61
10	1657 22	59	65
11	2417 8	55	63
12	2543 7	56	71
13	2683 4	56	70
14	1713 21	64	65
15	2333 12	56	60
16	1870 20	53	62
17	2113 16	54	73
18	3471 2	48	50
19	2383 11	56	60
20	2288 13	52	50
21	2397 20	64	73
22	2557 6	54	58
23	1897 19	64	63
24	3623 1	59	53

Grand Mean: 2265
CV : 13.1
LSD : 418

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

SYRIA

IZRA'A

ACSAD Staff

Field Crops Section

Date Planted Dec./23/1980

Latitude 32.51 N

Local check Haurani

Date Harvested June/18/1981

Longitude 36.15 E

Rainfall 329 mm

Elevation 575 m

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	3051 18	92	128	75
2	3117 15	95	130	72
3	2504 24	91	130	85
4	3047 19	92	133	65
5	3218 11	91	132	85
6	3263 10	94	133	75
7	2949 21	90	132	90
8	2776 23	94	129	72
9	3122 14	91	127	79
10	3626 4	93	134	70
11	3299 8	92	135	82
12	3210 12	91	135	80
13	3702 2	91	133	80
14	3065 17	91	128	72
15	3423 7	94	129	65
16	3277 9	92	127	95
17	2973 20	93	127	70
18	3661 3	90	128	83
19	3477 6	93	133	80
20	3743 1	91	130	81
21	3512 5	95	132	75
22	3123 13	94	128	85
23	3089 16	91	135	102
24	2944 22	96	133	80
Grand Mean: 3215				
CV : 15.1				
LSD : 683				

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

SYRIA

TEL HADYA

Cereal Staff

ICARDA, IRR Staff

Date Planted Nov./24/1980

Date Harvested June/27/1981

Rainfall 372 mm

Latitude 36.05 N

Longitude 36.55 E

Elevation 282 m

Local check Haurani

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	ST
1	4458 13	L	-	90	2
2	5408 6	L	-	100	0
3	4667 11	138	-	105	0
4	4617 12	L	-	90	0
5	4421 14	137	-	95	0
6	4967 10	142	-	90	0
7	4104 23	136	-	100	2
8	5763 3	145	-	90	0
9	4242 19	137	-	90	0
10	5267 8	144	-	90	0
11	4308 16	137	-	100	2
12	5196 9	144	-	90	0
13	5825 2	144	-	90	0
14	4200 21	142	-	80	0
15	5317 7	144	-	75	0
16	4296 18	L	-	75	1
17	5471 5	145	-	90	0
18	3833 24	132	-	90	1
19	5550 4	144	-	90	0
20	4308 17	140	-	80	0
21	6063 1	L	-	90	0
22	4108 22	143	-	85	1
23	4233 20	131	-	100	0
24	4333 15	139	-	130	0

Grand Mean: 4789

CV : 14.0

LSD : 943

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

SYRIA

TEL HADYA

Cereal Staff

ICARDA, Rainfed Set

Date Planted Dec./9/1980

Date Harvested June/20/1981

Rainfall 372 mm

Latitude 36.05 N

Longitude 36.55 E

Elevation 282 m

Local check Haurani

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
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1	3129 15	129	164	75
2	3279 9	129	174	75
3	3083 19	125	167	85
4	3417 3	127	168	80
5	3154 13	125	163	80
6	3096 18	128	169	75
7	3121 16	126	169	90
8	3563 1	128	174	80
9	3242 10	122	167	80
10	3313 7	127	164	80
11	3375 4	124	162	90
12	3121 17	124	167	85
13	3292 8	125	169	70
14	3154 14	126	161	70
15	3375 5	128	162	60
16	2804 23	128	166	75
17	3329 6	129	168	70
18	3067 21	123	159	80
19	3467 2	129	170	70
20	3025 22	127	158	75
21	3167 12	133	172	70
22	3083 20	129	167	80
23	3179 11	124	170	100
24	2800 24	125	169	105

Grand Mean: 3193

CV : 9.5

LSD : 427

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

AFRICA

TUNISIA

BEJA

Mr. Ali R.Maamouri, Mr. M.Deghais
INRAT

Date Planted Nov./24/1980

Date Harvested June/12/1981

Rainfall 571 mm

Latitude 37 N

Longitude 9 E

Elevation 165 m

Local check Dougga 74

Variety No.	Yield kg/ha	DH	DM	Pl.Ht
1	6319 15	135	-	90
2	6686 8	136	-	80
3	6190 16	135	-	95
4	6344 14	136	-	85
5	5802 22	135	-	90
6	6373 13	134	-	80
7	5184 24	133	-	95
8	7340 1	134	-	80
9	5972 19	132	-	80
10	6789 4	134	-	90
11	5681 23	134	-	100
12	6763 6	134	-	90
13	7141 2	134	-	90
14	6400 12	135	-	90
15	6807 3	135	-	80
16	6172 17	135	-	95
17	6654 10	136	-	85
18	5958 20	126	-	85
19	6480 11	135	-	80
20	6683 9	133	-	80
21	6766 5	136	-	85
22	6065 18	136	-	90
23	6708 7	127	-	105
24	5901 21	135	-	95

Grand Mean: 6382
CV : 5.6
LSD : 503

REGIONAL RAINFED WHEAT YIELD TRIAL 1980-81

MIDDLE EAST

TURKEY

DIYARBAKIR

Dr. A.Ertug

Anatolian Regional Agricultural Research Institute

Date Planted Oct./28/1980

Date Harvested July/12/1981

Rainfall 588 mm

Latitude 37.55 N

Longitude 40.12 E

Elevation 660 m

Local check Malabadi

Variety No.	Yield kg/ha	DH	DM	Pl.Ht	YR	LR
1	2817 12	175	211	70	-	5 MS
2	2683 15	175	211	75	-	T MR
3	3325 3	170	207	80	-	5 MR
4	2075 23	174	211	70	-	T MR
5	3592 1	170	207	65	-	0
6	2258 21	170	210	75	-	0
7	2883 9	160	202	90	-	5 MR
8	2608 17	169	210	90	-	0
9	2808 13	159	201	80	-	0
10	3342 2	168	209	90	-	T MR
11	2933 8	165	206	100	-	5 MS
12	3025 6	168	209	85	T MS	T MR
13	2225 22	176	-	75	T MR	5 MR
14	3083 5	168	209	90	0	T MR
15	2358 19	179	-	70	0	0
16	2650 16	164	209	90	-	T MR
17	2283 20	171	211	75	-	T MR
18	2843 11	158	197	90	-	T MR
19	2467 18	167	211	80	-	T MR
20	3025 7	163	203	70	-	T MR
21	1967 24	179	-	75	-	T MR
22	3217 4	171	209	80	T MR	T MR
23	2742 14	160	204	90	-	0
24	2867 10	170	209	80	-	T MR

Grand Mean: 2753

CV : 18.5

LSD : 716

Table 7: Elevation, Precipitation, Irrigation and Growing Season in the PON-B 1980-81.

No.	Country	Location	Latitude	Longitude	Elevation (m)	Rainfall (mm)	No. of Irrigations	Growing Season		
1	AFGHANISTAN	Darul	34.27 N	69. 7 E	1825	312	6	11/ 3/81	-	31/ 6/81
2	AFGHANISTAN	Kunduz	36.32 N	68.53 E	450	n.a	none	3/12/80	-	21/ 5/81
3	ALGERIA	Setif	36. 9 N	5.21 E	1000	342	none	13/12/80	-	20/ 6/81
4	ALGERIA	Khroub	36.25 N	6.67 E	640	n.a	n.a		n.a	
5	CYPRUS	Athalassa	35. 8 N	33.24 E	150	318	none	17/11/80	-	n.a
6	ECUADOR	Santa Catalina	0.22 S	78.33 W	3058	715	none	4/ 3/81	-	20/ 8/81
7	EGYPT	Sakha	30.45 N	31 E	0	n.a	5	17/12/80	-	29/ 5/80
8	ETHIOPIA	Ambo	8.57 N	38. 7 E	2250	n.a	n.a	29/ 6/81	-	15/10/81
9	ETHIOPIA	Nazareth	8.22 N	39.06 E	1550	316	none	10/ 7/81	-	n.a
10	FINLAND	Hankkija	60.42 N	25.03 E	45	341	none	23/ 5/81	-	11/ 9/81
11	IRAN	Karaj	50.35 N	58.50 E	1300	n.a	5	14/10/80	-	30/ 6/81
12	IRAQ	Arbil	36.11 N	44 E	414	454	none	10/11/80	-	3/ 6/80
13	IRAQ	Tel Afer	36.22 N	42.28 E	270	362	none	10/12/80	-	n.a
14	JORDAN	Ramtha	32.34 N	36.01 E	650	181	none	5/11/80	-	21/ 5/81
15	KENYA	Njoro	16 S	36.04 E	2000	622	none	18/11/80	-	14/ 4/81
16	KOREA	Suweon	36.17 N	126.59 E	39	210	none	20/ 3/81	-	30/ 6/81
17	LEBANON	Bekaa	33.55 N	36. 4 E	995	858	none	18/11/80	-	23/ 6/81
18	LEBANON	Kfardan	33.52 N	36.02 E	920	n.a	n.a		n.a	

Table 7: (Cont'd)

No.	Country	Location	Latitude	Longitude	Elevation (m)	Rainfall (mm)	No. of Irrigations	Growing Season		
19	LEBANON	Terbol	35.52 N	36 E	900	n.a	n.a	n.a		
20	LIBYA	Tajoura	32.53 N	13.17 E	11	n.a	none	30/11/80	-	10/ 5/81
21	MOROCCO	Tessaout	31 N	7 E	n.a	n.a	none	25/12/80	-	25/ 6/81
22	OMAN	Wadi Quryat	22.50 N	57.10 E	500	n.a	n.a	10/11/80	-	1/ 4/81
23	PAKISTAN	Faisalabad	31.30 N	73.10 E	213	124	2	18/11/80	-	27/ 4/81
24	PAKISTAN	Islamabad	33.39 N	73. 5 E	683	n.a	none	6/11/80	-	3/ 5/81
25	PAKISTAN	Tandojam	25 N	63.38 E	19	74	3	20/12/80	-	14/ 5/81
26	QATAR	Rodat El Faras	25.48 N	51.18 E	50	110	11	10/11/80	-	5/ 4/81
27	SPAIN	Madrid	41.41 N	2.50 W	490	n.a	n.a	n.a		
28	SYRIA	Izraa	32.51 N	36.15 E	575	329	none	24/12/80	-	30/ 5/81
29	SYRIA	Tel Hadya	36.05 N	36.55 E	282	327	1	20/10/80	-	25/ 5/81
30	TUNISIA	Beja	37 N	9 E	165	590	none	13/11/80	-	25/ 5/81
31	TUNISIA	Fahs	36.20 N	9.54 E	200	n.a	n.a	6/11/80	-	28/ 5/81
32	TUNISIA	Hindi Zitoun	36 N	8.09 E	n.a	n.a	n.a	n.a		
33	TUNISIA	Mateur	37.03 N	9.40 E	100	n.a	n.a	30/11/80	-	10/ 6/81
34	TUNISIA	Le Kef	36.10 N	8.40 E	1000	n.a	n.a	n.a		
35	TURKEY	Diyarbakir	37.55 N	40.12 E	660	588	none	29/10/80	-	7/ 7/81
36	U.S.A.	Bozeman	45.40 N	111.00 W	925	200	2	31/ 5/81	-	n.a

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
13	Coho/Zephyr Kronsted 72-73-39-1B-1Y-1B-1Y-0B	7	111	152	78	10.7	38.5	10	10	23	2	3	5
14	CM67/Apm CMB 72-21-5Y-1B-5Y-1B-1Y-0B	7	109	153	73	12.0	32.7	18	3	6	3	1	3
15	11012.2/Por//WPG 708-21 CMB 74-915-A-2Y-1B-1Y-0B	2	109	153	77	11.9	43.4	35	11	13	2	2	4
16	Cr.364-4	2	111	156	81	9.2	44.7	14	19	13	3	5	2
17	Nordgrol/Kristina, Ca 49201	1	121	160	73	10.1	36.2	20	16	23	2	2	3
18	Gv380/Magnelone 1406	4	121	157	81	11.5	34.5	6	10	23	2	2	2
19	Ariana	4	127	162	105	-	-	3	6	18	2	2	2
20	Beecher (check)	5	110	153	86	-	-	28	20	10	4	3	3
21	Lechtaler	2	119	156	85	12.0	42.9	8	12	33	3	4	4
22	Hanna CI 640	7	114	149	75	11.0	33.7	13	21	13	4	4	4
23	Alger/Ceres, 362-1-1-OAP	6	124	163	79	11.5	38.5	0	3	0	2	1	1
24	Gitane	8	115	154	83	8.7	40.6	0	4	33	2	3	3
25	Athos	6	119	157	77	9.2	37.2	3	8	5	1	2	4
26	Lignee 527 - Montpellier	12	116	157	79	8.2	37.7	0	6	23	2	4	2
27	Lignee 540 - Montpellier	11	113	154	79	9.1	32.6	10	3	33	2	3	3
28	Lignee 686 - Montpellier	6	125	162	76	10.8	32.8	8	1	33	1	1	2

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
29	Lignee 131 - Montpellier	7	126	162	77	11.9	40.3	8	4	0	3	1	1
30	Mapache (TCL)	3	114	157	91	-	-	8	1	0	2	0	0
31	Lignee 1242 - Montpellier	7	125	160	79	12.7	37.1	9	2	0	2	2	3
32	Lignee 1479 - Montpellier	4	125	160	79	12.9	44.6	9	7	23	1	2	2
33	Mv-46	8	115	155	81	11.0	35.7	9	9	23	2	2	3
34	Antares	5	125	161	74	-	-	15	5	0	2	1	3
35	Dram	5	117	156	80	9.1	42.0	8	21	3	2	2	4
36	Piccolo	6	124	159	70	10.1	40.9	8	4	1	2	4	5
37	Atem	5	117	156	76	9.3	39.1	10	10	13	2	4	3
38	AC253	5	118	155	80	9.9	36.1	22	4	1	2	3	4
39	Europa	11	118	157	75	9.8	40.8	11	3	8	2	4	5
40	Beecher (check)	11	109	155	86	-	-	25	21	13	3	4	3
41	Sonja	3	124	156	78	11.1	43.9	8	3	1	2	1	3
42	9Brevia/Uhre	14	115	157	85	9.8	39.2	10	6	13	2	2	4
43	6Berac/Bera	10	115	156	85	10.0	35.1	5	15	5	3	5	5
44	Lima Monteiro/Beka//Aurore/3/Mari	9	113	153	81	9.3	34.3	2	10	8	3	2	4
45	8 Union/Delisa	8	117	157	82	9.1	38.7	2	6	5	3	4	3
46	Bahtim/DL71	6	105	150	69	8.4	39.0	25	9	13	3	1	5

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
47	Pitayo/DL70 CMB 76-15-500Y-500B-0Y	5	107	150	71	9.5	33.4	18	20	2	4	2	4
48	BDGC/Gas//CM67/U.Sask 1744 CMB 76-279-503Y-500B-0Y	2	108	150	70	9.7	34.9	35	12	50	3	3	3
49	Api/CM67//Por/U.Sask 1766 CMB 75A-115-500Y-500B-0Y	4	105	149	70	10.9	36.1	20	19	1	3	2	5
50	IA/IRA//BUI X 12257-1N-0M (TCL)	1	111	150	96	-	-	0	17	0	2	0	0
51	11012.2/Impala//Birence CMB 74A-1697-D-2B-2Y-500B-500Y-0B	10	110	152	83	9.7	42.1	11	10	13	3	1	4
52	Bal.Loc.46/Deir Alla 106 4L-1AP-0AP	10	107	151	85	9.3	43.9	20	14	23	4	2	4
53	CI 1382/Giza 117//Beecher 4L-1AP-0AP	6	111	154	84	8.3	41.7	27	15	23	5	6	2
54	CI 4977/Benton//Bigo 4L-1AP-0AP	4	112	155	86	8.3	33.0	27	15	0	5	3	4
55	As46//Avt/Aths 2L-1AP-0AP	9	111	155	88	8.0	47.9	20	17	13	3	4	3
56	As46//Avt/Aths 6L-1AP-0AP	12	113	155	88	8.8	45.0	3	12	33	3	4	4
57	As46//Avt/Aths 7L-4AP-0AP	9	112	155	86	8.9	39.1	18	8	50	3	5	4

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
58	CN100/D623//Fun/2*Fun/3/Tra/4/10925-1 7L-4AP-OAP	6	109	154	87	10.5	33.9	17	8	28	3	4	2
59	CN100/D623//Fun/2*Fun/3/Tra/4/10925-1 7L-5AP-OAP	5	110	151	86	9.4	31.5	20	8	0	2	3	3
60	Beecher (check)	4	110	152	86	-	-	13	15	13	2	2	2
61	2*Cer/Ki//Pro/Toll/3/As54/Tra/4/Bal.16 1L-1AP-OAP	4	112	154	77	7.6	40.6	27	12	0	2	1	4
62	As54/Tra//2*Cer/4*Toll/3/2*Avt/Ki//Bz/4/Vt/5/ Pro/6/Beecher 2L-3AP-OAP	5	112	155	84	7.4	37.3	11	7	33	2	4	2
63	As54/Tra//2*Cer/4*Toll/3/2*Avt/Ki//Bz/4/Vt/5/ Pro/6/Beecher 4L-3AP-OAP	7	111	153	86	8.4	44.6	13	6	33	3	4	2
64	2*Cer/Ki//Pro/Toll/3/As54/Tra/4/Bal.16 1L-2AP-OAP	0	110	154	77	10.2	42.6	27	7	23	2	2	4
65	As54/Tra//2*Cer/4*Toll/3/2*Avt/Ki//Bz/4/Vt/5/ Pro/6/Beecher 4L-4AP-OAP	9	108	153	77	9.8	46.7	43	6	23	2	5	2
66	As54/Tra//2*Cer/4*Toll/3/2*Avt/Ki//Bz/4/Vt/5/ Pro/6/Beecher 4L-5AP-OAP	6	109	154	82	11.3	43.0	13	11	13	3	4	2
67	As54/Tra//2*Cer/4*Toll/3/2*Avt/Ki//Bz/4/Vt/5/ Pro/6/Beecher 6L-4AP-OAP	3	109	151	83	9.4	44.3	27	10	18	3	4	2
68	As54/Tra//2*Cer/4*Toll/3/2*Avt/Ki//Bz/4/Vt/5/ Pro/6/Beecher 2L-5AP-OAP	8	108	151	82	8.4	37.9	17	7	43	3	2	2

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
69	CM6//Bal.16 1L-1AP-OAP	8	108	152	84	7.7	42.4	10	11	33	5	2	3
70	BGL'S' 330 (TCL) X 1530A-12M-3Y-3M-1Y-0M-1M-0Y	2	112	153	101	-	-	8	9	0	5	0	2
71	CM67//Bal.16 1L-5AP-OAP	9	108	150	70	9.7	35.3	7	10	23	4	2	5
72	Strain 205/Reka 3L-3AP-OAP	5	113	153	84	7.7	46.0	42	6	33	4	4	5
73	3309/Attiki//12240 4L-2AP-OAP	4	110	152	80	9.5	33.6	22	15	17	5	1	5
74	M66.85/Deir Alla 106 2L-1AP-OAP	4	114	154	85	10.2	37.4	15	10	13	4	2	5
75	Union/CI 3576//Coho 7L-4AP-OAP	2	113	155	81	8.8	46.0	27	11	4	4	3	5
76	M66.85/Deir Alla 106 2L-1AP-OAP	8	113	154	80	8.4	35.1	27	22	13	4	2	5
77	IB65//Avt/Aths 1L-1AP-OAP	3	113	154	77	9.3	38.8	47	11	33	3	4	2
78	IB65//Avt/Aths 7L-1AP-OAP	2	114	156	80	10.0	41.6	8	10	33	5	2	3
79	IB65//Avt/Aths 7L-3AP-OAP	0	110	156	81	12.0	40.1	0	10	50	2	3	5

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
80	Beecher (check)	10	109	152	84	-							
81	Union/CI 3576//Coho 6L-3AP-OAP	3	112	154	80	8.4	42.3	47	7	36	4	4	3
82	Union/CI 3576//Coho 9L-12AP-OAP	1	109	156	74	12.8	43.3	22	6	13	2	2	4
83	Union/CI 3576//Coho 12-2AP-OAP	6	106	151	73	7.2	46.9	23	3	13	2	1	4
84	Bussell//Aurore/Esperance 1L-5AP-OAP	1	111	152	79	9.8	53.2	35	8	33	4	5	4
85	As46/Pro//Bal.16/Api 5L-3AP-OAP	9	111	153	76	8.8	44.7	35	3	33	5	4	4
86	As46/Giza 120//11016/Giza 118 1L-3AP-OAP	8	112	152	79	8.5	40.6	28	10	1	4	5	4
87	Beacon/Celaya//Avt/Aths 5L-3AP-OAP	4	106	152	83	10.7	39.1	20	4	33	4	3	3
88	Aths//Api/CM67 CMB 75A-276-3S-1AP-OAP	4	109	154	75	11.8	45.2	23	4	50	3	2	5
89	Indian Dwarf/CM67//NP106 CMB 75A-910-3S-5AP-OAP	3	109	153	75	10.9	51.6	13	5	33	5	3	5
90	Lejon-IRA (TCL) 13895-B-100Y-101B-103Y-0Y	2	112	156	101	-	-	0	10	0	1	0	2

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
91	Indian Dwarf/CM67//NP106 CMB 75A-928-1S-2AP-0AP	6	109	152	72	9.8	51.8	28	4	23	2	3	6
92	Nopal//Apm/IB65 CMB 75A-976-10S-4AP-0AP	2	107	149	70	10.7	36.5	18	3	33	3	3	4
93	Nopal//Api/CM67 CMB 75-978-2S-3AP-0AP	5	111	151	71	11.5	38.2	20	5	33	4	0	4
94	Nopal//Api/CM67 CMB 75A-978-2S-5AP-0AP	7	109	151	70	11.4	42.0	11	5	23	4	2	4
95	7028/2759-69.82//Ds/Apro CMB 75A-1038-5S-7AP-0AP	6	110	153	88	9.2	47.6	32	15	23	6	3	2
96	RM1508/Pro//W12269 CMB 75A-1152-2S-2AP-0AP	9	107	149	79	10.1	46.1	0	1	23	2	3	5
97	IAR-H-81-Apm/IB65//Gva CMB 75A-1269-4S-1AP-0AP	4	111	154	91	8.1	47.0	0	13	0	5	3	3
98	Suwon No.20//Avt/Aths CMB 75A-1292-5S-1AP-0AP	5	116	157	91	7.3	53.9	14	4	0	2	4	2
99	Suwon No.20//Avt/Aths CMB 75A-1292-5S-6AP-0AP	6	116	156	94	8.0	50.4	8	5	33	2	3	2
100	Beecher (check)	6	110	154	89	-	-	11	17	33	2	4	3
101	Suwon No.20//Avt/Aths CMB 75A-1292-9S-3AP-0AP	3	114	156	87	8.7	44.1	14	8	13	3	4	2

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
102	H.Odesskji 17/DL71 CMB 75A-817-5S-4AP-OAP	6	115	155	91	8.5	39.6	14	11	23	2	4	0
103	Arizona 5908/Aths CYB 33-2A-OA-OA-5AP-1AP-OAP	3	110	152	79	9.1	48.0	12	6	40	4	3	4
104	Arizona 5908/Aths CYB 33-2A-OA-OA-5AP-3AP-OAP	0	111	152	82	8.4	37.1	20	3	13	3	3	5
105	Tanekase 2/Baitori//Aths CYB 79-OA-OA-4AP-1AP-OAP	8	110	153	88	8.7	50.9	21	15	23	4	4	1
106	Cambrinus/Attiki CYB 101-OAP-OAP-5AP-2AP-OAP	1	111	154	86	8.6	36.0	14	9	13	4	4	4
107	Tanekase 2/Baitori//Aths CYB 79-OA-OA-4AP-10AP-OAP	8	110	153	88	8.1	47.1	8	12	23	3	4	2
108	2*Shikki Shirazu/Attiki CYB 83-OA-OA-4AP-7AP-OAP	0	112	154	89	9.5	38.6	14	8	50	4	4	2
109	2*Shikki Shirazu/Attiki CYB 83-OA-OA-4AP-11AP-OAP	6	109	153	90	8.7	48.9	14	12	33	5	4	2
110	FW121/ Prol//Cin=Gazelle'S' (TCL) X 7267-24M-1Y-35M-0Y	2	113	140	93	-	-	0	0	0	1	0	0
111	2*Shikki Shirazu/Attiki CYB 83-OA-OA-7AP-1AP-OAP	5	104	153	89	9.0	53.7	12	17	23	4	4	3
112	2*Shikki Shirazu/Attiki CYB 83-OA-OA-7AP-6AP-OAP	7	109	153	89	8.6	48.3	9	18	33	2	4	3

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
113	2*Shikki Shirazu/Attiki CYB 83-0A-0A-8AP-7AP-0AP	3	109	150	80	9.7	34.8	25	25	13	3	3	3
114	Avt/Attiki CYB 121-0AP-0AP-5AP-3AP-0AP	3	110	154	89	9.9	46.4	32		23	2	4	4
115	Magnif 102/Tokak TC 74-7-4AP-1AP-0AP	6	112	153	80	-	-	32	12	23	4	4	4
116	W1 2231/Magnif 102 L 43-2AP-1AP-0AP	2	112	154	84	8.0	47.2	8	8	13	2	2	4
117	CM67/Bal. 16 L 43-2AP-1AP-0AP	4	111	153	88	7.7	48.8	18	13	13	5	3	2
118	As46/Pro//Bal. 16/Api L 79-1AP-1AP-0AP	3	113	152	87	7.2	37.3	36	12	8	5	3	2
119	CYPRUS Black/Deir Alla 106 3AP-5AP-0AP	3	109	152	89	7.9	52.1	29	18	23	4	3	2
120	Beecher (check)	7	109	151	92	-	-	9	21	13	3	4	2
121	Beecher/Coho 6AP-1AP-0AP	10	109	153	88	7.7	48.5	22	33	13	4	4	2
122	As/4/Dwgl-M2/M59.24//2*Api/3/Cq/Api ICB 76-87-180L-1AP-0AP	4	110	150	92	8.6	45.7	28	22	5	3	4	2
123	As/4/Dwgl-M2/M59.24//2*Api/3/Cq/Api ICB 76-87-180L-2AP-0AP	4	111	152	87	9.1	39.3	28	30	0	4	4	2

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
124	M.E.H.111.4/3/Apm/Dwarf 21//Par/1B65 CMB 73A-867-3369-4AP-2AP-OAP	12	108	149	77	8.9	36.8	17	26	30	5	3	5
125	M.E.H.111.4/3/Apm/Dwarf 21//Par/1B65 CMB 73A-867-3373-4AP-10AP-OAP	8	108	148	74	8.6	30.5	33	11	30	4	4	5
126	Balkan/Har.991//Avt/Ki//Avt/4/Toll/Bz/Vt CMB 73A-892-11AP-OAP	4	110	152	82	8.1	36.1	18	24	1	4	5	2
127	Tanekase 2/Baitori//Aths CYB 79-4AP-OAP	10	109	153	90	7.8	48.5	18	21	20	4	2	2
128	Avt//Ki/4/Avt/3/Toll/Bz/Vt/5/As54/Tra//Avt/ 2*Toll/3/Avt/Ki/6/Avt/Toll//Bz TA 76-77-F2-17L-OK-1AP-OAP	9	113	152	79	8.0	30.7	35	20	23	4	4	3
129	Avt/Ki/4/Avt/3/Toll/Bz//Vt/5/As54/Tra//Avt/ 2*Toll/3/Avt/Ki/6/Avt/Toll//Bz TA 76-77-F2-17L-OK-4AP-OAP	7	111	151	75	7.8	31.0	42	28	33	5	2	2
130	61-130-LDS (TCL) 1Y-SM-OY	0	111	159	105	-	-	7	0	1	4	0	0
131	Chile Comun/Avt CMB 73A-81-OAP-5AP-OAP	4	115	156	83	9.8	40.5	29	17	3	3	3	4
132	Balkan/Har.991//Avt/Ki/3/Avt/4/Toll/Bz//Vt CMB 73A-892-OAP-1AP-OAP	5	115	156	84	8.8	30.7	35	10	33	5	2	3
133	Pro/Toll//Cer/Toll/3/Dwgl/4/Api/5/Por 1L-1AP-OAP	5	110	153	77	9.7	41.5	53	29	61	5	2	3

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
134	CI 7117-9//Deir Alla 106 OAP-1AP-OAP	4	115	156	83	8.8	43.6	27	18	13	3	2	5
135	Cr.115/Por//Pro CMB 72A-76-3L-5L-6AP-9AP-OAP	4	109	152	79	8.9	34.5	32	27	25	6	0	3
136	Cr.115/Por//Pro CMB 72A-76-3L-5L-6AP-11AP-OAP	6	109	153	81	8.8	34.1	35	6	13	6	2	2
137	Cq/Comun//Apm/3/V2410/4/Giza 134 L 4271-1AP-9AP-OAP	0	110	152	85	8.0	35.2	25	5	33	2	2	4
138	Fun/H45//PI3604/Fun/3/Avt/Nor//Bz/4/Winn/3/ Cer/5/2*Pro/Toll//V1856/6/Aths L 4301-1AP-1AP-OAP	5	109	152	86	8.4	34.2	28	9	15	3	2	4
139	Balkan/3/Har.991//Avt/Ki/4/Avt/3/Toll/Bz//Vt CMB 73A-392-9L-5AP-OAP-3AP-OAP	5	114	154	85	8.4	32.9	35	4	30	2	2	2
140	Beecher (check)	6	110	153	86	-	-	35	15	20	4	4	2
141	Harbing/Avt//Aths CYB 18-2A-3A-2AP-OAP	7	115	155	92	7.7	39.7	35	25	50	3	3	3
142	Tunis/XV2240 1L-OAP	3	118	154	92	8.6	39.0	25	2	12	3	3	2
143	IB65//Avt/Aths 1L-OAP	5	110	152	87	9.5	40.1	42	28	13	6	4	2
144	Pro/109M//CM67/Gva CMB 75A-50-1S-OAP	6	114	155	80	7.8	41.6	25	35	23	4	2	3

Table 8: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
145	Aths//Api/CM67 CMB 75A-276-3SH-OAP	4	106	153	77	9.1	40.6	38	11	40	3	2	4
146	Beecher/Coho 2AP-OAP	4	111	154	80	8.1	37.7	35	12	33	3	2	3
147	Nepal//Api/CM67 CMB 75-978-2S-OAP	0	122	160	89	9.3	37.9	0	8	23	3	2	4
148	Apro/Suwon 18 TC 74-11-4AP-OAP	9	116	156	86	8.1	36.3	10	17	50	4	3	3
149	Clipper//Cr.115/Por	4	113	156	74	8.6	42.1	28	30	40	6	2	3
150	M2A/CIN (TCL) X 8286-B-2Y-1M-0Y	1	114	156	89	-	-	0	0	0	2	0	0

DH out of (24 locations); DM out of (17 locations); Pl.Ht out of (19 locations).

TENTH PRELIMINARY OBSERVATION NURSERY - BARLEY

The Tenth Preliminary Observation Nursery - Barley (10th PON) consisted of 150 entries, including Beecher as check every 20th entry. Entry numbers 10, 30, 50, 70, 90, 110, 130 and 150 were triticale lines. The data were received from 27 locations.

Out of all the barley entries, 13 lines seem to be widely adapted. They were selected at 10 or more locations in the region and reveal the improvement in the performance of the genotypes with respect to environmental factors that change across locations. The detailed summary for those 13 lines for the various agronomic and disease traits is presented in Table 9.

Agronomic Traits

The average number of days to heading for 24 locations varied from 104 (entry no: 111) to 127 (entry no: 19), whereas the days to maturity ranged from 148 (entry no: 125) to 162 (entries no: 19, 28 and 29). The average plant height calculated from the data of 19 locations ranged from 66 cm for the shortest Mari/Coho (entry no: 2) to 105 for Ariana (entry no: 19). Detailed agronomic and disease data as well as the frequency of selection over sites on the shortest and longest maturity duration lines are presented in Tables 10 and 11, respectively.

This detailed agronomic and disease data is valuable as it permits the identification of individuals possessing the desired character in a good genetic background from both agronomic and disease view points.

The length of the post anthesis period is a valuable character as it indicates the time length of kernel filling. Depending upon the environmental conditions prevailing between heading and maturity breeders might like to select for short or long grain filling time. Entries 22 and 31 had the shortest post anthesis period while entry no: 111 had the longest post anthesis period. Detailed agronomic and disease data are provided for these two groups in Tables 13 and 12.

The protein percentage and the 1000 kernel weight were estimated at only one location (Tel Hadya, Syria). Five lines had a protein percentage of 12.0 or more. They are presented in Table 14 with detailed agronomic and disease data. A particular notice is to be made relative to entry no: 98 (Suwon No.20//Avt/Aths, CMB 75A-1292-5S-1AP-0AP). It has a very high kernel weight (53.9g/1000 kernels) but its protein percentage is very low. Ketade (Bussell//Aurore/Esperance) (entry no: 84), however, combine high thousand kernel weight (53.2g) with fair protein content (9.8%).

The 1000 kernel weight also comes from Tel Hadya, Syria only. The five highest 1000 kernel weight lines are presented in Table 15 with an adequate characterization from the agronomic and disease view point for selection purpose as well as use as parental material in crossing. A particular mention is to be made relative to the line, Lignee 1479 (entry no: 32) which combines high protein content (12.9%) with high kernel weight (44.6g/1000 kernels).

Diseases

Data were recorded on the three rusts as well as powdery mildew, scald

and net blotch. Tables 16 to 21 give detailed agronomic and disease characterization to the most resistant lines to a particular disease, while Tables 22, 23 and 24 characterize the lines resistant to three, four and five diseases, respectively. A particular mention should be made of

- Lignee 131 (Table 24) entry no: 29 which is resistant to the three rusts as well as scald and net blotch.
- Alger/Ceres, 362 1-1-0AP (Table 24) entry no: 23 which is also resistant to the three rusts as well as scald and net blotch. Alger/Ceres, 362 1-1-0AP could be considered as resistant to all six diseases under study as its mean infection by powdery mildew did not exceed 2 on a scale of 1 to 9.

Table 9 : Agronomic and disease performance of most frequently selected lines in PON-B (1980-81).

Entry No.		FR	DH	DM	Pl.Ht	Protein %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
42	9 Brevia/Uhre	14	115	157	85	9.8	39.2	10	6	13	2	2	4
26	Lignee 628 (Montpellier)	12	116	157	79	8.2	37.7	0	6	23	2	4	2
56	Rihane'S' ICB 76-11-6L-1AP-OAP	12	113	155	88	8.8	45.0	3	12	33	3	4	4
124	M.E.H.111.4/3/Apm/Dwarf 21//Par/1B65 CMB 73A-867-3369-4AP-2AP-OAP	12	108	149	77	8.9	36.8	17	26	30	5	3	5
27	Lignee 540 (Montpellier)	11	113	154	79	9.1	32.6	10	3	33	2	3	3
39	Europa	11	118	157	75	9.8	40.8	11	3	8	2	4	5
9	A16-B	10	107	153	75	10.5	35.2	18	0	14	3	2	4
12	Dickson 628	10	113	155	91	11.9	39.0	35	14	23	3	3	2
43	6 Berac/Bera	10	115	156	85	10.0	35.1	5	15	5	3	5	5
51	11012.2/Impala//Birence CMB 74A-1697-D-2B-2Y-500B-500Y-0B	10	110	152	83	9.7	42.1	11	10	13	3	1	4
52	Bal.Loc.46/Deir Alla 106 4L-1AP-OAP	10	107	151	85	9.3	43.9	20	14	23	4	2	4
121	Beecher/Coho 6AP-1AP-OAP	10	109	153	88	7.7	48.5	22	33	13	4	4	2
127	Tanekase 2/Baitori//Aths CYB 79-4AP-OAP	10	109	153	90	7.8	48.5	18	21	20	4	2	2

Table 10: Shortest maturity duration lines as well as their agronomic and disease performance in PON-B (1980-81).

Entry No.		DH	DM	FR	Pl.Ht	Protein %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
49	Api/CM67//Por/U.Sask 1766 CMB 75A-115-500Y-500B-0Y	105	149	4	70	10.9	36.1	20	19	1	3	2	5
96	RM 1508/Pro//WI 2269 CMB 75A-1152-2S-2AP-OAP	107	149	9	79	10.1	46.1	0	1	23	2	3	5
124	M.E.H.111.4/3/Apm/Dwarf 21//Par/IB65 CMB 73A-867-3369-4AP-2AP-OAP	108	149	12	77	8.9	36.8	17	26	30	5	3	5
125	M.E.H.111.4/3/Apm/Dwarf 21//Par/IB65 CMB 73A-867-3373-4AP-10AP-OAP	108	148	8	74	8.6	30.5	33	11	30	4	4	5
22	Hanna C1640	114	149	7	75	11.0	33.7	13	21	13	4	4	4

Table 11: Longest maturity duration lines in PON-B (1980-81).

Entry No.		DH	DM	FR	Pl.Ht	Protein %	Wt 1000K	A.C.I			PM	NB	Sc
								YR	LR	SR			
19	Ariana	127	162	4	105	-	-	3	6	18	2	2	2
29	Lignee 131	126	162	7	77	11.9	40.3	8	4	0	3	1	1
28	Lignee 686	125	162	6	76	10.8	32.8	8	1	33	1	1	2
31	Lignee 1242	125	160	7	79	12.7	37.1	9	2	0	2	2	3
34	Antares	125	161	5	74	-	-	15	5	0	2	1	3

Table 12: Lines with longest post anthesis period.

Entry No.		DH	DM	PA	FR	Pl.Ht	Protein %	Wt 1000K	A.C.I			PM	NB	Sc
									YR	LR	SR			
82	Harmal	109	156	47	1	74	12.8	43.3	22	6	13	2	2	4
111	2*Shikki Shirazu/Attiki CYB 83-0A-0A-7AP-1AP-0AP	104	153	59	5	89	90	53.7	12	17	23	4	4	3

Table 13: Lines with shortest post anthesis period.

Entry No.		DH	DM	PA	FR	Pl.Ht	Protein %	Wt 1000K	A.C.I			PM	NB	Sc
									YR	LR	SR			
22	Hanna C1640	114	149	35	7	75	11.0	33.7	13	21	13	4	4	4
31	Lignee 1242	125	160	35	7	79	12.7	37.1	9	2	0	2	2	3

Table 14: Highest protein percentage lines in PON-B (1980-81).

Entry No.		Protein %	FR	DH	DM	Pl.Ht	1000 KW	A.C.I			PM	NB	Sc
								YR	LR	SR			
32	Lignee 1479 (Montpellier)	12.9	4	125	160	79	44.6	9	7	23	1	2	2
82	Harmal	12.8	1	109	156	74	43.3	22	6	13	2	2	4
31	Lignee 1242 (Montpellier)	12.7	7	125	160	79	37.1	9	2	0	2	2	3
14	CM67/Apm CMB 72-21-5Y-1B-5Y-1B-1Y-OB	12.0	7	109	153	73	32.7	18	3	6	3	1	3
79	Aran'S' ICB 76-35-7L-3AP-OAP	12.0	0	110	156	81	40.1	0	10	50	2	3	5

Table 15: Highest 1000 KW lines in PON-B (1980-81).

Entry No.		1000 KW	FR	DH	DM	Pl.Ht	Protein %	A.C.I			PM	NB	Sc
								YR	LR	SR			
98	Suwon No.20//Avt/Aths CMB 75A-1292-5S-1AP-0AP	53.9	5	116	157	91	7.3	14	4	0	2	4	2
111	2*Shikki Shirazu/Attiki CYB 83-0A-0A-7AP-1AP-0AP	53.7	5	104	153	89	9.0	12	17	23	4	4	3
84	Ketade	53.2	1	111	152	79	9.8	35	8	33	4	5	4
119	Kheila	52.1	3	109	152	89	7.9	29	18	23	4	3	2
105	Tanekase 2/Baitori//Aths	50.9	4	116	157	91	7.3	14	4	0	2	4	2

Table 16: Lines resistant to Yellow Rust in PON-B (1980-81).

Entry No.		A.C.I			PM	NB	Sc	FR	DH	DM	Pl.Ht	Protein %	1000 KW
		YR	LR	SR									
24	Gitane*	0	4	33	2	3	3	8	115	154	83	8.7	40.6
26	Lignee 527*	0	6	23	2	4	2	12	116	157	79	8.2	37.7
79	Aran'S' ICB 76-35-7L-3AP-OAP	0	10	50	2	3	5	0	110	156	81	12.0	40.1
96	RM 1508/Pro//WI 2269* CMB 75A-1152-2S-2AP-OAP	0	1	23	2	3	5	9	107	149	79	10.1	46.1
97	IAR-H-81-Apm/IB65//Gva* CMB 75A-1269-4S-1AP-OAP	0	13	0	5	3	3	4	111	154	91	8.1	47.0

*: Good resistance to several diseases.

Table 17: Lines resistant to Leaf Rust in PON-B (1980-81).

Entry No.		A.C.I			PM	NB	Sc	FR	DH	DM	Pl.Ht	Protein %	1000 KW
		LR	YR	SR									
9	A16-B	0	18	14	3	2	4	10	107	153	75	10.5	35.2
28	Lignee 686 (Montpellier)	1	8	33	1	1	2	6	125	162	76	10.8	32.8
31	Lignee 1242 (Montpellier)	2	9	0	2	2	3	7	125	160	79	12.7	37.1
96	RM 1508/Pro//WI 2269 CMB 75A-1152-2S-2AP-OAP	1	0	23	2	3	5	9	107	149	79	10.1	46.1
142	Tunis/XV 2240 1L-OAP	2	25	12	3	3	2	3	118	154	92	8.6	39.0

*: Good general resistance to diseases and high protein content.

Table 18: Lines resistant to Stem Rust in PON-B (1980-81).

Entry No.		A.C.I			PM	NB	Sc	FR	DH	DM	Pl.Ht	Protein %	1000 KW
		SR	YR	LR									
34	Antares	0	15	5	2	1	3	5	125	161	74	-	-
54	CI 4977/Benton//Bigo 4L-1AP-OAP	0	27	15	5	3	4	4	112	155	86	8.3	33.0
59	CN100/DC23//Fun/2*Fun/3/Tra/4/10925-1 ICB 76-18-7L-5AP-OAP	0	20	8	2	3	3	5	110	151	86	9.4	31.5
98	Suwon No.20//Avt/Aths CMB 75A-1292-5S-1AP-OAP	0	14	4	2	4	2	5	116	157	91	7.3	53.9
123	As/4/Dwg 1-M2/M59.24//2*Api/3/Cq/Api ICB 76-87-180L-2AP-OAP	0	28	30	4	4	2	4	111	152	87	9.1	39.3

Table 19: Lines resistant to Scald in PON-B (1980-81).

Entry No.		Sc	A.C.I			PM	NB	FR	DH	DM	Pl.Ht	Protein %	1000 KW
			YR	LR	SR								
23	Alger/Ceres, 362-1-1-OAP*	1	0	3	0	2	1	6	124	163	79	11.5	38.5
29	Lignee 131*	1	8	1	0	3	1	7	126	162	77	11.9	40.3
102	H.Odesskji 17/DL71 CMB 75A-817-5S-1AP-OAP	0	14	11	23	2	4	6	115	155	91	8.5	39.6
105	Tanekase 2/Baitori//Aths	1	21	15	23	4	4	8	110	153	88	8.7	50.9

*: Alger/Ceres, 362-1-1-OAP and Lignee 131 have an acceptable resistance to the six diseases most prevalent in the ICARDA region.

Table 20: Lines resistant to Net Blotch in PON-B (1980-81).

Entry No.		NB	A.C.I			PM	Sc	FR	DH	DM	Pl.Ht	Protein %	1000 KW
			YR	LR	SR								
14	CM67/Apm CMB 72-21-5Y-1B-5Y-1B-1Y-0B	1	18	3	6	3	3	7	109	153	73	12.0	32.7
46	Bahtim/DL71	1	25	9	13	3	5	6	105	150	69	8.4	39.0
51	11012.2/Impala//Birence CMB 74-1697-D-2B-2Y-500B-500Y-0B	1	11	10	13	3	4	10	110	152	83	8.7	42.1
73	3309/Attiki//12240 4L-2AP-OAP	1	22	15	17	5	5	4	110	152	80	9.5	33.6
83	Harmal'S'*	1	23	3	13	2	4	6	106	151	73	7.2	46.9
	ICB 76-38-12L-2AP-OAP												

*: Harmal'S' combines net blotch resistance with LR resistance as well as high kernel weight.

Table 21: Lines resistant to Powdery Mildew in PON-B (1980-81).

Entry No.		PM	A.C.I				NB	Sc	FR	DH	DM	Pl.Ht	Protein %	1000 KW
			YR	LR	SR									
25	Athos*	1	3	8	5	2	4	6	119	157	77		9.1	37.2
28	Lignee 686*	1	8	1	33	1	2	6	125	162	76		10.8	32.8
32	Lignee 1479	1	9	7	23	2	2	7	125	160	79		12.9	44.6
61	Sawsan**	2	27	12	0	1	4	4	112	154	77		7.6	40.6
82	Harmal**	2	22	6	13	2	4	1	109	156	74		12.8	43.3

*: Athos and Lignee 686 show resistance to four diseases each.

** : Lignee 1479 and Harmal combine YR resistance, high protein content and high kernel weight.

Table 22: Lines resistant to 3 diseases in PON-B (1980-81).

Entry No.		A.C.I			PM	NB	Sc	FR	DH	DM	Pl.Ht	Protein %	1000 KW
		YR	LR	SR									
14	CM67/Apm CMB 72-21-5Y-1B-5Y-1B-1Y-0B	18	3	6	3	1	3	7	109	153	73	12.0	32.7
31	Lignee 1242	9	2	0	2	2	3	7	125	160	79	12.7	37.1
32	Lignee 1479	9	7	23	1	2	2	4	125	160	79	12.9	44.6
34	Antares	15	5	0	2	1	3	5	125	161	74	-	-
36	Piccolo	8	4	1	2	4	5	6	124	159	70	10.1	40.9
44	Lima Monterio/Beka//Aurore/3/Mari	2	10	8	3	2	4	9	113	153	81	9.3	34.3
45	8 Union/Delisa	2	6	5	3	4	3	8	117	157	82	9.1	38.7

Table 23: Lines resistant to 4 diseases in PON-B (1980-81).

Entry No.		A.C.I			PM	NB	Sc	FR	DH	DM	Pl.Ht	Protein %	1000 KW
		YR	LR	SR									
25	Athos	3	8	5	1	2	4	6	119	157	77	9.2	37.2
28	Lignee 686	8	1	33	1	1	2	6	125	162	76	10.8	32.8
41	Sonja	8	3	1	2	1	3	3	124	156	78	11.1	43.9

Table 24: Lines resistant to 5 diseases in PON-B (1980-81).

Entry No.		A.C.I			PM	NB	Sc	FR	DH	DM	Pl.Ht	Protein %	1000 KW
		YR	LR	SR									
23	Alger/Ceres, 362-1-1-OAP	0	3	0	2	1	1	6	124	163	79	11.5	38.5
29	Lignee 131	8	4	0	3	1	1	7	126	162	77	11.9	40.3

Table 25: Elevation, Precipitation, Irrigation and Growing Season in the PON-BW 1980-81.

No.	Country	Location	Latitude	Longitude	Elevation (m)	Rainfall (mm)	No. of Irrigations	Growing Season		
1	AFGHANISTAN	Jalalabad	34.25 N	70.27 E	552	132	4	3/12/80	-	18/ 5/81
2	AFGHANISTAN	Kabul	34.27 N	69. 7 E	1825	312	6	10/10/80	-	20/ 7/81
3	AFGHANISTAN	Kunduz	36.32 N	68.53 E	450	n.a	3	1/12/80	-	31/ 5/81
4	ALGERIA	Khroub	36.25 N	6.67 E	640	380	none	14/12/80	-	4/ 7/81
5	ALGERIA	Smar	36. 9 N	5. 4 E	n.a	n.a	n.a		n.a	
6	BANGLADESH	Jamalpur	24.56 N	89.55 E	8	56	3	25/11/80	-	2/ 4/81
7	BANGLADESH	Joydebpur	24 N	92.25 E	8	148	3	17/12/80	-	1/ 4/81
8	CYPRUS	Athalassa	35. 8 N	33.24 E	150	335	none	1/ 1/81	-	20/ 5/81
9	ECUADOR	Santa Catalina	0.22 S	78.33 W	3058	850	none	8/ 1/81	-	6/ 8/81
10	EGYPT	Shandawell	25. 4 N	32. 2 E	21	n.a	6	15/12/80	-	n.a
11	GREECE	Thessaloniki	40.38 N	22.57 E	10	180	none	19/12/80	-	29/ 6/81
12	IRAN	Karaj	50.35 N	58.50 E	1300	n.a	5	14/10/80	-	30/ 6/81
13	IRAQ	Tel Afer	36.22 N	42.28 E	270	362	none	10/12/80	-	n.a
14	JORDAN	Deir Alla	32.12 N	35.27 E	224	244	3	18/11/80	-	27/ 4/81
15	KENYA	Njoro	16.00 S	36.04 E	2000	140	1		n.a	
16	LEBANON	Bekaa	33.56 N	36. 5 E	995	858	n.a	18/11/80	-	23/ 7/81
17	LEBANON	Tel Amara	33.55 N	35.28 E	950	n.a	none	24/11/80	-	2/ 7/81
18	LIBYA	El Sarir	26.00 N	22.00 E	n.a	n.a	none	21/11/80	-	21/ 4/81
19	MEXICO	Ciano	27.20 N	109.54 W	40	130	4	30/11/80	-	25/ 4/81
20	NEPAL	Bhairahwa	27. 6 N	85. 6 E	105	98	3	29/11/80	-	n.a

Table 25: (Cont'd)

No.	Country	Location	Latitude	Longitude	Elevation (m)	Rainfall (mm)	No. of Irrigations	Growing Season		
21	OMAN	Wadi Quryat	22.50 N	57.10 E	500	n.a	n.a	10/11/80	-	15/ 4/81
22	PAKISTAN	Faisalabad	31.30 N	73.10 E	213	144	4	6/11/80	-	7/ 5/81
23	PAKISTAN	Islamabad	33.39 N	73.50 E	683	50	none	5/11/80	-	16/ 5/81
24	PAKISTAN	Pirsabak	34.00 N	72.00 E	905	322	3	16/12/80	-	7/ 5/81
25	PAKISTAN	Tandojam	25. 2 N	63.38 E	19	74	5	20/12/80	-	25/ 4/81
26	PHILIPPINES	Laguma	14.11 N	121.13 E	21	40	5	30/12/80	-	20/ 4/81
27	QATAR	Rodat El Faras	25.48 N	51.18 E	50	110	13	16/11/80	-	7/ 4/81
28	SAUDI ARABIA	Riyadh	24.42 N	46.00 E	420	n.a	11	4/12/80	-	n.a
29	SPAIN	Lerida	41.31 N	0.49 W	280	300	3	1/12/80	-	6/ 8/81
30	SPAIN	Madrid	40.00 N	3.40 W	490	50	4	11/12/80	-	9/ 8/81
31	SUDAN	Gezira	14.24 N	33.29 E	411	n.a	7	7/11/80	-	5/ 3/81
32	SUDAN	New Halfa	15. 8 N	35.45 E	400	n.a	8	9/ 1/81	-	n.a
33	SYRIA	Izraa	32.51 N	36.15 E	575	329	n.a	24/12/80	-	16/ 6/81
34	SYRIA	Tel Hadya	36.05 N	36.55 E	282	327	2	4/12/80	-	20/ 6/81
35	TUNISIA	Beja	37.00 N	9.00 E	165	571	n.a	28/11/80	-	n.a
36	TUNISIA	Le Kef	36.10 N	8.40 E	1000	n.a	n.a		n.a	
37	TURKEY	Diyarbakir	37.55 N	40.12 E	660	588	none	29/10/80	-	6/ 6/81
38	YEMEN	Taiz	13.42 N	44 E	1350	n.a	6	20/11/80	-	15/ 3/81
39	ZAMBIA	Lusaka	15.26 S	28.20 E	1666	nil	7	8/ 6/81	-	15/ 8/81

Tenth Preliminary Observation Nursery - Breadwheat (1980-81)

Overall Performance of the Entries (32 locations)

Table 26:

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
1	Mexipak (check)	1	104	148	81	9.8	38.2	-	-	-	4	1
2	Tob2-7C CM 5207-C-3Y-1M-1Y-3M-0Y-4Ptz	5	103	148	83	10.4	45.4	15	6	6	4	2
3	S 270-CalxTob-8156/7CxBb-Cno CM 5813-B-1Y-500M-500Y-0M	9	104	149	77	10.4	39.6	11	8	4	5	2
4	Bb-Kal CM 9160-11M-5Y-4M-1Y-0M	11	113	154	84	9.7	36.9	1	4	2	4	2
5	Pichihiula'S' CM 7652-16Y-501M-0Y	8	100	149	88	9.9	40.4	16	15	30	4	3
6	Emu'S' CM 8327-C-9M-4Y-3M-0Y	2	108	149	86	9.0	45.6	7	4	5	4	3
7	Line 1624	8	102	148	83	9.2	44.5	11	27	11	5	6
8	Pima 77 II 21515-1P-1P-3P-5M-0Y	5	104	149	82	10.2	36.8	4	11	7	3	5
9	Veery'S'=Kvz-Buho'S'xKal-Bb CM 33027-F-15M-500Y-0M	10	107	151	83	10.7	41.9	0	2	2	4	2
10	Kvz-Ti 71/Maya'S'xBb-Inia=Klt'S' CM 33089-F-2M-3Y-0M	9	109	152	87	12.2	45.0	3	2	2	4	2

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
11	Cowbird CM 16716-M-3M-2Y-3M-0Y	6	107	152	85	10.6	44.0	4	13	13	3	5
12	P 106-19 (Bb (Son64-An64xNad/Jar'S')) L 491-2L-1AP-OAP	9	110	151	91	11.3	37.6	16	17	39	3	2
13	(Pato(R)-Ca1/7CxBb-Cno)Cno'S'-Pj62xG11o CM 30115-1L-1AP-OAP	11	107	152	85	10.9	46.2	1	7	13	3	4
14	To173-Mus'S' CM 35430-2L-4AP-OAP	4	99	146	78	11.0	56.5	36	13	13	5	3
15	Rsk-Jup 73 SWM 5083-1S-2AP-OAP	6	102	148	85	12.3	51.4	20	18	31	3	4
16	Bb-Ca1 ((TpxCno-Inia'S'/Sr'S')Hork) CM 46900-6AP-OAP	7	106	142	102	10.1	40.8	14	4	18	3	3
17	Ald'S'-Hork CM 42853-2AP-OAP	9	102	150	86	10.7	45.1	17	14	18	3	3
18	((No66-Bb/CnoxNad-Chr'S')7C)Anza CM 45315-3AP-OAP	13	105	150	91	9.8	40.5	14	20	11	5	2
19	Ska-Fury CM 45847-4AP-OAP	4	104	150	87	10.7	46.9	2	10	16	3	4
20	Mexipak (check)	3	106	142	85	9.7	10.7	-	-	-	4	3

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Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
21	Tes 76/Jar66-KvzxYr70 CM 45984-2AP-OAP	7	102	147	86	11.2	39.7	2	7	5	3	2
22	Tezopaco'S'-Bluetit'S' CM 46051-2AP-OAP	2	104	149	95	10.7	39.2	2	8	12	5	4
23	((WA4767/391-56D.81.14.53x1015.6410)W22)Ana SWM 6525-1AP-OAP	13	107	150	86	9.9	43.2	1	9	7	4	1
24	Fx68.44-NUE/Cuc SWM 6637-2AP-OAP	4	110	151	89	11.3	37.2	7	9	14	3	4
25	HD 832.5.5-BbxSon64 ICW 77-137-K-1AP-OAP	12	108	151	88	10.3	41.0	13	21	4	5	1
26	P 106-19xSoty-Justin*3 L 489-2L-1AP-OAP	15	107	150	85	11.6	41.7	4	5	5	5	2
27	Barouk/Inia'S'-NapoxCal*2 L 494-4L-2AP-OAP	9	100	147	84	10.6	42.5	7	12	5	4	1
28	Jup'S' (LR64-SonxCc/Ska) L 764-2L-1AP-OAP	11	101	148	79	11.8	42.6	5	5	4	4	1
29	Tob66-Cno'S'xPi62/Ska L 771-2L-3AP-OAP	13	105	150	82	11.1	41.4	2	10	18	3	1
30	No66-SotyxCno'S'-Inia'S' (Bb (Son64-An64xNad/ Jar'S')) L 791-6L-4AP-OAP	4	103	147	83	11.5	46.6	17	10	14	5	2
31	(Bb (Son-An64xNad/Jar3) Kt54-N10B L 879-1L-2AP-OAP	10	104	150	87	10.1	43.4	4	11	11	3	1

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
32	(Rfnx908-Fn(4777/Reixy-Kt Caf-Cn Kt 54-N10B) L 906-2L-2AP-OAP	7	104	150	86	10.5	41.4	5	10	17	4	5
33	Kvz/Inia'S'-OnxInia-Bb SWM 2893-3L-1AP-OAP	4	103	147	87	11.3	44.4	8	2	8	4	2
34	Kvz-Bbt'S' SWM 2897-1L-1AP-OAP	5	111	154	97	11.0	45.6	3	7	7	3	2
35	Reib 4751/Hopps-RonxKal SWM 2923-5L-1AP-OAP	2	107	150	88	9.6	44.8	21	15	19	4	2
36	Blue Boy-Ti 71 SWM 2931-1L-1AP-OAP	3	109	152	91	10.2	42.0	15	14	12	3	1
37	Sturdy(Bb-Cno/Cno'S'-No66xPi62) SWM 2972-2L-2AP-OAP	8	110	152	90	11.2	52.6	16	7	7	3	1
38	Ymh-Ald'S' SWM 3142-8L-1AP-OAP	7	110	153	91	11.9	50.2	4	10	8	3	0
39	Cc-IniaxCno-7C((Cha-Meng-8156/Cno-G11oxSr67) CM 32816-1L-4AP-OAP	7	100	150	85	12.7	46.4	1	11	18	4	4
40	Mexipak (check)	4	104	149	84	9.8	33.7	14	-	-	3	4
41	Soissonais Desprez-Bolillo'S'=SSD-Blo'S' CM 29963-2L-10AP-OAP	8	96	151	87	11.1	48.5	14	9	6	3	4
42	Pato(R)-Cal/7CxBb-Cno'S'xPj62xG11o CM 30115-1L-4AP-OAP	8	108	152	88	10.2	45.5	2	8	12	3	4

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
43	Kal-Hua'S'	9	105	150	88	9.9	37.1	28	10	19	5	3
44	((No66-Bb/CnoxNad63-Chr'S')7C)Kal CM 39642-3S-1AP-OAP	6	105	150	89	10.6	37.6	21	20	30	4	4
45	HD 2206-Yr.70 CM 40170-5S-1AP-OAP	5	126	172	84	12.0	35.0	14	13	14	1	3
46	Ptm70-Hua'S' CM 40272-1S-1AP-OAP	5	104	148	84	11.7	43.9	19	9	4	4	4
47	(Kl.Pe-Son64(Cjx36896-Gb54/Gb56-N-53-526))Emu'S' CM 40527-5S-2AP-OAP	10	101	145	84	13.0	49.9	9	22	10	5	4
48	Pato-OnxMaya74(Bb/PatoXlnia-Napo) CM 40738-2S-1AP-OAP	8	104	147	80	11.4	40.5	24	11	22	4	0
49	Jup'S'/HK-38MAxLoh-Dirk SWM 5097-3S-1AP-OAP	9	102	147	84	12.4	49.7	18	26	32	3	3
50	Zop'S'-Ald'S' CM 40626-2AP-3AP-OAP	11	104	142	90	10.8	45.9	17	29	12	4	1
51	Yr-Resel(B)-Ald'S' CM 31952-1AP-2AP-OAP	9	102	149	83	11.3	51.6	4	12	9	4	1
52	Mex x 120-WexKNG NCP 212-C-2KE-1AL-OAP	5	101	149	84	12.2	49.1	2	25	17	4	5
53	Bui-Gillo(Tob'S'-8156xCc-Inia'S'/Cal)KNG NCP 215-C-1KE-1AP-OAP	7	99	148	88	12.2	49.1	14	10	7	3	0

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
54	Sannine-Ald'S' L 932-OL-11AP-OAP	16	108	152	88	11.0	47.8	2	6	2	4	1
55	Ptm 70-Mon'S' CM 40270-OL-1AP-OAP	6	103	147	85	10.6	45.4	10	9	9	3	4
56	Bb'S'xBb-Kal CM 32285-5S-1AP-OAP	9	105	148	84	11.3	41.4	15	8	22	3	5
57	Cno'S'-Pj62xG11o/Tuc'S' CM 35054-1S-1AP-OAP	4	105	149	87	12.0	45.7	2	10	5	3	0
58	Inia-NapoxTob/Sprw L 17-7S-4AP-OAP	6	123	163	90	12.2	43.1	4	9	6	3	3
59	K6290.9(Cno-K48NxTob-Cno/We-Sx) L 51-2S-3S-2AP-OAP	3	104	147	85	13.3	49.1	7	9	3	4	0
60	Mexipak (check)	3	104	148	85	10.1	39.1	-	-	-	4	3
61	Jup 73-Soltane CM 8296-2AP-5AP-OAP	7	107	148	86	11.7	48.3	20	42	13	3	1
62	WexCno-Inia/Hork CM 39858-1AP-OAP	8	110	141	89	10.5	39.0	12	8	9	4	2
63	Jup 73-Bjy'S' CM 39992-2AP-OAP	3	101	150	83	11.5	38.9	15	12	12	3	3
64	Nova Prata/7C-OnxInia.B.Man L 931-OAP-2AP-OAP	4	101	148	84	12.7	49.7	18	11	11	3	3

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
65	Bch'S'xY50E-Ka13 CM 28988-OAP-3AP-OAP	9	101	150	93	12.5	42.7	14	22	13	3	3
66	((Cno-K58N/Tob-Cno)We)Sx) (LR64A-TzppxAn3E/ Jar'S') L 903-OL-1AP-OAP	8	101	147	87	12.8	46.4	6	20	12	3	4
67	Jup 73-Bjy'S' CM 39992-OSK-1AP-OAP	8	103	149	88	12.1	50.3	2	10	7	3	1
68	HD 1220-Ka1*3xBjy'S'=Neelkant'S' CM 40454-OSK-1AP-OAP	13	104	149	84	10.3	45.0	5	12	12	4	2
69	Pavon'S' (Fr-K58NxN10B)Son64xTzpp2 AN CM 2828-3AP-OAP	10	108	152	84	10.4	40.8	3	25	39	3	5
70	(K338-EdechxKaudiat 17-Kt-Y/Wren) Cut 75 SE 1169-1S-3S-1S-0S	6	113	154	79	12.0	47.0	1	10	5	3	0
71	Chat'S' CM 33090-N-1M-1Y-0M	8	111	153	81	10.9	37.5	3	8	4	3	4
72	Chat'S' CM 33090-T-1M-4Y-0M	10	109	152	82	10.6	39.9	1	4	2	3	4
73	Kvz-HD 2009 SWM 2984-1M-Y-1M-2Y-0M	6	113	155	85	10.5	41.3	1	13	9	3	0
74	Arz/IniAxTob'S'-Napo L 788-1L-1AP-OAP	5	104	149	78	9.7	42.1	16	15	12	3	3
75	SXxKvz SWM 2906-1L-2AP-OAP	8	114	154	77	10.6	36.1	8	9	5	3	3

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
76	Ti 71 ReselxKal-Bb CM 39315-1S-1AP-OAP	6	99	143	90	11.9	45.2	39	22	12	4	4
77	Ti 71 ReselxKal-Bb CM 39315-1S-2AP-OAP	6	98	145	86	11.9	45.2	48	24	6	3	5
78	((Fr316/MCM-KtxY50)Zar)Ti 71 Resel CM 39385-4S-3AP-OAP	4	100	143	78	11.1	44.2	17	27	26	4	5
79	((Fr316/MCM-KtxY50)Zar)Ti 71 Resel CM 39385-5S-5AP-OAP	5	104	149	78	10.2	37.8	6	9	20	4	1
80	Mexipak (check)	2	105	148	83	10.1	38.1	-	-	-	4	1
81	Kal-Ana CM 39599-3S-1AP-OAP	7	108	151	75	10.8	36.0	5	9	6	3	1
82	Hork-Kal CM 39714-1S-4AP-OAP	8	109	152	88	10.8	37.7	26	11	27	4	1
83	Hork-Kal CM 39714-1S-5AP-OAP	13	111	153	84	10.3	37.6	25	12	30	3	1
84	Flicker'S'-Hork CM 39816-1S-1AP-OAP	8	109	151	74	9.5	38.5	8	18	32	3	2
85	((Cno-7C-Tob/Cno'S'-No66)Kal)Hork CM 39846-3S-1AP-OAP	8	112	154	78	10.8	35.7	15	13	12	3	1
86	Pato-OnxMaya74 (Bb/PatoxInia-Napo) CM 40738-1S-3AP-OAP	9	102	147	75	11.4	39.9	4	17	18	3	2

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
87	RBS-Ti 71 Resel SWM 4781-4S-3AP-OAP	5	103	149	81	11.0	44.8	4	17	34	3	3
88	RBS-ERGA SWM 5387-1S-2AP-OAP	6	105	150	85	10.4	41.9	17	13	20	3	4
89	Mildress-Torim 73 SWM 5431-3S-4AP-OAP	11	106	151	88	10.2	39.6	13	11	0	4	2
90	Inia-NapoxTob66 (Fn-MdxK117A/Cofn2 (Son64-Ki. Rend/Cno'S'xLR642-S64) Sparrow L 822-1AP-3AP-OAP	7	100	149	86	11.5	49.7	15	9	23	3	5
91	Pato(R)-Cal/7Cx8b-Cno (CalxCno-Son (CnoxNad- Chr'S'/Son-K1. RendxBb) CM 30110-5AP-1AP-OAP	11	112	154	97	10.7	40.4	3	18	18	3	3
92	Mex x 120-We-KNG NCP 214 A-4-K-2AP-OAP	6	104	149	86	11.1	41.4	3	14	8	3	2
93	K 6290/9 ((Cno-K 58NxTob-Cno)We-Sx) L 51-2S-4S-2AP-OAP	6	108	152	83	10.3	39.6	2	7	9	3	1
94	((CnoxK58 N/Tob-Cno)We)Sx CM 8921-G-5M-5Y-OAP	8	101	148	82	10.8	46.2	11	8	4	3	2
95	Bb-Kal CM 9160-11M-5Y-6M-0Y-1Ptz	11	113	154	85	10.6	38.9	4	6	3	3	2
96	23584x15-13-5-Son64 PK 6110-1A-1A-0A-11A-23A-OAP	8	113	153	96	10.7	47.1	8	11	16	3	4

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
97	P 106-19xBb (Son64-An64xNad/Jar'S') L 491-6L-1AP-OAP	9	116	153	92	12.6	39.5	1	7	2	2	1
98	Barouk-Torim L 495-4L-5AP-OAP	9	104	149	86	10.3	35.8	17	22	26	3	3
99	YmhxBlo'S' SWM 3155-6L-2AP-OAP	5	103	148	84	10.9	40.5	17	12	14	3	2
100	Mexipak (check)	3	103	148	84	10.0	37.8	37	-	-	4	2
101	Tol73-Mus'S' CM 35430-2L-4AP-OAP	11	99	147	79	11.3	53.8	22	10	4	4	4
102	(Yr'S'/Bb-Calx7C-Nad63)Hork CM 39845-5S-2AP-OAP	8	99	149	87	11.1	40.6	14	16	20	4	1
103	Kal-BbxAz67 CM 40219-3S-1AP-OAP	6	101	147	86	11.7	43.8	22	20	20	4	3
104	Kal-BbxTJB41.1543 SWM 4979-7S-1AP-OAP	5	106	149	93	11.0	51.5	4	19	18	3	3
105	Sturdy'S'-Condor'S' SWM 5138-1S-1AP-OAP	11	106	149	87	11.4	45.2	8	15	28	3	2
106	Emu'S'-TJB84.1543 SWM 5207-2S-2AP-OAP	8	114	153	92	10.9	43.8	2	3	9	4	1
107	Inia'S'-Cc (12300-TdxJar66/Pak20) L 794-3AP-1AP-OAP	4	104	150	91	11.5	40.0	2	5	8	3	3
108	(Adc-C/FrxFn-YxCofn-Dw-Nar59)Yr'S' L 834-1AP-3AP-OAP	8	106	148	84	11.8	44.2	25	19	12	4	4

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
109	(Nar/PLNor67xCno-Son64)Yr'S'/Bb-Calx7C-Nad L 883-4AP-2AP-0AP	3	112	151	91	12.8	40.7	5	18	18	3	3
110	Maya74-Pvn'S' CM 39426-1AP-1AP-0AP	11	104	149	83	11.3	42.3	19	15	14	3	1
111	((Rfn2x908xCfn-11-50)Cfn*3xCc-Cno))LR642- Son64xCc/Ska L 774-1AP-4AP-0AP	7	113	149	90	11.3	46.9	11	5	5	3	2
112	Mb2xInia'S'-Napo(No66-Bb/CnoxNad-Chr'S'7C CM 32973-2AP-3AP-0AP	5	106	149	83	11.1	46.1	9	13	18	4	2
113	Bch'S'xY50E-Kal3 CM 39761-9KE-3AP-0AP	8	110	152	87	11.3	46.0	3	11	22	4	1
114	Bez2-Hua'S' SWM 5344-8KE-1AP-0AP	6	109	149	102	12.1	43.5	9	25	21	3	4
115	Mex120-WexKNG MCP 214-A-5KE-2AP-0AP	9	126	166	91	11.4	46.6	7	28	21	3	3
116	Tob-CnoxHD832(CnoxK48 N/Tob-Cno)We L 885-0L-1AP-0AP	5	104	148	85	12.0	42.4	22	23	9	4	0
117	Maya74-Choli CM 39427-11AP-0AP	7	122	162	92	12.0	44.3	6	14	17	3	4
118	Cno'S'-Nor67xSA42 PK 4272-595-1L-0KE-0S-5S-1AP-0AP	5	101	145	77	13.3	36.4	10	11	6	4	2
119	Bbt'S'xBb-Kal CM 32285-3S-4AP-0AP	6	101	146	79	13.4	41.5	9	8	15	4	1
120	Mexipak (check)	4	106	149	83	9.8	36.6	-	-	-	4	2

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
121	Kal-BbxCj71'S'/Ald'S' CM 32421-4S-5AP-OAP	9	107	150	91	12.0	48.1	17	24	14	4	3
122	Gallo-Sal. Seafoam CM 29378-1AP-4AP-OAP	10	104	150	91	11.5	46.9	12	10	19	3	3
123	Choli-Saka CM 29480-1AP-2AP-OAP	6	117	156	90	11.8	38.5	9	7	17	3	1
124	Vireo	5	105	143	79	12.3	45.6	11	4	-	4	4
125	Buck Buck'S' CM 31678-R-4Y-2M-500Y-509M-0Y	10	105	151	81	12.0	43.0	15	6	10	3	2
126	Bobwhite'S' CM 33203-K-12M-5Y-1M-0Y	10	106	150	83	12.5	44.3	2	4	6	3	0
127	Maya74'S'-Yding'S' ((HK38MA(4777xRei-Y/Kt)) Yr70) CM 33477-L-2M-7Y-5M-1Y-0M	8	109	150	87	12.4	44.2	11	4	9	3	3
128	Crow'S' CM 40457-20M-5Y-0M	12	103	148	79	11.0	38.9	7	10	13	3	2
129	Myna'S' SWM 4589-7Y-8M-1Y-0M	10	104	151	83	10.1	42.2	22	6	26	3	1
130	Buck Buck'S' CM 31678-R-4Y-2M-24Y-1M-0Y	5	105	151	75	10.9	43.7	15	4	16	3	2
131	Towhee'S' CM 34709-G-15M-3Y-0M	10	106	151	85	11.7	36.6	9	2	14	3	1
132	Warbler'S' CM 39814-500M-502Y-0M	8	106	150	88	12.9	48.6	5	13	12	3	1

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
133	Dove'S' CM 38199-L-11Y-1M-1Y-OM	6	109	151	82	11.6	44.7	2	8	3	3	2
134	Thrush'S' CM 34742-E-2M-8Y-2M-1Y-OM	4	107	151	83	10.3	41.0	14	7	28	3	4
135	Sunbird'S' CM 34630-D-5M-2Y-3M-3Y-OM	6	110	153	80	12.3	52.6	1	2	3	3	1
136	Sunbird'S' CM 34630-D-5M-2Y-1M-1Y-OM	4	109	153	80	12.2	54.1	1	2	4	3	1
137	Swift'S' CM 33232-C-5M-1Y-10M-0Y	7	108	150	85	12.9	41.1	15	5	13	3	1
138	Grouse'S' CM 30986-I-1Y-1M-1Y-1M-0B	5	106	146	86	11.0	41.6	20	4	17	3	2
139	Adria	3	114	151	72	10.9	38.7	6	28	38	3	1
140	Mexipak (check)	3	105	148	83	10.3	36.2	-	-	-	4	2
141	Marzotto	2	135	174	71	11.9	37.7	3	19	35	2	2
142	Tarro	7	103	147	87	11.3	46.4	21	43	50	4	1
143	Flavio	4	112	151	84	10.8	38.9	6	28	5	3	2
144	Kavco	8	107	148	96	13.9	35.8	5	5	6	3	0
145	H277.69xTor'S'-Tob66/FS1029 CMH 1211-3Y-1B-1Y-2Y-0B	3	99	148	81	11.1	47.0	0	0	0	3	0
146	Octo Oc-Aqrot=Addax X 7224-10M-1Y-100M-0Y	6	98	149	88	11.9	39.4	0	0	0	4	0

Table 26: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
147	IGA-M2A X 11814-2M-2Y-100Y-0Y	10	99	148	93	11.2	39.7	0	0	0	4	0
148	M2A-IRA X 11960-6M-1Y-1Y-0M	11	103	150	91	11.3	41.6	0	0	0	3	0
149	M2A-WW 15 X 17045-13Y-100Y-4M-0Y	4	99	149	81	12.0	46.1	0	0	0	4	0
150	Mexipak (check)	5	106	149	85	10.4	40.3	69	48	20	4	1.5

DH out of (30 locations); DM out of (23 locations); Pl.Ht out of (31 locations).

TENTH PRELIMINARY OBSERVATION NURSERY - BREADWHEAT (1980-81)

The Tenth Preliminary Observation Nursery - Breadwheat (PON-BW) consisted of breadwheat entries (1 - 144), and triticales lines (144 - 149). Mexipak 65 was included as check variety (no: 1, 20, 40, 60, 80, 100, 120, 140, 150). Data were received from 32 locations.

Sannine-Ald'S' was the most frequently selected breadwheat line, chosen at 16 locations. The agronomic and disease data for lines selected at 13 or more locations are presented in Table 27. The range in days to heading were 96 (no: 41) to 135 (no: 141), for days to maturity 142 (no: 16 and no: 50) to 174 (no: 141). The most frequently selected lines were medium in heading and maturity. Plant height ranged from 71 cm (no: 141) to 102 (no: 16 and no: 114).

Protein content ranged from 9.0 (no: 6) to 13.9% (no: 144), and the 1000KW ranged from 33.7 (Mexipak) to 56.6 gr (no:14). These data are presented in Tables 28 and 29. Since these data are from one location only, they are useful only as an indication for grain quality performance.

Table 27: Agronomic and disease data for the lines selected 13 or more times in PON-BW (1980-81).

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
54	Sannine-Ald'S' L 932-0L-11AP-OAP	16	108	152	88	11.0	47.8	2	6	2	4	1
26	P106-19xSoty-Jt*3 L 489-2L-1AP-OAP	15	107	150	85	11.6	41.7	4	5	5	5	2
18	((No66-Bb/CnoxNad-Chr'S')7C)Anza CM 45315-3AP-OAP	13	105	150	91	9.8	40.5	14	20	11	5	2
23	((WA4767/391-56D.81.14.53x1015.6410)W22)Ana SWM 6525-1AP-OAP	13	107	150	86	9.9	43.2	1	9	7	4	1
29	Tob66-Cno'S'xPi62/Ska L 771-2L-3AP-OAP	13	105	150	82	11.1	41.4	2	10	18	3	1
68	HD1220-Kal*3xBjy'S'=Nkt'S' CM 40454-0SK-1AP-OAP	13	104	149	84	10.3	45.0	5	12	12	4	2
83	Hork-Kal CM 39714-1S-5AP-OAP	13	111	153	84	10.3	37.6	25	12	30	3	1

Table 28: Agronomic and disease data for lines in PON-BW with protein content more than 13 percent.

Entry No.	Variety or Cross and Pedigree	Prot. %	FR	DH	DM	Pl.Ht	Wt 1000K	A.C.I			Sept	PM
								YR	LR	SR		
144	Kavco	13.9	8	107	148	96	35.8	5	5	6	3	0
119	Bbt'S'x8b-Kal CM 32285-3S-4AP-OAP	13.4	6	101	146	79	41.5	9	8	15	4	1
118	Cno'S'-Nor67xSA42 PK 4272-595-1L-OKE-OS-5S-1AP-OAP	13.3	5	101	145	77	36.4	10	11	6	4	2
59	K6290.9 (Cno-58NxTob-Cno/We-Sx) L 51-2S-3S-2AP-OAP	13.3	3	104	147	85	49.1	7	9	3	4	0
47	(K1pe-Son64(Cjx36896-Gb54/Gb56-N-53-536)) Emu'S' CM 40527-5S-2AP-OAP	13.0	10	101	145	84	49.9	9	22	10	5	4

Table 29: Agronomic and disease data for lines in PON-BW with high 1000 KW.

Entry No.	Variety or Cross and Pedigree	Wt 1000K	FR	DH	DM	Pl.Ht	Prot. %	A.C.I			Sept	PM
								YR	LR	SR		
14	Tol73-Mus'S' CM 35430-2L-4AP-OAP	56.5	4	99	146	78	11.0	36	13	13	5	3
136	Sunbird'S' CM 34630-D-5M-2Y-1M-1Y-OM	54.1	4	109	153	80	12.2	1	2	4	3	1
101	Tol73-Mus'S' CM 35430-2L-4AP-OAP	53.8	11	99	147	79	11.3	22	10	4	4	4
135	Sunbird'S' CM 34630-D-5M-2Y-3M-3Y-OM	52.6	6	110	153	80	12.3	1	2	3	3	1
37	Sturdy(Bb-Cno/Cno'S'-No66xPi62) SWM 2972-2L-2AP-OAP	52.6	8	110	152	90	11.2	16	7	7	3	1

Table 30: Agronomic and disease data for lines in the PON-BW (1980-81) resistant to the three rusts.

Entry No.	Variety or Cross and Pedigree	A.C.I			Sept	PM	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K
		YR	LR	SR								
4	Bb-Kal CM 9160-11M-5Y-4M-1Y-OM	1	4	2	4	2	11	113	154	84	9.7	36.9
9	Vee'S' CM 33027-F-15M-500Y-OM	0	2	2	4	2	10	107	151	83	10.7	41.9
10	Kvz-Ti71/Maya'S'xBb-Inia=Klt'S'	3	2	2	4	2	9	109	152	87	12.2	45.0
26	P106-19xSoty-Jt*3 L 489-2L-1AP-OAP	4	5	5	5	2	15	107	150	85	11.6	41.7
28	Jup'S' (LR64-SonxCc/Ska) L 764-2L-1AP-OAP	5	5	4	4	1	11	101	148	79	11.8	42.6
72	Chat'S' CM 33090-T-1M-4Y-OM	1	4	2	3	0	10	109	152	82	10.6	39.9
135	Sunbird'S' CM 34630-D-5M-2Y-3M-3Y-OM	1	2	3	3	1	6	110	153	80	12.3	52.6
136	Sunbird'S' CM 34630-D-5M-2Y-1M-1Y-OM	1	2	4	3	1	4	109	153	80	12.2	54.1

Table 31: Elevation, Precipitation, Irrigation and Growing Season in the PON-D 1980-81.

No.	Country	Location	Latitude	Longitude	Elevation (m)	Rainfall (mm)	No. of Irrigations	Growing Season		
1	AFGHANISTAN	Bulkh	36.40 N	67 E	378	162	6	26/11/80	-	22/ 6/81
2	AFGHANISTAN	Darul	34.27 N	69. 7 E	1825	n.a	6	10/10/80	-	25/ 7/81
3	ALGERIA	Khroub	36.25 N	6.67 E	640	380	none	14/12/80	-	4/ 7/81
4	ALGERIA	Setif	36. 9 N	5.21 E	1000	342	none	13/12/80	-	23/ 6/81
5	ALGERIA	Smar	36. 9 N	5. 4 E	n.a	n.a	n.a		n.a	
6	BANGLADESH	Jamalpur	24.56 N	89.55 E	8	56	3	25/11/80	-	30/ 3/81
7	BANGLADESH	Jessore	23.13 N	89.13 E	8	n.a	n.a		n.a	
8	BANGLADESH	Joydebpur	24 N	92.25 E	8	n.a	n.a		n.a	
9	CYPRUS	Athalassa	35. 8 N	33.24 E	150	335	none	1/ 1/81	-	20/ 5/81
10	ECUADOR	Santa Catalina	0.22 S	78.33 W	3058	n.a	n.a	7/ 1/81	-	n.a
11	EGYPT	Gemmeiza	31.07 N	30.48 E	9	n.a	n.a		n.a	
12	EGYPT	Sakha	30.45 N	31 E	0	n.a	n.a	30/11/80	-	28/ 6/81
13	EGYPT	Shandawell	25. 4 N	32. 2 E	21	n.a	6	20/11/80	-	30/ 5/81
14	FRANCE	Montpellier	43.37 N	1.39 E	49	n.a	none	21/11/80	-	1/ 6/81
15	GREECE	Thessaloniki	40.38 N	22.57 N	10	180	none	25/11/80	-	27/ 6/81
16	IRAQ	Bakrajo	35.33 N	46.25 E	700	787	none	30/10/80	-	12/ 7/81
17	IRAQ	Dohuk	33 N	47 E	480	704	none	27/11/80	-	30/ 6/81
18	ITALY	Casaccia	43.50 N	13.30 E	20	700	none	17/11/80	-	27/ 6/81
19	JORDAN	Marrow	32.33 N	35.51 E	618	386	none	16/11/80	-	6/ 6/81
20	KENYA	Njoro	16 S	36.04 E	2000	140	1		n.a	

Table 31: (Cont'd)

No.	Country	Location	Latitude	Longitude	Elevation (m)	Rainfall (mm)	No. of Irrigations	Growing Season		
21	LEBANON	Bekaa	33.55 N	36. 4 E	995	858	none	18/11/80	-	24/ 6/81
22	LEBANON	Kfardan	33.52 N	36.02 E	920	n.a	n.a		n.a	
23	LIBYA	El Sarir	26 N	22 E	n.a	n.a	n.a	12/11/80	-	23/ 4/81
24	LIBYA	El Sarir	26 N	22 E	n.a	n.a	n.a	12/11/80	-	n.a
25	MEXICO	Ciano	27.20 N	109.54 W	40	110	4	23/11/80	-	17/ 4/81
26	MOROCCO	Guich	34.02 N	6.51 W	n.a	n.a	n.a		n.a	
27	PAKISTAN	Ayub	31.30 N	73.10 E	213	126	2	28/10/80	-	16/ 4/81
28	PORTUGAL	Elvas	38.53 N	7. 9 W	208	n.a	n.a		n.a	
29	SAUDI ARABIA	Riyadh	24.42 N	46 E	420	n.a	11	4/12/80	-	n.a
30	SPAIN	La Reina	37.51 N	4.30 W	150	350	3	7/ 1/80	-	30/ 6/81
31	SPAIN	Madrid	40 N	3.40 W	490	50	4	10/12/80	-	9/ 8/81
32	SYRIA	Izraa	32.51 N	36.15 E	575	329	none	23/12/80	-	15/ 6/81
33	SYRIA	Tel Hadya(RF)	36.05 N	36.55 E	282	327	none	1/12/80	-	15/ 6/81
34	SYRIA	Tel Hadya(IRR)	36.05 N	36.55 E	282	327	2	20/10/80	-	10/ 6/81
35	TUNISIA	Beja	37 N	9 E	165	571	none	29/12/80	-	15/ 6/81
36	TUNISIA	Le Kef	36.10 N	8.40 E	1000	n.a	n.a		n.a	
37	TURKEY	Diyarbakir	37.55 N	40.12 E	660	588	none	28/10/80	-	8/ 7/81
38	TURKEY	Izmir	38.25 N	27.10 E	n.a	n.a	n.a		n.a	
39	YEMEN	Taiz	13.42 N	44 E	1350	n.a	6	20/11/80	-	15/ 3/81

Tenth Preliminary Observation Nursery - Durum (1980-81)

Overall Performance of the Entries (34 locations)

Table 32:

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
1	Waha (check)	8	118	175	81	8.9	39	47.6	0	13	35	4
2	Ato'S'/AA'S'//Plc'S' CD 1859-16-500B-OSK	9	121	176	84	8.8	23	53.0	1	13	40	3
3	Fg'S'//Mgh'S'/Gta'S' 9237-4SK-OSK	4	120	177	80	8.8	30	50.4	7	12	40	2
4	Bittern'S'	7	120	175	77	8.9	25	52.6	0	13	40	2
5	Stk'S'//21563/AA'S' CD 3935-1Y-1M-0Y	5	121	177	79	8.7	15	48.5	1	16	46	4
6	D.dwarf S-15/Cr'S' D 33312-7Y-2M-1Y-0M	12	121	177	81	8.3	12	48.1	2	16	48	4
7	DU-GVZ451 (68-1797)-CPxVZ-156 (Rye-TC5) S03829 W-229A-OAP	6	125	179	78	9.6	25	52.2	1	17	45	5
8	S-15/Cr'S' D 33212-8Y-4M-2Y-0M	10	118	176	80	8.3	21	53.7	1	14	45	5
9	Stk'S'//Chap/21563=Mallard'S' CD 1894-1Y-0Y	16	119	176	79	7.4	4	50.8	1	22	45	3
10	Ruff'S'/Fg'S' CM 9880-25M-1Y-1M	8	121	176	78	8.5	18	54.8	0	14	48	6
11	Boy'S' CD 4404-J-5Y-0Y-0M	7	122	178	77	8.8	27	43.0	1	25	40	6

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. C	Wt 1000K	A.C.I			PM
									YR	LR	SR	
12	Gr'S'/Fg'S'/3/21563/Gs'S'//Cit'S'/P66-270 CD 1074-1Y-3Y	6	120	178	85	10.4	58	58.2	1	11	15	4
13	P66-270/Gu'S'/4/Rabi//Gs/Cr/3/Jo/Cr CD 1276-A-1Y-0KE	3	123	179	73	11.1	70	47.3	0	13	35	3
14	Jo/Cr//Gs/3/Pg CD 7474-10Y-2M-0Y	16	118	175	81	11.2	89	55.3	1	12	40	2
15	Cit//Gs/AA CM 9916-4S-1S-0KE	12	117	175	83	10.5	70	48.1	2	12	40	4
16	Garza//G11/Br.180-LK/Gb-220xLds CM 9648-7S-1S-0KE	6	121	176	75	12.3	96	51.3	0	11	35	2
17	Ato'S' D 32864	8	118	175	80	11.3	99	48.1	8	17	40	2
18	Cr'S'/Fg CM 9682-70M-3Y-1M-0Y	8	119	175	78	12.3	95	53.6	2	12	40	2
19	Ente'S'/Mexi'S' CD 8153-12M-1Y-1M-0Y	10	123	177	81	10.4	75	47.2	3	15	45	2
20	Stork (check)	6	115	174	82	10.1	63	52.8	3	14	45	3
21	Cfn5/Mca'S'//Cr'S'/3/Mario'S'/4/Jo'S'/Cr'S' CD 10612-B-4M-1Y-1M-0Y	9	121	175	82	10.0	76	52.0	1	16	45	2
22	AA'S'/Cr'S'//Cit'S'/4/Cr'S'/5/21563/3/61-130 /Lds CD 7657-1Y-2M-1Y-1M-0Y	6	118	176	76	10.9	91	54.2	1	15	45	5
23	Cit'S'/Gta'S'//Ruff'S'/3/T.dic.V.Vernum/ G11'S' CM 14566-E-500Y-12M-0Y-0M	12	126	177	82	11.2	89	50.7	7	15	46	2

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
24	Mexi'S'/Fg'S' CD 1895-12Y-0Y-3E	4	120	176	77	10.8	90	54.4	7	15	48	2
25	Cit'S'/Fg'S' CD 3568-8Y-1M-3Y-0M	11	123	178	77	11.7	94	49.6	1	16	45	3
26	Mexi'S'//Chap/21563=Mallard'S' CD 1894-3Y-1Y-8M-1Y-0M	14	118	176	77	10.0	50	52.3	2	11	36	2
27	Mexi'S'//Chap/21563=Mallard'S' CD 1894-1Y-1Y-1M-2Y-0M	11	118	175	78	9.3	82	51.8	1	11	35	4
28	Gre'S' CD 14432-C-1Y-3M-1Y	14	121	177	82	9.0	58	50.3	2	13	35	4
29	D.dwarf S-15/Cr'S' D 33312-7Y-4M-1Y-0M	13	121	175	80	9.3	68	49.3	7	7	20	5
30	Gll'S'//T.dic.V.Vernum/Gll'S' CM 86-1M-2Y-6M-0Y	9	117	173	77	11.5	92	54.5	2	11	35	6
31	D-14	10	116	174	73	9.5	25	53.6	1	12	35	6
32	Mexi'S'/Gta'S' CD 1896-12Y-0Y-1E	7	119	176	76	9.3	59	49.9	1	15	35	5
33	Gediz'S' D 27534-1M-1Y-1M-0Y	7	120	176	80	9.8	86	49.8	1	21	40	4
34	Gr/Fg/3/21563/Gs//Cit/4/P66-270 CD 1074-1Y-3Y-0Y-OKE	5	118	175	80	9.5	35	51.6	2	12	38	5

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
35	T.dic.V.Vernum/G11 23636-1M-6R-OM	7	122	178	80	9.1	31	49.9	1	9	30	5
36	D.dwarf S-15/Geier CD 532-3Y-1Y-2M-0Y	5	121	177	76	9.3	39	53.7	1	17	35	5
37	Chap/21563/V01658/3/Rabi'S'/Fg'S' CD 10680-A-1M-1Y-1M-0Y	9	120	178	86	9.6	40	57.0	1	24	36	5
38	Boy'S' CD 4404-J-1Y-OM-2E	6	119	177	83	8.9	47	52.0	2	13	36	5
39	Can 02109//21563/AA'S'/3/S-15/Cr'S' CD 10535-D-1M-3Y-OM	9	122	179	81	10.2	59	56.1	1	12	43	5
40	Waha (check)	8	118	173	78	10.8	78	50.6	3	14	40	5
41	Corm'S'/Stk'S' CD 9702-2AP-0AP	8	117	173	82	11.9	89	55.0	2	15	35	5
42	Mca'S'//21563/AA'S'/3/Pg'S'/4/Snipe'S' CD 15495-5S-0AP	6	123	177	81	9.7	62	56.1	3	14	25	5
43	Jo'S'/Cr'S'//Gs'S'/3/TA73 Col.1 CD 7473-S 213-0AP	6	118	175	77	10.7	79	53.0	2	21	45	5
44	Creso	4	127	178	75	10.1	42	51.7	2	4	25	5
45	Valitalico	2	128	180	78	12.1	77	54.8	2	6	28	3
46	Ibis'S'/Gta'S' CM 18577-11Y-6Y-2Y-0Y	10	119	176	79	10.0	87	53.3	1	14	45	5
47	Khroub 76	1	123	176	79	10.9	91	57.0	1	19	46	5

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
48	Turk 1	11	119	172	79	10.1	56	55.4	1	14	45	5
49	D.dwarf S-15/Cr'S'/3/Cit'S'/AA'S'//Fg'S' CD 7443-11Y-4M-0Y	11	119	173	78	10.3	83	49.1	1	15	46	5
50	S0179/S0179//Durum6/3/21563/AA'S'//Fg'S' CD 20626-1A-OAP	7	128	177	78	10.4	71	54.9	1	18	35	4
51	Kif'S'/Int.4793 CD 21032-3A-OAP	4	119	176	75	11.6	81	57.0	0	12	38	5
52	Gdovz 578//Jo'S'/Cr'S' CD 21512-2A-OAP	7	125	181	81	11.2	90	58.8	1	17	40	5
53	Gdo 512/Rabi'S' L 4-1AP-2AP-OAP	10	119	175	75	11.2	93	47.3	2	17	41	6
54	Gdo 512//D.dwarf S-15/Jo'S' L 5-3AP-2AP-OAP	12	121	177	83	11.2	89	49.3	1	4	48	5
55	Azteca/Chimite/3/Stw63/Gu//RD119 L 38-2AP-2AP-OAP	4	120	178	78	11.2	71	55.0	2	10	48	5
56	Cr'S'/Stk'S' L 92-6AP-1AP-OAP	7	121	178	86	11.2	64	49.7	1	15	45	3
57	Jo'S'/3/Gu'S'//61-130/Lds/4/Brant'S'/Al'S' L 162-2AP-1AP-OAP	9	119	174	83	12.1	87	57.4	2	14	45	4
58	Rabi'S'/3/Gs'S'/AA'S'//Plc'S' L 184-4AP-2AP-OAP	9	122	177	82	10.7	64	57.3	2	12	40	2
59	Gta'S'//Jo'S'/Cr'S' L 09408-1L-2AP-OAP	10	122	177	80	11.4	93	55.7	1	12	45	4

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
60	Stork (check)	5	114	173	81	10.7	36	53.4	3	13	30	2
61	Rabi'S'//Fg'S'/Gdovz 466 ICD 7437-4L-1AP-OAP	4	120	177	79	12.0	94	56.0	0	13	35	1
62	Rabi'S'/4/G11'S'//Lds/RL360/3/Pg'S' ICD 7462-2L-2AP-OAP	6	121	177	81	12.5	93	51.4	0	10	35	4
63	Rabi'S'/Pg'S' ICD 7466-2L-2AP-OAP	7	122	176	81	11.8	94	53.0	0	11	35	2
64	Rabi'S'/Pg'S' ICD 7466-3L-1AP-OAP	8	120	176	75	12.4	95	56.0	1	12	35	5
65	Ato'S'/Candeal II ICD 7476-4L-2AP-OAP	16	119	177	80	10.5	80	53.2	2	13	30	4
66	Gdovz 469/AA'S'//Pg'S' ICD 7489-1L-1AP-OAP	9	130	181	85	9.3	23	54.7	0	6	20	4
67	Fg'S'/3/Jo'S'/Cr'S'//Gs'S'/AA'S' L 0557-3L-3AP-OAP	7	123	177	77	11.4	89	56.9	2	5	20	2
68	Fg'S'/Jo'S'/3/Gu'S'/61-130//Lds L 0558-3L-2AP-OAP	18	118	175	78	12.3	93	53.2	0	12	40	5
69	Fg'S'/Jo'S'/3/Gu'S'/61-130//Lds L 0558-3L-3AP-OAP	15	118	175	79	11.7	91	52.5	0	13	40	5
70	21563/Cr'S'//Stk'S' L 0579-2L-1AP-OAP	7	118	175	75	10.2	65	55.0	1	14	43	4
71	Cr'S'//T.dic.V.Vernum/G11'S'/3/Cit71 L 0584-1L-2AP-OAP	11	119	174	77	10.6	78	54.7	0	13	35	5

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
72	Cr'S'//T.dic.V.Vernum/GII'S'/3/Cit71 L 0584-2L-1AP-OAP	10	119	175	81	10.6	75	55.5	0	12	40	6
73	D.dwarf S-15/Cr'S'//Rabi'S' L 0606-1L-1AP-OAP	8	120	177	73	10.8	72	55.4	1	13	38	6
74	Ibis'S'//Rabi'S'/31810 12645-3L-3AP-OAP	12	123	178	78	10.3	38	62.6	1	12	40	5
75	Ovi/Cp//Fg'S' 12839-5L-1AP-OAP	8	123	179	81	10.6	82	58.4	1	6	30	4
76	Gediz/Fg'S' 12938-1L-1AP-OAP	11	119	175	81	11.3	84	45.3	0	10	38	5
77	Fg'S'//Rabi/31810 12941-4L-1AP-OAP	8	123	178	74	13.0	89	51.3	4	6	25	5
78	Fg'S'/Rabi'S' ICD 74113-2L-1AP-OAP	2	124	178	73	11.5	79	57.5	5	7	25	5
79	Fg'S'/Rabi'S' ICD 74113-4L-1AP-OAP	2	124	179	75	12.0	89	54.1	5	10	45	5
80	Waha (check)	7	118	173	78	11.6	80	49.4	1	10	20	5
81	Snipe'S'/Ato'S' ICD 74120-5L-1AP-OAP	8	118	174	75	10.5	72	52.4	7	15	35	6
82	Snipe'S'/Ato'S' ICD 74120-8L-1AP-OAP	11	119	176	77	11.3	84	56.2	1	8	20	6
83	Snipe/Magh'S' ICD 74122-2L-1AP-OAP	12	119	176	75	11.4	70	51.6	6	10	30	6

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
84	Snipe'S'/Fg'S' ICD 74123-3L-1AP-OAP	8	118	174	78	11.4	71	55.9	4	10	35	5
85	Fg'S'/Sincap 9 CD 15708-3S-1AP-OAP	9	119	176	76	10.5	60	57.9	3	10	40	4
86	Fg'S'/Sincap 9 CD 15708-6S-1AP-OAP	7	126	175	77	10.4	51	54.4	5	8	41	6
87	Magh'S'/4/Jo'S'/3/G11'S'//61-130/Lds L 614-OL-3AP-OAP	7	121	172	75	11.6	83	52.7	3	9	30	4
88	Can.2101/Magh'S'//Mexi'S'/3/W11s/65150 CD 15111-3S-2AP-OAP	17	121	176	80	11.8	85	51.1	3	6	18	5
89	Plc'S'/Ibis'S'//Gta'S'/Rtte/3/Gediz'S' CD 15530-8S-1AP-OAP	5	121	176	73	11.0	81	48.2	0	6	15	5
90	Int 4793/4/Gta'S'//ZB/LK//60-120/3/G11'S' CD 15656-1S-1AP-OAP	6	120	178	72	10.0	66	49.8	6	6	10	4
91	Fg'S'//Rabi'S'/31810 S 136-OAP-2AP-OAP	10	124	179	74	11.1	56	50.6	1	10	35	5
92	Fg'S'/Magh'S' L 0559-OL-2AP-OAP	8	122	178	83	11.8	79	53.5	6	9	35	4
93	V12/Ovi//F1durum331/3/156/4/D67-3/Gta'S' CD 18494-2Y-2AP-OAP	9	128	179	85	10.3	68	49.1	4	10	35	2
94	Castel Porziano/Boy'S' CD 19011-2Y-1AP-OAP	10	121	177	85	12.1	89	52.5	1	10	35	1

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot.	Vit.	Wt 1000K	A.C.I			PM
									YR	LR	SR	
95	Cr'S'/Sincap 9//Adler'S'/Mexi'S' CD 19688-B-1Y-3AP-OAP	7	126	180	85	10.1	28	56.3	5	11	36	4
96	Fg'S'/Gr'S'//Candeal 11/4/Grebe'S'/3/Cfn'S' /Fg'S'//Ptl'S' CD 19965-A-2Y-3AP-OAP	7	123	179	85	12.4	85	54.9	3	10	36	5
97	Fg'S'/Gr'S'//Candeal 11/4/Grebe'S'/3/Cfn'S' /Fg'S'//Ptl'S' CD 19965-A	5	123	179	84	12.6	92	54.3	0	11	96	5
98	Gdo 574/USA 1658 L 0400-1L-1AP-OAP	9	116	178	86	10.9	78	46.3	6	12	45	5
99	Fg'S'/Sincap 9 CD 15708-3S-2AP-OAP	10	120	177	76	10.2	56	56.5	1	13	45	3
100	Stork (check)	8	115	176	79	9.9	54	49.2	0	15	35	2
101	Fg'S'/3/Jo'S'/Cr'S'//Gs'S'/AA'S' L 0557-0L-2AP-OAP	9	121	178	75	11.5	71	45.1	1	12	40	5
102	V 776	8	127	180	79	11.0	72	53.2	6	15	40	5
103	Rabi'S'/Cr'S' L 172-3AP-1AP-OAP	3	122	178	73	11.0	71	52.9	7	11	35	1
104	LD357 E/TC//Jo'S'/3/Cit 71 L 081-3AP-OAP	6	122	178	83	11.1	79	49.8	3	6	35	4
105	Ibis'S'//Rabi'S'/31810 L 017-1AP-1AP-OAP	7	123	179	79	10.6	46	51.8	6	5	38	5
106	Fg'S'/Ato'S' L 0558-4L-3AP-OAP	14	118	176	83	12.5	88	51.9	1	11	38	4

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
107	Cr'S'/F3Tum//AA'S'/3/Fg'S'/4/Gediz CD 14903-3S-1AP-OAP	7	122	177	83	11.0	84	51.6	1	9	35	3
108	AA'S'/Ld357E//2*TC/3/G11'S'/4/Rabi'S' /31810 L606-OL-1AP-OAP	6	120	177	75	10.1	70	51.2	6	9	35	5
109	V 872	6	127	181	79	11.7	66	56.4	3	3	30	4
110	Gta'S'/Fg'S'//PI192620/3/Gdovz 394/Cit'S' CD 19497-C-1Y-1AP-OAP	8	125	179	77	9.7	57	49.2	8	3	30	5
111	Candea 11/Gs'S' CM 9630-1L-1AP-OAP	13	123	178	78	8.9	65	51.0	14	4	37	5
112	Fg'S'/3/Jo'S'/Cr'S'//Gs'S'/AA'S' L 85-3AP-OKE-1AP-OAP	11	121	177	84	10.1	43	54.0	4	8	35	3
113	Stk'S'//G11'S'/T.dic.V.Vernum CD 9442-2S-OS-2KE-OAP	11	117	176	80	8.1	25	55.0	1	6	25	4
114	BD 2013/Pg'S' CM 9564-8S-OS-3KE-2AP-OAP	10	122	179	80	10.0	60	50.7	5	15	35	5
115	Rabi'S'/Fg'S' CM 10162-76M-0Y-1B	13	122	178	81	9.6	58	53.0	6	13	43	4
116	Mal'S'/Kif'S'//2*S0179/Durum6 CD 19479-A-2Y-5M-0Y	10	119	176	79	8.3	10	53.1	1	10	35	5
117	Gs'S'/Ibis'S'//Kif'S'/3/USDA-0580 CD 19591-A-3Y-6M-0Y	10	121	177	74	8.7	16	54.6	1	12	50	4

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
118	21563/3/LKE/Ld390//Ch67/4/Cr'S'/5/Ibis'S'/6/USDA 0580 CD 19608-A-3Y-1M-0Y	10	124	179	75	8.7	29	48.0	7	10	43	2
119	Jo'S'/Cr'S'//Gs'S'/AA'S'/3/G-58128/4/Br'S'/Jo'S'//Kiwi'S' CD 19822-D-4Y-1M-0Y	12	124	179	77	8.5	36	50.6	7	10	65	3
120	Waha (check)	7	118	175	76	9.8	56	45.9	1	10	30	2
121	Gta'S'/4/ZB/LK//60-120/3/G11'S'/5/Fg'S' CD 11814-5Y-8M-2Y-4M-0Y	14	120	178	80	9.5	25	49.5	6	10	43	2
122	21563/3/LKE/Ld390//Ch67/4/Gta'S'/5/Snipe'S'/5/Gediz'S' CD 19646-E-1Y-5M-0Y	8	123	178	75	8.8	58	52.5	6	14	45	3
123	Cit'S'/Fg'S' CD 3568-8Y-1M-3Y-0M	12	123	178	78	9.8	40	51.8	0	13	30	2
124	2*SO 179/Durum6 HRL 861-2B-0Y-2B-100Y-7M	12	122	178	73	8.7	42	50.9	0	12	40	4
125	Pg'S'//Ruff'S'/Fg'S' CD 8442-32M-1Y-5M-3Y-0M	14	121	178	75	11.9	90	58.1	5	12	30	2
126	Erpel'S'/Ruso CD 10437-31M-1Y-1M-1Y-0M	12	125	179	74	10.3	47	57.8	1	12	45	2
127	Misri/Mexi'S'//Snipe'S' CD 10662-F-1M-1Y-2M-3Y-0M	10	124	178	73	11.0	76	50.5	0	12	43	4
128	Dack'S'/Kiwi'S' CD 12499-9Y-2M-5Y-2M-0Y	11	121	178	74	10.1	52	50.7	0	12	45	4
129	Ggovz 385/3/2*BYE/Tc//T.gle/3//*TC CM 473-5S-1S-1S-0S	15	121	178	80	9.8	23	52.1	1	12	40	3

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
130	Erpel'S'/Ruso CD 10437-7M-1Y-OM	13	124	179	74	10.7	52	51.6	5	10	30	3
131	21563/Gr'S'//Mexi'S' CD 497-4D-1D-3D-OD	8	118	177	79	11.1	80	57.3	0	12	30	1
132	Fg'S' D 27582-8M-13Y-2M-0Y	16	120	176	78	11.7	80	50.4	0	12	48	2
133	Gs'S'/Cr'S' D 27676-6M-2Y-OM-500M-0Y	9	122	178	76	11.0	72	47.6	0	10	40	5
134	Jo'S'/Cr'S'//D.Coll.01 CD 7473-24Y-1M-0Y	8	120	177	75	11.7	83	49.3	0	12	40	4
135	Ibis'S'/Gta'S' CM 18577-11Y-6Y-2Y-0Y	8	122	179	77	10.7	40	55.2	5	12	45	4
136	Cit'S'/Mca'S'/4/Pg'S'/3/G11'S'//Lds/56.1 CM 14662-1-500Y-1M-3Y-2Y-0Y	7	118	176	72	9.8	53	51.2	0	13	43	5
137	Cit//Gs/AA CM 9911-2S-1S-OKE	9	119	176	76	9.7	29	51.9	3	14	30	5
138	Rabi'S'/3/G11'S'//Lds/RL3601/4/Fg'S' CD 7455-4Y-1M-0Y	10	120	177	77	9.8	61	51.3	0	12	35	3
139	Gr'S'/Fg'S'/3/21563/Gs'S'//Cit'S'/4/P66-270 CD 1074-1Y-3Y-OM	13	120	177	83	10.0	42	61.7	2	5	35	4
140	Stork (check)	7	116	176	78	10.4	71	58.7	6	11	40	4
141	Cit71//Plc'S'/Cr'S' L 0469-3L-2AP-OAP	5	119	177	82	9.7	28	59.5	0	14	40	4

Table 32: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
142	Ruff/Fg'S'//USA 02275 CD 11683-3S-2AP-0AP	11	121	179	75	10.7	67	52.0	0	5	20	4
143	V 744	6	125	180	76	10.0	52	60.8	1	10	30	1
144	V 849	8	124	178	79	9.8	20	57.3	0	12	45	1
145	Karmel	11	124	179	77	8.6	35	48.0	11	12	48	3
146	M2A-IRA X 8516-E-1Y-1M-0Y	11	113	174	85	9.4	-	40.3	0	12	40	1
147	IA-Bush X 7254-29M-1Y-101M-0Y	7	113	174	92	10.0	-	43.2	0	12	15	1
148	Arabian = ABN	7	113	174	89	9.9	-	45.7	1	7	0	1
149	M2A-IGA $\times$ IA-KLA X 11286-C-4M-4Y-0Y	5	113	174	96	10.1	-	46.4	0	0	1	1
150	KLA-M2A X 8816-A-1Y-1M-2Y-0Y	6	115	174	89	9.8	-	40.9	1	0	0	1

DH out of (22 locations); DM out of (15 locations); Pl.Ht out of (23 locations).

TENTH PRELIMINARY OBSERVATION NURSERY - DURUM

The Tenth Preliminary Observation Nursery - Durum (10th PON-D) consisted of 150 entries, with Waha (entry no: 1, 40, 80, 120) and Stork (entry no: 20, 60, 100, 140) as durum checks. Entries 146 to 150 were triticale lines. Data were received from 34 locations.

The entries that were selected most frequently are listed in Table 33. The agronomic and disease data are given for these varieties.

Agronomic Traits

The number of days to heading ranged from 114 (Stork) to 130 (entry 66). The most frequently selected lines (Table 33) needed about as many days to head as the regional check Waha.

The number of days to maturity ranged from 172 to 181. The frequently selected lines (Table 33) were similar for this character to the Waha check.

The heights of the durum entries in this nursery were in the relatively narrow range of 72 to 86 cm.

Grain Quality

The protein content ranged from 7.4 to 13.0%, based on data from one location only (Tel Hadya). The variation in protein content for Waha ranged from 8.9 to 11.6%, for Stork from 9.9 to 10.7%. Table 34 lists the entries with the highest protein content in the grain.

The percentage vitreous kernels ranged from 4 to 99%. It should be noted that sunibug attack results in yellow berry-like symptoms. This may have had its effect on the results of part of the entries. Table 35 lists the entries with the highest percentage of vitreous kernels.

The durum varieties ranged from 43.0 (no: 11) to 62.6 (no: 74) gram for the thousand kernel weight. The entries with the highest thousand kernel weights are listed in Table 36.

Diseases

The A.C.I values for yellow rust were relatively low, ranging from 0 to 14 (no: 111). Therefore, no definite conclusions about differences in resistance can be drawn.

For leaf rust, the A.C.I values were higher, ranging from 3 to 25. The entries with the lowest scores for leaf rust attack are listed in Table 37.

The A.C.I values for stem rust ranged from 10 to 96. Data on the best three entries are presented in Table 38.

The scores for powdery mildew were low, ranging from 1 to 6. Also here the differences were too small to detect clear resistance.

Triticale

The most selected triticale line was M2A-IRA (no: 146). It was selected at 11 locations. The triticale lines headed about one week earlier than the durum and breadwheat entries. Most lines showed low A.C.I values for the three rusts.

Table 33: Agronomic and disease data of most frequently selected lines in PON-D (1980-81).

Entry No.		FR*	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
68	Fg'S'/Jo'S'/3/Gu'S'/61-130//Lds L 0558-3L-2AP-OAP	18	118	175	78	12.3	93	53.2	0	12	40	5
9	Mallard'S' CD 1894-1Y-0Y	16	119	176	79	7.4	4	50.8	1	22	45	3
14	Jo/Cr//Gs/3/Pg CD 7474-10Y-2M-0Y	16	118	175	81	11.2	89	55.3	1	12	40	2
65	Ato'S'/Candeal II ICD 7476-4L-2AP-OAP	16	119	177	80	10.5	80	53.2	2	13	30	4
132	Fg'S' D 27582-8M-13Y-2M-0Y	16	120	176	78	11.7	80	50.4	0	12	48	2
69	Fg'S'/Jo'S'/3/Gu'S'/61-130//Lds L 0558-3L-3AP-OAP	15	118	175	79	11.7	91	52.5	0	13	40	5

*: Out of 34 locations.

Table 34: Agronomic and disease data of durum entries in PON-D with the highest protein contents.

Entry No.		Prot. %	FR	DH	DM	Pl.Ht	Vit. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
77	Fg'S'//Rabi/31810 12941-4L-1AP-OAP	13.0	8	123	178	74	89	51.3	4	6	25	5
97	Fg'S'/Gr'S'//Candea 11/4/Grebe'S'/3/Cfn'S' /Fg'S'/Ptl'S' CD 19965-A	12.6	5	123	179	84	92	54.3	0	11	96	5
106	Fg'S'/Ato'S' L 0558-4L-3AP-OAP	12.5	14	118	176	83	88	51.9	1	11	38	4
62	Rabi'S'/4/G11'S'//Lds/RL 360/3/Pg'S' ICD 7462-2L-2AP-OAP	12.5	6	121	177	81	93	51.4	0	10	35	4
64	Rabi'S'/Pg'S' ICD 7466-3L-1AP-OAP	12.4	8	120	176	75	95	56.0	1	12	35	5
96	Fg'S'/Gr'S'//Candea 11/4/Grebe'S'/3/Cfn'S'/ Fg'S'//Ptl'S' CD 19965-A-2Y-3AP-OAP	12.4	7	123	179	85	85	54.9	3	10	36	5

Table 35: Agronomic and disease data of durum entries with the highest percentage vitreous kernels in PON-D.

Entry No.		Vit. %	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I			PM
									YR	LR	SR	
17	Ato'S' D 32864	99	8	118	175	80	11.3	48.1	8	17	40	2
16	Garza//G11/Br 180-LK/Gb-220XLds CM 9648-7S-1S-OKE	96	6	121	176	76	12.3	51.3	0	11	35	2
18	Cr'S'/Fg CM 9682-70M-3Y-1M-0Y	95	8	119	175	78	12.3	53.6	2	12	40	2
64	Rabi'S'/Pg'S' ICD 7466-3L-1AP-OAP	95	8	120	176	75	12.4	56.0	1	12	35	5

Table 36: Agronomic and disease data of durum entries with the highest thousand kernel weight in PON-D.

Entry No.		Wt 1000K	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	A.C.I			PM
									YR	LR	SR	
74	Ibis'S'//Rabi'S'/31810 12645-3L-3AP-OAP	62.6	12	123	178	78	10.3	38	1	12	40	5
139	Gr'S'/Fg'S'/3/21563/Gs'S'//Cit'S'/4/P66-270 CD 1074-1Y-3Y-0M	61.7	13	120	177	83	10.0	42	2	5	35	4
143	V744	60.8	6	125	180	76	10.0	52	1	10	30	1
141	Cit71//Plc'S'/Cr'S' L 0469-3L-2AP-OAP	59.5	5	119	177	82	9.7	28	0	14	40	4
52	Gdovz 578//Jo'S'/Cr'S' CD 21512-2AP-OAP	58.8	7	125	181	81	11.2	90	1	17	40	5

Table 37: Durum entries in PON-D with the lowest leaf rust attack.

Entry No.		A.C.I			PM	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K
		LR	YR	SR								
109	V872	3	3	30	4	6	127	181	79	11.7	66	56.4
110	Gta'S'/Fg'S'//PI 192620/3/Ggovz 394/Cit'S' CD 19497-C-1Y-1AP-OAP	3	8	30	5	8	125	179	77	9.7	57	49.2
44	Creso	4	2	25	5	4	127	178	75	10.1	42	51.7
54	Gdo512//D.dwarf S-15/Jo'S' L 5-3AP-2AP-OAP	4	1	48	5	12	121	177	83	11.2	89	49.3
111	Candeal 11/Gs'S' CM 9630-1L-1AP-OAP	4	14	37	5	13	123	178	78	8.9	65	51.0

Table 38: Durum entries in PON-D with the lowest stem rust attack.

Entry No.		A.C.I			PM	FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K
		SR	YR	LR								
90	Int 4793/4/Gta'S'//ZB/LK//60-120/3/G11'S' CD 15656-1S-1AP-0AP	10	6	6	4	6	120	178	72	10.0	66	49.8
12	Gr'S'/Fg'S'/3/21563/Gs'S'//Cit'S'/P66-270 CD 1074-1Y-3Y	15	1	11	4	6	120	178	85	10.4	58	58.2
89	Plc'S'/Ibis'S'//Gta'S'/Rtte/3/Gediz'S' CD 15530-8S-1AP-0AP	15	0	6	5	5	121	176	73	11.0	81	48.2

Table 39: Elevation, Precipitation, Irrigation and Growing Season in the PON-RF 1980-81.

No.	Country	Location	Latitude	Longitude	Elevation (m)	Rainfall (mm)	No. of Irrigations	Growing Season		
1	AFGHANISTAN	Bulkh	36.42 N	67 E	378	162	6	25/11/80	-	24/ 6/81
2	ALGERIA	Setif	36.09 N	5.21 E	1000	342	none	13/12/80	-	22/ 6/81
3	BANGLADESH	Jamalpur	24.56 N	89.55 E	8	56	3	22/11/80	-	30/ 3/81
4	CYPRUS	Athalassa	35. 8 N	33.24 E	150	335	none	15/ 1/81	-	20/ 5/81
5	ECUADOR	Santa Catalina	0.22 S	78.33 W	3058	n.a	n.a	8/ 1/81	-	6/ 8/81
6	EGYPT	Sakha	30.45 N	31.00 E	0	n.a	n.a		n.a	
7	ETHIOPIA	Debre Zeit	8.55 N	38.58 E	1900	n.a	n.a	7/ 8/81	-	n.a
8	GREECE	Thessaloniki	40.38 N	22.57 E	10	180	none	19/11/80	-	30/ 6/81
9	IRAQ	Dohuk	33 N	47 E	480	704	none	27/11/80	-	29/ 6/81
10	IRAQ	Hammam Al Alile	36.91 N	42.00 E	320	n.a	none	3/ 1/80	-	10/ 6/81
11	JORDAN	Marrow	32.33 N	35.51 E	618	386	n.a	15/11/80	-	4/ 6/81
12	JORDAN	Mshakar	31.43 N	35.48 E	785	493	n.a	1/12/80	-	16/ 7/81
13	KENYA	Njoro	16 S	36.04 E	2000	n.a	n.a		n.a	
14	LEBANON	Kfardan	33.52 N	36.02 E	1080	n.a	none		n.a	
15	LEBANON	Tel Amara	33.55 N	35.28 E	950	n.a	none		n.a	
16	LEBANON	Terbol	35.52 N	36.00 E	890	n.a	none		n.a	
17	LIBYA	Tajoura	32.53 N	13.17 E	11	n.a	n.a	30/11/80	-	10/ 5/81
18	MEXICO	Ciano	27.29 N	109.57 E	38	130	4	29/11/80	-	24/ 4/81
19	OMAN	Wadi Quryat	22.50 N	57.10 E	500	n.a	n.a	10/11/80	-	8/ 4/81
20	PAKISTAN	Islamabad	33.39 N	73.50 E	683	50	none	4/11/80	-	12/ 5/81

Table 39: (Cont'd)

No.	Country	Location	Latitude	Longitude	Elevation (m)	Rainfall (mm)	No. of Irrigations	Growing Season		
21	PAKISTAN	Pirsabak	34.00 N	72.00 E	905	323	none	16/12/80	-	7/ 5/81
22	SAUDI ARABIA	Riyadh	24.42 N	46.00 E	420	n.a	9	15/12/80	-	n.a
23	SAUDI ARABIA	Taif	21.26 N	40.28 E	1500	40	3	3/ 1/81	-	18/ 4/81
24	SPAIN	Lerida	41.31 N	0.49 W	280	300	none	12/11/80	-	16/ 7/81
25	SYRIA	Izraa	32.51 N	36.15 E	575	329	none	23/12/80	-	15/ 6/81
26	SYRIA	Tel Hadya (RF)	36.05 N	36.55 E	282	327	none	1/12/80	-	15/ 6/81
27	SYRIA	Tel Hadya (IRR)	36.05 N	36.55 E	282	327	2	20/10/80	-	10/ 6/81
28	TUNISIA	Beja	37.00 N	9.00 E	165	571	none	29/11/80	-	15/ 6/81
29	TURKEY	Diyarbakir	37.55 N	40.12 E	660	588	none	29/10/80	-	7/ 6/81

Tenth Preliminary Observation Nursery - Rainfed (1980-81)

Overall Performance of the Entries (29 locations)

Table 40:

Entry No.	Variety or Cross and Pedigree	RF	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
1	Mexipak 65 (BW-check)	-	124	159	84	11.4	39.1	13	20	15
2	C29-Cd1 (Cgn/Tob-CnoxCno-Inia) CM 16722-K-6M-4Y-2M-0Y	5	122	158	86	12.4	41.2	4	3	0
3	Sparrow'S' CM 2183-3Y-0M	6	115	155	84	12.6	48.5	3	14	0
4	Pavon'S' CM 8399-D-4M-3Y-1M-0Y	8	124	165	82	12.1	44.8	9	4	0
5	12300.TdoxJar66-Pak 20 PK 6029-1K-7K-0L	3	121	159	86	11.2	43.3	0	1	0
6	Jorvil(2)xMeng-8156/Cno'S'-Cal L 492-4L-1AP-OAP	7	126	161	89	12.0	45.4	3	12	0
7	Ti 71-Pci'S' CM 27712-3L-1AP-OAP	4	118	159	72	12.7	51.3	2	13	0
8	Jup'S'xCD-Vg Sel.101(2) SWM 5094-5S-1AP-OAP	8	134	159	88	13.3	50.6	0	12	0
9	Sturdy-Condor'S' SWM 5138-1S-1AP-OAP	9	122	157	82	13.5	46.9	2	2	33
10	Cocorit (D-check)	9	123	159	82	12.5	53.8	1	3	12

Table 40: (Cont'd')

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
11	Maya74-Choli CM 39427-5AP-OAP	7	117	156	83	14.2	52.6	0	15	30
12	(11.54.302xWRT 233-Jn(5)/Cno)SX CM 45727-3AP-OAP	6	113	158	83	13.8	44.1	5	12	0
13	PericoxS311-Nor 67 CM 45743-1AP-OAP	5	121	158	92	12.9	53.8	3	14	16
14	Cleopatra 74-Goldfinch'S' CM 46063-3AP-OAP	7	121	159	86	12.1	46.6	4	13	0
15	Pavon'S'-Sparrow'S' CM 64702-2AP-OAP	3	128	158	82	13.2	41.6	1	1	0
16	Jorvil(2)-Meng 8156/Cno'S'-Cal L 492-6L-1AP-OAP	1	121	159	81	12.3	50.7	3	4	10
17	Baroukx((Fto2-C13170xCno-Son64) L 493-1L-1AP-OAP	7	118	157	65	12.5	41.1	5	13	10
18	Tob66-Cno'S'xPi62(LR642-Son64xCc/Ska) L 772-1L-1AP-OAP	5	119	160	82	12.7	42.0	2	7	27
19	Arz/IniAxTob'S'-Napo L 788-1L-1AP-OAP	2	121	153	83	13.1	53.0	6	1	16
20	Mexipak 65 (BW-check)	4	124	153	82	10.3	40.0	11	20	27
21	Rieb 4751/Hopps-RonxKal SWM 2923-5L-1AP-OAP	5	124	160	80	10.8	48.3	1	5	16
22	Ymh-Choli SWM 3137-1L-1AP-OAP	2	120	153	85	15.5	44.3	1	21	27

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
23	((Fr316/MCM-KtxY50)Za)Ti 71 Resel CM 39385-5S-1AP-OAP	4	118	164	82	12.9	44.0	7	6	12
24	HD 1220-Kal3xBjy'S' CM 40454-2S-1AP-OAP	8	121	157	81	12.2	41.7	0	13	8
25	Carpintero'S'-Blue Jay CM 40464-5S-1AP-OAP	3	120	158	84	12.8	39.5	2	27	4
26	Pato-OnxMaya 74(Bb/PatoxInia-Napo) CM 40738-5S-1AP-OAP	8	124	159	89	11.9	39.4	11	18	8
27	Mex120-WexKNG NCP 212-C-3KE-1AP-OAP	3	116	157	84	13.5	48.2	0	6	0
28	Sannine (D630)-Nai-WeiQui-RM/Cno(2)-Chr L 932-OL-5AP-OAP	7	124	161	85	11.1	37.6	0	4	0
29	Nuri 70-Emu'S' CM 28111-2AP-1AP-OAP	5	127	155	87	11.7	43.9	2	1	16
30	Cocorit (D-check)	8	123	160	84	12.1	51.0	5	1	12
31	CJ71/CcxCno-Son64 CM 29033-1L-OL	10	123	160	83	11.4	42.8	1	2	0
32	AuxKal-Bb/Wop'S' CM 33203-S-1M-1Y-OM	9	124	159	73	11.8	48.1	9	2	24
33	Ceb148(Cno'S'-Inia'S'xLfn/TobxKl.Pet-Raf) SWM 1368-500Y-1B-501M-503M-OM	5	123	159	80	11.6	36.0	2	0	0
34	Burgas2-Sort12.13xKal-Bb SWM 3115-3M-4Y-1M-OM	8	128	161	71	12.6	42.7	0	0	0

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I.		
								YR	LR	SR
35	Napo-CdlxZbz/Sx CM 45642-2AP-0AP	2	119	157	88	13.3	38.9	16	0	8
36	Roedel-(P101)2xTorim73 SWM 6316-1AP-0AP	9	124	163	89	11.1	39.8	23	8	25
37	P106-19xSoty-Justin(3) L 482-2L-1AP-0AP	9	116	159	82	12.4	43.8	0	0	8
38	P106-19x(Fto(2)-Cl 13170xCno-Son64) Inia-Bb L 490-1L-3AP-0AP	11	123	161	72	12.6	43.3	26	10	32
39	Riebesel 4751-Mochis73 SWM 4912-4S-2AP-0AP	3	120	158	80	13.3	50.6	13	0	14
40	Mexipak 65 (BW-check)	3	125	159	81	11.0	39.4	15	30	0
41	Pato(R)-Cal/7CxBb-Cno(CalxCno-Son(CnoxNad- Chr'S'/Son-KL.RendxBb)) CM 30170-5AP-2AP-0AP	4	130	166	89	11.8	39.1	2	28	16
42	Pato(R)-Cal/7CxBb-Cno/CalxCno-Son(CnoxNad- Chr'S'/Son-KL.RendxBb) CM 30170-5AP-3AP-0AP	2	128	166	93	12.7	44.9	1	8	18
43	Inia-NapoxTob/Sparrow L 17-7S-7S-6AP-0AP	4	135	180	77	11.9	41.2	2	0	0
44	HD1944xCno'S'-Gallo CM 15273-1L-2L-3L-OK-OSK-0AP-2AP-0AP	9	120	158	78	11.5	42.2	2	29	5
45	IniaxTob'S'-Napo/Cno'S'-Gallo L 836-0AP-7AP-0AP	7	123	159	78	10.6	44.3	3	8	16

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
46	((NP876-Pj62xCno'S'-Pj62)Cj53-6896xGb56(2)/Yalta)Mxp Tu 701-6AL-2AL-OG	4	124	160	80	12.4	40.3	2	11	16
47	Cno'S'-Jar'S'xBb-Inia	2	124	158	82	11.6	38.5	1	0	24
48	Bez-Ald	6	123	158	87	12.1	39.4	0	17	4
49	(BM2899xVit-Mhd)/Omid(4))Son64-Y 50ExGto /8156(R)-Tob'S'	10	127	163	93	12.1	47.7	2	0	27
50	Cocorit (D-check)	5	123	159	83	12.2	52.4	4	2	0
51	P106-19/Son64-K1RexCno3-Fr L 484-1L-2AP-OAP	7	121	157	88	10.8	50.4	13	0	0
52	P106-19/Tzpp-Son64xCno'S' L 485-2L-1AP-OAP	8	122	164	86	10.2	43.4	23	13	16
53	P106-19/Tzpp-Son64xCno'S' L 485-2L-2AP-OAP	5	121	153	77	11.2	50.1	8	5	20
54	Pci'S'xBez SWM 2885-1L-3AP-OAP	6	117	155	87	11.3	45.2	2	1	20
55	G11-Aust 11.61.157xCno-No66/Pvn'S' CM 30326-1L-2AP-OAP	2	126	164	80	11.2	38.9	4	0	0
56	Bch'S' (7C-Pato(B)/LR64-IniaxInia-Bb) CM 35330-1L-5AP-OAP	7	115	153	79	10.5	48.0	5	0	0
57	BbxCno'S'-No66/Cno'S'-Pj62xG11 CM 35619-1L-2AP-OAP	7	117	152	95	11.4	44.4	0	29	8
58	Jup73-Bjy'S' CM 39992-1S-2AP-OAP	1	126	161	76	10.4	44.0	4	18	0

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
59	Ptm70-Huac'S' CM 40272-1S-4AP-OAP	8	122	162	79	9.9	43.3	7	4	0
60	Mexipak 65 (BW-check)	3	125	159	79	9.6	39.2	12	28	0
61	HD1220-Ka13x8jy'S' CM 40454-4S-3AP-OAP	15	123	158	82	10.0	44.3	6	9	0
62	(Nor67/CD-P101xDrc)Tob66 SWM 4792-4S-1AP-OAP	3	123	159	81	10.4	43.2	1	0	12
63	Jup'S'/HK-38MAxLoh-Dirk SWM 5097-5S-1AP-OAP	8	119	157	79	10.4	45.7	0	1	25
64	Pg'S'//Chap/21563	15	128	154	84	11.2	50.1	9	7	12
65	Plc'S'/Cr//Jo/RD119 CM 17046-10L-13L-2L-OK	8	125	160	77	11.6	48.8	0	0	4
66	21564/Cr'S'//Fg'S' CM 7491-11Y-1M-0Y-OKE	11	126	159	76	11.8	49.2	2	4	4
67	Gdovz 471/Br//Pg CM 13919-34Y-2Y-3Y-0Y-OKE	8	126	160	78	11.5	54.4	0	1	20
68	Waha'S'//D.dwarf S-15/Cr'S' 10448-9SK-0SK	10	122	160	79	11.7	47.6	1	2	27
69	Cr'S'/Tag.B.Ball//Pg'S'/Ralle'S' CD 14334-G-2Y-3M-0Y	11	120	162	78	11.5	54.0	0	1	41
70	Cocorit (D-check)	9	123	157	81	11.0	52.0	1	1	8

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
71	Gdo 512/Cit'S'//Ruff'S'/Fg'S'	11	123	159	78	11.3	47.6	3	1	26
72	Mexi'S'/Fg'S'=Rok'S' CD 1895-12Y-0Y-2E	9	123	159	78	10.6	49.6	17	1	11
73	6710/6780//Pt1'S' CM 17512-2M-1Y-0AP	9	128	158	76	11.8	44.8	1	2	22
74	Rabi'S'/PI 94587-1//101S/3/Pt1'S' CM 17731-A-2Y-1Y-0Y	7	128	158	68	11.6	42.9	0	1	25
75	Mexi'S'//Chap'S'/21563 CD 3909-12Y-0M-0KE	8	129	158	77	11.6	52.7	0	1	7
76	Gdovz 469/Garza CM 549-2S-2S-2S-0S-0KE	9	125	170	74	12.7	59.4	2	1	9
77	Plc'S'/Ruff'S'//Gta'S'/D 6715 CM 17904-D-3M-1Y-0Y	11	125	158	78	11.7	46.8	4	8	18
78	BD 1543 Inrat69//Coot'S'/3/Gta'S' CD 13557-J-3Y-3M-1Y-0M	10	124	158	92	10.8	47.3	0	3	23
79	F 9.3	4	132	164	93	12.7	56.1	6	3	35
80	Mexipak (BW-check)	1	125	159	79	10.5	39.3	18	29	-
81	Cr'S'/Gs'S'/3/2F/Lds//Kobak2916/61-130 L 63-2AP-0AP	8	121	159	78	12.0	51.4	2	5	28
82	Fg'S'/3/Jo'S'/Cr'S'//Gs'S'/AA'S' -2AP-0AP	10	139	162	80	11.8	49.0	0	1	29
83	Cit'S'/Gs'S'/3/Pg'S'//Lds/56-1 CM 14542-B-1Y-1M-3Y	5	127	162	75	10.2	46.8	5	10	34

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
84	Cr'S'/Gs'S'/3/2F/Lds//Kobak2916/61-130 L 63-2AP-1AP-OAP	11	122	158	79	11.7	50.0	0	2	20
85	D.dwarf S-15/Cr'S'//Stk'S' L 96-1AP-1AP-OAP	13	123	158	83	12.7	53.4	0	1	19
86	Cr'S'//T.dic.V.Vernum/Gu'S'/3/Jori L 127-1AP-1AP-OAP	6	125	159	78	11.5	50.4	1	3	3
87	Rabi'S'/3/Gs'S'/AA'S'//Plc'S'=Alsin L 0603-5L-1AP-OAP	10	122	160	70	11.3	56.9	9	1	4
88	Gediz/Fg'S' 12938-4L-2AP-OAP	10	124	159	79	12.2	52.0	7	8	8
89	Snipe'S'/Ato'S' ICD 74120-4L-2AP-OAP	10	123	166	70	11.3	52.2	11	7	18
90	Cocorit (D-check)	7	122	158	80	11.4	53.6	4	1	0
91	LD 357E/2*TC/Jo'S'/3/Fg'S' L 612-OL-3AP-OAP	10	128	162	77	11.1	48.9	3	2	32
92	Fg'S'/Snipe'S' S 211-OAP-1AP-OAP	10	125	160	78	11.1	51.4	7	4	5
93	Ruff'S'/Ward CD 18864-2Y-1AP-OAP	8	120	159	72	12.7	52.8	17	1	9
94	Cit'S'/Mca'S'/4/Pg'S'/3/Gil'S'/Lds//56-1 CD 15407-5S-6AP-OAP	9	126	159	75	12.1	49.9	5	0	4
95	Magh'S'/Gs'S'//AA'S'/3/Rabi'S'/4/21563/AA'S' /5/P66-270/6/Fg'S'/Gr'S'//Gta'S' CD 19951-A-3Y-2AP-OAP	6	127	165	78	12.3	50.0	6	5	34

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
96	Fg'S'/Gr'S'//Candeal11/4/Grebe'S'/3/Cfn'S'/ Fg'S'//Pt1'S' CD 19965-A-2Y-1AP-OAP	6	128	167	81	11.6	51.9	2	3	14
97	Jo'S'/3/Gu'S'//61-130/Lds/4/Brant'S'/Al'S' L 162-3AP-1AP-OAP	10	118	159	83	11.9	56.4	5	7	10
98	Snipe'S'/Fg'S' ICD 74117-1L-1AP-OAP	9	126	161	74	11.2	46.8	0	5	2
99	Gta'S'//Jo'S'/Cr'S' L 0408-1L-1AP-OAP	8	128	163	73	11.1	48.2	0	22	0
100	Mexipak (BW-check)	4	129	159	85	10.9	37.4	2	23	0
101	Mexi'S'/Chap'S'//21563/3/Rabi'S' CD 14759-2S-4AP-OAP	11	124	159	73	11.5	50.7	1	0	9
102	Ralle'S'/Candeal11//Fg'S' CD 13811-A-1Y-5M-1Y-1M-0Y	8	125	160	78	12.2	53.9	1	1	7
103	Fg'S' D 27582-8M-13Y-2M-0Y	8	124	160	75	12.1	51.5	1	1	3
104	Bo'S'/Gdo VZ 385 CM 9-11S-1S-3S-0S	10	127	164	79	11.7	49.2	6	5	4
105	Bit'S' CM 9799-126M-1M-5Y-0Y	8	125	160	77	11.3	50.2	4	3	5
106	Ggo VZ 471/Br'S'//Pg'S' CM 13919-11Y-2M-2Y-0Y	8	124	160	82	11.2	54.1	0	1	17
107	ZD/Mahm//Mrari/3/S-15/Cr'S'/4/Mexi CD 1283-A-4Y-1Y-1M-0Y-OKE	7	121	160	78	10.8	48.7	2	6	18

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
108	Plc/Cr//Mca/3/D67-3/Cit 71 CM 18004-B-6M-3Y-1Y-0Y	8	122	158	76	10.9	44.0	0	5	18
109	Cr'S'/4/21563/3/61-130/Lds/5/Camel Tooth/6/ Gs'S'/Cr'S'//2*S.0179/Durum 6 CD 21860-2A-OAP	6	124	162	80	9.9	49.7	0	14	12
110	Cocorit (D-check)	8	135	159	79	10.6	51.0	1	0	0
111	Mexicano 1518/Lobeiro//Ggo394/Cit'S'/4/AA'S' /3/LK/LD390//Ch67 CD 22077-1AP-OAP	10	123	159	81	10.1	50.8	4	7	16
112	D6973/Cit'S'/3/S.0179/S.0179//Durum 6 CD 22229-2B-OAP	6	132	165	74	10.9	52.3	2	8	14
113	D.dwarf S-15/Cr'S'/3/Jo'S'/Cr'S'//Gs'S'/AA'S' L 191-1AP-1AP-OAP	10	126	161	79	10.7	49.3	11	1	26
114	Ato'S'//D.dwarf S-15/Jo'S' L 0521-1L-1AP-OAP	10	130	159	81	11.4	48.9	8	1	5
115	Rabi'S'/Plc/4/G11'S'/3/61-130//Lds ICD 74107-3L-3AP-OAP	14	126	162	80	12.5	49.1	9	1	3
116	Snipe'S'/3/Jo'S'/Cr'S'//Gs'S'/AA'S' ICD 74119-1L-1AP-OAP	7	124	160	78	12.9	55.7	0	1	0
117	Magh'S'/Jo'S'/3/G11'S'//61-130/Lds -4AP-OAP	15	135	161	78	10.6	54.2	2	1	2
118	21563/3/LKE/Ld390//Ch67/4/Gta'S'/5/Palestin- ian 20C-606 CD 14646-2S-2AP-OAP	4	124	159	72	13.0	54.5	1	1	8
119	Ovi/Cp//Fg'S' S 114-OAP-1AP-OAP	7	136	174	72	10.3	50.5	0	1	27

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
120	Mexipak (BW-check)	1	124	159	80	10.1	40.3	13	14	0
121	Goose'S'/Qfn//Ruff'S'/Pt1'S' CD 192276-A-1Y-1AP-OAP	4	134	157	75	11.1	47.8	0	12	12
122	Jo'S'/Cr'S'//Gs'S'/AA'S'/3/Fg'S' L 41-OL-1AP-OAP	5	133	160	78	10.1	50.9	0	1	22
123	D 67-3/Gta'S'//Rabi'S'/31810 CD 14579-1S-2AP-OAP	8	123	160	73	10.4	53.5	14	4	12
124	Qfn//D.dwarf S-15/Cr'S' L 0506-OL-1AP-OAP	6	138	166	79	11.4	58.4	1	2	1
125	21563/3/LKE/Ld390//Ch67/4/Cr'S'/Gs'S'/5/Jo'S' /3/Ld357E/Tc*2//G11'S'/Fg'S' CD 9545-6S-OS-2KE-1AP-OAP	5	125	159	78	10.7	53.1	4	3	3
126	BD 2013/Pg'S' CM 9564-10S-OS-1KE-1AP-OAP	9	125	159	77	10.7	49.7	8	3	6
127	AA'S'/3/Ld357E/Tc//G11'S'/4/S-15/Cr'S' L 04-3AP-2AP-OAP	4	122	159	78	11.5	54.1	5	2	21
128	Fg'S'/Gta'S' CD 9262-5KE-OSK	4	120	158	76	12.0	47.3	1	3	10
129	V 772	6	123	159	74	11.7	53.9	2	1	11
130	Cocorit (D-check)	5	123	158	77	10.6	50.4	3	0	18
131	V 841	7	130	166	76	11.6	52.7	17	0	6

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
132	V 856	4	134	152	72	11.2	58.1	11	1	6
133	V 957	5	129	165	75	12.3	57.9	14	0	8
134	21563/Jo'S'//D.dwarf S-15/Cr'S' L 0414-3L-1AP-OAP	7	124	159	81	11.5	53.5	0	4	5
135	M2A=Angora 'R' X 2802-9N-2M-3N-1M-3Y-1M-1Y-0M	7	116	156	94	11.1	47.4	0	0	0
136	RM x H277.69-UMx2*2 X 22107-100Y-2M-1Y-0M	7	114	155	92	12.3	36.3	0	0	1
137	M2A-CML=PANDA'R' X 8386-D-2Y-0M-100Y-102B-100Y-1Y-0M	6	114	160	90	11.7	40.3	1	1	0
138	M2A-SPYxM2A X 16379-5Y-3Y-1M-0Y	11	118	156	90	11.7	39.8	0	0	0
139	M2A2-KLAXBvr'S' X 11433-B-1M-3Y-3M-6M-2Y-1M-0Y	8	117	159	93	10.8	43.1	2	6	0
140	Mexipak (check)	2	123	159	86	10.5	45.9	14	22	8
141	Arz-Mexipak MutxBgl/Abn X 36378-OKE	3	117	158	88	10.7	45.9	0	3	1
142	M2A-Bgl X 15490	12	118	171	99	10.9	42.4	0	4	0
143	IA-KalxGal X 14920	9	118	163	111	9.7	50.3	0	1	8
144	Camel-PatoxBgl B-113	9	117	159	102	9.8	45.7	0	0	0

Table 40: (Cont'd)

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
145	Ars-PixFs381 X 167307	3	123	161	107	9.2	45.7	0	5	3
146	M2A-Buitre X 12264	10	120	165	102	9.6	42.5	0	2	2
147	Drira-Outcross X 21295	12	118	164	114	9.6	49.6	0	3	2
148	Ram'S' 12257-1N-OM	8	118	164	103	9.8	48.3	1	0	0
149	Beaguelita'S' X 22427-101Y-2M-6Y-1M-4Y-OM	14	120	153	99	10.1	48.4	0	0	0
150	Cocorit (check)	7	117	152	84	15.7	52.2	0	6	0

DH out of (20 locations); DM out of (13 locations); Pl.Ht out of (22 locations);
YR out of (10 locations); LR out of (12 locations); SR out of (7 locations)

TENTH PRELIMINARY OBSERVATION NURSERY - RAINFED (1980-81)

The Tenth Preliminary Observation Nursery - Rainfed (PON-Rf) consisted of breadwheat entries (nos: 1 - 63), durum entries (no: 64 - 134) and triticale lines (no: 135 - 150). Mexipak 65 was included as breadwheat check (no: 1, 20, 50, 60, 80, 100, 120, 140), Cocorit as durum check variety (no: 10, 30, 50, 70, 90, 110, 130, 150). Data were received from 29 locations.

Breadwheat

The most frequently selected breadwheat line was (no: 61), HD 1220-Kal3x Bjj'S'=Nkt'S', chosen at 15 locations. P106-19(Fto²-Cl 13170xCno-Son64/Inia-Bb) was selected at 11 locations, but was susceptible to all three rusts. (BM2889xVit-M.hd/Omid⁴) Son64-Y50_ExGto/8156(R)-Tob (no: 49) and Cj 71/CcxCno-Son64 (no: 31) were selected at 10 locations. Only no: 31 was resistant to all three rusts of those lines selected at 10 or more locations (Table 41).

Although rust data for the three rusts were recorded from 10, 12 and 7 locations respectively for stripe, leaf and stem rust, the A.C.I for the susceptible variety Mxp was relatively low. This indicates a relatively low overall infection of rust intensity for the data reported. Only Burgus 2-Sort12.13xKal-Bb (no: 34) had 0 infection and was selected at 8 locations. These lines with less than 5 A.C.I number for all three rusts as nos: 2, 5, 15, 28, 31, 33, 34, 43 and 55 (Table 42).

Protein and 1000KW are given for Tel Hadya only and represent response to that location only. No: 9, 11, 22 and 27 appear to have good protein, with good 1000KW and early to medium maturity. These lines may have good protein potential, but should be verified under more locations (Tables 43 and 44).

Durum wheat

The agronomic and disease data on the most widely adapted durum entries in the PON-Rf are listed in Table 45.

The number of days to heading ranged from 118 (no: 97) to 139 (no: 82), the number of days to maturity from 152 (no: 132) to 174 (no: 119).

The plant height ranged from 68 (no: 74) to 93 cm (no: 79), but most of the frequently selected lines (Table 45) had a height of about 80 cm.

There was little variation in protein content (between 9.9 and 13.0%) and thousand kernel weight (42.9 to 59.4 g). The data were obtained for one location only, and are just an indication. Vitreousness was determined for two environments in Tel Hadya. The incidence of yellow berry was low: the average values for vitreousness ranged from 76.0 (no: 109 and 117) to 99.8% (no: 118).

The data for a few lines with good grain quality performance, based on these limited data, are listed in Table 46.

The A.C.I values for the three rusts were rather low: the maximum values for yellow rust, leaf rust and stem rust were 17, 22 and 41, respectively. In Table 47 the durum lines with the lowest A.C.I values for the three rusts are listed.

Triticale

The most frequently selected triticale lines were Beaguelita'S' (no: 149); Drira outcorss (no: 147) and M2A/Bgl (no: 142). The majority of the triticale lines were earlier heading than the breadwheat and durum wheat entries, but not earlier maturing. The height for triticale varied from 88 to 114 cm.

The protein percentage and thousand kernel weight tended to be somewhat lower than the nursery average, but the data presented were obtained from one location only.

As a group, the triticale lines showed low A.C.I values for the three rust diseases.

Table 41: Agronomic and disease data of most frequently selected breadwheat lines in PON-Rf (1980-81).

Entry No.	Variety or Cross and Pedigree	FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K	A.C.I		
								YR	LR	SR
61	HD 1220-Kal3xBjy'S'=Neelkant'S' CM 40454-4S-3AP-OAP	15	123	158	82	10.0	44.3	6	9	0
38	P106-19x(Fto(2)-Cl 13170xCno-Son64)Inia-Bb L4go 1L-3AP-OAP	11	123	161	72	12.6	43.3	26	10	32
31	Cj71/CcxCno-Son64 CM 29033-1L-OL	10	123	160	83	11.4	42.8	1	2	0
49	(BM2899xVit-Mhd)/Omid(4))Son64-Y50ExGto/8156(R)-Tob'S'	10	127	163	93	12.1	47.7	2	0	27

Table 42: Agronomic and disease data of the most resistant breadwheat lines in PON-Rf to three rust diseases.

Entry No.	Variety or Cross and Pedigree	A.C.I			FR	DH	DM	Pl.Ht	Prot. %	Wt 1000K
		YR	LR	SR						
2	C29-Cd1 (Cgn/Tob-CnoxCno-Inia) CM 16722-K-6M-4Y-2M-0Y	4	3	0	5	122	158	86	12.4	41.2
5	12300-TdoxJar66-Pak20 PK 6029-1K-7K-0L	0	1	0	3	121	159	86	11.2	43.3
15	Pavon'S'-Sparrow'S' CM 64702-2AP-0AP	1	1	0	3	128	158	82	13.2	41.6
28	Sannine(D630)-Nai-Weiqui-RM/Cno(2)-Chr=Sannine//Ald'S' L 932-0L-5AP-0AP	0	4	0	7	124	161	85	11.1	37.6
31	Cj71/CcxCno-Son64 CM 29033-1L-0L	1	2	0	10	123	160	83	11.4	42.8
33	Ceb148(Cno'S'-Inia'S'xLfn/TobxKl.Pet-Raf) SWM 1368-500Y-1B-501M-503M-0M	2	0	0	5	123	159	80	11.6	36.0
34	Burgas2-Sort 12.13xKal-Bb SWM 3115-3M-4Y-1M-0M	0	0	0	8	128	161	71	12.6	42.7
43	Inia-NapoxTob/Sparrow L 17-7S-7S-6AP-0AP	2	0	0	4	135	180	77	11.9	41.2
55	G11-Aust 11.61.157xCno-No66/Pvn'S' CM 30326-1L-2AP-0AP	4	0	0	2	126	164	80	11.2	38.9

Table 43: Agronomic and disease data of the breadwheat entries in PON-Rf with the highest protein content.

Entry No.	Variety or Cross and Pedigree	Prot. %	FR	DH	DM	Pl.Ht	Wt 1000K	A.C.I		
								YR	LR	SR
22	Ymh-Choli SWM 3137-1L-1AP-OAP	15.5	2	120	153	85	44.3	1	21	27
11	Maya74-Choli CM 39427-5AP-OAP	14.2	7	117	156	83	52.6	0	15	30
12	(11.54.302xWRT 233-Jn(5)/Cno)Sx CM 45727-3AP-OAP	13.8	6	113	158	83	44.1	5	12	0

Table 44: Agronomic and disease data of the breadwheat entries in PON-Rf with the highest thousand kernel weight.

Entry No.	Variety or Cross and Pedigree	Wt 1000K	FR	DH	DM	Pl.Ht	Prot. %	A.C.I		
								YR	LR	SR
13	PericoxS311-Nor67 CM 45743-1AP-OAP	53.8	5	121	158	92	12.9	3	14	16
19	Arz/IniAxTob'S'-Napo L 788-1L-1AP-OAP	53.0	2	121	153	83	13.1	6	1	16
11	Maya74-Choli CM 39427-5AP-OAP	52.6	7	117	156	83	14.2	0	15	30

Table 45: Agronomic and disease data on the most frequently selected durum entries in PON-Rf.

Entry No.	Variety or Cross and Pedigree	FR*	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K	A.C.I		
									YR	LR	SR
64	Pg'S'//Chap/21563	15	128	154	84	11.2	87.5	50.1	9	7	12
117	Magh'S'/Jo'S'/3/G11'S'//61-130/Lds -4AP-OAP	15	135	161	78	10.6	76.0	54.2	2	1	2
115	Rabi'S'/Plc/4/G11'S'/3/61-130//Lds ICD 74.107-3L-3AP-OAP	14	126	162	80	12.5	98.3	49.1	9	1	3
85	D.dwarf S-15/Cr'S'//Stk'S' L 96-1AP-1AP-OAP	13	123	158	83	12.7	97.8	53.4	0	1	19
66	21564/Cr'S'//Fg'S' CM 7491-11Y-1M-OY-OKE	11	126	159	76	11.8	97.5	49.2	2	4	4
69	Cr'S'/Tag. B. Ball//Pg'S'/Ralle'S' CD 14334-G-2Y-3M-OY	11	120	162	78	11.5	93.3	54.0	0	1	41
71	Gdo 512/Cit'S'//Ruff'S'/Fg'S'	11	123	159	78	11.3	94.5	47.6	3	1	26
77	Plc'S'/Ruff'S'//Gta'S'/D6715 CM 17904-D-3M-1Y-OY	11	125	158	78	11.7	96.3	46.8	4	8	18
84	Cr'S'/Gs'S'/3/2F/Lds//Kobak2916/61-130 L 63-2AP-1AP-OAP	11	122	158	79	11.7	91.3	50.0	0	2	20
101	Mexi'S'/Chap'S'//21563/3/Rabi'S' CD 14759-2S-4AP-OAP	11	124	159	73	11.5	96.3	50.7	1	0	9

*: Out of 29 locations.

Table 46: Agronomic and disease data of the durum lines in PON-Rf with the best performance for grain quality characters.

Entry No.	Variety or Cross and Pedigree	Prot. %	Vit. %	Wt 1000K	FR	DH	DM	Pl.Ht	A.C.I		
									YR	LR	SR
76	Ggovz 469/Garza CM 549-2S-2S-2S-OS-OKE	12.7	97.5	59.4	9	125	170	74	2	1	9
79	F9.3	12.7	96.5	56.1	4	132	164	93	6	3	35
85	D.dwarf S-15/Cr'S'//Stk'S' L 96-1AP-1AP-OAP	12.7	97.8	53.4	13	123	158	83	0	1	19
93	Ruff'S'/Ward CD 18864-2Y-1AP-OAP	12.7	98.8	52.8	8	120	159	72	17	1	9
116	Snipe'S'/3/Jo'S'/Cr'S'//Gs'S'/AA'S' ICD 74119-1L-1AP-OAP	12.9	97.0	55.7	7	124	160	78	0	1	0
118	21563/3/LKE/Ld390//Ch67/4/Gra'S'/5/Palestinian 20C-606 CD 14646-2S-2AP-OAP	13.0	99.8	54.5	4	124	159	72	1	1	8

Table 47: Agronomic and disease data of the durum entries in PON-Rf with low disease scores to the three rusts.

Entry No.	Variety or Cross and Pedigree	A.C.I			FR	DH	DM	Pl.Ht	Prot. %	Vit. %	Wt 1000K
		YR	LR	SR							
65	Plc'S'/Cr//Jo/RD119 CM 17046-10L-13L-2L-OK	0	0	4	8	125	160	77	11.6	98.8	48.8
86	Cr'S'//T.dic.V.Vernum/Gu'S'/3/Jori L 127-1AP-1AP-OAP	1	3	3	6	125	159	78	11.5	91.0	50.4
103	Fg'S' D 27582-8M-13Y-2M-OY	1	1	3	8	124	160	75	12.1	99.5	51.5
116	Snipe'S'/3/Jo'S'/Cr'S'//Gs'S'/AA'S' ICD 74119-1L-1AP-OAP	0	1	0	7	124	160	78	12.9	97.0	55.7
117	Magh'S'/Jo'S'/3/G11'S'//61-130/Lds -4AP-OAP	2	1	2	15	135	161	78	10.6	76.0	54.2
124	Qfn//D.dwarf S-15/Cr'S' L 0506-OL-1AP-OAP	1	2	1	6	138	166	79	11.4	91.5	58.4