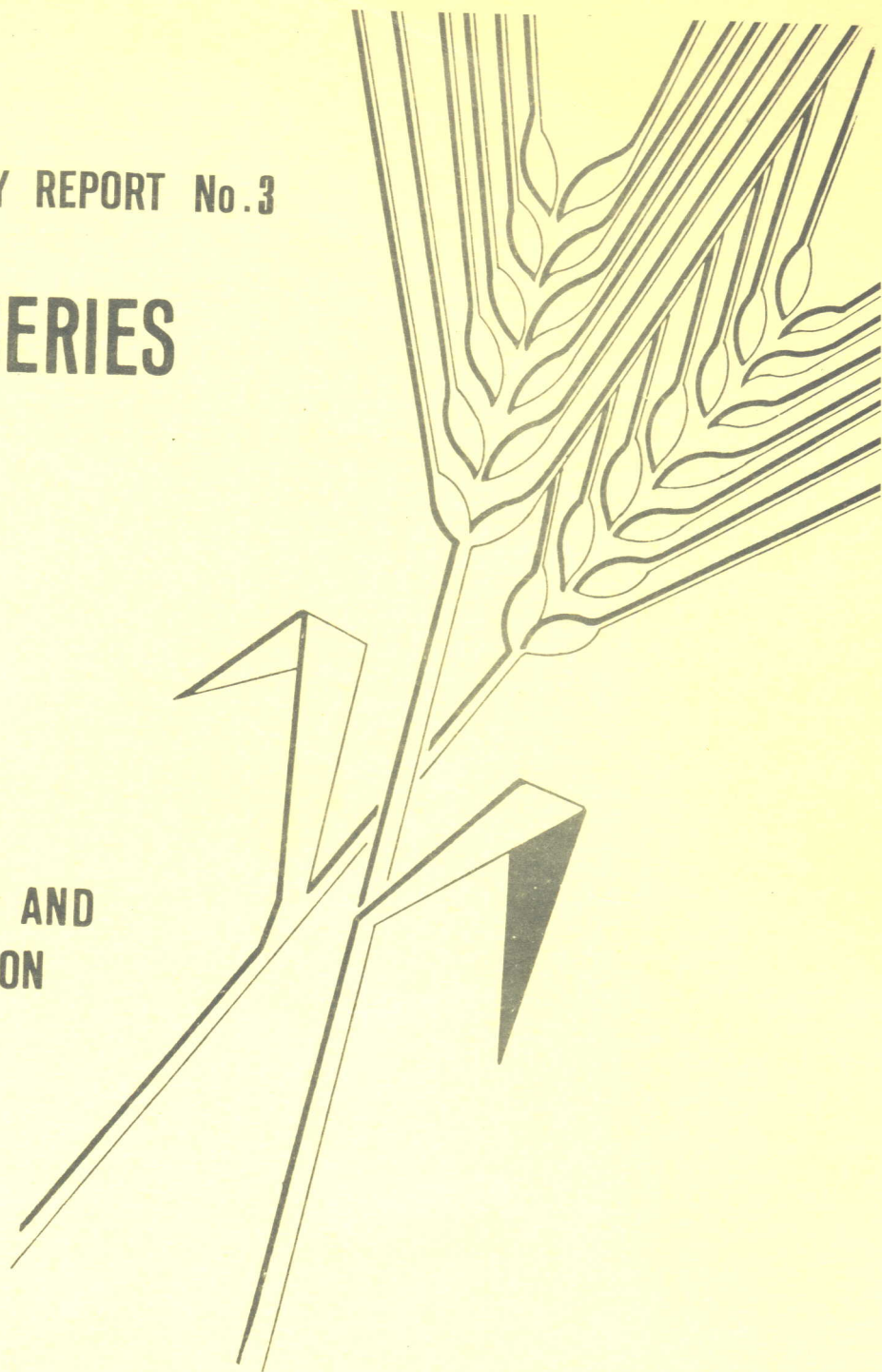


INTERNATIONAL NURSERY REPORT No.3

CEREALS NURSERIES

1979-1980

REGIONAL YIELD TRIALS AND
PRELIMINARY OBSERVATION
NURSERIES



THE INTERNATIONAL CENTER FOR AGRICULTURAL RESEARCH IN THE DRY AREAS
(ICARDA)

CEREALS INTERNATIONAL
NURSERIES REPORT
1979-80

REGIONAL YIELD TRIALS
and
PRELIMINARY OBSERVATION
NURSERIES

APRIL
1980

PREFACE

REPORT ON THE REGIONAL WHEAT AND BARLEY TRIALS AND NURSERIES

1979-80

This report follows the preliminary report circulated in 1980. It contains summaries of all the information received from the nursery cooperators responsible for planting and recording three Regional Yield Trials (RYT) and four Preliminary Observation Nurseries (PON) conducted at over 30 locations throughout the Near East and North Africa. The nurseires and trials were prepared and distributed by the International Center for Agricultural Research in the Dry Areas (ICARDA) in conjunction with the International Maize and Wheat Improvement Center (CIMMYT).

The keen interest and the willing cooperation of the National Research Programs in nursery management, data collection and the return of field books is gratefully acknowledged. ICARDA's Cereals program staff designed the trials and compiled the information.

The conclusions made in this report represent only the views of Cereal Improvement Program. I trust this report will be found to be useful.



Mohamed A. Nour
Director General

CONTENTS

	<u>Page</u>
- Introduction	3
- List of cooperators 1979-1980	5
- Locations of the Regional Yield Trials	15
- Locations of the Preliminary Observation Nurseries	17
- Locations from which disease data were utilized	19
- 11th Regional Wheat Yield Trial (11-RWYT)	25
- 8th Rainfed Regional Wheat Yield Trial (8th-TWYT-RF)	57
- The Regional Barley Yield Trial (10th RBYT)	81
- Preliminary Observation Nursery-Breadwheat (Rainfed) - (9th-PON-Bw-RF)	109
- 9th Preliminary Observation Nursery-Breadwheat	119
- 9th Preliminary Observation Nursery-Durum (9th-PON- D)	131
- 9th Preliminary Observation Nursery-Barley (9th-PON- B)	141
- Key to abbreviations used in the tables	Back cover

Regional Yield Trials

Introduction

Three Regional Yield Trials (RYT):

Eleventh Regional Wheat Yield Trial (11th-RWYT)

Eighth Regional Wheat Yield Trial-Rainfed(8th-RWYT-RF)

Tenth Regional Barley Yield Trial(10th-RBYT)

are distributed for the 1979-80 growing season to evaluate the selected lines for their yield potential along with other traits of economic importance under a wide range of agroclimatic conditions throughout the Near East, Middle East, South West Asia, Mediterranean Europe, North Africa and in a few other countries outside these regions. Cooperating institutions are able to make suitable selections from these lines for further testing, utilization or for release in their own countries. The results of the trials are collected by the cooperators which are summarized by ICARDA and the overall information distributed to all the countries concerned.

The entries in the RYT are selected from the regional nurseries which are conducted at several locations in ICARDA's region. These represent the best lines selected from ICARDA's own material, the national programs, and other sources such as CIMMYT in Mexico.

In general those lines which perform well under a wide range of environmental conditions are the most desirable. These lines/varieties are likely to give high and stable yields under varying conditions. The disease data collected provide information on the resistance of lines in different environments and on the severity of disease infestation in different parts of the region.

The seed of 25 varieties for each trial were sent to cooperators throughout the region. These were sown in a randomised complete block design with four replications. Six rows, each 2.5 m long, were planted in each plot with row to row spacings of 30 cms. Only the four center rows were harvested for yield to avoid border effects. In most locations data were recorded on the number of days to heading and maturity , plant height, and observation on natural disease infestation.

Each RYT included a regional check and a national check. The regional check was a commercial variety included to provide a uniform check throughout the region. The national check was chosen by each cooperator and was intended to represent the best improved commercial variety in each country.

Grain protein percentage (10% moisture basis) was determined using the Udy Dye Binding(UDB) method. This was done at only one location so that the varietal values should be considered as relative values, not as absolute ones.

Frequency; the number of locations where a line ranked among the top 10 for grain yield. This gives an indication of wide adaptation (high yield in several locations) or narrow adaptation(high yield at only a few locations).

This report gives detailed data on grain yield, the major agronomic characters and on diseases. The data for each trial or nursery are discussed and summarised in the text and in small tables in each section. Details on the performance of each variety or line are presented in subsequent tables.

LIST OF COOPERATORS 1979-80

List of Cooperators for 1979 - 80

- | | |
|--|--|
| <p>* Dr.P.M.Kishthwarz
c/o Head Department of Research
Ministry of Agriculture&Land Reforms
Kabul
<u>AFGHANISTAN</u></p> | <p>* Dr.S.Jana
Crop Science Department
University of Saskatchewan
Saskatoon
<u>CANADA</u></p> |
| <p>* Head
Department of Research
Ministry of Agriculture&Reforms
Kabul
<u>AFGHANISTAN</u></p> | <p>* Deputy Chairman
Chinese Academy of Agriculture &
Forestry Sciences
Pekin
<u>CHINA</u></p> |
| <p>* The General Director
IDGC
P.O.Box:16
El-Harrach
Algiers
<u>ALGERIA</u></p> | <p>* Dr.Ying Cunshan
Head Plant Production Laboratory
Resources
Germplasm Institute
Beajing
<u>CHINA</u></p> |
| <p>* Dr.J.D.Oates
The University of Sydney
Plant Breeding Institute
P.O.Box:180
N.S.W. 2206
Castle Hill
<u>AUSTRALIA</u></p> | <p>* Dr.Hadjichristodoulou
Agricultural Research Institute
Nicosia
<u>CYPRUS</u></p> |
| <p>* Director
Bangladesh Agricultural Res. Inst.
87 Pionner Road
Kakrail, Dacca-2
<u>BANGLADESH</u></p> | <p>* Dr.P.Bartos
Institute of Genetics&Plant Breeding
Praha
Ruzqne
<u>CZECHOSLOVAKIA</u></p> |
| <p>* Mr.A.Razzaque
Director, Bari
Joydebpur, Dacca
<u>BANGLADESH</u></p> | <p>* Mr.H.J.Dubin
CIMMYT/INIAP
Ap.Post:2600
Quito
<u>ECUADOR</u></p> |
| <p>* Dr.I.Todorov
Institute For Wheat&Sunflower Breeding
Tolbuhin
<u>BULGARIA</u></p> | <p>* Dr.A.S.Gomaa
Wheat & Barley Program Leader
Director Field Crops Res. Inst.
Agricultural Res. Center
Giza
<u>EGYPT</u></p> |

- * Dr.T.M.Abdel Hak
 Institute of Plant Pathology
 Agricultural Research Center
 Giza
EGYPT
- * Mr.J.Chery
 Station D'Amelioration des Plantes
 Ecole National Superieure d'Agriculture
 34060 Montpellier Cedex
FRANCE
- * Dr.A.Mansour
 Director
 Barley Improvement Program
 Agricultural Research Center
 Giza
EGYPT
- * Dr.J.Rossineau
 Directeur General
 France Canada Semences S.A
 Champigny en Beauce
 41330 La Chapelle Vendonoise
FRANCE
- * Dr.N.H.Chamberlain
 Nickerson R.P.B Ltd
 JNRC Rothwell
 Lincoln LN7
ENGLAND
- * Dr.Grignac
 Station d'Amelioration des Plantes
 34060 Montpellier
FRANCE
- * Dr.T.Tesemma
 Debre Zeit Agricultural Experiment
 Station
 P.O.Box:32
 Debre Zeit
ETHIOPIA
- * Dr.M.Trottet
 INRA Station d'Amelioration des Plantes
 B.P:29
 35650 Le Rheu
FRANCE
- * Mr.J.Mohammed
 Institute of Agricultural Research
 P.O.Box:2003
 Addis Ababa
ETHIOPIA
- * Dr.E.Skorda
 Cereal Institute
 Thessaloniki
GREECE
- * Dr.Gorshkow
 Scientific Phytopathological Lab.
 P.O.Box:37
 Ambo
ETHIOPIA
- * Dr.M.Ram
 Project Coordinator
 Indian Agri. Res. Institute
 Regional Station
 Karnal - 132001
INDIA
- * Dr.H.Gebre
 Institute of Agricultural Research
 P.O.Box:2003
 Addis Ababa
ETHIOPIA
- * Dr.L.M.Joshi
 Department of Mycology & Plant
 Pathology
 Indian Agricultural Res. Inst.
 New Delhi 12
INDIA
- * Dr.E.J.Kivi
 Hankkija Plant Breeding Institute
 SF 04300
 Hyryla
FINLAND
- * Dr.K.B.Jain
 Cummings Laboratory
 Indian Agricultural Research Institute
 New Delhi 12
INDIA

- * Dr.M.V.Rao
Cummings Laboratory
Indian Agricultural Research Institute
New Delhi 12
INDIA
- * Dr.L.Rossi
Agriculture Laboratory Research Center
Via.Agrillaresse
Roma
ITALY
- * Dr.H.Kaveh
Ministry of Agriculture
Seed & Plant Improvement
Karaj
IRAN
- * Dr.N.Kathkuda
Head, Field Crops Section
Ministry of Agriculture
P.O.Box: 226 Amman
JORDAN
- * Dr.R.S.Parkin
Jezira Agricultural Development Project
Tel Afer
IRAQ
- * Mr.M.Duwayri
Faculty of Agriculture
University of Jordan
Amman
JORDAN
- * Dr.A.Adary
Department of Field Crops
College of Agriculture & Forestry
Hammame El-Alile
Mosul
IRAQ
- * Dr.R.N.Little
Kenya Breweries Limited
P.O.Box:707
Nakuru
KENYA
- * Dr.A.S.Beldawi
Department of Plant Pathology
Abu Ghraib Experiment Station
Abu Ghraib
IRAQ
- * Drs.G.Kingma/M.Oggema
CIMMYT
P.O.Box:25711
Nairobi
KENYA
- * Dr.O.Ameen
Director
Cereal Crops Department
Abu Ghraib
Baghdad
IRAQ
- * Dr.Chang Hwan Cho
Chief Wheat & Barley Division
Suweon
KOREA
- * Prof.G.T.Scarsia Mugnozza
University of Bari
Institute of Plant Breeding
Via Amendola 165
70126 Bari
ITALY
- * Dr.Eun Sup Lee
Wheat & Barley Research Institute
Office of Rural Development
Suweon
KOREA
- * Dr.G.Zitelli
Istituto Sperimentale de Cerealicoltura
Via Cassia 176
00191 Roma
ITALY
- * Dr.A.Alameddine
Agricultural Research Institute
Tel Amara
Rayak
LEBANON

- * ICARDA
Terbol
LEBANON
- * Dr.M.Solh
School of Agriculture
Beirut
LEBANON
- * Dr.A.Maddur
Agricultural Research Center
P.O.Box:2480
Tripoli
LIBYA
- * Dr.J.Hazdic
Field Crops Res. Scientist
Agricultural Res. Center
P.O.Box:19315
Sebha
LIBYA
- * Cereal Staff
CIMMYT
Londres 40
Ap.Post:6DF, 6.641
MEXICO
- * Dr.M.Basri
Head. Department of Plant Pathology
B.P:704
Agdal
Rabat
MOROCCO
- * Dr.L.Gallagher
B.P:120
Hassan Institute
Rabat
MOROCCO
- * Dr.H.Faraj
Director, INRAT
B.P:415 Avenue Nasr
Rabat
MOROCCO
- * Mr.P.Jouve
Department d'Agronomie
IAV Hassan II
B.P:704
Agdal
Rabat
MOROCCO
- * Mr.B.Karki
Assistant Plant Pathologist
P.O.Box:1126
Khumaltar, Lalpur
NEPAL
- * Dr.S.Pana
Chief Wheat Development Officer
Ministry of Food Agriculture&Irrigation
Bhairahwa Agricultral Farm
Bhairahwa
NEPAL
- * Chief Agronomist/Barley Breeder
P.O.Box:169
GFO Khumalta
Kathmandu
NEPAL
- * Dr.L.B.Olugbemi
Institute for Agricultural Res.
Ahmadu Bello University
P.O.Box:1044
Zaria
NIGERIA
- * Dr.A.Mjeni
Directorate of Agriculture Research
P.O.Box:467 Muscat
OMAN
- * Dr.M.Nourullah
Coordinator Wheat
Pakistan Agricultural Research Council
P.O.Box:1031
Islamabad
PAKISTAN
- * Dr.S.F.Hassan
Department of Plant Protection
Cereal Diseases Research Institute
58 Embassy Road
Islamabad
PAKISTAN

- | | |
|--|---|
| <p>* Dr.K.Bahadur
Director
Cereals Research Institute
Pirsabak
Nowshehra
<u>PAKISTAN</u></p> | <p>* Mr.O.H.Khalil
Water Resources&Agricultural Development
Project
Field Crops Division
P.O.Box:1967 Doha
<u>Qatar</u></p> |
| <p>* Mr.Sher Muhammed
Wheat Botanist
Agricultural Research Institute
Quetta
<u>PAKISTAN</u></p> | <p>* Mr.Z.Adham
Director General
Agricultural Research Department
Ministry of Agriculture & Water
Riadh
<u>SAUDI ARABIA</u></p> |
| <p>* Mr.A.H.Natali
Wheat Botanist
Agricultural Research Institute
Tandojam
<u>PAKISTAN</u></p> | <p>* Dr.H.I.Sayed
Plant Production Department
Faculty of Agriculture
Riadh University
Riadh
<u>SAUDI ARABIA</u></p> |
| <p>* Dr.M.A.Bajwa
Director Wheat
Wheat Research Institute
Faisalabad
<u>PAKISTAN</u></p> | <p>* Dr.J.F.Martin
Activida des Agricolas Aragonesas S.A
Aeropuerto de Zaragoza
Zaragoza
<u>SPAIN</u></p> |
| <p>* Dr.Abdur Rehman
Chairman Department of Plant Breeding &
Genetics
University of Agriculture
Faisalabad
<u>PAKISTAN</u></p> | <p>* Dr.J.A.Sanchez
Mahissa
Paseo Cenlos I, No202
Barcelona 13
<u>SPAIN</u></p> |
| <p>* Dr.T.M.Masajo
Chief Agriculture Division
USAID
Manila
<u>PHILIPPINES</u></p> | <p>* Dr.L.Silvela
Semillas Agricolas S.A
Joaquin Garcia Morata 4
Madrid
<u>SPAIN</u></p> |
| <p>* Mr.M.T.Barradas
Director of National Plant Breeding
Station
Elvas 7351
<u>PORTUGAL</u></p> | <p>* Mr.G.Arnau
Cultivadores de Semillas Seleccionadas S.A
Paseo de la Habana - 56
Madrid 16
<u>SPAIN</u></p> |
| <p>* Dr.G.Varughese
Urbanizacao Lapinka, Lote 15
S.Pedro. Estoril
Lisbano
<u>PORTUGAL</u></p> | |

- * Dr.J.C.Garcia
V. INIA
Estacion de Mejor de Las Plantas
de Gran Cultivo
Jeres de la Frontera
Cadis
SPAIN
- * ICARDA
Cereal Improvement Program
SYRIA
- * Mr.F.Montes
V. INIA
Seville
SPAIN
- * Mr.P.Stegmark
Sverige Sutsudes Farming
Svalof Stockholm
SWEDEN
- * Dr.M.S.Mohamed
Head of Station
New Halfa Research Station
P.O.Box:17
New Halfa
SUDAN
- * Mr.R.V.Ndondi
Agronomic Research Project
Lyamunga
P.O.Box:1807
Moshi
TANZANIA
- * Dr..A.B.El Ahmadi
Plant Breeding Section
Gezira Research Station
Wad Medani
SUDAN
- * Dr.A.Daaloul
Institut des Grandes Cultures
Le Kef
Tunis
TUNISIA
- * Mr.A.Ramanathan
The Ceylon Brewery Ltd.
Nuwara
Eliya
SRILANKA
- * Mr.A.Maamouri
INRAT
Genetique de Cereales
Ariana
Tunis
TUNISIA
- * Director
Agricultural Research Institute
Douma
Damascus
SYRIA
- * Mme.F.Laribi
Offices des Cereals
Rue Alain Savary
Tunis
TUNISIA
- * Dr.L.R.Morsi
Director Plant Semences Division
ACSAD
P.O.Box:2440
Damascus
SYRIA
- * Dr.P.Solen
Regional Agricultural Research Institute
P.K.:9
Menemen Izmir
TURKEY
- * Dr.Abdel Halim Idris
P.O.Box:5908
Damascus
SYRIA
- * Director
National Winter Cereals Project
c/o RF/CIMMYT
P.K.:229
Ankara
TURKEY

- * Dr.J.Rowland
Church of Uganda
Karamoja Agricultural Project
P.O.Box:44
Moroto
UGANDA
- * Dr.M.Boskovic
Institute for Plant Protection
2100 Novisad
YUGOSLAVIA
- * Dr.W.Mc.Cuiston
Oregon State University Corralis
Oregon 97331
U.S.A.
- * Dr.S.N.Sisodia
University of Zambia
School of Agricultural Sciences
P.O.Box:2379
Lusaka
ZAMBIA
- * Dr.G.Sharp
Montana State University
Bozeman - MT 59717
U.S.A.
- * Mr.Raemaker
Mt.Makulu Research Station
Chilanga
P.O.Box:7
ZAMBIA
- * Dr.R.Kilpatrick
Beltsville Agricultural Research Center
Beltsville Maryland 20705
U.S.A.
- * Dr.J.G.Braidek
c/o Canadian High Commission
P.O.Box:1313
Lusaka
ZAMBIA
- * Dr.W.M.Porter
Germplasm Resources Laboratory
Plant Genetics & Germplasm Institute
Beltsville 20705 Maryland
U.S.A.
- * Dr.J.Quick
Professor
North Dakota State University
P.O.Box:5051 Fargo
North Dakota 58105
U.S.A.
- * Dr.M.El. Ghouri
Agriculture Central Research Station &
Training Center
P.O.Box:4788
Taiz
YEMEN NORTH
- * Mr.J.Bakshi
UNDP
P.O.Box:1188
Aden
YEMEN SOUTH

LOCATIONS OF THE REGIONAL YIELD TRIALS 1979-80

1- AFGHANISTAN	Bulkh	23- JORDAN	Irbed
2- "	Shisham Bagh	24- "	Ramtha
3- "	Khroub	25- LEBANON	Tel Amarra
4- "	Setif	26- "	Terbol
5- BANGLADESH	Jamalpur	27- MEXICO	Ciano
6- "	Ishurdi	28- MOROCCO	Rabat
7- CYPRUS	Laxia	29- NEPAL	Bhairahwa
8- EGYPT	Giza	30- OMAN	Wadi Quryat
9- "	Nubaria	31- PORTUGAL	Elvas
10- "	Sabahia	32- S.ARBABIA	Al Gassim
11- "	Sakha	33- "	Dirab
12- "	Shandawell	34- SPAIN	Barcelona
13- "	Sids	35- "	El-Eucivar
14- FRANCE	Montpellier	36- "	Semillas
15- GREECE	Thessaloniki	37- SUDAN	Gezira
16- IRAQ	Hammam Al Alile	38- "	New Halfa
17- IRAN	Darab	39- SYRIA	Izra'a
18- "	Gorgan	40- "	Tel Hadya
19- ITALY	Bari	41- TUNISIA	Beja
20- "	Rome	42- "	Le Kef
21- JORDAN	Amman	43- "	Mateur
22- "	Rabbah	44- TURKEY	Izmir
		45- U.S.A	Montana (Bozman)

LOCATIONS OF THE PRELIMINARY OBSERVATION NURSERIES

1979-80

1- AFGHANISTAN	Shisham Bagh	25- MEXICO	Toluca
2- ALGERIA	Khroub	26- MOROCCO	Rabat
3- "	Setif	27- OMAN	Wadi Quryat
4- "	Sidi-Bel-bbes	28- PHILIPPINES	Los Banos
5- BANGLADESH	Ishurdi	29- S.ARABIA	Dirab
6- CYPRUS	Athalassa	30- SPAIN	Catalina
7- EGYPT	Giza	31- "	El-Eucivar
8- "	Nubaria	32- "	Barcelona
9- "	Sakha	33- "	Semillas
10- "	Shandawell	34- SUDAN	Gezira
11- "	Sids	35- "	New Halfa
12- ETHIOPIA	Debre Zeit	36- "	Wad Medani
13- GREECE	Thessaloniki	37- SYRIA	Gelein
14- IRAN	Gorgan	38- "	Izra'a
15- "	Karaj	39- "	Karahta
16- IRAQ	Hammam Al Alile	40- "	Tel Hadya RF
17- ITALY	Fiorenzuola	41- "	Tel Hadya IRR
18- JORDAN	Amman	42- TUNISIA	Beja
19- "	Deir Alla	43- "	Le Kef
20- "	Irbed	44- "	Mateur
21- "	Rabbah	45- "	Tunis
22- LEBANON	Tel Amara	46- TURKEY	Diyarbaker
23- "	Terbol	47- "	Eskishehir
24- MEXICO	Ciano	48- "	Izmir

NINTH PRELIMINARY OBSERVATION NURSERY-BARLEY

Yellow rust	:	ECUADOR, Santa Catalina, PORTUGAL, Elvas, SPAIN, Semillas, SYRIA, Tel Hadia.
Leaf rust	:	CYPRUS, Athalassa, ECUADOR, Santa Catalina, EGYPT, Sakha, GREECE, Thessaloniki, SYRIA, Tel Hadia, TUNISIA, Beja, TURKEY, Izmir.
Stem rust	:	EGYPT, Sakha, SUDAN, New Halfa.
Powdery mildew	:	CYPRUS, Athalassa, ECUADOR, Santa Catalina, EGYPT, Giza, Sakha, FRANCE, Montpellier, GREECE, Thessaloniki, ITALY, Fiorenzuola, MOROCCO, Rabat, PORTUGAL, Elvas, SYRIA, Tel-Hadya, TUNISIA, Le Kef, Mateur, TURKEY, Izmir.
Scald	:	ALGERIA, Khroub, CYPRUS, Athalassa, ECUADOR, Santa Catalina, ITALY, Fiorenzuola, KENYA, Njoro, PORTUGAL, Elvas, SYRIA, Tel-Hadya, TUNISIA, Le Kef, TURKEY, Izmir, U.S.A, Montana(Bozman).
Net blotch	:	ALGERIA, Khroub, CYPRUS, Athalassa, KENYA, Njoro, PORTUGAL, Elvas, SYRIA, Tel Hadia, TUNISIA, Beja, U.S.A, Montana (Bozman).

NINTH PRELIMINARY OBSERVATION NURSERY-DURUM

Yellow rust	:	LEBANON, Tel Amara, MEXICO , Taluka, PORTUGAL, Elvas, SPAIN El Ecuivar, Semillas, TURKEY, Izmir.
Leaf rust	:	BANGLADESH, Ishurdi, GREECE, Thessaloniki, LEBANON, Tel-Amara, MEXICO, Taluka, SPAIN, El Ecuivar, Semillas, TURKEY, Izmir.
Stem rust	:	BANGLADESH, Ishurdi, ETHIOPIA, Debre Zeit, KENYA, Njoro, LEBANON, Tel Amara, MEXICO, Taluka, SUDAN, New Halfa, TURKEY, Izmir.

- Powdery mildew : GREECE, Thessaloniki, LEBANON, Tel Amara, PORTUGAL, Elvas, SPAIN, El-Ecuivar, SYRIA, Tel Hadya, TUNISIA, Beja.
- Septoria : CYPRUS, Athalassa, PORTUGAL, Elvas, SPAIN, El-Ecuivar, TUNISIA, Beja, TURKEY, Izmir.

NINTH PRELIMINARY OBSERVATION NURSERY-BREADWHEAT

- Yellow rust : AUSTRALIA, Castle Hill, ECUADOR, Quito, EGYPT, Sakha, JORDAN, Deir Alla, KENYA, Njoro, PORTUGAL, Elvas, SPAIN, Barcelona, Semillas, SYRIA, Tel Hadya, TURKEY, Izmir.
- Leaf rust : AUSTRALIA, Castle Hill, BANGLADESH, Ishurdi, EGYPT, Sakha, GREECE, Thessaloniki, IRAN, Gorgan, JORDAN, Deir Alla, MEXICO, Ciano, SPAIN, Barcelona, SYRIA, Tel Hadya, TURKEY, Izmir.
- Stem rust : AUSTRALIA, Castle Hill, BANGLADESH, Ishurdi, EGYPT, Sakha, IRAN, Gorgan, JORDAN, Deir Alla, SUDAN, New Halfa, SYRIA, Tel Hadya, TURKEY, Izmir.
- Powdery mildew : ALGERIA, Khroub, GREECE, Thessaloniki, IRAN, Gorgan, PORTUGAL, Elvas, SPAIN, Barcelona, TUNISIA, Beja.
- Septoria : CYPRUS, Athalassa, IRAN, Gorgan, PORTUGAL, Elvas, SYRIA, Tel Hadya, TUNISIA, Beja, TURKEY, Izmir.

NINTH PRELIMINARY OBSERVATION NURSERY-RAINFED

- Yellow rust : AUSTRALIA, Castle Hill, EGYPT, Sakha, KENYA, Njoro, SPAIN, Catalina, SYRIA, Tel Hadya, TURKEY, Izmir.
- Leaf rust : AUSTRALIA, ETHIOPIA, Debre Zeit, GREECE, Thessaloniki, IRAQ, Hammam Al Alile, MEXICO, Ciano, SPAIN, Catalina, SYRIA, Tel-Hadya, TURKEY, Izmir.

Stem rust	:	AUSTRALIA, Castle Hill, BANGLADESH, Ishurdi, EGYPT, Sakha, ETHIOPIA, Debre Zeit, SUDAN, New Halfa, SYRIA, Tel Hadya, TURKEY, Izmir.
Powdery mildew	:	GREECE, Thessaloniki, SPAIN, Barcelona, SYRIA, Tel Hadya, TUNISIA, Beja.
Septoria	:	CYPRUS, Athalassa, SYRIA, Tel Hadya, TUNISIA, Beja, TURKEY, Izmir.

KEY TO ABBREVIATIONS USED IN THE TABLES

HEAD DAYS	Days to heading
MAT DAYS	Days to maturity
PLNT HT	Plant height in cm

A.C.I	Average coefficient of infection
R	Resistant
I	Intermediate
S	Susceptible

LR	Leaf rust
YR	Yellow rust
SR	Stem rust
POW	Powdery mildew
SEPT TRIT	<u>Septoria tritici</u>
NB	Net blotch
SCLD	Scald

Eleventh Regional Wheat Yield Trial

This trial included 13 breadwheat, eight durum and one triticale lines/varieties. In addition to these two national checks of best commercial varieties one each of breadwheat and durum were also added at each site.

The overall performance data of 27 locations has been presented in table 1 where as the disease observations and detailed data of each site has been presented in table 2 and 3 respectively. At all the locations except one, i.e Semillas-Spain, at least one and in many cases several new lines of durum and breadwheat out yielded the national check varieties. Among all the entries the triticale line Maya I-Arm "S" gave the highest yield of 9042 kg/ha in Shisham-Bagh, Afganistan. This triticale line also showed fairly wide adaptation and at 12 locations ranked among the first 10 top yielding varieties.

From these data it also emerges that the research efforts in durum are bearing fruit as most of the durum lines out yielded the breadwheat entries at several locations and durum variety Redhead "S" topped the list in the overall performance ranking. Redhead "S" also showed very wide adaptability as out of 27 locations it was among the first 10 top yielders at 19 locations. The other durum lines which showed wider adaptation are Waha "S", Cr "S" (21563/61-130 x Lds) and Bittern "S". However some of the durum lines performed fairly well at specific locations. From diseases point of view these lines at majority of the sites showed better resistance to the prevalent diseases.

The breadwheat entries were also compared to a regional check Mexipak 65 in addition to the national check variety. With the exception of three sites, i.e. Shisham-Bagh(Afganistan), Bari(Italy), and Shandawel (Egypt) at least one or more entries out yielded the Mexipak 65 regional check where as with the exception of two sites in Spain (El-Ecivar and Semillas) one or more of the new lines gave better yields than the local improved check.

Most of the new lines also showed better multiple disease resistance as compared to the national and regional check varieties. The breadwheat lines 7C x Tob-Cno "S"/Ka1, (CC-Inia/Tob-Cfn x Cfn x Bb) 7C, Jup 73 x Y50E-Ka13, HD 2127, Pavon "S", and Varer: "S" ranked among the first 10 top yielding lines at majority of the sites indicating their wider adaptability and potential plasticity which these lines can provide to the national programs.

Conclusions

The following lines of durum and breadwheat seem to possess wider adaptation and high yield potential:

Durum: Redhead "S", Waha "S", Cr "S" (21563/61-130 x Lds), and bittern "S"
Breadwheat: 7C x Tob-Cno "S"/Ka1, (CC-Inia/Tob-Cfn x Bb) 7C, Jup 73 x Y50E-Ka13, Pavon "S" and Varen "S".

Table 1. ELEVENTH REGIONAL WHEAT YIELD TRIAL 1979-1980

OVERALL PERFORMANCE OF VARIETIES (27 LOCATIONS)

ENTRY NO	VARIETY/CROSS PEDIGREES	YIELD Kg/Ha	RANK	FR*	DAYS TO HEAD	DAYS TO MATURE	PLANT HEIGHT (cm)	PROTEIN	Wt 1000 kernels
1	BW Mexipak 65	4151	15	10	114	150	93	n/a	n/a
2	BW Jup 73 x Y 50E - Kal ³ CM 15517-1L-2L-OSK	4347	6	17	108	150	96	11.1	39.15
3	D Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte CM 17904-B-3M-1Y-1Y-OSK	4349	4	13	115	151	87	11.4	45.14
4	BW Pavon'S' CM 8399-D-4M-3Y-OM	4265	9	16	116	151	94	12.2	37.28
5	D Pg'S' x Magh - Gta'S' 9237-4SK-OSK	4029	19	8	116	152	86	11.5	46.75
6	BW HD 2127	4326	7	16	116	151	92	11	38.38
7	D Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563 CD 4404-B-9Y-3M-OY	4215	12	12	115	152	89	11.9	40.09
8	BW II 12300-Tob x Cno'S'/SX CM 16045-13M-1Y-OM	4042	18	11	114	152	94	11.8	37.72
9	D Cr'S' (21563/61-130 X Lds) CM 225-21M-1Y-OM-OY	4242	10	16	114	150	85	n/a	n/a
10	BW 7C x Tob - Cno'S'/Kal CM 8865-D-4M-1Y-1M-2Y-OM	4356	3	16	115	151	88	10.9	34.96
11	D Bittern'S' = 21563-AA'S' x Pg'S' CM 9799-126M-1M-5Y-OY	4294	8	13	116	152	85	n/a	n/a
12	D National Check (Durum)	4374	2	12	110	148	93	n/a	n/a
13	BW (CC - Inia/Tob - Cfn x Bb) 7C CM 8237-G-1M-3Y-2M-4Y-OM	4347	5	15	119	153	94	13	37.31
14	BW MESABI'S' = (Wal/CC- 56 x Cno) 7C CM 5513-D-1Y-1M-5Y-1M-1Y-OM	4071	17	10	114	150	100	11.1	40.67
15	D Cr'S' - USA - S02229 CM 18882-2Y-OY	4180	14	12	115	151	83	13.0	41.13
16	BW VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S') 7C CM 5375-F-1Y-1M-1Y-OM	4224	11	16	120	153	88	13.3	33.57
17	D Gdo VZ 469 - Cr'S' CM 459-2S-2S-1S-OS	3661	24	2	122	155	89	12.8	54.97
18	BW IWP 19 = E 6254 - Kal ² 72L-41	3958	21	7	113	147	95	11.1	40.29
19	D Redhead'S' = Pg'S' - Jo'S' x Cr'S' CM 13102-10M-1Y-OM	4507	1	19	119	152	87	10.7	41.61
20	BW 633 VD VI	4023	20	6	115	150	92	12.6	34.44
21	Tcl Maya I - Arm'S' X 2148-1N-1M-OY	4197	13	12	107	150	98	n/a	n/a
22	BW Cgn x Kal - Bb	3868	22	3	112	149	93	12.7	34.99
23	BW Sakha 7	3806	23	4	112	148	87	12.8	35.73
24	- National Check (BW)	4107	16	14	108	183	119	n/a	n/a

Table 2. Diseases For The RWYT

Entry No	Variety / Cross Pedigree	YR 9Loc	A.C.I.			Sept 3Loc
			LR 13Loc	SR 8Loc	PM 7Loc	
1	BW Mexipak 65	2	32	11	3	5
2	BW Jup 73 x Y 50E - Kal ³ CM 15517-1L-2L-OSK	0	8	15	3	1
3	D Waha'S' = Plc'S' - Ruff'S' x Gra'S' - Rette CM 17904-B-3M-1Y-1Y-OSK	0	4	0	4	3
4	BW Pavon'S' CM 8399-D-4M-3Y-OM	0	0	1	3	1
5	D Fg'S' x Magh - Gta'S' 9237-4SK-OSK	0	4	1	3	3
6	BW HD 2127	1	1	0	3	1
7	D Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563 CD 4404-B-9Y-3M-OY	0	6	0	4	0
8	BW II 12300-Tob x Cno'Sp/SX CM 16045-13M-1Y-OM	0	0	1	3	2
9	D Cr'S' (21563/61-130 x Lds) CM 225-21M-1Y-OM-OY	0	11	0	6	2
10	BW 7C X Tob - Cno'S'/Kal CM 8865-D-4M-1Y-1M-2Y-OM	2	4	3	4	2
11	D Bittern'S' = 21563-AA'S' x Fg'S' CM 9799-126M-1M-5Y-OM	0	8	0	3	2
12	D National Check (Durum)	0	13	0	4	3
13	BW (CC - Inia/Tob - Cfn x Bb)7C CM 8237-G-1M-3Y-2M-4Y-OM	0	3	1	3	3
14	BW MESABI'S' = (Wal/CC-8156 x Cno)7C CM 5513-D-1Y-1M-5Y-1M-1Y-OM	0	0	0	4	1
15	D Cr'S' - USA - S02229 CM 18882-2Y-OY	0	10	5	5	2
16	BW VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C CM 5375-F-1Y-1M-1Y-OM	0	0	0	3	4
17	D Gdo VZ 469 - Cr'S' CM 459-2S-2S-1S-OS	0	1	0	5	2
18	BW IWP 19 = E 6254 - Kal 2 72L-41	0	2	7	2	3
19	D Redhead'S' = Pg'S' - Jo'S' x Cr'S' CM 13102-10M-1Y-OM	0	13	0	3	2
20	BW 633 VD VI	0	5	9	1	2
21	Tcl Maya I - Arm'S' X 2148-1N-1M-OY	0	5	0	0	1
22	BW Cgn x Kal - Bb	0	0	4	3	1
23	BW Sakha 7	0	8	1	5	3
24	- National Check (BW)	0	8	4	3	2

Table 3.

REGIONAL WHEAT YIELD TRIAL 1979-1980

ASIA

AFGHANISTAN

SHISHAM-BAGH

MR. ABDEL WASEH KOOCHI

SHISHAM-BAGH RESEARCH STATION

DATE PLANTED NOV/27/79

DATE HARVESTED --/--/--

RAINFALL

IRRIGATION 6times

LATITUDE 34 25'N

LONGITUDE 70 27'E

ELEVATION 552 m

NITROGEN 120 Kg/Ha

PHOSPHORUS 60 Kg/Ha

POTASSIUM 30 Kg/Ha

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
21	Maya I - Arm'S'	9042	126	177	125	0	0	0	3	-	-
1	Mexipak 65	9000	132	172	115	4	5	4	3	-	-
22	Cgn x Kal - Bb	8875	132	175	100	2	0	0	2	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	8817	145	181	100	1	0	0	2	-	-
2	Jup 73 x Y 50E - Kal'3	8533	130	173	120	3	0	0	2	-	-
6	HD 2127	8475	133	170	110	0	0	0	2	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	8346	131	175	130	0	0	0	3	-	-
20	633 VD VI	8333	138	177	110	2	0	0	1	-	-
10	7C x Tob - Cno'S'/Kal	7975	139	181	120	2	0	0	1	-	-
15	Cr'S' - USA - S02229	7958	133	183	100	0	0	1	1	-	-
9	Cr'S' (21563/61-130 X Lds)	7833	138	180	95	3	0	0	0	-	-
12	National Check (Durum)	7783	129	177	120	8	4	1	4	-	-
7	Boyerros'S' = Marte'S' - Stk'S' x Ch - 21563	7750	138	171	105	0	0	2	0	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	7625	141	177	95	1	0	0	2	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	7600	140	180	110	1	0	0	1	-	-
18	IWP 19 = E 6254 - Kal'2	7463	138	177	120	2	0	0	1	-	-
17	Gdo VZ 469 - Cr'S'	7450	147	182	95	0	0	0	2	-	-
8	II 12300-Tob x Cno'S'/SX	7267	139	180	110	1	0	0	0	-	-
24	National Check (BW)	7175	130	170	110	1	0	0	3	-	-
23	Sakha 7	7142	131	172	105	2	0	0	1	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	6967	131	175	100	2	4	2	0	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	6833	148	179	105	1	0	0	2	-	-
4	Pavon'S'	6338	133	177	110	0	2	1	0	-	-
5	Pg'S' x Magh - Gta'S'	6150	139	180	100	2	1	0	0	-	-

GRAND MEAN 7780.4

MAXIMUM 9041.7

MINIMUM 6150.0

COEFFICIENT OF VARIATION AS PC 12.2

LSD VARIETY MEANS 5 PC 1341.3

Table 3 cont.

REGIONAL WHEAT YIELD TRIAL 1979-1980

AFRICA

ALGERIA

KHROUB

GENERAL DIRECTOR OF IGC
KHROUB STATION, CONSTANTINE

DATE PLANTED NOV/27/79

DATE HARVESTED --/--/--

RAINFALL 501.1 mm

IRRIGATION

LATITUDE 36 16'N

LONGITUDE 6 42'E

ELEVATION 640 m

NITROGEN 66 kg/ha

PHOSPHORUS 46 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
6	HD 2127	6600	152	n/a	100	---	---	---	1	-	-
1	Mexipak 65	6583	153	n/a	100	20MR	---	---	1	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	6500	150	n/a	95	---	---	---	4	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	6438	152	n/a	110	---	---	---	4	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	6283	149	n/a	90	---	---	---	2	-	-
4	Pavon'S'	6229	151	n/a	100	---	---	---	4	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	6229	150	n/a	95	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal^3	6167	149	n/a	110	---	---	---	2	-	-
18	IWP 19 = E 6254 - Kal^2	6133	147	n/a	100	---	---	---	-	-	-
9	Cr'S' (21563/61-130 X Lds)	5735	151	n/a	90	---	---	---	4	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	5675	151	n/a	100	---	---	---	1	-	-
7	Boyerros'S' = Marte'S' - Stk'S' x Ch - 21563	5575	152	n/a	95	---	---	---	3	-	-
21	Maya I - Arm'S'	5500	145	n/a	100	---	---	---	-	-	-
20	633 VD VI	5388	146	n/a	90	---	---	---	2	-	-
15	Cr'S' - USA - S02229	5350	152	n/a	80	---	---	30S	4	-	-
12	National Check (Durum)	5246	150	n/a	140	---	---	---	2	-	-
8	II 12300-Tob x Cno'S'/SX	5125	150	n/a	90	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal	5096	151	n/a	90	---	---	---	5	-	-
5	Fg'S' x Magh - Gta'S'	4942	153	n/a	95	---	---	10S	-	-	-
22	Cgn x Kal - Bb	4925	155	n/a	90	---	---	---	4	-	-
11	Bittern'S' = 21563-AA'S' x Fg'S'	4921	151	n/a	90	---	---	---	6	-	-
23	Sakha 7	4871	145	n/a	80	---	---	---	6	-	-
17	Gdo VZ 469 - Cr'S'	4443	152	n/a	95	---	---	---	4	-	-
24	National Check (BW)	3646	155	n/a	120	---	---	---	2	-	-

GRAND MEAN 5625.2

MAXIMUM 6600.0

MINIMUM 3645.8

COEFFICIENT OF VARIATION AS PC 8.5

LSD VARIETY MAENS 5 PC 679.3

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

ASIA

BANGLADESH

ISHURDI

MR. A. RAZZAQUE

PRINCIPAL SCIENTIFIC OFFICER (WHEAT) TEJGAON

DATE PLANTED NOV/19/79

DATE HARVESTED --/--/--

RAINFALL 139 mm

IRRIGATION 370 mm

LATITUDE 24 25' N

LONGITUDE 89 04' E

ELEVATION 8 m

NITROGEN 110 kg/ha

PHOSPHORUS 65 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
2	Jup 73 x Y 50E - Kal ³	4563	64	117	103	---	0	0	-	-	-
4	Pavon'S'	4563	83	118	102	---	0	0	-	-	-
12	National Check (Durum) **	4167	78	113	100	---	0	0	-	-	-
24	National Check (BW) *	4125	62	107	97	---	5-10S	0	-	-	-
10	7C x Tob - Cno'S'/Kal	3958	77	115	90	---	0	0	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	3729	94	121	86	---	0	0	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	3667	97	123	102	---	0	0	-	-	-
8	II 12300-Tob x Cno'S'/SX	3583	76	117	95	---	0	0	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	3458	82	115	94	---	10S	0	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	3417	84	120	92	---	5S	0	-	-	-
20	633 VD VI	3417	76	112	84	---	TMS	0	-	-	-
23	Sakha 7	3375	96	117	90	---	0	0	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	3354	72	112	100	---	TMS	0	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	3929	97	121	90	---	TMS	0	-	-	-
21	Maya I - Arm'S'	3292	67	116	90	---	TMS	0	-	-	-
1	Mexipak 65	3167	63	107	78	---	70S	0	-	-	-
22	Cgn x Kal - Bb	3083	67	111	99	---	0	0	-	-	-
9	Cr'S' (21563/61-130 X Lds)	2917	77	115	81	---	0	0	-	-	-
6	HD 2127	2875	81	117	90	---	0	0	-	-	-
18	IWP 19 = E 6254 - Kal ²	2750	95	109	83	---	0	0	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	2667	97	121	82	---	0	0	-	-	-
17	Gdo VZ 469 - Cr'S'	2625	100	131	94	---	0	0	-	-	-
5	Pg'S' x Magh - Gta'S'	2521	85	120	83	---	0	0	-	-	-
15	Cr'S' - USA - S02229	2458	83	117	68	---	0	0	-	-	-

GRAND MEAN 3375.9

MAXIMUM 4563.0

MINIMUM 2458.0

COEFFICIENT OF VARIATION AS PC 20.7

LSD VARIETY MEANS 5 PC 989.2

* Sonalika

** Jupitaco

Table 3 cont REGIONAL WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

CYPRUS

LAXIA

AGRONOMY STAFF

AGRICULTURAL RESEARCH STATION

DATE PLANTED DEC/5/79

DATE HARVESTED --/--/--

RAINFALL 412 mm

IRRIGATION

LATITUDE 34 4'N

LONGITUDE 33 20'E

ELEVATION 150 m

NITROGEN 74 kg/ha

PHOSPHORUS 45 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
9	Cr'S' (21563/61-130 x Lds)	3263	124	n/a	85	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX	3163	125	n/a	95	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	3117	123	n/a	80	---	---	---	-	-	-
15	Cr'S' - USA - S02229	2994	124	n/a	80	---	---	---	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	2847	129	n/a	85	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal	2825	124	n/a	90	---	---	---	-	-	-
7	Boyeross'S' = Marte'S' - Stk'S' x Ch - 21563	2747	124	n/a	90	---	---	---	-	-	-
12	National Check (Durum) **	2727	121	n/a	85	---	---	---	-	-	-
21	Maya I - Arm'S'	2559	114	n/a	95	---	---	---	-	-	-
6	HD 2127	2525	124	n/a	95	---	---	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	2432	123	n/a	85	---	---	---	-	-	-
5	Pg'S' x Magh - Gta'S'	2399	124	n/a	80	---	---	---	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	2372	123	n/a	85	---	---	---	-	-	-
4	Pavon'S'	2263	124	n/a	80	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal^3	2075	121	n/a	85	---	---	---	-	-	-
1	Mexipak 65	2032	124	n/a	85	---	---	---	-	-	-
18	IWP 19 = E 6254 - Kal^2	1990	120	n/a	90	---	---	---	-	-	-
17	Gdo VZ 469 - Cr'S'	1932	136	n/a	85	---	---	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	1918	126	n/a	80	---	---	---	-	-	-
23	Sakha 7	1891	123	n/a	80	---	---	---	-	-	-
20	633 VD VI	1876	125	n/a	90	---	---	---	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	1651	124	n/a	85	---	---	---	-	-	-
24	National Check (BW) *	1404	114	n/a	80	---	---	---	-	-	-
22	Cgn x Kal - Bb	1294	123	n/a	85	---	---	---	-	-	-

GRAND MEAN 2345.7

MAXIMUM 3263.0

MINIMUM 1294.0

COEFFICIENT OF VARIATION AS PC 21.0

LSD VARIETY MAENS 5 PC 805.9

* Hazero 18

** Arones

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

AFRICA			EGYPT			NUBARIA									
MR.MOUSTAFA ARAB															
NUBARIA RESEARCH STATION															
DATE PLANTED DEC/15/79			DATE HARVESTED --/--/--			RAINFALL			IRRIGATION						
LATITUDE			LONGITUDE			ELEVATION									
NITROGEN 45 kg/ha			PHOSPHORUS 15 kg/ha			POTASSIUM									
VAR NO.	VARIETY/CROSS					YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'					1875	89	n/a	84	---	---	---	-	-	-
7	Boyeross'S' = Marte'S' - Stk'S' x Ch - 21563					1867	95	n/a	78	---	---	---	-	-	-
4	Pavon'S'					1817	92	n/a	108	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal'3					1788	90	n/a	101	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX					1783	96	n/a	98	---	---	---	-	-	-
20	633 VD VI					1775	96	n/a	101	---	---	---	-	-	-
9	Cr'S' (21563/61-130 X Lds)					1708	94	n/a	86	---	---	---	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'					1708	95	n/a	84	---	---	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C					1696	97	n/a	86	---	---	---	-	-	-
12	National Check (Durum)					1688	86	n/a	86	---	---	---	-	-	-
1	Mexipak 65					1658	96	n/a	96	---	---	---	-	-	-
6	HD 2127					1646	94	n/a	88	---	---	---	-	-	-
21	Maya I - Arm'S'					1583	102	n/a	78	---	---	---	-	-	-
22	Cgn x Kal - Bb					1517	88	n/a	85	---	---	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C					1513	97	n/a	82	---	---	---	-	-	-
24	National Check (BW)					1504	106	n/a	84	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal					1475	90	n/a	97	---	---	---	-	-	-
17	Gdo VZ 469 - Cr'S'					1383	106	n/a	84	---	---	---	-	-	-
23	Sakha 7					1350	93	n/a	108	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte					1317	108	n/a	91	---	---	---	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C					1304	99	n/a	86	---	---	---	-	-	-
15	Cr'S' - USA - S02229					1279	108	n/a	95	---	---	---	-	-	-
5	Pg'S' x Magh - Gta'S'					1238	112	n/a	71	---	---	---	-	-	-
18	IWP 19 = E 6254 - Ka.'2					1208	91	n/a	78	---	---	---	-	-	-
GRAND MEAN						1570.0									
MAXIMUM						1875.0									
MINIMUM						1208.3									
COEFFICIENT OF VARIATION AS PC						16.4									
LSD VARIETY MAENS 5 PC						364.1									

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

AFRICA EGYPT SAKHA

MR.M.EL SHAMY
SAKHA AGRICULTURAL RESEARCH STATION

DATE PLANTED DEC/7/79 DATE HARVESTED --/--/-- RAINFALL 105.2 mm IRRIGATION 6 times
LATITUDE 30 45'N LONGITUDE 31 E ELEVATION A.S.L
NITROGEN 170 kg/ha PHOSPHORUS 38 kg/ha POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POND	SEPT TRIT	SCLD
4	Pavon'S'	5658	106	148	105	TR-R	0	0	-	-	-
24	National Check (BW)	5154	109	149	115	0	0	20S	-	-	-
10	7C x Tob - Cno'S'/Kal	5146	109	151	105	0	0	TRS	-	-	-
6	HD 2127	5146	107	147	110	0	10S	0	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	5067	105	149	100	0	10MS	0	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	4958	108	151	105	0	TRS	TR-MS	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	4938	105	143	120	0	0	0	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	4925	109	146	90	0	0	0	-	-	-
2	Jup 73 x Y 50E - Kal'3	4838	101	146	115	0	0	5S	-	-	-
11	Bittern'S' = 21563-AA'S' x Fg'S'	4642	105	148	100	0	TR-MR	0	-	-	-
5	Fg'S' x Magh - Gta'S'	4629	104	149	95	TR-MR	TR-MR	0	-	-	-
20	633 VD VI	4625	105	143	105	0	10MS	TRS	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	4604	108	146	90	0	10MS	0	-	-	-
8	II 12300-Tob x Cno'S'/SX	4550	108	149	105	0	0	5S	-	-	-
18	IWP 19 = E 6254 - Kal'2	4446	101	145	110	0	10S	TR-MR	-	-	-
15	Cr'S' - USA - S02229	4392	104	144	90	0	0	TR-MS	0	0	-
23	Sakha 7	4346	100	140	90	0	0	0	-	-	-
1	Mexipak 65	4313	107	147	115	0	80S	TRS	-	-	-
21	Maya I - Arm'S'	4250	95	142	115	0	10MS	TR-MR	-	-	-
9	Cr'S' (21563/61-130 X Lds)	4150	105	148	90	0	5MS	0	-	-	-
22	Cgn x Kal - Bb	4092	101	147	110	0	0	5S	-	-	-
17	Gdo VZ 469 - Cr'S'	4079	113	150	95	TR-MR	0	0	-	-	-
12	National Check (Durum)	3892	98	146	100	0	20S	0	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	3458	103	146	100	0	10MR	0	-	-	-

GRAND MEAN 4595.7
MAXIMUM 5658.3
MINIMUM 3458.3
COEFFICIENT OF VARIATION AS PC 18.4
LSD VARIETY MEANS 5 PC 1193.2

Table 3 Cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

AFRICA

EGYPT

SHANDAWEL

MR.M.G.MOSAAD

SHANDAWEL RESEACH STATION . SOUHAG

DATE PLANTED NOV/26/79

DATE HARVESTED ---/---/---

RAINFALL

IRRIGATION 5 times

LATITUDE

LONGITUDE

ELEVATION

NITROGEN

70 Kg/ha

PHOSPHORUS

15 Kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	6150	96	142	105	--	--	--	-	-	-
12	National Check (Durum)	5750	95	144	105	--	--	--	-	-	-
1	Mexipak 65	5146	107	150	120	--	--	--	-	-	-
13	(CC - Inia/Tob - Cfn x 8b)7C	5104	112	145	125	--	--	--	-	-	-
5	Fg'S' x Magh - Gta'S'	5025	104	143	100	--	--	--	-	-	-
21	Maya I - Arm'S'	4883	103	142	125	--	--	--	-	-	-
15	Cr'S' - USA - S02229	4875	103	139	95	--	--	--	-	-	-
23	Sakha 7	4842	103	142	100	--	--	--	-	-	-
6	HD 2127	4783	103	143	100	--	--	--	-	-	-
9	Cr'S' (21563/61-130 X Lds)	4783	105	139	95	--	--	--	-	-	-
11	Bittern'S' = 21563-AA'S' x Fg'S'	4683	96	139	95	--	--	--	-	-	-
10	7C x Tob - Cno'S'/Kal	4604	104	142	105	--	--	--	-	-	-
2	Jup 73 x Y 50E - Kal^3	4592	104	146	120	--	--	--	-	-	-
17	Gdo VZ 469 - Cr'S'	4592	102	143	110	--	--	--	-	-	-
22	Cgn x Kal - Bb	4542	97	139	120	--	--	--	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	4400	98	145	95	--	--	--	-	-	-
24	National Check (BW)	4258	97	143	120	--	--	--	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	4221	104	139	95	--	--	--	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	4200	96	142	135	--	--	--	-	-	-
18	IWP 19 = E 6254 - Kal^2	4192	96	142	115	--	--	--	-	-	-
20	633 VD VI	4142	107	143	105	--	--	--	-	-	-
8	II 12300-Tob x Cno'S'/SX	3754	107	145	120	--	--	--	-	-	-
16	VANERN'S' = (No 66-Bb/Cno Nad-Chris 'S')7C	3750	117	145	110	--	--	--	-	-	-
4	Pavon'S'	3708	107	145	105	--	--	--	-	-	-

GRAND MEAN 4624.0

MAXIMUM 6150.0

MINIMUM 3708.0

COEFFICIENT OF VARIATION AS PC 17.0

LSD VARIETY MAENS 5 PC 1112.0

* Sakha 69

** Stork'S'

Table 3 Cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

AFRICA EGYPT SIDS
MR.A.SIFIN ARMANUSE & MR.M.ABDEL ALIM
SIDS RESEARCH STATION . BENI SUEF

VAR NO.	VARIETY/CROSS	DATE PLANTED	NOV/26/79	DATE HARVESTED	--/--/--	RAINFALL	IRRIGATION				
		LATITUDE	29 04'N	LONGITUDE	31 04'E	ELEVATION					
		NITROGEN	175 Kg/ha	PHOSPHORUS	37 Kg/ha	POTASSIUM					
		YIELD	HEAD	MAT	PLNT	YELL	LEAF	STEM	POWD	SEPT	SCLD
		KG/HA	DAYS	DAYS	HT	RUST	RUST	RUST		TRIT	
11	Bittern'S' = 21563-AA'S' x Fg'S'	8033	104	152	110	-	-	-	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	7679	104	149	110	--	-	--	-	-	-
12	National Check (Durum)	7667	95	147	115	-	-	--	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	7629	111	154	105	-	-	-	-	-	-
15	Cr'S' - USA - S02229	7446	102	150	95	-	-	--	-	-	-
17	Gdo VZ 469 - Cr'S'	6838	107	152	110	-	--	-	-	-	-
9	Cr'S' (21563/61-130 x Lds)	6825	103	152	105	-	-	-	-	-	-
6	HD 2127	6767	104	149	120	-	-	--	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	6583	102	149	110	-	-	-	-	-	-
5	Pg'S' x Magh - Gta'S'	6375	107	151	110	-	-	-	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	6288	110	154	125	--	-	-	-	-	-
4	Pavon'S'	6125	107	150	125	-	-	-	-	-	-
20	633 VD VI	6113	109	153	120	-	-	-	-	-	-
21	Maya I - Arm'S'	5908	98	149	135	-	-	-	-	-	-
2	Jup 73 x Y 50E - Kal^3	5850	103	147	125	-	-	-	-	-	-
24	National Check (BW)	5813	100	149	130	--	-	-	-	-	-
22	Cgn x Kal - Bb	5788	107	154	130	-	-	-	-	-	-
10	7C x Tob - Cno'S'/Kal	5671	110	153	120	-	-	-	-	-	-
8	II 12300-Tob x Cno'S'/SX	5646	110	150	130	--	-	-	-	-	-
18	IWP 19 = E 6254 - Kal^2	5267	104	149	125	-	-	-	-	-	-
1	Mexipak 65	5225	109	149	120	-	-	-	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	5179	112	155	110	-	-	-	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	5113	109	152	130	-	-	-	-	-	-
23	Sakha 7	4579	104	148	110	-	--	-	-	-	-

GRAND MEAN 6266.8

MAXIMUM 8033.0

MINIMUM 4579.0

COEFFICIENT OF VARIATION AS PC 10.4

LSD VARIETY MAENS 5 PC 924.9

* Sakha 69

** Stork'S'

Table 3 Cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

EUROPE

GREECE

THESSALONIKI

DR.ELPIS A.SKORDA

CEREAL INSTITUTE , THESSALONIKI

DATE PLANTED NOV/8/79

DATE HARVESTED --/--/--

RAINFALL 405 mm

IRRIGATION

LATITUDE 40 38' N

LONGITUDE 22 57' E

ELEVATION 10 m

NITROGEN 300 Kg/ha

PHOSPHORUS 40 Kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	5769	178	233	108	--	0	--	1	-	-
12	National Check (Durum)	5736	176	229	101	--	0	--	0	-	-
10	7C x Tob - Cno'S'/Kal	5731	173	231	94	--	0	--	0	-	-
4	Pavon'S'	5587	175	230	102	--	0	--	1	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	5587	172	227	111	--	5MS	--	0	-	-
18	IWP 19 = E 6254 - Kal^2	5457	171	226	109	--	0	--	2	-	-
8	II 12300-Tob x Cno'S'/SX	5409	117	234	118	--	5MS	--	2	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	5385	178	230	113	--	0	--	1	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	5288	179	231	99	--	0	--	2	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	5101	180	230	98	--	0	--	1	-	-
1	Mexipak 65	5087	178	230	109	--	0	--	1	-	-
17	Gdo VZ 469 - Cr'S'	4856	178	233	103	--	5MS	--	1	-	-
20	633 VD VI	4692	174	226	104	--	0	--	2	-	-
9	Cr'S' (21563/61-130 x Lds)	4644	174	231	90	--	5MS	--	2	-	-
2	Jup 73 x Y 50E - Kal^3	4635	117	226	109	--	5MS	--	3	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	4620	179	234	102	--	0	--	0	-	-
6	HD 2127	4476	179	234	101	--	0	--	1	-	-
5	Pg'S' x Magh - Gta'S'	4471	178	233	88	--	0	--	0	-	-
22	Cgn x Kal - Bb	4423	173	227	108	--	0	--	1	-	-
24	National Check (BW)	4284	173	229	115	--	0	--	0	-	-
21	Maya I - Arm'S'	4144	161	228	117	--	0	--	1	-	-
23	Sakha 7	4067	166	227	92	--	0	--	1	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	3913	176	229	88	--	30MS	--	1	-	-

GRAND MEAN 4883.0

MAXIMUM 5769.0

MINIMUM 3913.0

COEFFICIENT OF VARIATION AS PC 10.6

LSD VARIETY MAENS 5 PC 729.4

Table 3 Cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

ASIA	IRAN	DARAB
------	------	-------

MR.HOSSEIN AMIN
DARAB STATION , FARS

DATE PLANTED	NOV/21/79
LATITUDE	28 29'N
NITROGEN	120 Kg/ha

DATE HARVESTED --/--/--
LONGITUDE 54 55' E
PHOSPHORUS 60 Kg/ha

RAINFALL	450 mm
ELEVATION	1050 m
POTASSIUM	

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
9	Cr'S' (21563/61-130 X Lds)	8250	127	176	93	0	0	0	-	-	-
7	BoyerOS'S' = Marte'S' - Stk'S' x Ch - 21563	6667	129	176	95	0	0	0	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	6583	129	172	92	0	0	0	-	-	-
4	Pavon'S'	6583	129	172	96	0	0	0	-	-	-
15	Cr'S' - USA - S02229	6250	129	177	95	0	0	0	-	-	-
22	Cgn x Kal - Bb	6000	128	176	96	0	0	0	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	5917	129	178	95	0	0	0	-	-	-
10	7C x Tob - Cno'S'/Kal	5750	128	173	100	0	0	0	-	-	-
23	Sakha 7	5750	129	175	100	0	0	0	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	5667	130	177	94	0	0	0	-	-	-
11	Bittern'S' = 21563-AA'S' x Fg'S'	5583	127	177	97	0	0	0	-	-	-
6	HD 2127	5375	129	174	97	0	0	0	-	-	-
2	Jup 73 x Y 50E - Kal^3	5333	127	174	112	0	0	0	-	-	-
12	National Check (Durum)	5292	129	174	110	0	0	0	-	-	-
20	633 VD VI	5250	126	178	100	0	0	0	-	-	-
21	Maya I - Arm'S'	5250	128	177	97	0	0	0	-	-	-
24	National Check (BW)	5250	12	817	598	0	0	0	-	-	-
18	IWP 19 = E 6254 - Kal^2	5167	128	174	116	0	0	0	-	-	-
5	Fg'S' x Magh - Gta'S'	5000	128	175	100	0	0	0	-	-	-
17	Gdo VZ 469 - Cr'S'	5000	129	179	102	0	0	0	-	-	-
8	II 12300-Tob x Cno'S'/SX	4917	129	176	94	0	0	0	-	-	-
1	Mexipak 65	4833	129	173	94	0	0	0	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	4750	130	173	100	0	0	0	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	4250	127	175	110	0	0	0	-	-	-

GRAND MEAN	5611.1
MAXIMUM	8250.0
MINIMUM	4250.0
COEFFICIENT OF VARIATION AS PC	22.5
LSD VARIETY MAENS 5 PC	1785.6

Table 3 Cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

ASIA IRAN GORGAN

DR. P. IRANI
GORGAN - ARACHI , MOHALLEH

DATE PLANTED	NOV/10/79	DATE HARVESTED	--/--/--	RAINFALL	312.5 mm	IRRIGATION
LATITUDE	36 55'N	LONGITUDE	54 20'E	ELEVATION	120 m	
NITROGEN	90 Kg/ha	PHOSPHORUS	60 Kg/ha	POTASSIUM		

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
21	Maya I - Arm'S'	5600	112	170	101	0	0	0	4	3	-
18	IWP 19 = E 6254 - Kal^2	5250	121	170	100	0	0	0	3	3	-
12	National Check (Durum)	5042	111	170	100	0	0	0	2	5	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	4975	126	170	92	0	0	0	3	3	-
10	7C x Tob - Cno'S'/Kal	4892	123	170	85	0	0	0	5	6	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	4750	126	170	94	0	0	0	3	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	4683	129	170	105	0	0	0	3	5	-
13	(CC - Inia/Tob - Cfn x Bb)7C	4608	126	170	102	0	0	0	4	5	-
24	National Check (BW)	4500	113	170	85	0	0	0	5	3	-
1	Mexipak 65	4492	127	170	100	0	0	0	1	0	-
2	Jup 73 x Y 50E - Kal^3	4425	121	170	86	0	0	0	-	5	-
20	633 VD VI	4417	121	170	90	0	0	0	4	0	-
23	Sakha 7	4333	116	170	70	0	0	0	3	3	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	4108	124	170	88	0	0	0	4	1	-
8	II 12300-Tob x Cno'S'/SX	4083	127	170	95	0	0	0	4	3	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	4083	126	170	80	0	0	0	5	3	-
5	Fg'S' x Magh - Gta'S'	4025	126	170	100	0	0	0	3	4	-
4	Pavon'S'	4008	123	170	90	0	0	--	4	3	-
9	Cr'S' (21563/61-130 x Lds)	3850	122	170	94	0	0	0	3	2	-
17	Gdo VZ 469 - Cr'S'	3850	128	170	80	0	0	0	4	2	-
15	Cr'S' - USA - S02229	3817	129	170	90	0	0	--	3	2	-
7	Boyeross'S' = Marte'S' - Stk'S' x Ch - 21563	3700	126	170	96	0	0	0	5	3	-
22	Cgn x Kal - Bb	3683	129	170	89	0	0	0	5	1	-
6	HD 2127	3350	126	170	92	0	0	0	4	1	-

GRAND MEAN 4355.2

MAXIMUM 5600.0

MINIMUM 3350.0

COEFFICIENT OF VARIATION AS PC 12.4

LSD VARIETY MAENS 5 PC 765.1

Table 3 Cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

EUROPE		ITALY		BARI							
DR.G.T.SCARNIA-MUNGNOZZA											
AZIENDA MARWCCI . VALENZANO BARI											
DATE PLANTED		DEC/12/79		DATE HARVESTED		--/--/--		RAINFALL		590 mm	
LATITUDE		41 7'N		LONGITUDE		4 5'E		ELEVATION		10 m	
NITROGEN		100 Kg/ha		PHOSPHORUS		100 Kg/ha		POTASSIUM			
VAP NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
5	Fg'S' x Magh - Gta'S'	4422	143	n/a	n/a	--	2	--	0	-	-
1	Mexipak 65	4256	145	n/a	n/a	--	4	--	0	-	-
4	Pavon'S'	4250	142	n/a	n/a	--	4	--	0	-	-
7	BoyerOS'S' = Marte'S' - Stk'S' x Ch - 21563	4242	145	n/a	n/a	--	0	--	0	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	4206	140	n/a	n/a	--	0	--	0	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	4094	143	n/a	n/a	--	0	--	0	-	-
10	7C x Tob - Cno'S'/Kal	4061	147	n/a	n/a	--	8	--	0	-	-
6	HD 2127	4044	146	n/a	n/a	--	9	--	0	-	-
9	Cr'S' (21563/61-130 X Lds)	3950	145	n/a	n/a	--	9	--	3	-	-
11	Bittern'S' = 21563-AA'S' x Fg'S'	3883	144	n/a	n/a	--	0	--	2	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	3850	145	n/a	n/a	--	9	--	1	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	3661	144	n/a	n/a	--	0	--	0	-	-
8	II 12300-Tob x Cno'S'/SX	3639	148	n/a	n/a	--	0	--	0	-	-
15	Cr'S' - USA - S02229	3611	143	n/a	n/a	--	9	--	3	-	-
12	National Check (Durum)	3561	139	n/a	n/a	--	0	--	0	-	-
22	Cgn x Kal - Bb	3550	142	n/a	n/a	--	0	--	0	-	-
20	633 VD VI	3500	143	n/a	n/a	--	0	--	0	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	3472	146	n/a	n/a	--	0	--	0	-	-
24	National Check (BW)	3211	144	n/a	n/a	--	0	--	0	-	-
2	Jup 73 x Y 50E - Kal^3	3178	138	n/a	n/a	--	4	--	0	-	-
21	Maya I - Arm'S'	3056	137	n/a	n/a	--	0	--	0	-	-
17	Gdo VZ 469 - Cr'S'	3022	143	n/a	n/a	--	0	--	0	-	-
23	Sakha 7	2928	140	n/a	n/a	--	0	--	0	-	-
18	IWP 19 = E 6254 - Kal^2	2856	142	n/a	n/a	--	0	--	0	-	-

GRAND MEAN 3687.6

MAXIMUM 4422.2

MINIMUM 2855.6

COEFFICIENT OF VARIATION AS PC 11.3

LSD VARIETY MAENS 5 PC 591.3

* Capeite

** Valnova

Table 3 cont.

REGIONAL WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

JORDAN

RABBAH

DR.N.KHATKHUDA

DEPARTMET OF AGRICULTURAL RESEARCH . AMMAN

DATE PLANTED NOV/15/79

DATE HARVESTED --/--/--

RAINFALL 643 mm

IRRIGATION

LATITUDE 35 45'N

LONGITUDE 35 44'E

ELEVATION 970 m

NITROGEN 25 kg/ha

PHOSPHORUS 20 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	2500	133	154	75	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX	2444	133	154	70	---	---	---	-	-	-
24	National Check (BW)	2439	133	154	80	---	---	---	-	-	-
21	Maya I - Arm'S'	2417	133	154	80	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal^3	2378	113	154	65	---	---	---	-	-	-
23	Sakha 7	2361	133	154	65	---	---	---	-	-	-
18	IWP 19 = E 6254 - Kal^2	2350	133	154	75	---	---	---	-	-	-
4	Pavon'S'	2339	133	154	70	---	---	---	-	-	-
11	Bittern'S' = 21563-AA'S' x Fg'S'	2294	133	154	70	---	---	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	2289	133	154	70	---	---	---	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	2283	133	154	75	---	---	---	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	2267	133	154	70	---	---	---	-	-	-
6	HD 2127	2222	133	154	60	---	---	---	-	-	-
9	Cr'S' (21563/61-130 X Lds)	2189	133	154	70	---	---	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	2094	133	154	70	---	---	---	-	-	-
5	Fg'S' x Magh - Gta'S'	2089	133	154	70	---	---	---	-	-	-
1	Mexipak 65	2083	113	154	55	---	---	---	-	-	-
12	National Check (Durum) **	2072	133	154	85	---	---	---	-	-	-
17	Gdo VZ 469 - Cr'S'	2050	133	154	70	---	---	---	-	-	-
20	633 VD VI	2022	133	154	70	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal	2006	133	154	65	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	1972	133	154	65	---	---	---	-	-	-
15	Cr'S' - USA - S02229	1967	133	154	65	---	---	---	-	-	-
22	Cgn x Kal - Bb	1811	133	154	70	---	---	---	-	-	-

GRAND MEAN 2205.8

MAXIMUM 2500.0

MINIMUM 1811.0

COEFFICIENT OF VARIATION AS PC 16.7

LSD VARIETY MAENS 5 PC 520.9

** Deir Alla 2

Table 3 cont.

REGIONAL WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

LEBANON

TERBOL

CEREAL STAFF

ICARDA, RAYAK

DATE PLANTED NOV/28/79

LATITUDE 35 52' N

NITROGEN 100 kg/ha

DATE HARVESTED --/--/--

LONGITUDE 36 E

PHOSPHORUS 60 kg/ha

RAINFALL 825 mm

ELEVATION 900 m

POTASSIUM

IRRIGATION 100 mm , 2 times

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
4	Pavon'S'	6250	158	203	95	---	---	---	-	-	-
15	Cr'S' - USA - S02229	6205	159	210	75	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal^3	6140	156	205	100	---	---	---	-	-	-
12	National Check (Durum)	6015	156	202	85	---	---	---	-	-	-
21	Maya I - Arm'S'	6010	145	209	100	---	---	---	-	-	-
6	HD 2127	5975	156	203	90	---	---	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	5970	158	205	80	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX	5965	159	205	90	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal	5935	158	200	85	---	---	---	-	-	-
9	Cr'S' (21563/61-130 X Lds)	5920	161	209	70	---	---	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	5870	158	205	80	---	---	---	-	-	-
22	Cgn x Kal - Bb	5780	157	205	90	---	---	---	-	-	-
24	National Check (BW)	5700	160	206	90	---	---	---	-	-	-
1	Mexipak 65	5570	159	203	90	---	---	---	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	5515	161	210	80	---	---	---	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	5310	161	211	65	---	---	---	-	-	-
18	IWP 19 = E 6254 - Kal^2	5290	156	171	95	---	---	---	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	5280	165	211	75	---	---	---	-	-	-
5	Pg'S' x Magh - Gta'S'	5260	161	205	80	---	---	---	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	5255	156	202	95	---	---	---	-	-	-
20	633 VD VI	5160	159	207	85	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	5135	159	209	80	---	---	---	-	-	-
23	Sakha 7	4760	152	196	80	---	---	---	-	-	-
17	Gdo VZ 469 - Cr'S'	4490	166	180	75	---	---	---	-	-	-

GRAND MEAN	5615.0
------------	--------

MAXIMUM	6250.0
---------	--------

MINIMUM	4490.0
---------	--------

COEFFICIENT OF VARIATION AS PC 10.3

LSB VARIETY MAENS 5 PC	819.2
------------------------	-------

Table 3 cont.

REGIONAL WHEAT YIELD TRIAL 1979-1980

NORTH AMERICA		MEXICO		CIANO									
DR.S.RAJARAM													
OBREGON SONORA , CIMMYT													
DATE PLANTED		NOV/16/1979	DATE HARVESTED		--/--/--	RAINFALL		IRRIGATION		5 times			
LATITUDE		27 29'N	LONGITUDE		109 57'E	ELEVATION		38.39 m					
NITROGEN		150 kg/ha	PHOSPHORUS		60 kg/ha	POTASSIUM							
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD		
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	6353	88	n/a	75	--	0	--	--	--	--		
15	Cr'S' - USA - S02229	6342	87	n/a	65	--	0	--	--	--	--		
11	Bittern'S' = 21563-AA'S' x Pg'S'	6056	89	n/a	75	--	0	--	--	--	--		
12	National Check (Durum) **	5942	89	n/a	80	--	0	--	--	--	--		
6	HD 2127	5778	92	n/a	80	--	0	--	--	--	--		
9	Cr'S' (21563/61-130 X Lds)	5614	89	n/a	90	--	0	--	--	--	--		
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	5469	91	n/a	80	--	TMS	--	--	--	--		
24	National Check (BW) *	5469	90	n/a	75	--	5MRMS	--	--	--	--		
13	(CC - Inia/Tob - Cfn x Bb)7C	5411	95	n/a	90	--	5MS	--	--	--	--		
2	Jup 73 x Y 50E - Kal'3	5383	89	n/a	90	--	10S	--	--	--	--		
1	Mexipak 65	5339	92	n/a	80	--	50S	--	--	--	--		
21	Maya I - Arm'S'	5239	86	n/a	100	--	TMS	--	--	--	--		
5	Pg'S' x Magh - Gta'S'	5078	89	n/a	85	--	0	--	--	--	--		
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	5056	101	n/a	90	--	5S	--	--	--	--		
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	5039	96	n/a	85	--	TMS	--	--	--	--		
10	7C x Tob - Cno'S'/Kal	4992	93	n/a	70	--	TMS	--	--	--	--		
23	Sakha 7	4911	91	n/a	80	--	40S	--	--	--	--		
22	Cgn x Kal - Bb	4825	88	n/a	90	--	TMS	--	--	--	--		
4	Pavon'S'	4778	93	n/a	95	--	5MS	--	--	--	--		
20	633 VD VI	4750	94	n/a	85	--	5S	--	--	--	--		
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	4667	89	n/a	90	--	TR	--	--	--	--		
8	II 12300-Tob x Cno'S'/SX	4614	95	n/a	80	--	TMS	--	--	--	--		
18	IWP 19 = E 6254 - Kal'2	4589	90	n/a	85	--	0	--	--	--	--		
17	Gdo VZ 469 - Cr'S'	3958	100	n/a	85	--	0	--	--	--	--		
GRAND MEAN		5235.4											
MAXIMUM		6353.0											
MINIMUM		3958.0											
COEFFICIENT OF VARIATION AS PC		6.7											
LSD VARIETY MAENS 5 PC		499.6											

* Nacozari 76

** Yavaros 79

Table 3 cont.

REGIONAL WHEAT YIELD TRIAL 1979-1980

ASIA

NEPAL

BHAIRAHWA

MR.M.L.SAB

BHAIRAHWA AGRICULTURAL FARM

DATE PLANTED NOV/21/1979

DATE HARVESTED --/--/--

RAINFALL 60.4 mm

IRRIGATION

LATITUDE 27 6'N

LONGITUDE 83 4'E

ELEVATION 105.5 m

NITROGEN 60 kg/ha

PHOSPHORUS 40 kg/ha

POTASSIUM 20 kg/ha

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
6	HD 2127	4460	81	117	86	---	0	---	-	-	-
18	IMP 19 = E 6254 - Kal ²	4374	76	109	68	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal	4111	79	115	78	---	0	---	-	-	-
21	Maya I - Arm'S'	4063	73	115	100	---	---	---	-	-	-
1	Mexipak 65	3994	79	115	79	---	508	---	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	3956	79	113	93	---	0	---	-	-	-
2	Jup 73 x Y 50E - Kal ³	3844	76	113	86	---	0	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	3756	90	121	76	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX	3710	87	117	95	---	0	---	-	-	-
24	National Check (BW) *	3706	64	106	86	---	0	---	-	-	-
23	Sakha 7	3619	81	115	74	---	---	---	-	-	-
17	Gdo Vz 469 - Cr'S'	3500	98	n/a	79	---	0	---	-	-	-
12	National Check (Durum) **	3438	66	106	90	---	0	---	-	-	-
22	Ogn x Kal - Bb	3413	76	115	89	---	408	---	-	-	-
4	Pavon'S'	3288	88	121	83	---	0	---	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	3263	84	120	85	---	---	---	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	3200	88	121	71	---	---	---	-	-	-
20	633 VD VI	3150	85	117	86	---	0	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	3100	91	124	87	---	---	---	-	-	-
5	Pg'S' x Magh - Gta'S'	3069	79	117	71	---	---	---	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	3006	95	126	77	---	0	---	-	-	-
9	Cr'S' (21563/61-130 X Lds)	2688	76	115	74	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	2556	79	117	69	---	---	---	-	-	-
15	Cr'S' - USA - 802229	2425	79	113	93	---	0	---	-	-	-

GRAND MEAN 3486.9

MAXIMUM 4460.0

MINIMUM 2425.0

COEFFICIENT OF VARIATION AS PC 11.9

LSD VARIETY MAENS 5 PC 587.9

* NL 88

** RR 21

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

OMAN

WADI QURYAT

DR. MAHMOUD AKHTAR

AGRICULTURAL RESEARCH STATION

DATE PLANTED NOV/10/79

DATE HARVESTED --/--/--

RAINFALL

IRRIGATION

LATITUDE 22 50'N

LONGITUDE 57 10'E

ELEVATION 400 m

NITROGEN 88 kg/ha

PHOSPHORUS

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	2099	n/a	n/a	n/a	--	--	--	-	-	-
8	II 12300-Tob x Cno'S'/SX	2037	n/a	n/a	n/a	--	--	--	-	-	-
10	7C x Tob - Cno'S'/Kal	1914	n/a	n/a	n/a	--	--	--	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	1852	n/a	n/a	n/a	--	--	--	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	1852	n/a	n/a	n/a	--	--	--	-	-	-
23	Sakha 7	1821	n/a	n/a	n/a	--	--	--	-	-	-
24	National Check (BW)	1790	n/a	n/a	n/a	--	--	--	-	-	-
6	HD 2127	1728	n/a	n/a	n/a	--	--	--	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	1574	n/a	n/a	n/a	--	--	--	-	-	-
7	Boyeross'S' = Marte'S' - Stk'S' x Ch - 21563	1543	n/a	n/a	n/a	--	--	--	-	-	-
15	Cr'S' - USA - S02229	1481	n/a	n/a	n/a	--	--	--	-	-	-
2	Jup 73 x Y 50E - Kal'3	1451	n/a	n/a	n/a	--	--	--	-	-	-
12	National Check (Durum)	1296	n/a	n/a	n/a	--	--	--	-	-	-
9	Cr'S' (21563/61-130 X Lds)	1204	n/a	n/a	n/a	--	--	--	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	1204	n/a	n/a	n/a	--	--	--	-	-	-
20	633 VD VI	1204	n/a	n/a	n/a	--	--	--	-	-	-
1	Mexipak 65	1019	n/a	n/a	n/a	--	--	--	-	-	-
4	Pavon'S'	1019	n/a	n/a	n/a	--	--	--	-	-	-
21	Maya I - Arm'S'	1019	n/a	n/a	n/a	--	--	--	-	-	-
5	Pg'S' x Magh - Gta'S'	926	n/a	n/a	n/a	--	--	--	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	895	n/a	n/a	n/a	--	--	--	-	-	-
22	Cgn x Kal - Bb	617	n/a	n/a	n/a	--	--	--	-	-	-
18	IWP 19 = E 6254 - Kal'2	586	n/a	n/a	n/a	--	--	--	-	-	-
17	Gdo VZ 469 - Cr'S'	463	n/a	n/a	n/a	--	--	--	-	-	-
GRAND MEAN		1358.0									
MAXIMUM		2098.8									
MINIMUM		463.0									
COEFFICIENT OF VARIATION AS PC		33.1									
LSD VARIETY MAENS 5 PC		742.7									

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST			SAUDI ARABIA			DIRAB										
DR.H.SAYED																
COLLEGE OF AGRICULTURE EXPERIMENTAL STATION																
DATE PLANTED			DEC/28/79			DATE HARVESTED			--/--/--			RAINFALL		IRRIGATION 80 mm		
LATITUDE			24 42'N			LONGITUDE			46 44'E			ELEVATION		600 m		
NITROGEN			100 kg/ha			PHOSPHORUS			50 kg/ha			POTASSIUM				
VAR NO.	VARIETY/CROSS					YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD	
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'					3533	77	108	73	--	--	--	-	-	-	
14	MESABI'S' = (Wal/CC-8156 x Cno)7C					3508	73	106	80	--	--	--	-	-	-	
5	Pg'S' x Magh - Gta'S'					3383	74	107	73	--	--	--	-	-	-	
7	Boyeross'S' = Marte'S' - Stk'S' x Ch - 21563					3238	75	106	80	--	--	--	-	-	-	
2	Jup 73 x Y 50E - Kal'3					3139	70	105	79	--	--	--	-	-	-	
15	Cr'S' - USA - S02229					3038	72	108	63	--	--	--	-	-	-	
6	HD 2127					3015	76	107	82	--	--	--	-	-	-	
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C					2981	77	108	74	--	--	--	-	-	-	
9	Cr'S' (21563/61-130 X Lds)					2907	75	107	83	--	--	--	-	-	-	
17	Gdo VZ 469 - Cr'S'					2839	84	119	75	--	--	--	-	-	-	
18	IWP 19 = E 6254 - Kal'2					2780	73	106	77	--	--	--	-	-	-	
4	Pavon'S'					2768	75	106	78	--	--	--	-	-	-	
12	National Check (Durum) *					2727	75	104	68	--	--	--	-	-	-	
24	National Check (BW) *					2660	73	101	74	--	--	--	-	-	-	
23	Sakha 7					2616	73	105	67	--	--	--	-	-	-	
11	Bittern'S' = 21563-AA'S' x Pg'S'					2563	76	106	67	--	--	--	-	-	-	
1	Mexipak 65					2478	72	105	77	--	--	--	-	-	-	
20	633 VD VI					2383	73	106	72	--	--	--	-	-	-	
8	II 12300-Tob x Cno'S'/SX					2342	72	105	73	--	--	--	-	-	-	
10	7C x Tob - Cno'S'/Kal					2325	75	107	63	--	--	--	-	-	-	
21	Maya I - Arm'S'					2302	67	106	82	--	--	--	-	-	-	
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte					2300	73	104	84	--	--	--	-	-	-	
22	Cgn x Kal - Bb					2197	71	106	81	--	--	--	-	-	-	
13	(CC - Inia/Tob - Cfn x Bb)7C					2143	76	106	67	--	--	--	-	-	-	
GRAND MEAN						2756.7										
MAXIMUM						3533.0										
MINIMUM						2143.0										
COEFFICIENT OF VARIATION AS PC						24.0										
LSD VARIETY MAENS 5 PC						934.6										

* Jori

** Arz

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

SAUDI ARABIA

DIRAB

DR.H.SAYED

COLLEGE OF AGRICULTURE EXPERIMENTAL STATION

DATE PLANTED DEC/28/79

DATE HARVESTED --/--/--

RAINFALL

IRRIGATION 80 MM

LATITUDE 24 42'N

LONGITUDE 46 44'E

ELEVATION 600 m

NITROGEN 100 kg/ha

PHOSPHORUS 50 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
10	7C x Tob - Cno'S'/Kal	803	70	94	43	--	--	--	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	711	74	106	35	--	--	--	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	648	67	101	52	--	--	--	-	-	-
20	633 VD VI	644	72	100	41	--	--	--	-	-	-
21	Maya I - Arm'S'	644	70	105	44	--	--	--	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	634	73	92	49	--	--	--	-	-	-
2	Jup 73 x Y 50E - Kal^3	626	67	98	40	--	--	--	-	-	-
9	Cr'S' (21563/61-130 x Lds)	623	66	91	49	--	--	--	-	-	-
8	II 12300-Tob x Cno'S'/SX	600	73	104	37	--	--	--	-	-	-
4	Pavon'S'	591	70	101	39	--	--	--	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	590	72	101	44	--	--	--	-	-	-
1	Mexipak 65	587	67	92	48	--	--	--	-	-	-
6	HD 2127	580	69	103	47	--	--	--	-	-	-
12	National Check (Durum) *#	567	70	99	44	--	--	--	-	-	-
17	Gdo VZ 469 - Cr'S'	567	80	102	45	--	--	--	-	-	-
23	Sakha 7	562	68	95	37	--	--	--	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	517	73	105	45	--	--	--	-	-	-
22	Cgn x Kal - Bb	504	69	95	43	--	--	--	-	-	-
7	Boyeross'S' = Marte'S' - Stk'S' x Ch - 21563	502	67	104	45	--	--	--	-	-	-
24	National Check (BW) *#	499	70	100	41	--	--	--	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	487	69	99	43	--	--	--	-	-	-
5	Pg'S' x Magh - Gta'S'	478	70	105	46	--	--	--	-	-	-
18	IWP 19 = E 6254 - Kal^2	436	66	101	52	--	--	--	-	-	-
15	Cr'S' - USA - S02229	358	68	92	42	--	--	--	-	-	-

GRAND MEAN 573.2

MAXIMUM 803.0

MINIMUM 358.0

COEFFICIENT OF VARIATION AS PC 44.4

LSD VARIETY MAENS 5 PC 419.7

* Jori

** Arz

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

EUROPE SPAIN BARCELONA

DR. J. A. MARTIN SANCHEZ
MAHISA, BORJAS BLANCAS, LERIDA

DATE PLANTED	NOV/15/1979	DATE HARVESTED	--/--/--	RAINFALL	161 mm	IRRIGATION
LATITUDE	41 31'N	LONGITUDE	0 49'W	ELEVATION	280 m	
NITROGEN	180 kg/ha	PHOSPHORUS	120 kg/ha	POTASSIUM	120 kg/ha	

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	PWD	SEPT TRIT	SCLD
16	VANERN'S' = (Mo 66-Bb/Cno x Nad-Chris 'S')7C	6342	138	195	96	0	0	--	6	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	6142	135	193	105	0	0	--	7	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	5958	140	193	85	0	0	--	7	-	-
24	National Check (BW)	5917	133	193	100	0	0	--	5	-	-
10	7C x Tob - Cno'S'/Kal	5733	135	193	100	0	0	--	8	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	5642	137	193	97	0	0	--	6	-	-
18	IWP 19 = E 6254 - Kal^2	5608	131	187	102	0	0	--	6	-	-
1	Mexipak 65	5250	138	195	108	0	0	--	7	-	-
4	Pavon'S'	4900	133	187	96	0	0	--	7	-	-
20	633 VD VI	4858	133	193	100	0	0	--	6	-	-
2	Jup 73 x Y 50B - Kal^3	4800	133	193	107	0	0	--	7	-	-
5	Pg'S' x Magh - Gta'S'	4692	135	193	85	0	0	--	7	-	-
6	HD 2127	4675	133	187	96	0	0	--	7	-	-
21	Maya I - Arm'S'	4650	124	187	92	0	0	--	0	-	-
8	II 12300-Tob x Cno'S'/SX	4417	133	193	94	0	0	--	7	-	-
22	Cgn x Kal - Bb	4400	131	193	92	0	0	--	6	-	-
23	Sakha 7	4383	131	187	86	0	0	--	7	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	3833	136	193	80	0	0	--	7	-	-
12	National Check (Durum)	3808	129	193	85	0	0	--	8	-	-
15	Cr'S' - USA - S02229	3675	136	193	80	0	0	--	8	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	3628	135	193	85	0	0	--	7	-	-
7	Boyeron'S' = Marte'S' - Stk' x Ch - 21563	3408	133	187	93	0	0	--	7	-	-
9	Cr'S' (21563/61-130 x Lds)	3233	133	189	90	0	0	--	8	-	-
17	Gdo Vz 469 - Cr'S'	3133	138	187	88	0	0	--	7	-	-

GRAND MEAN 4711.9

MAXIMUM 6342.0

MINIMUM 3133.0

COEFFICIENT OF VARIATION AS PC 19.5

LSD VARIETY MAENS 5 PC 1300.4

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

EUROPE SPAIN EL-EUCIVAR

DR.J.A.MARTIN SANCHEZ
MAHISSA , BORJAS BLANCAS , LERIDA

DATE PLANTED DEC/19/1979 DATE HARVESTED ---/---/--- RAINFALL 161 mm IRRIGATION 500 mm
LATITUDE 38 N LONGITUDE 6 W ELEVATION 200 m
NITROGEN 200 kg/ha PHOSPHORUS 100 kg/ha POTASSIUM 100 kg/ha

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	6650	120	175	97	0	0	---	0	1	-
12	National Check (Durum) **	6292	112	168	104	0	0	---	2	0	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	6258	116	171	98	0	0	---	2	0	-
7	Boyerros'S' = Marte'S' - Stk'S' x Ch - 21563	5908	118	173	110	0	0	---	0	0	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	5858	117	168	104	0	0	---	0	1	-
5	Pg'S' x Magh - Gta'S'	5775	118	171	110	0	0	---	0	2	-
9	Cr'S' (21563/61-130 X Lds)	5767	117	168	98	0	0	---	5	0	-
15	Cr'S' - USA - S02229	5708	117	168	84	0	0	---	1	3	-
21	Maya I - Arm'S'	5200	105	168	106	0	0	---	1	0	-
24	National Check (BW)	5117	117	168	110	0	0	---	3	2	-
10	7C x Tob - Cno'S'/Kal	5108	121	173	98	0	0	---	1	1	-
23	Sakha 7	4800	112	168	98	0	0	---	3	2	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S') 7C	4700	120	171	98	0	0	---	5	1	-
13	(CC - Inia/Tob - Cfn x Bb) 7C	4600	121	173	98	0	0	---	3	1	-
2	Jup 73 x Y 50E - Kal^3	4533	117	171	110	0	0	---	0	1	-
14	MESABI'S' = (Wal/CC-8156 x Cno) 7C	4500	118	173	98	0	0	---	6	0	-
17	Gdo VZ 469 - Cr'S'	4500	120	173	98	0	0	---	0	1	-
1	Mexipak 65	4417	120	173	115	0	0	---	2	2	-
8	II 12300-Tob x Cno'S'/SX	4333	123	175	96	0	0	---	9	0	-
4	Pavon'S'	4292	120	171	110	0	0	---	3	0	-
22	Cgn x Kal - Bb	4233	116	168	98	0	0	---	9	1	-
18	IWP 19 = E 6254 - Kal^2	4200	117	171	105	0	0	---	2	0	-
6	HD 2127	4092	121	171	110	0	0	---	1	0	-
20	633 VD VI	3958	120	171	96	0	1	---	1	0	-

GRAND MEAN 5033.3

MAXIMUM 6650.0

MINIMUM 3958.0

COEFFICIENT OF VARIATION AS PC 13.9

LSD VARIETY MAENS 5 PC 990.2

** Mexicali

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

EUROPE SPAIN SEMILLAS

DR. LUIS SILVELA
SEMILLAS AGRICOLAS ARANJUEZ

DATE PLANTED DEC/20/1979 DATE HARVESTED --/--/-- RAINFALL 300 mm IRRIGATION 120 mm
 LATITUDE 40 N LONGITUDE 3 40'W ELEVATION 490 m
 NITROGEN 180 kg/ha PHOSPHORUS 90 kg/ha POTASSIUM 90 kg/ha

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	PO'D	SEPT TRIT	SCLD
12	National Check (Durum) **	7167	n/a	123	95	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rttz	6785	n/a	129	65	---	---	---	-	-	-
24	National Check (BW) *	6611	n/a	133	110	---	---	---	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	6493	n/a	130	105	---	---	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	6465	n/a	133	100	---	---	---	-	-	-
9	Cr'S' (21563/61-130 x Lds)	6347	n/a	129	90	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal^3	6292	n/a	129	90	---	---	---	-	-	-
6	HD 2127	6229	n/a	137	100	---	---	---	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	5993	n/a	130	105	---	---	---	-	-	-
21	Maya I - Arm'S'	5986	n/a	122	110	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal	5882	n/a	137	80	---	---	---	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	5771	n/a	129	85	---	---	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	5771	n/a	133	95	---	---	---	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	5757	n/a	132	115	---	---	---	-	-	-
5	Pg'S' x Magh - Gta'S'	5708	n/a	130	90	---	---	---	-	-	-
18	IWP 19 = E 6254 - Kal^2	5672	n/a	131	100	---	---	---	-	-	-
15	Cr'S' - USA - 802229	5639	n/a	127	90	---	---	---	-	-	-
20	633 VD VI	5444	n/a	132	100	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX	5069	n/a	138	110	---	---	---	-	-	-
17	Gdo VZ 469 - Cr'S'	4958	n/a	129	100	---	---	---	-	-	-
4	Pavon'S'	4882	n/a	131	100	---	---	---	-	-	-
22	Cgn x Kal - Bb	4681	n/a	127	95	---	---	---	-	-	-
23	Sakha 7	4604	n/a	129	90	---	---	---	-	-	-
1	Mexipak 65	4313	n/a	139	95	---	---	---	-	-	-

GRAND MEAN 5832.4

MAXIMUM 7166.7

MINIMUM 4312.5

COEFFICIENT OF VARIATION AS PC 19.2

LSD VARIETY MAENS 5 PC 1582.4

* Abiaca

** Taso

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

AFRICA

SUDAN

GEZIRA

DR.ABDALLAH.B.ELAHMADI
GEZIRA RESEARCH STATIONDATE PLANTED NOV/30/1979
LATITUDE 14 24'N
NITROGEN 92 kg/haDATE HARVESTED --/--/--
LONGITUDE 33 29'E
PHOSPHORUSRAINFALL 6 times
ELEVATION 411 m
POTASSIUM

IRRIGATION 1000 mm

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	PO nd	SEPT TRIT	SCLD
9	Cr'S' (21563/61-130 X Lds)	1678	53	93	54	---	---	---	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'	1671	61	98	52	---	---	---	-	-	-
15	Cr'S' - USA - S02229	1650	53	93	52	---	---	---	-	-	-
6	HD 2127	1649	60	98	60	---	---	---	-	-	-
21	Maya I - Arm'S'	1572	53	93	65	---	---	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S') 7C	1428	63	101	60	---	---	---	-	-	-
24	National Check (BW) *	1426	55	94	52	---	---	---	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	1425	68	104	62	---	---	---	-	-	-
4	Pavon'S'	1338	60	96	62	---	---	---	-	-	-
5	Pg'S' x Magh - Gta'S'	1333	56	95	50	---	---	---	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	1329	55	98	53	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal ³	1310	53	95	65	---	---	---	-	-	-
20	633 VD VI	1298	56	95	58	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	1106	56	94	56	---	---	---	-	-	-
17	Gdo VZ 469 - Cr'S'	1045	72	108	65	---	---	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb) 7C	1023	63	101	58	---	---	---	-	-	-
22	Cgn x Kal - Bb	917	53	93	60	---	---	---	-	-	-
12	National Check (Durum)	878	53	93	53	---	---	---	-	-	-
23	Sakha 7	869	55	94	56	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX	860	55	94	57	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal	844	53	93	50	---	---	---	-	-	-
1	Mexipak 65	681	53	93	58	---	---	---	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno) 7C	583	53	93	60	---	---	---	-	-	-
18	IWP 19 = E 6254 - Kal ²	563	53	93	55	---	---	---	-	-	-

GRAND MEAN 1186.6

MAXIMUM 1678.0

MINIMUM 563.0

COEFFICIENT OF VARIATION AS PC 23.1

LSD VARIETY MAENS 5 PC 388.4

* Mexicani

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

AFRICA			SUDAN			NEW HALFA									
DR.MOHAMED.S.MOHAMED															
NEW HALFA RESEARCH STATION															
DATE PLANTED			DEC/3/1979			DATE HARVESTED			--/--/--						
LATITUDE			15 8'N			LONGITUDE			35 45'E						
NITROGEN			100 kg/ha			PHOSPHORUS			POTASSIUM						
									RAINFALL						
									ELEVATION 400 m						
									IRRIGATION 800 mm						
VAR NO.	VARIETY/CROSS					YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
13	(CC - Inia/Tob - Cfn x Bb)7C					3942	66	102	n/a	--	--	--	-	-	-
15	Cr'S' - USA - S02229					3883	63	100	n/a	--	--	--	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'					3850	70	104	n/a	--	--	--	-	-	-
9	Cr'S' (21563/61-130 X Lds)					3700	56	98	n/a	--	--	--	-	-	-
6	HD 2127					3658	65	100	n/a	--	--	--	-	-	-
24	National Check (BW) *					3642	58	98	n/a	--	--	--	-	-	-
2	Jup 73 x Y 50E - Kal^3					3542	56	99	n/a	--	--	--	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S') 7C					3475	65	101	n/a	--	--	--	-	-	-
5	Pg'S' x Magh - Gta'S'					3425	64	101	n/a	--	--	--	-	-	-
4	Pavon'S'					3417	63	100	n/a	--	--	--	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563					3300	65	100	n/a	--	--	--	-	-	-
11	Bittern'S' = 21563-AA'S' x Pg'S'					3283	65	101	n/a	--	--	--	-	-	-
8	II 12300-Tob x Cno'S'/SX					3275	64	98	n/a	--	--	--	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte					3150	63	98	n/a	--	--	--	-	-	-
20	633 VD VI					3142	62	99	n/a	--	--	--	-	-	-
1	Mexipak 65					3025	55	93	n/a	--	--	--	-	-	-
10	7C x Tob - Cno'S'/Kal					2924	57	98	n/a	--	--	--	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno) 7C					2775	55	93	n/a	--	--	--	-	-	-
23	Sakha 7					2583	58	93	n/a	--	--	--	-	-	-
17	Gdo V2 469 - Cr'S'					2575	64	103	n/a	--	--	--	-	-	-
12	National Check (Durum) **					2533	52	93	n/a	--	--	--	-	-	-
18	IWP 19 = E 6254 - Kal^2					2408	52	93	n/a	--	--	--	-	-	-
22	Cgn x Kal - Bb					2308	52	97	n/a	--	--	--	-	-	-
21	Maya I - Arm'S'					2300	55	98	n/a	--	--	--	-	-	-
GRAND MEAN						3172.2									
MAXIMUM						3942.0									
MINIMUM						2300.0									
COEFFICIENT OF VARIATION AS PC						10.5									
LSD VARIETY MAENS 5 PC						471.1									

* Mexicani

** Giza 157

REGIONAL WHEAT YIELD TRIAL 1979-1980

TEL HADIA

RAINFALL	424 mm
ELEVATION	292 m
POTASSIUM	

IRRIGATION

DATE PLANTED NOV/28/79
LATITUDE 36 N
NITROGEN 60 kg/ha

DATE HARVESTED --/--/--
LONGITUDE 37 E
PHOSPHORUS 60 kg/ha

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
11	Bittern'S' = 21563-AA'S' x Pg'S'	5918	140	n/a	100	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	5838	142	n/a	105	---	---	---	-	-	-
15	Cr'S' - USA - S02229	5496	142	n/a	95	---	---	---	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	5483	147	n/a	105	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX	5471	143	n/a	110	---	---	---	-	-	-
10	7C x Tob - Cno'S'/Kal	5467	142	n/a	100	---	---	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	5408	144	n/a	110	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal'3	5354	140	n/a	100	---	---	---	-	-	-
4	Pavon'S'	5350	142	n/a	105	---	---	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	5289	145	n/a	95	---	---	---	-	-	-
5	Pg'S' x Magh - Gta'S'	5271	143	n/a	95	---	---	---	-	-	-
12	National Check (Durum)	5200	136	n/a	105	---	---	---	-	-	-
7	Boyeros'S' = Martq'S' - Stk'S' x Ch - 21563	5125	144	n/a	100	---	---	---	-	-	-
17	Gdo VZ 469 - Cr'S'	5112	147	n/a	105	---	---	---	-	-	-
6	BD 2127	4815	143	n/a	100	---	---	---	-	-	-
22	Cgn x Kal - Bb	4636	141	n/a	110	---	---	---	-	-	-
20	633 VD VI	4600	140	n/a	100	---	---	---	-	-	-
9	Cr'S' (21563/61-130 X Lds)	4575	143	n/a	95	---	---	---	-	-	-
1	Mexipak 65	4554	146	n/a	100	---	---	---	-	-	-
23	Sakha 7	4547	135	n/a	105	---	---	---	-	-	-
21	Maya I - Arm'S'	4475	131	n/a	100	---	---	---	-	-	-
18	IWP 19 = E 6254 - Kal'2	4208	142	n/a	110	---	---	---	-	-	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	3896	140	n/a	115	---	---	---	-	-	-
24	National Check (BW)	3867	141	n/a	140	---	---	---	-	-	-

GRAND MEAN 4998.0

MAXIMUM	5918.0
---------	--------

MINIMUM	3867.0
---------	--------

COEFFICIENT OF VARIATION AS PC 11.7

LSB VARIETY MAENS 5 PC	826.3
------------------------	-------

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

SYRIA

TEL HADIA

**CEREAL STAFF (IRRIGATED SET)
ICARDA . ALEPPO**

DATE PLANTED NOV/28/79

DATE HARVESTED --/--/--

RAINFALL 424 mm

IRRIGATION 100 mm

LATITUDE 36 N

LONGITUDE 37 E

ELEVATION 292 m

NITROGEN 80 kg/ha

PHOSPHORUS 60 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
10	7C x Tob - Cno'S'/Kal	4929	149	191	90	---	---	---	-	-	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S')7C	4863	156	192	80	---	---	---	-	-	-
11	Bittern'S' = 21563-AA'S' x Fg'S'	4829	149	192	95	---	---	---	-	-	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	4750	155	184	100	---	---	---	-	-	-
5	Fg'S' x Magh - Gta'S'	4738	149	194	80	---	---	---	-	-	-
20	633 VD VI	4500	155	180	105	---	---	---	-	-	-
1	Mexipak 65	4433	153	190	85	---	---	---	-	-	-
2	Jup 73 x Y 50E - Kal^3	4421	150	187	80	---	---	---	-	-	-
12	National Check (Durum)	4396	143	186	95	---	---	---	-	-	-
9	Cr'S' (21563/61-130 x Lds)	4308	157	192	80	---	---	---	-	-	-
15	Cr'S' - USA - S02229	4275	151	194	120	---	---	---	-	-	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	4271	149	194	100	---	---	---	-	-	-
21	Maya I - Arm'S'	4179	138	192	85	---	---	---	-	-	-
22	Cgn x Kal - Bb	4008	147	186	100	---	---	---	-	-	-
6	HD 2127	3854	153	185	95	---	---	---	-	-	-
7	Boyeros'S' = Marte'S' - Stk'S' x Ch - 21563	3780	155	193	85	---	---	---	-	-	-
13	(CC - Inia/Tob - Cfn x Bb)7C	3733	156	193	95	---	---	---	-	-	-
17	Gdo VZ 469 - Cr'S'	3725	156	192	85	---	---	---	-	-	-
4	Pavon'S'	3717	149	187	90	---	---	---	-	-	-
8	II 12300-Tob x Cno'S'/SX	3667	155	185	80	---	---	---	-	-	-
18	IWP 19 = E 6254 - Kal^	3521	149	186	90	---	---	---	-	-	-
14	MESABI'S' = (Wal/CC-81 5 x Cno)7C	3463	150	186	80	---	---	---	-	-	-
23	Sakha 7	3408	145	192	125	---	---	---	-	-	-
24	National Check (BW)	2928	147	190	130	---	---	---	-	-	-

GRAND MEAN 4112.3

MAXIMUM	4929.0
---------	--------

MINIMUM	2928.0
---------	--------

COEFFICIENT OF VARIATION AS PC	18.7
--------------------------------	------

LSO VARIETY MAENS 5 PC	1087.3
------------------------	--------

Table 3 cont. REGIONAL WHEAT YIELD TRIAL 1979-1980

AFRICA

TUNISIA

BEJA

L'INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE
GENETIQUE DE CEREALES . ARIANADATE PLANTED NOV/29/1979
LATITUDE 36 52'N
NITROGEN 80 kg/haDATE HARVESTED ---/---/---
LONGITUDE 9 13'E
PHOSPHORUS 67.5 kg/haRAINFALL 729 mm
ELEVATION 165 m
POTASSIUM

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
13	(CC - Inia/Tob - Cfn x Bb)7C	8403	136	n/a	110	---	---	---	7	5	-
4	Pavon'S'	7763	132	n/a	110	---	---	---	3	0	-
6	HD 2127	7720	135	n/a	105	---	---	---	3	0	-
24	National Check (BW) .	7625	136	n/a	110	---	---	---	2	2	-
16	VANERN'S' = (No 66-Bb/Cno x Nad-Chris 'S') 7C	7511	137	n/a	105	---	---	---	4	4	-
1	Mexipak 65	7445	136	n/a	110	---	---	---	4	8	-
19	Redhead'S' = Pg'S' - Jo'S' x Cr'S'	7325	137	n/a	100	---	---	---	9	4	-
11	Bittern'S' = 21563-AA'S' x Fg'S'	7164	133	n/a	100	---	---	---	5	3	-
2	Jup 73 x Y 50E - Kal^3	7120	127	n/a	110	---	---	---	3	0	-
10	7C x Tob - Cno'S'/Kal	7005	137	n/a	105	---	---	---	5	3	-
20	633 VD VI	6996	133	n/a	105	---	---	---	0	0	-
7	Boyerros'S' = Marte'S' - Stk'S' x Ch - 21563	6961	129	n/a	100	---	---	---	9	0	-
23	Sakha 7	6414	126	n/a	95	---	---	---	9	3	-
22	Cgn x Kal - Bb	6931	127	n/a	110	---	---	---	2	0	-
14	MESABI'S' = (Wal/CC-8156 x Cno)7C	6929	131	n/a	125	---	---	---	7	5	-
3	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	6925	130	n/a	100	---	---	---	9	5	-
21	Maya I - Arm'S'	6868	119	n/a	110	---	---	---	0	4	-
5	Fg'S' x Magh - Gta'S'	6845	131	n/a	100	---	---	---	5	5	-
18	IWP 19 = E 6254 - Kal^2	6800	130	n/a	115	---	---	---	-	4	-
12	National Check (Durum) ..	6747	124	n/a	85	---	---	---	4	5	-
8	II 12300-Tob x Cno'S'/SX	6484	135	n/a	105	---	---	---	5	4	-
9	Cr'S' (21563/61-130 X Lds)	6352	129	n/a	90	---	---	---	9	6	-
15	Cr'S' - USA - S02229	6145	128	n/a	95	---	---	---	9	4	-
17	Gdo VZ 469 - Cr'S'	6031	142	n/a	105	---	---	---	9	4	-

GRAND MEAN 7170.6

MAXIMUM 8403.0

MINIMUM 6031.0

COEFFICIENT OF VARIATION AS PC 5.7

LSD VARIETY MAENS 5 PC 575.0

* Dougga 74

** Maghrebi 77

Eighth Rainfed Regional Wheat Yield Trial

This trial included 10 bread wheat, 10 durum wheat and two triticale lines which were compared to a national check one each of breadwheat and durum at eighteen locations. The mean varietal yields for breadwheat, durum and triticale ranged from 2776-392, 2730-3191 and 2963-3145 kg/ha respectively over these locations. The average yield of breadwheat and durum checks were 3205 and 3097 kg/ha respectively (Table 4). It seems that the breadwheat lines have a slight edge over durums and triticale.

However at five locations out of eighteen the new breadwheat lines out yielded all the entries where as at seven locations the new durum lines/ varieties were on the top (Table 6). At four sites, i.e Setif-Algeria, Hamman Al Alile-Iraq, Rome-Italy and Terbol-Lebanon , the national bread wheat checks were leading the list which indicates the improvement in the yield level of national checks where as some of the new durum wheat lines were better than the national check varieties at majority of the places except at Setif-Algeria and Irbed-Jordan. Out of the two triticale lines Beagle was on the top with 3333 kg/ha and 1668 kg/ha at Jamalpur-Bangladesh and Aman-Jordan, respectively. In general the durum wheat is performing better in the Middle East as compared to breadwheat and triticale.

Three top yielding breadwheat lines, Lachish line No 1568/2, Bulbul "S" and Tob-8156 kal gave an overall mean yield of 3392, 3358, 3220 kg/ha respectively. These lines also showed wide adaptibility as they were among the first 10 top yielders at more than 50% of the locations. The protein content in those three top most lines ranged from 11.0 to 12.3%.

Among the new durum wheat lines the overall average yield data from all the eighteen locations indicate the better yielding capacity of two lines,i.e

Mexi 5 x Gs"S"-Cr"S"/Ibis"S" and Ato "S" x AA"S" - Plc "S", over that of the national check, with considerable wider adaptability. However some of the new durum wheat lines such as Waha "S", Cit-Fg"S" and Cimmaron-Saribursa-7113 were top yielders at specific locations indicating their high yield potential.

The varietal means for agronomic characters are listed in table 4. The range of number of days to heading in breadwheat was 119-126 days and that for maturity was 164-170 days. The average number of days taken to head and mature by the three top yielding breadwheat lines was 124 and 167 respectively. In the durum lines the ranges in number of days to head and mature were 124-137 and 167-178, respectively. The two top yielding durum lines had the averages of 127 and 171 number of days to head and mature respectively. These data reveal that the durums as a group require slightly longer period of growth as compared to breadwheat.

Diseases

The average coefficient of infection (ACI) for yellow rust in breadwheat lines varied from 0-8, for leaf rust from 1-35, for stem rust from 0-10 and for powdery mildew 2-5. In case of durum wheat lines the ACI for yellow rust was zero, for leaf rust 1-22, stem rust 0-4 and powdery mildew 3-6. The two triticales lines were comparatively resistant to these diseases. Triticale line Inia-Arms had zero infestation for all the diseases except for leaf rust the ACI was one.

The disease data for various diseases indicate fairly high level of resistance in the new lines and some of the lines are showing multiple disease resistance.

Conclusions

The following lines in these trials seem to be promising:

Breadwheat: Lachish line No 1568/2

Bulbul "S" (this line is relatively susceptible to yellow rust)
and Tob-8156 ka1

Durum wheat: Mexi "S" x Gs "S" - Cr"S"/Ibis "S",
Ato "S" x AA "S" - Plc "S" and Fg "S"- Boy "S"

Triticale: Beagle

Table 4. EIGHTH RAINFED REGIONAL WHEAT YIELD TRIAL 1979-1980

OVERALL PERFORMANCE OF VARIETIES (18 LOCATIONS)

ENTRY NO	VARIETY/CROSS PEDIGREES	YIELD Kg/Ha	RANK	PR*	DAYS TO HEAD	DAYS TO MATURE	PLANT HEIGHT (cm)	PROTEIN %	Wt 1000 kernels
1	BW Mexipak 65	3143	8	13	126	169	87	n/a	n/a
2	BW Kal-Bb 26992-30M-300Y-300M-501Y-501M-OY	2908	18	5	121	168	91	13.3	35.34
3	D Timgad 73 = D-2 = Cocorit 'S' D 27617-21M-300Y-OB	2865	20	6	132	176	94	9.8	48.42
4	BW UP 114	3018	13	8	123	168	96	11.8	43.18
5	D Cimarron - Sari Bursa - 7113 YE-1134-6E-OE	2759	23	5	137	178	77	9.3	45.14
6	BW Lachish Line No 1568/2	3392	1	11	124	170	89	12.3	44.10
7	D Fg'S' - Boy'S' CM 17147-7M-10Y	3093	10	8	128	171	84	10.6	49.34
8	BW Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp PK 2858-7A-3A-3A-OA	3358	2	14	124	166	91	12.1	34.68
9	D Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte CM 17904-B-3M-1Y-1Y-OSK	3084	11	8	126	170	85	n/a	n/a
10	BW IWP 501	2892	19	5	120	168	89	n/a	n/a
11	D Ato'S' x AA'S' - Plc'S' CD 1859-16-500B-OSK	3147	6	7	128	171	86	10.0	45.71
12	D National Check (Durum)	3097	9	7	124	167	89	n/a	n/a
13	D Mexi'S' x Gs'S' - Cr'S'/Ibis'S' CD 4505-G-3Y-5M-OY	3191	5	8	126	170	89	11.6	46.31
14	BW Moncho'S' CM 8288-A-3M-1Y-13M-OY	2983	15	8	126	169	92	11.5	35.43
15	D F 9-3	2730	24	5	132	180	109	13.8	51.03
16	BW Tob-8156 Kal CM 8783-OL-5L-3L-2L-OKE-OSK-OAP	3220	3	9	124	167	87	11.0	36.57
17	D Oviachi - Amarelejo	2846	21	7	131	170	87	11.1	50.20
18	BW 678 VD VIII	3013	14	6	119	164	85	11.4	30.07
19	D Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71 CM 18004-B-6M-1Y-2Y-OY	2974	16	2	124	169	90	10.4	45.21
20	BW (Cno-7C x CC-Tob/Cno'S' - No 66) Kal CM 11377-A-1Y-7M-1Y-OM	2776	22	4	123	165	92	13.6	38.85
21	D Cit'S' - Fg'S' CD 3568-5Y-1M-OY	3033	12	9	130	172	83	11.2	47.81
22	Tcl Inia - Arm'S' x 1648-5M-2M-OY-2B-OY	2963	17	6	115	163	92	n/a	n/a
23	Tcl Beagle	3145	7	8	119	169	119	n/a	n/a
24	- National check (BW)	3205	4	12	122	165	97	n/a	n/a

Table 5. Diseases For The RFWYT

Entry No	Variety / Cross Pedigree	YR 5Loc	A.C.I.		PM 4Loc
			LR 8Loc	SR 5Loc	
1	BW Mxipack 65	3	35	10	2
2	BW Kal-Bb 26992-30M-300Y-300M-501Y-501M-OY	0	1	0	5
3	D Timgad 73 = D-2 = Cocorit 'S' D 27617-21M-300Y-OB	0	1	0	4
4	BW UP 114	5	10	0	2
5	D Cimarron - Sari Bursa - 7113 YE-1134-6E-OE	0	22	3	4
6	BW Lachish Line No 1568/2	3	13	5	5
7	D Fg'S' - Bo S CM 17147-7M-10Y	0	6	2	6
8	BW Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp PK 2858-7A-3A-3A-OA	8	8	6	4
9	D Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rette CM 17904-B-3M-1Y-1Y-OSK	0	5	0	4
10	BW IWP 501	0	3	10	3
11	D Ato'S' x AA'S' - Plc'S' CD 1859-16-500B-OSK	0	8	0	4
12	D National Check (Durum)	0	4	0	3
13	D Mexi'S' x Gs'S' - Cr'S'/Ibis'S' CD 4505-G-3Y-5M-OY	0	12	0	5
14	BW Moncho'S' CM 8288-A-3M-1Y-1.3M-oY	0	5	3	4
15	D F 9-3	0	6	4	4
16	BW Tob-8156 Kal CM 8783-OL-5L-3L-2L-OKE-OSK-OAP	3	8	2	3
17	D Oviachi -, Amarelejo	0	4	0	5
18	BW 678 VD VIII	0	4	0	5
19	D Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71 CM 18004-B-6M-1Y-2Y-OY	0	7	0	3
20	BW (Cno-7C x CC-Tob/Cno'S' - Nq 66)Kal CM 11377-A-1Y-7M-1Y-OM	0	16	0	4
21	D Cit'S' - Fg'S' CD 3568-5Y-1M-OY	0	7	3	5
22	Tcl Inia - Arm'S' X 1648-5N-2M-OY-2B-OY	0	1	0	0
23	Tcl Beagle	0	5	5	0
24	- National check (BW)	0	13	3	3

Table 6.

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

AFRICA		ALGERIA		SETIF									
DIRECTOR IGC													
SETIF STATION													
DATE PLANTED		NOV/28/1979	DATE HARVESTED		---/---/---	RAINFALL		430 mm	IRRIGATION				
LATITUDE		36 9'N	LONGITUDE		5 31'E	ELEVATION		1000 m					
NITROGEN		100 kg/ha	PHOSPHORUS		100 kg/ha	POTASSIUM							
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD		
24	National check (BW) *	2467	137	n/a	61	---	---	---	-	-	-		
12	National Check (Durum) ..	2025	137	n/a	50	---	---	---	-	-	-		
23	Beagle	1067	134	n/a	72	---	---	---	-	-	-		
15	F 9-3	1000	137	n/a	73	---	---	---	-	-	-		
22	Inia - Arm'S'	917	134	n/a	64	---	---	---	-	-	-		
17	Oviachi - Amarelejo	908	137	n/a	54	---	---	---	-	-	-		
8	Bulbul'S' = (Pi-Prond x Pi-Mazoe) Mexp	842	140	n/a	42	---	---	---	-	-	-		
10	IWP 501	817	140	n/a	44	---	---	---	-	-	-		
16	Tob-8156 Kal	808	158	n/a	52	---	---	---	-	-	-		
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	800	137	n/a	55	---	---	---	-	-	-		
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	733	138	n/a	63	---	---	---	-	-	-		
2	Kal-Bb	729	138	n/a	46	---	---	---	-	-	-		
7	Fg'S' - Boy'S'	675	138	n/a	53	---	---	---	-	-	-		
11	Ato'S' x AA'S' - Plc'S'	650	140	n/a	58	---	---	---	-	-	-		
1	Mexipak 65	600	141	n/a	48	---	---	---	-	-	-		
20	(Cno-7C x CC-Tob/Cno'S' - No 66)Kal	600	137	n/a	44	---	---	---	-	-	-		
5	Cimarron - Sari Bursa - 7113	592	138	n/a	43	---	---	---	-	-	-		
3	Timgad 73 = D-2 = Cocorit 'S'	575	137	n/a	68	---	---	---	-	-	-		
21	Cit'S' - Fg'S'	567	137	n/a	61	---	---	---	-	-	-		
4	UP 114	558	137	n/a	37	---	---	---	-	-	-		
14	Moncho'S'	558	137	n/a	43	---	---	---	-	-	-		
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	467	137	n/a	56	---	---	---	-	-	-		
6	Lachish Line No 1568/2	450	137	n/a	51	---	---	---	-	-	-		
18	678 VD VIII	408	138	n/a	44	---	---	---	-	-	-		
GRAND MEAN		825.5											
MAXIMUM		2466.7											
MINIMUM		408.3											
COEFFICIENT OF VARIATION AS PC		27.1											
LSD VARIETY MAENS 5 PC		315.9											

* Maron Semias

* B.B.B

Table 6 cont.

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

ASIA

BANGLADESH

JAMALPUR

MR.N.K.SABA

BANGLADESH AGRICULTURAL RESEARCH INSTITUTE

DATE PLANTED NOV/13/1979

DATE HARVESTED --/--/--

RAINFALL 39 mm

IRRIGATION

LATITUDE 24 56'N

LONGITUDE 89 55'E

ELEVATION 8 m

NITROGEN 110 kg/ha

PHOSPHORUS 65 kg/ha

POTASSIUM 45 kg/ha

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
23	Beagle	3333	74	129	126	--	0	0	-	-	-
8	Bulbul'S' = (Pi-Prond x Pi-Mazoe) Mexp	2950	64	121	98	--	TR	0	-	-	-
16	Tob-8156 Kal	2767	61	121	86	--	30S	0	-	-	-
6	Lachish Line No 1568/2	2667	74	124	93	--	TR	0	-	-	-
2	Kal-Bb	2600	58	121	92	--	0	0	-	-	-
24	National check (BW)	2600	53	114	95	--	10S	0	-	-	-
1	Mexipak 65	2550	62	124	84	--	30S	0	-	-	-
22	Inia - Arm'S'	2467	67	121	98	--	0	0	-	-	-
4	UP 114	2450	79	129	111	--	0	0	-	-	-
18	678 VD VIII	2367	62	121	88	--	0	0	-	-	-
21	Cit'S' - Pg'S'	2317	99	139	88	--	0	0	-	-	-
11	Ato'S' x AA'S' - Plc'S'	2183	78	124	92	--	0	0	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	2183	62	124	98	--	5MS	0	-	-	-
14	Moncho'S'	2150	91	134	109	--	TR	0	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	2150	79	129	90	--	0	0	-	-	-
12	National Check (Durum) ..	1600	83	134	79	--	0	0	-	-	-
10	IWP 501	1450	58	121	96	--	0	0	-	-	-
7	Pg'S' - Boy'S'	1433	87	134	83	--	0	0	-	-	-
13	Mexi'S' x Ga'S' - Cr'S'/Ibis'S'	1417	88	139	105	--	0	0	-	-	-
3	Timgad 73 = D-2 = Cocorit'S'	1400	105	139	94	--	0	0	-	-	-
17	Oviachi - Amarelejo	1350	104	134	96	--	0	0	-	-	-
15	F 9-3	1300	103	139	113	--	0	0	-	-	-
5	Cimarron - Sari Bursa - 7113	1233	107	139	82	--	0	0	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	1133	78	129	88	--	0	0	-	-	-
	GRAND MEAN	2085.4									
	MAXIMUM	3333.0									
	MINIMUM	1133.0									
	COEFFICIENT OF VARIATION AS PC	30.9									
	LSD VARIETY MAENS 5 PC	912.0									

* Sonalika

** Cocorit

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

CYPRUS

LAXIA

STAFF OF AGRONOMY

AGRICULTURAL RESEARCH INSTITUTE

DATE PLANTED DEC/5/1979

DATE HARVESTED --/--/--

RAINFALL 412 mm

IRRIGATION

LATITUDE 34 4'N

LONGITUDE 33 2'E

ELEVATION 150 m

NITROGEN 74 kg/ha

PHOSPHORUS 45 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
17	Oviachi - Amarelejo	4344	126	n/a	95	---	---	---	-	-	-
12	National Check (Durum) **	3884	121	n/a	90	---	---	---	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis S	3808	123	n/a	90	---	---	---	-	-	-
5	Cimarron - Sari Bursa - 7113	3690	135	n/a	80	---	---	---	-	-	-
7	Fg'S' - Boy'S'	3653	124	n/a	85	---	---	---	-	-	-
9	Waha'S' = Rlc'S' - Ruff'S' x Gta'S' - Rtte	3416	124	n/a	85	---	---	---	-	-	-
23	Beagle	3311	117	n/a	120	---	---	---	-	-	-
11	Ato'S' x AA'S' - Plc'S'	3255	124	n/a	90	---	---	---	-	-	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	3220	120	n/a	95	---	---	---	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	3174	103	n/a	105	---	---	---	-	-	-
21	Cit'S' - Fg'S'	3106	134	n/a	90	---	---	---	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	3053	122	n/a	95	---	---	---	-	-	-
6	Lachish Line No 1568/2	2797	122	n/a	95	---	---	---	-	-	-
16	Tob-8156 Kal	2758	123	n/a	90	---	---	---	-	-	-
4	UP 114	2741	120	n/a	95	---	---	---	-	-	-
15	F 9-3	2691	134	n/a	115	---	---	---	-	-	-
22	Inia - Arm'S'	2684	117	n/a	85	---	---	---	-	-	-
1	Mexipak 65	2581	125	n/a	85	---	---	---	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	2490	124	n/a	95	---	---	---	-	-	-
2	Kal-Bb	2471	118	n/a	95	---	---	---	-	-	-
14	Moncho'S'	2471	128	n/a	95	---	---	---	-	-	-
10	IWP 501	2397	117	n/a	90	---	---	---	-	-	-
18	678 VD VIII	2354	120	n/a	90	---	---	---	-	-	-
24	National check (BW) *	1726	115	n/a	85	---	---	---	-	-	-

GRAND MEAN 3003.2

MAXIMUM 4344.0

MINIMUM 1726.0

COEFFICIENT OF VARIATION AS PC 21.4

LSD VARIETY MAENS 5 PC 1060.7

* Hazero

** Aronas

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

AFRICA

EGYPT

SABAHIEA

MR. MOHAMMED ABDEL HALIM HASSANEIN

SABAHIEA STATION , EXPERIMENT STATION , ALEXANDRIA

DATE PLANTED DEC/8/1979

DATE HARVESTED --/--/--

RAINFALL

IRRIGATION

LATITUDE 31 13'N

LONGITUDE 29 55'E

ELEVATION

NITROGEN 45 uni/acer

PHOSPHORUS 0

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
10	IWP 501	3750	120	156	95	--	--	--	-	-	-
15	F 9-3	3542	96	124	95	--	--	--	-	-	-
17	Oviachi - Amarelejo	3542	94	114	85	--	--	--	-	-	-
21	Cit'S' - Fg'S'	3500	112	144	65	--	--	--	-	-	-
8	Bulbul'S' = (Pi-Prond x Pi-Mazoe) Mexp	3458	125	150	100	--	--	--	-	-	-
6	Lachish Line No 1568/2	3333	127	158	90	--	--	--	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	3333	98	128	90	--	--	--	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	3292	106	139	90	--	--	--	-	-	-
7	Fg'S' - Boy'S'	3250	121	152	85	--	--	--	-	-	-
18	678 VD VIII	2917	98	128	90	--	--	--	-	-	-
16	Tob-8156 Kal	2583	106	140	100	--	--	--	-	-	-
11	Ato'S' x AA'S' - Plc'S'	2542	126	160	95	--	--	--	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	2500	130	158	70	--	--	--	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	2500	102	134	100	--	--	--	-	-	-
2	Kal-Bb	2375	121	151	85	--	--	--	-	-	-
4	UP 114	2208	128	159	100	--	--	--	-	-	-
23	Beagle	2133	116	151	125	--	--	--	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	2083	128	160	90	--	--	--	-	-	-
22	Inia - Arm'S'	1875	80	114	100	--	--	--	-	-	-
14	Moncho'S'	1750	101	137	95	--	--	--	-	-	-
24	National check (BW) .	1625	98	130	100	--	--	--	-	-	-
5	Cimarron - Sari Bursa - 7113	1333	144	178	45	--	--	--	-	-	-
12	National Check (Durum) ..	1333	94	128	90	--	--	--	-	-	-
1	Mexipak 65	767	128	160	85	--	--	--	-	-	-

GRAND MEAN 2563.5

MAXIMUM 3750.0

MINIMUM 766.7

COEFFICIENT OF VARIATION AS PC 17.0

LSD VARIETY MAENS 5 PC 617.6

* Sakha 79

** St ork

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

AFRICA

EGYPT

SAKHA

MR.M.N.HAMDY

SAKHA AGRICULTURAL RESEARCH STATION

DATE PLANTED DEC/7/1979

DATE HARVESTED --/--/--

RAINFALL 105.2 mm

IRRIGATION 6 times

LATITUDE 30 45' N

LONGITUDE 31 E

ELEVATION a.s.level

NITROGEN 170 kg/ha

PHOSPHORUS 38 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAP RUST	STEM RUST	POWD	SEPT TRIT	SCLD
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	4700	104	142	105	0	10MS	TRMR	-	-	-
7	Fg'S' - Boy'S'	4492	106	143	100	0	TRS	SS	-	-	-
10	IWP 501	4242	96	143	115	0	0	TRS	-	-	-
11	Ato'S' x AA'S' - Plc'S'	4233	106	147	105	0	20S	0	-	-	-
12	National Check (Durum)	4171	96	142	110	0	10S	0	-	-	-
14	Moncho'S'	4163	108	146	100	0	TRMR	TRS	-	-	-
22	Inia - Arm'S'	4100	98	141	105	0	TR	0	-	-	-
24	National check (BW)	4083	109	148	105	0	0	10S	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	3979	104	144	100	0	5MS	0	-	-	-
8	Bulbul'S' = (Pi-Prond x Pi-Mazoe) Mexp	3950	104	139	115	0	30S	SS	-	-	-
2	Kal-Bb	3792	102	139	110	0	0	0	-	-	-
6	Lachish Line No 1568/2	3754	101	140	105	0	20S	SS	-	-	-
5	Cimarron - Sari Bursa - 7113	3646	115	152	80	0	60S	TRS	-	-	-
17	Oviachi - Amarelejo	3592	111	147	85	0	TRMS	TRMR	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	3575	103	137	110	0	TRMR	TR	-	-	-
15	F 9-3	3492	112	147	120	0	10MS	SS	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	3492	115	151	95	0	TRMR	TRS	-	-	-
18	678 VD VIII	3383	100	137	95	0	10MS	0	-	-	-
16	Tob-8156 Kal	3354	104	138	100	0	TR	TRS	-	-	-
1	Mexipak 65	3333	106	144	105	0	60S	0	-	-	-
21	Cit'S' - Fg'S'	3292	111	146	90	0	5S	--	-	-	-
23	Beagle	3183	99	143	140	--	10S	0	-	-	-
4	UP 114	3158	101	139	110	10S	10S	0	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66)Kal	2713	105	142	100	0	20S	TR	-	-	-

GRAND MEAN 3744.6

MAXIMUM 4700.0

MINIMUM 2712.5

COEFFICIENT OF VARIATION AS PC 20.0

LSD VARIETY MAENS 5 PC 1058.1

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

EUROPE

GREECE

THESSALONIKI

DR.ELPIS.A.SKORDA

CEREAL INSTITUTE , THESSALONIKI

DATE PLANTED NOV/8/1979

DATE HARVESTED ---/---/---

RAINFALL 405 mm

IRRIGATION

LATITUDE 40 38'N

LONGITUDE 22 57'E

ELEVATION 10 m

NITROGEN 120 kg/ha

PHOSPHORUS 40 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
6	Lachish Line No 1568/2	5851	169	227	101	---	5MS	---	9	-	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	5817	173	228	102	---	5MS	---	3	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	5798	179	231	110	---	---	---	3	-	-
14	Moncho'S'	5764	173	229	139	---	0	---	2	-	-
16	Tob-8156 Kal	5750	173	227	100	---	0	---	3	-	-
18	678 VD VIII	5712	167	227	114	---	0	---	5	-	-
1	Mexipak 65	5514	174	226	113	---	20MS	---	3	-	-
15	P 9-3	5274	180	232	108	---	10MS	---	2	-	-
21	Cit'S' - Fg'S'	5264	179	230	105	---	5MS	---	3	-	-
7	Fg'S' - Boy'S'	5245	180	230	113	---	5MS	---	3	-	-
4	UP 114	5240	169	229	93	---	0	---	1	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	5188	178	229	114	---	0	---	4	-	-
24	National check (BW)	5188	177	230	103	---	10MS	---	3	-	-
12	National Check (Durum)	5173	172	226	103	---	10MS	---	3	-	-
22	Inia - Arm'S'	5120	160	227	108	---	0	---	0	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	5072	174	228	118	---	10MS	---	3	-	-
2	Kal-Bb	4947	169	227	110	---	0	---	3	-	-
5	Cimarron - Sari Bursa - 7113	4942	181	230	110	---	40MS	---	1	-	-
23	Beagle	4899	163	229	130	---	0	---	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66)Kal	4731	176	228	116	---	0	---	2	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	4510	183	231	120	---	5MS	---	1	-	-
11	Ato'S' x AA'S' - Plc'S'	4510	179	230	113	---	0	---	1	-	-
17	Oviachi - Amarelejo	4245	180	231	106	---	20MS	---	5	-	-
10	IWP 501	3503	169	228	103	---	0	---	-	-	-

GRAND MEAN 5148.2

MAXIMUM 5851.0

MINIMUM 3503.0

COEFFICIENT OF VARIATION AS PC 10.2

LSD VARIETY MEANS 5 PC 739.2

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

IRAQ

HAMMAM AL ALILE

DR. ADNAN H. ADARY

COLLEGE OF AGRICULTURE AND FORESTRY

DATE PLANTED DEC/16/1979

DATE HARVESTED --/--/--

RAINFALL 442 mm

IRRIGATION

LATITUDE 36 91' N

LONGITUDE 43 16' E

ELEVATION 320 m

NITROGEN 40 kg/ha

PHOSPHORUS 40 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
24	National check (BW)	1388	127	158	110	0	0	0	-	-	-
1	Mexipak 65	1375	129	160	75	0	3	0	-	-	-
11	Ato'S' x AA'S' - Plc'S'	1354	133	169	74	0	0	0	-	-	-
16	Tob-8156 Kal	1354	124	159	78	0	0	0	-	-	-
21	Cit'S' - Fg'S'	1354	129	169	80	0	0	0	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	1246	127	163	75	0	0	0	-	-	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	1175	126	163	85	0	0	0	-	-	-
15	F 9-3	1154	131	171	108	0	0	0	-	-	-
14	Moncho'S'	1133	127	161	85	0	0	0	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	1108	132	169	85	0	0	0	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	1100	127	171	82	0	1	0	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	1092	125	163	85	0	4	0	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	1071	127	169	82	0	7	0	-	-	-
17	Oviachi - Amarelejo	983	131	171	75	0	0	0	-	-	-
7	Fg'S' - Boy'S'	975	131	169	73	0	0	0	-	-	-
4	UP 114	938	122	161	90	0	0	0	-	-	-
6	Lachish Line No 1568/2	933	126	163	85	0	1	0	-	-	-
2	Kal-Bb	929	123	161	80	0	0	0	-	-	-
18	678 VD VIII	870	121	153	78	0	1	0	-	-	-
23	Beagle	854	117	166	102	0	0	0	-	-	-
22	Inia - Arm'S'	850	117	165	83	0	0	0	-	-	-
5	Cimarron - Sari Bursa - 7113	831	132	169	74	0	0	0	-	-	-
10	IWP 501	692	123	166	80	0	0	0	-	-	-
12	National Check (Durum)	375	140	169	100	0	0	0	-	-	-

GRAND MEAN 1047.0

MAXIMUM 1388.0

MINIMUM 375.0

COEFFICIENT OF VARIATION AS PC 33.8

LSD VARIETY MAENS 5 PC 501.0

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

EUROPE

ITALY

ROME

DR.G.ZITELLI

ISTITUTO SPERIMENTAL PER LA CEREALICULTURA

DATE PLANTED NOV/30/1979

DATE HARVESTED ---/---/---

RAINFALL

IRRIGATION

LATITUDE 41 53'N

LONGITUDE 12 30'E

ELEVATION 162 m

NITROGEN

PHOSPHORUS

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
21	Cit'S' - Pg'S'	4708	165	212	n/a	---	---	---	-	-	-
24	National check (BW)	4542	161	209	n/a	---	---	---	-	-	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	4417	160	209	n/a	---	---	---	-	-	-
6	Lachish Line No 1568/2	4333	160	210	n/a	---	---	---	-	-	-
23	Beagle	4333	158	208	n/a	---	---	---	-	-	-
18	678 VD VIII	4208	160	210	n/a	---	---	---	-	-	-
15	P 9-3	4208	160	215	n/a	---	---	---	-	-	-
1	Mexipak 65	4000	164	215	n/a	---	---	---	-	-	-
17	Oviachi - Amarelejo	3917	166	213	n/a	---	---	---	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	3909	162	210	n/a	---	---	---	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	3875	160	210	n/a	---	---	---	-	-	-
11	Ato'S' x AA'S' - Plc'S'	3792	161	210	n/a	---	---	---	-	-	-
22	Inia - Arm'S'	3792	158	208	n/a	---	---	---	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	3708	160	209	n/a	---	---	---	-	-	-
12	National Check (Durum) **	3667	160	210	n/a	---	---	---	-	-	-
14	Moncho'S'	3625	160	210	n/a	---	---	---	-	-	-
4	UP 114	3583	159	210	n/a	---	---	---	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	3458	160	210	n/a	---	---	---	-	-	-
7	Pg'S' - Boy'S'	3375	161	208	n/a	---	---	---	-	-	-
10	IWP 501	3333	159	215	n/a	---	---	---	-	-	-
5	Cimarron - Sari Bursa - 7113	3208	165	212	n/a	---	---	---	-	-	-
2	Kal-Bb	2875	160	213	n/a	---	---	---	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	2875	164	216	n/a	---	---	---	-	-	-
16	Tob-8156 Kal	2792	161	212	n/a	---	---	---	-	-	-

GRAND MEAN 3812.0

MAXIMUM 4708.3

MINIMUM 2791.7

COEFFICIENT OF VARIATION AS PC 24.6

LSD VARIETY MAENS 5 PC 1325.0

* Adria

** Valenando

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

JORDAN

AMMAN

MR.M.DUWAYRI
UNIVERSITY OF JORDAN

DATE PLANTED --/--/--
LATITUDE 31 57'N
NITROGEN

DATE HARVESTED --/--/--
LONGITUDE 35 56'E
PHOSPHORUS

RAINFALL
ELEVATION
POTASSIUM

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
23	Beagle	1668	n/a	n/a	n/a	---	---	---	---	---	---
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	1503	n/a	n/a	n/a	---	---	---	---	---	---
22	Inia - Arm'S'	1357	n/a	n/a	n/a	---	---	---	---	---	---
10	IWP 501	1277	n/a	n/a	n/a	---	---	---	---	---	---
16	Tob-8156 Kal	1212	n/a	n/a	n/a	---	---	---	---	---	---
24	Kal-B5	1136	n/a	n/a	n/a	---	---	---	---	---	---
24	National Check (BW)	1013	n/a	n/a	n/a	---	---	---	---	---	---
17	Oviachi - Amarelejo	1008	n/a	n/a	n/a	---	---	---	---	---	---
14	UP 114	994	n/a	n/a	n/a	---	---	---	---	---	---
14	Moncho'S'	970	n/a	n/a	n/a	---	---	---	---	---	---
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	962	n/a	n/a	n/a	---	---	---	---	---	---
6	Lachish Line No 1568/2	953	n/a	n/a	n/a	---	---	---	---	---	---
18	678 VD VIII	918	n/a	n/a	n/a	---	---	---	---	---	---
1	Mexipak 65	901	n/a	n/a	n/a	---	---	---	---	---	---
15	P 9-3	821	n/a	n/a	n/a	---	---	---	---	---	---
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	805	n/a	n/a	n/a	---	---	---	---	---	---
5	Cimarron - Sari Bursa - 7113	680	n/a	n/a	n/a	---	---	---	---	---	---
11	Ato'S' x AA'S' - Plc'S'	625	n/a	n/a	n/a	---	---	---	---	---	---
19	Plc'S' - Cr'S' x Moa'S'/D 67-3-Cit 71	572	n/a	n/a	n/a	---	---	---	---	---	---
12	National Check (Durum)	549	n/a	n/a	n/a	---	---	---	---	---	---
7	Pg'S' - Boy'S'	515	n/a	n/a	n/a	---	---	---	---	---	---
21	Cit'S' - Pg'S'	424	n/a	n/a	n/a	---	---	---	---	---	---
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	371	n/a	n/a	n/a	---	---	---	---	---	---
3	Timgad 73 = D-2 = Cocorit 'S'	168	n/a	n/a	n/a	---	---	---	---	---	---
	GRAND MEAN	891.7									
	MAXIMUM	1667.5									
	MINIMUM	167.5									
	COEFFICIENT OF VARIATION AS PC	52.5									
	LSD VARIETY MAENS 5 PC	662.2									

VAR
AVR

WHEAT
VARIETY
DATE PLANTED
DATE HARVESTED
LATITUDE
LONGITUDE
ELEVATION
POTASSIUM

RAINFALL
ELEVATION
POTASSIUM

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST JORDAN IRBED

DR.N.KHATKHUDA
IRBED STATION . UNIVERSITY OF JORDAN

DATE PLANTED NOV/19/1979 DATE HARVESTED --/--/-- RAINFALL 738.6 m IRRIGATION
LATITUDE 35 51'N LONGITUDE 32 32'E ELEVATION 555 m
NITROGEN 30 kg/ha PHOSPHORUS 30 kg/ha POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
12	National Check (Durum) **	1967	120	n/a	105	0	10	0	1	-	-
16	Tob-8156 Kal	1867	120	n/a	75	0	15	0	1	-	-
17	Oviachi - Amarelejo	1850	117	n/a	85	0	10	0	1	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	1817	114	n/a	85	0	TR	0	1	-	-
4	UP 114	1767	114	n/a	105	0	20	0	1	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	1750	120	n/a	85	0	20	0	0	-	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	1733	118	n/a	85	0	TR	0	1	-	-
1	Mexipak 65	1700	120	n/a	85	0	0	0	1	-	-
21	Cit'S' - Fg'S'	1683	118	n/a	70	0	10	0	0	-	-
2	Kal-Bb	1650	115	n/a	90	0	10	0	0	-	-
5	Cimarron - Sari Bursa - 7113	1650	120	n/a	85	TR	20	0	1	-	-
7	Fg'S' - Boy'S'	1608	122	n/a	75	0	15	0	1	-	-
6	Lachish Line No 1568/2	1592	120	n/a	85	0	15	0	1	-	-
15	F 9-3	1575	118	n/a	85	0	20	0	1	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	1567	120	n/a	75	0	15	0	0	-	-
18	678 VD VIII	1533	115	n/a	80	0	10	0	1	-	-
24	National check (BW)	1525	118	n/a	95	0	0	0	0	-	-
23	Beagle	1433	112	n/a	100	0	15	0	0	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	1392	118	n/a	70	0	15	0	2	-	-
10	IWP 501	1392	115	n/a	75	TR	20	0	1	-	-
14	Moncho'S'	1392	118	n/a	70	0	10	0	1	-	-
11	Ato'S' x AA'S' - Plc'S'	1250	122	n/a	75	0	10	0	1	-	-
22	Inia - Arm'S'	1075	113	n/a	85	0	10	0	0	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	992	122	n/a	80	0	10	0	1	-	-

GRAND MEAN 1573.6

MAXIMUM 1967.0

MINIMUM 992.0

COEFFICIENT OF VARIATION AS PC 23.3

LSD VARIETY MAENS 5 PC 518.5

** Deir Alla 2

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

LEBANON

TERBOL

CEREAL STAFF

ICARDA . TERBOL STATION , RAYAK

DATE PLANTED NOV/28/1979

DATE HARVESTED --/--/--

RAINFALL 825 mm

IRRIGATION

LATITUDE 35 52'N

LONGITUDE 36 E

ELEVATION 900 m

NITROGEN

PHOSPHORUS

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
3	Timgad 73 = D-2 = Cocorit 'S'	2554	166	208	80	--	--	--	-	-	-
23	Beagle	2083	146	201	105	--	--	--	-	-	-
1	Mexipak 65	2021	158	202	75	--	--	--	-	-	-
24	National check (BW) *	1967	161	205	60	--	--	--	-	-	-
5	Cimarron - Sari Bursa - 7113	1921	169	210	55	--	--	--	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	1871	163	206	60	--	--	--	-	-	-
8	Bulbul'S' = (Pi-Prond x Pi-Mazoe) Mexp	1867	158	199	70	--	--	--	-	-	-
17	Oviachi - Amarelejo	1683	161	206	60	--	--	--	-	-	-
6	Lachish Line No 1568/2	1733	164	207	65	--	--	--	-	-	-
21	Cit'S' - Fg'S'	1708	165	211	65	--	--	--	-	-	-
15	F 9-3	1692	163	210	95	--	--	--	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	1671	168	210	60	--	--	--	-	-	-
11	Ato'S' x AA'S' - Plc'S'	1658	167	209	55	--	--	--	-	-	-
16	Tob-8156 Kal	1617	161	200	70	--	--	--	-	-	-
10	IWP 501	1608	153	198	80	--	--	--	-	-	-
12	National Check (Durum) **	1583	167	210	60	--	--	--	-	-	-
22	Inia - Arm'S'	1471	146	202	80	--	--	--	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	1417	166	211	60	--	--	--	-	-	-
4	UP 114	1388	154	199	85	--	--	--	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	1383	161	202	60	--	--	--	-	-	-
14	Moncho'S'	1321	159	200	70	--	--	--	-	-	-
7	Fg'S' - Boy'S'	1258	166	209	60	--	--	--	-	-	-
18	678 VD VIII	1242	158	197	65	--	--	--	-	-	-
2	Kal-Bb	1025	152	194	80	--	--	--	-	-	-

GRAND MEAN 1658.2

MAXIMUM 2554.0

MINIMUM 1025.0

COEFFICIENT OF VARIATION AS PC 19.4

LSD VARIETY MAENS 5 PC 455.6

* Mexipak

** Jori

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

NORTH AMERICA

MEXICO

CIANO

CEREAL STAFF

CIANO . OBREGON SONORA . CIMMYT

DATE PLANTED NOV/17/1979

DATE HARVESTED --/--/--

RAINFALL

IRRIGATION 5 times

LATITUDE 27 29'N

LONGITUDE 109 57'E

ELEVATION 38.39 m

NITROGEN 325 kg/ha

PHOSPHORUS 132 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	6433	89	n/a	80	---	0	---	-	-	-
12	National Check (Durum) **	6225	90	n/a	80	---	0	---	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	6053	91	n/a	80	---	TMS	---	-	-	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	5728	91	n/a	90	---	TMS	---	-	-	-
24	National check (BW) *	5650	87	n/a	75	---	TMS	---	-	-	-
11	Ato'S' x AA'S' - Plc'S'	5492	91	n/a	85	---	0	---	-	-	-
7	Pg'S' - Boy'S'	5469	91	n/a	80	---	0	---	-	-	-
6	Lachish Line No 1568/2	5431	86	n/a	80	---	5S	---	-	-	-
1	Mexipak 65	5400	92	n/a	80	---	80S	---	-	-	-
21	Cit'S' - Pg'S'	5372	97	n/a	85	---	TMS	---	-	-	-
18	678 VD VIII	5267	90	n/a	80	---	TMS	---	-	-	-
16	Tob-8156 Kal	5206	92	n/a	80	---	20S	---	-	-	-
5	Cimarron - Sari Bursa - 7113	4733	108	n/a	80	---	0	---	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	4703	84	n/a	90	---	0	---	-	-	-
2	Kal-Bb	4647	87	n/a	90	---	TMS	---	-	-	-
14	Moncho'S'	4550	98	n/a	100	---	TMS	---	-	-	-
10	IWP 501	5431	84	n/a	85	---	5S	---	-	-	-
17	Oviachi - Amarelejo	4322	107	n/a	90	---	0	---	-	-	-
22	Inia - Arm'S'	4253	89	n/a	90	---	0	---	-	-	-
23	Beagle	4178	92	n/a	125	---	0	---	-	-	-
4	UP 114	4072	89	n/a	100	---	TMS	---	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	4003	93	n/a	90	---	0	---	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	3964	104	n/a	100	---	0	---	-	-	-
15	F 9-3	2153	103	n/a	125	---	0	---	-	-	-

GRAND MEAN 4909.7

MAXIMUM 6433.0

MINIMUM 2153.0

COEFFICIENT OF VARIATION AS PC 10.9

LSD VARIETY MAENS 5 PC 758.7

* Nacozeni 76

** Yavard 79

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

AFRICA

SUDAN

NEW HALFA

DR. MOHAMED SALIH MOHAMED
NEW HALFA RESEARCH STATION . KASSALA PROVINCE

DATE PLANTED DEC/3/1979
LATITUDE 15 8' N
NITROGEN 100 kg/ha

DATE HARVESTED --/--/--
LONGITUDE 35 45' E
PHOSPHORUS

RAINFALL
ELEVATION 400 m
POTASSIUM

IRRIGATION 800 m . 8 times

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
11	Ato'S' x AA'S' - Plc'S'	3883	65	100	n/a	--	--	--	-	-	-
14	Moncho'S'	3750	67	103	n/a	--	--	--	-	-	-
24	National check (BW) *	3750	58	98	n/a	--	--	--	-	-	-
4	UP 114	3592	62	102	n/a	--	--	--	-	-	-
8	Bulbul'S' = (Pi-Prond x Pi-Mazoe) Mexp	3525	55	98	n/a	--	--	--	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	3492	62	98	n/a	--	--	--	-	-	-
21	Cit'S' - Pg'S'	3367	71	108	n/a	--	--	--	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	3350	66	103	n/a	--	--	--	-	-	-
7	Pg'S' - Boy'S'	3342	65	101	n/a	--	--	--	-	-	-
1	Mexipak 65	3242	58	100	n/a	--	--	--	-	-	-
23	Beagle	3208	67	103	n/a	--	--	--	-	-	-
6	Lachish Line No 1568/2	3142	58	100	n/a	--	--	--	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	3108	62	100	n/a	--	--	--	-	-	-
16	Tob-8156 Kal	3083	55	98	n/a	--	--	--	-	-	-
18	678 VD VIII	3025	55	98	n/a	--	--	--	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	2988	75	119	n/a	--	--	--	-	-	-
15	P 9-3	2933	87	188	n/a	--	--	--	-	-	-
2	Kal-Bb	2713	53	98	n/a	--	--	--	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	2658	56	98	n/a	--	--	--	-	-	-
22	Inia - Arm'S'	2508	62	100	n/a	--	--	--	-	-	-
12	National Check (Durum) **	2475	52	93	n/a	--	--	--	-	-	-
5	Cimarron - Sari Bursa - 71 3	2317	90	120	n/a	--	--	--	-	-	-
17	Oviachi - Amarelejo	2100	93	120	n/a	--	--	--	-	-	-
10	IWP 501	2083	52	98	n/a	--	--	--	-	-	-

GRAND MEAN 3068.1

MAXIMUM 3883.0

MINIMUM 2083.0

COEFFICIENT OF VARIATION AS PC 12.9

LSD VARIETY MAENS 5 PC 560.2

* Mexicani

** Giza 157

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

OMAN

WADI QURYAT

DR. MAHMOUD AKHTAR

AGRICULTURAL RESEARCH STATION , WADI QURYAT

DATE PLANTED NOV/10/1979

LATITUDE 22 50'N

NITROGEN 88 kg/ha

DATE HARVESTED --/--/--

LONGITUDE 57 10'E

PHOSPHORUS

RAINFALL

ELEVATION

POTASSIUM

400 m

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
10	IWP 501	2130	n/a	n/a	n/a	--	--	--	-	-	-
4	UP 114	2037	n/a	n/a	n/a	--	--	--	-	-	-
6	Lachish Line No 1568/2	2037	n/a	n/a	n/a	--	--	--	-	-	-
16	Tob-8156 Kal	2006	n/a	n/a	n/a	--	--	--	-	-	-
23	Beagle	1790	n/a	n/a	n/a	--	--	--	-	-	-
12	National Check (Durum)	1667	n/a	n/a	n/a	--	--	--	-	-	-
24	National check (BW)	1605	n/a	n/a	n/a	--	--	--	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66) Kal	1543	n/a	n/a	n/a	--	--	--	-	-	-
1	Mexipak 65	1481	n/a	n/a	n/a	--	--	--	-	-	-
11	Ato'S' x AA'S' - Plc'S'	1481	n/a	n/a	n/a	--	--	--	-	-	-
7	Fg'S' - Boy'S'	1358	n/a	n/a	n/a	--	--	--	-	-	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	1358	n/a	n/a	n/a	--	--	--	-	-	-
14	Moncho'S'	1296	n/a	n/a	n/a	--	--	--	-	-	-
22	Inia - Arm'S'	1296	n/a	n/a	n/a	--	--	--	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	1235	n/a	n/a	n/a	--	--	--	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	1173	n/a	n/a	n/a	--	--	--	-	-	-
18	678 VD VIII	1111	n/a	n/a	n/a	--	--	--	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	988	n/a	n/a	n/a	--	--	--	-	-	-
5	Cimarron - Sari Bursa - 7113	895	n/a	n/a	n/a	--	--	--	-	-	-
17	Oviachi - Amarelejo	802	n/a	n/a	n/a	--	--	--	-	-	-
21	Cit'S' - Fg'S'	802	n/a	n/a	n/a	--	--	--	-	-	-
15	F 9-3	679	n/a	n/a	n/a	--	--	--	-	-	-
2	Kal-Bb	494	n/a	n/a	n/a	--	--	--	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	370	n/a	n/a	n/a	--	--	--	-	-	-

GRAND MEAN 1318.2

MAXIMUM 2129.6

MINIMUM 370.4

COEFFICIENT OF VARIATION AS PC 40.2

LSD VARIETY MAENS 5 PC 873.8

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

SYRIA

TEL HADIA

CEREAL STAFF (RAINFED SET)
ICARDA , ALEPPODATE PLANTED NOV/28/1979
LATITUDE 36 N
NITROGEN 60 kg/haDATE HARVESTED --/--/--
LONGITUDE 37 E
PHOSPHORUS 60 kg/haRAINFALL 429 mm
ELEVATION 292 m
POTASSIUM

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
5	Cimarron - Sari Bursa - 7113	4738	151	n/a	90	--	--	--	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	4675	151	n/a	110	--	--	--	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	4600	146	n/a	95	--	--	--	-	-	-
7	Fg'S' - Boy'S'	4517	143	n/a	95	--	--	--	-	-	-
11	Ato'S' x AA'S' - Plc'S'	4429	149	n/a	100	--	--	--	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	4371	149	n/a	95	--	--	--	-	-	-
6	Lachish Line No 1568/2	4231	141	184	100	--	--	--	-	-	-
21	Cit'S' - Fg'S'	4099	148	n/a	100	--	--	--	-	-	-
18	678 VD VIII	4083	136	181	90	--	--	--	-	-	-
1	Mexipak 65	4038	144	n/a	105	--	--	--	-	-	-
16	Tob-8156 Kal	3992	140	184	100	--	--	--	-	-	-
2	Kal-Bb	3967	142	184	105	--	--	--	-	-	-
12	National Check (Durum)	3967	146	n/a	100	--	--	--	-	-	-
23	Beagle	3883	132	n/a	130	--	--	--	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	3877	142	184	105	--	--	--	-	-	-
15	F 9-3	3858	148	n/a	130	--	--	--	-	-	-
14	Moncho'S'	3825	141	184	100	--	--	--	-	-	-
17	Oviachi - Amarelejo	3733	142	n/a	100	--	--	--	-	-	-
22	Inia - Arm'S'	3563	132	n/a	95	--	--	--	-	-	-
10	IWP 501	3533	140	n/a	95	--	--	--	-	-	-
8	Bulbul'S' = (Pi-Prond x Pi-Mazoe) Mexp	3450	140	n/a	100	--	--	--	-	-	-
4	UP 114	3446	139	n/a	110	--	--	--	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - 10 66) Kal	3121	141	n/a	100	--	--	--	-	-	-
24	National check (BW)	2679	140	n/a	135	--	--	--	-	-	-

GRAND MEAN 3944.7

MAXIMUM 4738.0

MINIMUM 2679.0

COEFFICIENT OF VARIATION AS PC 14.7

LSD VARIETY MAENS 5 PC 817.3

REGIONAL RAINPFD WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST

SYRIA

TEL HADIA

CEREAL STAFF (IRRIGATED SET)
ICARDA . ALEPPO

DATE PLANTED NOV/28/1979
LATITUDE 36 N
NITROGEN 80 kg/ha

DATE HARVESTED ---/---/---
LONGITUDE 37 E
PHOSPHORUS 60 kg/ha

RAINFALL 429 mm
ELEVATION 292 m
POTASSIUM

IRRIGATION 100 mm

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
7	Fg'S' - Boy'S'	5008	149	193	85	---	---	---	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	4683	156	194	100	---	---	---	-	-	-
16	Tob-8156 Kal	4613	150	192	80	---	---	---	-	-	-
6	Lachish Line No 1568/2	4596	143	185	95	---	---	---	-	-	-
14	Moncho'S'	4592	150	186	80	---	---	---	-	-	-
5	Cimarron - Sari Bursa - 7113	4404	156	194	80	---	---	---	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	4380	151	192	80	---	---	---	-	-	-
23	Beagle	4363	140	192	125	---	---	---	-	-	-
1	Mexipak 65	4321	155	190	85	---	---	---	-	-	-
4	UP 114	4308	142	187	90	---	---	---	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	4238	150	193	95	---	---	---	-	-	-
11	Ato'S' x AA'S' - Plc'S'	4002	151	192	95	---	---	---	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	3842	143	184	100	---	---	---	-	-	-
15	F 9-3	3817	156	194	120	---	---	---	-	-	-
21	Cit'S' - Fg'S'	3800	149	192	85	---	---	---	-	-	-
12	National Check (Durum)*	3758	142	187	95	---	---	---	-	-	-
18	678 VD VIII	3689	142	186	90	---	---	---	-	-	-
17	Oviachi - Amarelejo	3604	149	192	85	---	---	---	-	-	-
2	Kal-Bb	3500	149	187	80	---	---	---	-	-	-
22	Inia - Arm'S'	3 63	138	186	100	---	---	---	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66)Kal	3113	147	186	105	---	---	---	-	-	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	3092	151	185	80	---	---	---	-	-	-
10	IWP 501	3079	148	191	90	---	---	---	-	-	-
24	National check (BW) *	2933	149	190	130	---	---	---	-	-	-

GRAND MEAN 3966.5

MAXIMUM 5008.0

MINIMUM 2933.0

COEFFICIENT OF VARIATION AS PC 22.4

LSD VARIETY MAENS 5 PC 1256.9

*

* * Jori

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

AFRICA TUNISIA BEJA

INRAT
L'INSTITUT DES GRANDES CULTURES

DATE PLANTED	NOV/29/1979	DATE HARVESTED	--/--/--	RAINFALL	729 mm	IRRIGATION
LATITUDE	36 N	LONGITUDE	9 E	ELEVATION	165 m	
NITROGEN	80 kg/ha	PHOSPHORUS	67.5 kg/ha	POTASSIUM		

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
6	Lachish Line No 1568/2	8182	127	n/a	110	--	--	--	3	8	-
24	National check (BW)	8061	136	n/a	110	--	--	--	3	3	-
16	Tob-8156 Kal	7749	130	n/a	115	--	--	--	3	2	-
1	Mexipak 65	7714	137	n/a	105	--	--	--	4	0	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	7471	137	n/a	110	--	--	--	9	0	-
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	7291	131	n/a	115	--	--	--	7	4	-
22	Inia - Arm'S'	7153	121	n/a	105	--	--	--	0	3	-
14	Moncho'S'	7123	137	n/a	110	--	--	--	6	0	-
4	UP 114	7113	124	n/a	120	--	--	--	3	0	-
2	Kal-Bb	6983	127	n/a	115	--	--	--	8	0	-
11	Ato'S' x AA'S' - Plc'S'	6934	124	n/a	85	--	--	--	8	0	-
23	Beagle	6921	125	n/a	145	--	--	--	0	0	-
3	Timgad 73 = D-2 = Cocorit'S'	6850	151	n/a	115	--	--	--	9	0	-
10	IWP 501	6762	123	n/a	115	--	--	--	3	0	-
12	National Check (Durum) ..	6540	134	n/a	100	--	--	--	3	4	-
18	678 VD VIII	6434	124	n/a	105	--	--	--	8	0	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66)Kal	6429	133	n/a	115	--	--	--	8	4	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	6360	128	n/a	100	--	--	--	9	0	-
7	Fg'S' - Boy'S'	6244	137	n/a	100	--	--	--	9	0	-
19	Plc'S' - Cr'S' x Mca'S'/1: 67-3-Cit 71	6200	126	n/a	105	--	--	--	5	4	-
5	Cimarron - Sari Bursa - 7113	5662	148	n/a	100	--	--	--	9	0	-
15	F 9-3	5532	147	n/a	135	--	--	--	8	0	-
21	Cit'S' - Fg'S'	5512	141	n/a	100	--	--	--	9	4	-
17	Oviachi - Amarelejo	5465	142	n/a	110	--	--	--	9	0	-

GRAND MEAN 6778.5

MAXIMUM 8182.0

MINIMUM 5465.0

COEFFICIENT OF VARIATION AS PC 8.2

LSD VARIETY MAENS 5 PC 790.1

* Dougga 74

** Maghrebi 72

REGIONAL RAINFED WHEAT YIELD TRIAL 1979-1980

MIDDLE EAST TURKEY IZMIR

DR.POLAT SOLEN
REGIONAL AGRICULTURAL RESEARCH INSTITUTE

DATE PLANTED --/--/--
LATITUDE 38 25'N
NITROGEN

DATE HARVESTED --/--/--
LONGITUDE 27 10'E
PHOSPHORUS

RAINFALL
ELEVATION
POTASSIUM

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	SCLD
8	Bulbul'S' = (Pi-Frond x Pi-Mazoe) Mexp	5608	n/a	n/a	n/a	--	--	--	-	-	-
2	Kal-Bb	5518	n/a	n/a	n/a	--	--	--	-	-	-
22	Inia - Arm'S'	5398	n/a	n/a	n/a	--	--	--	-	-	-
6	Lachish Line No 1568/2	5037	n/a	n/a	n/a	--	--	--	-	-	-
1	Mexipak 65	5027	n/a	n/a	n/a	--	--	--	-	-	-
24	National check (BW)	4883	n/a	n/a	n/a	--	--	--	-	-	-
12	National Check (Durum)	4792	n/a	n/a	n/a	--	--	--	-	-	-
4	UP 114	4727	n/a	n/a	n/a	--	--	--	-	-	-
18	678 VD VIII	4718	n/a	n/a	n/a	--	--	--	-	-	-
14	Moncho'S'	4627	n/a	n/a	n/a	--	--	--	-	-	-
10	IWP 501	4575	n/a	n/a	n/a	--	--	--	-	-	-
16	Tob-8156 Kal	4442	n/a	n/a	n/a	--	--	--	-	-	-
9	Waha'S' = Plc'S' - Ruff'S' x Gta'S' - Rtte	4367	n/a	n/a	n/a	--	--	--	-	-	-
11	Ato'S' x AA'S' - Plc'S'	4365	n/a	n/a	n/a	--	--	--	-	-	-
20	(Cno-7C x CC-Tob/Cno'S' - No 66)Kal	4252	n/a	n/a	n/a	--	--	--	-	-	-
23	Beagle	3966	n/a	n/a	n/a	--	--	--	-	-	-
3	Timgad 73 = D-2 = Cocorit 'S'	3866	n/a	n/a	n/a	--	--	--	-	-	-
19	Plc'S' - Cr'S' x Mca'S'/D 67-3-Cit 71	3845	n/a	n/a	n/a	--	--	--	-	-	-
17	Oviachi - Amarelejo	3787	n/a	n/a	n/a	--	--	--	-	-	-
21	Cit'S' - Fg'S'	3712	n/a	n/a	n/a	--	--	--	-	-	-
15	F 9-3	3415	n/a	n/a	n/a	--	--	--	-	-	-
13	Mexi'S' x Gs'S' - Cr'S'/Ibis'S'	3283	n/a	n/a	n/a	--	--	--	-	-	-
7	Fg'S' - Boy'S'	3260	n/a	n/a	n/a	--	--	--	-	-	-
5	Cimarron - Sari Bursa - 7113	3187	n/a	n/a	n/a	--	--	--	-	-	-

GRAND MEAN 4360.0

MAXIMUM 5608.0

MINIMUM 3187.0

COEFFICIENT OF VARIATION AS PC 16.8

LSD VARIETY MAENS 5 PC 1038.2

Tenth Regional Barley Yield Trial

This trial included 21 barley lines, two triticales, one durum wheat and one national check variety of barley. The lines/varieties included were selected from various national and international nurseries with diverse genetic background and better yield potential. The trial was conducted at 23 locations throughout the region.

The results showed that the overall varietal mean yield ranged from 2915 - 4155 kg/ha where as the average yield of national check was 3039 kg/ha indicating an average improvement of 37% in the yield level over the check. (Table 7).

Almost at all the sites majority of the new barley lines outyielded the national check variety except at Tel Amara-Lebanon site where the national check variety topped the list. (Table 9). The triticale line Beagle was top yielder at four sites as well as gave the highest yield of 10848 kg/ha at Oregon-USA, however in the overall mean yield ranking it occupied 12th position.

From these data it appears that some of the varieties like ER-APAM, API-CM67 and TJ70 have fairly wide adaptability beside high yield potential. Variety Bco. Mr-Godiva seems to be better adapted to high rainfall and cool conditions as it outyielded all the entries at Oregon-USA, Mateur-Tunisia, Rabat-Morocco and Thessaloniki-Greece. Among all the barley lines/varieties it also gave the highest yield of 9390 kg/ha at Oregon-USA. Whereas under dry situations and relatively short growing season WI2198 and TJ70 seem to be better adapted.

Six highest yielding lines, i.e. entry Nos. 11, 14, 12, 10, 4 and 8 were among the top yielding lines at least at eight of the testing sites indicating their stability and consistency in better yielding ability.

Agronomic characters

The overall mean number of days for breeding and maturity ranged from 111 - 125 and 153 - 160 respectively (Table 7). However, the average number of days to head and mature incase of three top yielding lines was 112 and 154 respectively. The number of days taken to head and mature varied considerably at different sites.

The overall mean plant height for all the entries at 23 locations ranged from 73 - 96 cms where as triticale line Beagle was the tallest with 112 cm. The overall top yielding line ER-APAM showed an average height of 73 cm where as the average height for the first 3 top yielders was 77 cms.

Diseases

The average coefficient of infestation (ACI) for yellow rust for all the lines was zero. However, the ACI for leaf rust in barley lines varied from 14 - 45 where as the national check had an ACI of 51. The ACI for the first five top yielding lines i.e. entry Nos. 11, 14, 12, 10 and 4 was 41, 38, 39; 33 and 43 respectively. For other diseases also it appears that there is considerable improvement and progress in incorporating multiple disease resistance in the new lines.

Conclusions

The following barley varieties seem to be promising in these regional yield trials in order of their yield and disease performance:

ER-APAM

WI 2198

CM67-Sv.Mari

Minn 126-CM67

Bco.Mr-Godiva

Cr.368/4/1

Table 7. TENTH BARLEY REGIONAL YIELD TRIAL 1979-1980

OVERALL PERFORMANCE OF VARIETIES (23 LOCATIONS)

ENTRY NO	VARIETY/CROSS PEDIGREES	YIELD Kg/Ha	RANK	PR*	DAYS TO HEAD	DAYS TO MATURE	PLANT HEIGHT (cm)	PROTEIN %
1	Beecher	3320	14	6	113	155	95	n/a
2	Bco.mr-Godiva	3573	7	7	121	160	82	11.6
3	Cr.366.3/2 (Giza 117-Bahtim 52) (Gizax118-PAO 86)	3332	13	4	113	155	85	9.8
4	Composite 29	3598	5	8	119	157	96	10.4
5	CI 13575	3052	22	0	116	153	86	11.2
6	FB(E) NYT/72	3381	11	7	118	156	89	10.0
7	TJ 70	3452	9	7	113	155	87	10.6
8	Cr 368/4/1 (Giza 117 x Bahtim 52) (Cr.193/11 x PAO 78)	3590	6	10	112	154	85	11.2
9	Cr.370/45/2 (Giza 117 x R.R.801) (Giza 118 x PAO 86)	3388	10	8	112	155	90	11.0
10	Minn 126-CM 67	3664	4	9	112	155	83	12.0
11	ER - Apam	4155	1	13	112	153	73	11.0
12	CM 67-SV Mari CMB 72-14D-8Y-1B-3Y-1B-OY	3725	3	10	113	155	77	10.3
13	Api-CM 67 CMB 72-60-500Y-502B-503Y-502B-OY	3502	8	5	116	155	81	10.8
14	WI 2198	3731	2	10	112	153	81	11.2
15	Purdue 5623A 1315P	3256	15	4	122	159	90	10.2
16	U.Sask.1766-Api CMB 72-183-502Y-500B-500Y-OS	2915	24	1	115	155	86	10.1
17	CI 8887-CI 5761 SEA 13-20S-1S-OS	3253	17	8	120	155	84	10.6
18	CI 8887-CI 5761 SEA 13-34S-5S-OS	3238	18	3	125	158	85	10.2
19	Carina	3232	19	5	123	158	83	9.4
20	(CN 42 x CI 7772/Fun x Fun/Tch) Fun x Ki II 11694-2B-Bulk-7N-4N	3169	20	4	111	154	78	11.3
21	Beagle (TCL)	3375	12	7	114	156	112	n/a
22	Navajoa (TCL)	3070	21	6	117	157	92	n/a
23	Waha 'S' (Durum)	3256	16	7	123	156	83	n/a
24	National Check	3039	23	3	115	154	87	n/a

Table 8. DISEASES FOR THE REGIONAL BARLEY YIELD TRIAL
1979 - 80

Entry No	Variety / Cross Pedigree	A.C.I			PM 9Loc	NB 3Loc	SC 4Loc
		YR 1Loc	LR 7Loc	SR 1Loc			
1	Beecher	0	33	-	6	1	0
2	Bco-mr-Godiva	0	23	-	5	6	2
3	Cr.366.3/2 (Giza 117-Bahtim 52)(Gizax118-FAO 86)	0	14	-	4	6	3
4	Composite 29	0	43	40	5	1	4
5	CI 13575	0	40	-	6	4	3
6	FB(E) NYT/72	0	29	20	6	1	2
7	TJ 70	0	46	30	5	1	3
8	Cr 368/4/1 (Giza 117 x Bahtim 52)(Cr.193/11xFAO 78)	0	39	-	5	6	3
9	Cr.370/45/2 (Giza 117 x R.R.801)(Giza 118xFAO 86)	0	43	-	4	6	4
10	Minn 126-CM 67	0	33	-	4	7	5
11	ER - Apan	0	41	-	6	3	4
12	CM 67-SV Mari CM 72-14D-8Y-1B-3Y-1B-OY	0	39	-	6	3	2
13	Api-CM 67 CMB 72-60-500Y-502B-503Y-502B-OY	0	33	-	4	3	4
14	WI 2198	0	38	30	5	3	4
15	Purdue 5623A 1315P	0	31	-	4	1	3
16	U.Sask.1766-Api CMB 72-183-502Y-500Y-OS	0	45	-	6	1	3
17	CI 8887-CI 5761 SEA 13-20S-1S-OS	0	31	-	4	3	2
18	CI 8887-CI 5761 SEA 13-34S-5S-OS	0	25	-	4	3	3
19	Carina	0	25	-	4	7	0
20	(CN 42xCI 7772/FunxFun/Tch)FunxKi II 11694-2B-Bulk-7N-4N	0	28	-	5	1	3
21	Beagle (TCL)	0	18	-	2	0	2
22	Navajoa (YCL)	0	3	-	1	0	3
23	Waha 's' (Durum)	0	3	-	2	0	1
24	National check	0	51	20	4	3	2

Table 9. REGIONAL BARLEY YIELD TRIAL 1979-1980

ASIA		AFGHANISTAN		BULKH							
DIVISION OF CROP IMPROVEMENT DEPARTMENT OF RESEARCH & SOIL BULKH RESEARCH STATION											
DATE PLANTED		NOV/9/1979	DATE HARVESTED		--/--/--	RAINFALL		179.8 mm	IRRIGATION		5 times
LATITUDE			LONGITUDE			ELEVATION		350 m			
NITROGEN		50 kg/ha	PHOSPHORUS		40 kg/ha	POTASSIUM					
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
4	Composite 29	3204	130	157	92	0	0	0	4	-	-
21	Beagle (TCL)	3128	130	169	105	0	0	0	6	-	-
1	Beecher	2724	127	155	75	0	0	0	2	-	-
11	ER - Apam	2638	124	155	60	0	0	0	0	-	-
8	Cr 368/4/1	2594	129	155	70	0	0	0	0	-	-
14	WI 2198	2425	127	155	63	0	0	0	0	-	-
15	Purdue 5623A 1315P	2414	138	170	70	0	0	0	0	-	-
19	Carina	2308	137	169	78	0	0	0	0	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	2262	129	157	65	0	0	0	4	-	-
2	Bco,mr-Godiva	2240	138	164	70	0	0	0	0	-	-
7	TJ 70	2190	129	157	78	0	0	0	5	-	-
23	Waha 'S' (Durum)	2175	135	170	75	0	0	0	4	-	-
22	Navajoa (TCL)	2135	131	170	80	0	0	0	0	-	-
9	Cr.370/45/2	2112	129	155	71	0	0	0	0	-	-
5	CI 13575	2103	130	157	72	0	0	0	7	-	-
3	Cr.366.3/2	2089	127	157	80	0	0	0	0	-	-
10	Minn 126-CM 67	2065	127	157	78	0	0	0	1	-	-
24	National Check	2062	129	153	80	0	0	0	0	-	-
6	FB(E) NYT/72	2013	129	157	85	0	0	0	7	-	-
16	U.Sask.1766-Api	1937	132	164	60	0	0	0	4	-	-
17	CI 8887-CI 5761	1921	137	164	72	0	0	0	0	-	-
18	CI 8887-CI 5761	1476	137	170	70	0	0	0	0	-	-
12	CM 67-SV Mari	1438	124	157	61	0	0	0	-	-	-
13	Api-CM 67	918	132	157	59	0	0	0	0	-	-
GRAND MEAN		2190.5									
MAXIMUM		3204.2									
MINIMUM		918.3									
COEFFICIENT OF VARIATION AS PC		30.2									
LSD VARIETY MAENS 5 PC		934.3									

Table 9 Cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST

CYPRUS

LAXIA

AGRONOMY STAFF

AGRICULTURAL RESEARCH INSTITUTE

DATE PLANTED DEC/5/79

34 4' N

DATE HARVESTED

LONGITUDE

--/--/--

33' 20' E

RAINFALL

412 **DATA**

ELEVATION

150 m

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
11	ER - Apam	7685	106	n/a	110	--	25MS	--	4	-	T
9	Cr.370/45/2	7008	109	n/a	125	--	10MR	--	4	-	6
21	Beagle (TCL)	6890	114	n/a	150	--	3MR	--	4	-	T
1	Beecher	6681	107	n/a	130	--	10MR	--	4	-	5
14	WI 2198	6501	106	n/a	110	--	10MR	--	4	-	6
23	Waha 'S' (Durum)	6445	124	n/a	105	--	10MR	--	3	-	T
8	Cr 368/4/1	6223	109	n/a	115	--	--	--	0	-	0
22	Navajoa (TCL)	6185	112	n/a	120	--	15MR	--	T	-	5
12	CM 67-SV Mari	6070	109	n/a	110	--	35MS	--	T	-	8
2	Bco.mr-Godiva	6014	117	n/a	110	--	30MS	--	3	-	6
4	Composite 29	5929	113	n/a	130	--	20MR	--	4	-	T
24	National Check	5873	108	n/a	115	--	5MR	-	T	-	5
10	Minn 126-CM 67	5855	114	n/a	115	--	5MR	--	3	-	T
3	Cr.366.3/2	5710	106	n/a	115	--	--	--	0	-	0
5	CI 13575	5492	110	n/a	115	--	20MR	--	3	-	6
13	Api-CM 67	5441	111	n/a	100	--	20MR	--	3	-	6
7	TJ 70	5389	106	n/a	115	--	20MR	3/5	3	-	5
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	5237	105	n/a	110	--	25MS	--	-	-	T
19	Carina	5201	121	n/a	105	--	5MR	--	T	-	5
16	U.Sask.1766-Api	5074	112	n/a	120	--	15MR	--	3	-	6
6	FB(E) NYT/72	5061	114	n/a	115	--	--	--	0	-	0
17	CI 8887-CI 5761	5050	116	n/a	110	--	40S	--	4	-	T
15	Purdue 5623A 1315P	5025	116	n/a	120	--	5MR	--	3	-	4
18	CI 8887-CI 5761	4712	122	n/a	110	--	15MR	--	T	-	T

GRAND MEAN 5864.6

MAXIMUM	7684.8
---------	--------

MINIMUM	4712.4
---------	--------

COEFFICIENT OF VARIATION AS PC 17.0

LSO VARIETY MAENS 5 PC	1644.2
------------------------	--------

Table 9 cont.

REGIONAL BARLEY YIELD TRIAL 1979-1980

AFRICA

EGYPT

GIZA

DR.M.I.KHALIFA

GIZA RESEARCH CENTER

DATE PLANTED DEC/14/1979

DATE HARVESTED ---/---/---

RAINFALL

IRRIGATION 5 times

LATITUDE 30 N

LONGITUDE 30 E

ELEVATION 30 m

NITROGEN

PHOSPHORUS

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
12	CM 67-SV Mari	5550	86	n/a	64	---	---	---	2	-	-
3	Cr.366.3/2	5167	89	n/a	93	---	---	---	2	-	-
11	ER - Apam	4806	86	n/a	80	---	---	---	4	-	-
24	National Check *	4717	88	n/a	100	---	---	---	2	-	-
14	WI 2198	4639	86	n/a	85	---	---	---	2	-	-
1	Beecher	4583	93	n/a	116	---	---	---	4	-	-
10	Minn 126-CM 67	4433	84	n/a	93	---	---	---	4	-	-
7	TJ 70	4372	88	n/a	105	---	---	---	9	-	-
8	Cr 368/4/1	4083	88	n/a	84	---	---	---	4	-	-
4	Composite 29	4006	95	n/a	107	---	---	---	9	-	-
2	Bco.mr-Godiva	3817	93	n/a	87	---	---	---	2	-	-
23	Waha 'S' (Durum)	3589	98	n/a	100	---	---	---	2	-	-
9	Cr.370/45/2	3470	84	n/a	98	---	---	---	4	-	-
5	CI 13575	3381	90	n/a	90	---	---	---	9	-	-
19	Carina	3167	105	n/a	80	---	---	---	2	-	-
22	Navajoa (TCL)	3061	97	n/a	109	---	---	---	2	-	-
15	Purdue 5623A 1315P	2906	100	n/a	87	---	---	---	4	-	-
6	PB(E) NYT/72	2889	93	n/a	104	---	---	---	9	-	-
21	Beagle (TCL)	2844	93	n/a	110	---	---	---	2	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	2833	93	n/a	85	---	---	---	6	-	-
13	Api-CM 67	2822	89	n/a	85	---	---	---	2	-	-
17	CI 8887-CI 5761	2811	99	n/a	73	---	---	---	2	-	-
16	U.Sask.1766-Api	2089	89	n/a	75	---	---	---	2	-	-
18	CI 8887-CI 5761	1917	105	n/a	74	---	---	---	2	-	-

GRAND MEAN 3664.6

MAXIMUM 5550.0

MINIMUM 1916.7

COEFFICIENT OF VARIATION AS PC 23.2

LSD VARIETY MAENS 5 PC 1402.6

* Giza 121

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

AFRICA EGYPT SIDS

DR.M.I.KHALIFA
SIDS RESEARCH STATION , BENI SUEFDATE PLANTED NOV/28/1979 DATE HARVESTED --/--/--
LATITUDE 29 04'N LONGITUDE 31 04'E
NITROGEN PHOSPHORUSRAINFALL
ELEVATION
POTASSIUM

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
13	Api-CM 67	5221	94	130	115	---	---	---	-	-	-
12	CM 67-SV Mari	5063	84	125	100	---	---	---	-	-	-
14	WI 2198	4929	86	125	110	---	---	---	-	-	-
8	Cr 368/4/1	4721	86	130	115	---	---	---	-	-	-
7	TJ 70	4654	86	130	115	---	---	---	-	-	-
24	National Check *	4550	83	125	110	---	---	---	-	-	-
23	Waha 'S' (Durum)	4542	108	143	100	---	---	---	-	-	-
18	CI 8887-CI 5761	4525	105	137	125	---	---	---	-	-	-
3	Cr.366.3/2	4467	85	128	110	---	---	---	-	-	-
11	ER - Apam	4467	84	125	100	---	---	---	-	-	-
2	Bco.mr-Godiva	4238	104	136	115	---	---	---	-	-	-
10	Minn 126-CM 67	4125	83	125	100	---	---	---	-	-	-
4	Composite 29	3938	104	136	132	---	---	---	-	-	-
1	Beecher	3908	88	130	135	---	---	---	-	-	-
9	Cr.370/45/2	3888	86	130	115	---	---	---	-	-	-
16	U.Sask.1766-Api	3821	99	130	140	---	---	---	-	-	-
21	Beagle (TCL)	3596	102	142	160	---	---	---	-	-	-
22	Navajoa (TCL)	3579	102	142	125	---	---	---	-	-	-
15	Purdue 5623A 1315P	3438	105	138	120	---	---	---	-	-	-
6	PB(E) NYT/72	3333	101	136	125	---	---	---	-	-	-
19	Carina	3271	105	134	120	---	---	---	-	-	-
5	CI 13575	3183	99	130	120	---	---	---	-	-	-
17	CI 8887-CI 5761	3079	99	130	125	---	---	---	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	2946	83	123	105	---	---	---	-	-	-

GRAND MEAN 4061.6

MAXIMUM 5220.8

MINIMUM 2945.8

COEFFICIENT OF VARIATION AS PC 19.0

LSD VARIETY MAENS 5 PC 1089.0

* Giza 121

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

EUROPE

FRANCE

MONTPELLIER

DR.J.CHERY

AMELIORATION DES PLANTES INRA

DATE PLANTED FEB/4/1980

DATE HARVESTED --/--/--

RAINFALL 270 mm

IRRIGATION

LATITUDE 43 37'N

LONGITUDE 1 39'E

ELEVATION 49 m

NITROGEN 60 kg/ha

PHOSPHORUS 100 kg/ha

POTASSIUM 100 kg/ha

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
21	Beagle (TCL)	5920	95	150	125	---	---	---	1	-	-
10	Minn 126-CM 67	5840	92	150	100	---	---	---	1	-	-
22	Navajoa (TCL)	5520	94	150	95	---	---	---	1	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	5280	91	150	100	---	---	---	3	-	-
23	Waha 'S' (Durum)	5280	99	150	75	---	---	---	1	-	-
13	Api-CM 67	5040	92	150	100	---	---	---	2	-	-
7	TJ 70	4960	89	150	105	---	---	---	3	-	-
15	Purdue 5623A 1315P	4880	98	150	100	---	---	---	3	-	-
14	WI 2198	4720	88	150	90	---	---	---	5	-	-
1	Beecher	4640	89	150	115	---	---	---	6	-	-
11	ER - Apam	4640	89	150	85	---	---	---	7	-	-
17	CI 8887-CI 5761	4640	98	150	95	---	---	---	7	-	-
24	National Check ,	4560	98	150	100	---	---	---	6	-	-
3	Cr.366.3/2	4480	90	150	105	---	---	---	5	-	-
5	CI 13575	4400	93	150	110	---	---	---	4	-	-
8	Cr 368/4/1	4320	89	150	100	---	---	---	4	-	-
6	FB(E) NYT/72	4240	91	150	110	---	---	---	5	-	-
19	Carina	4240	100	150	100	---	---	---	5	-	-
2	Bco.mr-Godiva	4080	100	150	90	---	---	---	8	-	-
18	CI 8887-CI 5761	4080	99	150	100	---	---	---	7	-	-
12	CM 67-SV Mari	4000	89	150	90	---	---	---	7	-	-
9	Cr.370/45/2	3920	89	150	100	---	---	---	5	-	-
16	U.Sask.1766-Api	3920	93	150	100	---	---	---	8	-	-
4	Composite 29	3760	93	150	110	---	---	---	6	-	-

GRAND MEAN 4640.0

MAXIMUM 5920.0

MINIMUM 3760.0

COEFFICIENT OF VARIATION AS PC 8.5

LSD VARIETY MAENS 5 PC 813.6

* Alpha

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

EUROPE GREECE THESSALONIKI

DR.ELPIS.A.SKORDA
CEREAL INSTITUTE , THESSALONIKI

DATE PLANTED	DEC/29/1979	DATE HARVESTED	---/---/---	RAINFALL	285 mm	IRRIGATION
LATITUDE	40 38'N	LONGITUDE	22 57'E	ELEVATION	10 m	
NITROGEN	100 kg/ha	PHOSPHORUS	40 kg/ha	POTASSIUM		

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
2	Bco.mr-Godiva	4330	134	173	110	--	10MR	--	5	-	-
18	CI 8887-CI 5761	4114	135	171	94	--	10MR	--	3	-	-
15	Purdue 5623A 1315P	3942	132	175	106	--	60MS	--	3	-	-
19	Carina	3841	135	173	94	--	10MR	--	-	-	-
8	Cr 368/4/1	3752	119	171	93	--	60MS	--	5	-	-
11	ER - Apam	3644	121	170	84	--	80MS	--	6	-	-
17	CI 8887-CI 5761	3442	128	171	93	--	40MR	--	3	-	-
14	WI 2198	3183	121	165	95	--	80MS	--	6	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	3139	122	171	95	--	60MS	--	4	-	-
1	Beecher	2966	121	169	105	--	60MS	--	6	-	-
16	U.Sask.1766-Api	2938	124	169	100	--	60MS	--	7	-	-
3	Cr.366.3/2	2875	121	170	95	--	5MR	--	6	-	-
4	Composite 29	2817	125	171	109	--	40MS	--	3	-	-
10	Minn 126-CM 67	2808	126	171	105	--	60MS	--	2	-	-
6	FB(E) NYT/72	2712	125	170	102	--	40MS	--	6	-	-
13	Api-CM 67	2697	126	172	103	--	60MS	--	4	-	-
12	CM 67-SV Mari	2611	121	170	88	--	80MS	--	6	-	-
5	CI 13575	2529	128	173	109	--	60MS	--	3	-	-
24	National Check *	2514	133	170	108	--	60MS	--	1	-	-
7	TJ 70	2476	121	170	99	--	50MS	--	6	-	-
9	Cr.370/45/2	2159	120	172	102	--	40MS	--	4	-	-
21	Beagle (TCL)	1572	130	179	126	--	0	--	1	-	-
22	Nava'joa (TCL)	1536	129	179	108	--	0	--	2	-	-
23	Waha 'S' (Durum)	1433	135	178	90	--	0	--	3	-	-

GRAND MEAN 2917.9

MAXIMUM 4329.8

MINIMUM 1432.7

COEFFICIENT OF VARIATION AS PC 15.1

LSD VARIETY MAENS 5 PC 622.6

*
Beka

Table 9 Cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST

JORDAN

RAMTHA

DR.N.KHATKHUDA
RAMTHA STATIONDATE PLANTED NOV/7/79
LATITUDE 34 32'N
NITROGEN 30 Kg/haDATE HARVESTED --/--/--
LONGITUDE 36 01'E
PHOSPHORUS 40 Kg/haRAINFALL 300 mm
ELEVATION 650 m
POTASSIUM

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
14	WI 2198	4150	127	177	80	--	--	--	-	-	-
11	ER - Apam	3933	127	158	85	--	--	--	-	-	-
12	CM 67-SV Mari	3517	127	158	85	--	--	--	-	-	-
1	Beecher	3500	127	171	115	--	--	--	-	-	-
4	Composite 29	3400	129	167	100	--	--	--	-	-	-
10	Minn 126-CM 67	3292	124	158	100	--	--	--	-	-	-
7	TJ 70	3183	122	153	95	--	--	--	-	-	-
9	Cr.370/45/2	3133	122	160	100	--	--	--	-	-	-
8	Cr 368/4/1	3108	122	163	95	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	3050	127	158	90	--	--	--	-	-	-
16	U.Sask.1766-API	2842	129	160	95	--	--	--	-	-	-
13	Api-CM 67	2825	129	160	95	--	--	--	-	-	-
5	CI 13575	2808	127	164	95	--	--	--	-	-	-
6	FB(E) NYT/72	2792	129	159	100	--	--	--	-	-	-
2	Bco.mr-Godiva	2725	131	170	90	--	--	--	-	-	-
18	CI 8887-CI 5761	2675	134	155	85	--	--	--	-	-	-
3	Cr.366.3/2	2642	123	158	95	--	--	--	-	-	-
17	CI 8887-CI 5761	2458	129	155	95	--	--	--	-	-	-
19	Carina	2458	138	155	80	--	--	--	-	-	-
24	National Check	2350	122	157	95	--	--	--	-	-	-
15	Purdue 5623A 1315P	2283	131	167	90	--	--	--	-	-	-
22	Navajoa (TCL)	1792	136	179	90	--	--	--	-	-	-
23	Waha 'S' (Durum)	1783	140	179	80	--	--	--	-	-	-
21	Beagle (TCL)	1750	134	179	115	--	--	--	-	-	-

GRAND MEAN 2852.1

MAXIMUM 4150.0

MINIMUM 1750.0

COEFFICIENT OF VARIATION AS PC 13.4

LSD VARIETY MAENS 5 PC 539.9

*Deir Alla 106

Table 9 Cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST LEBANON TEL AMARA

DR.A.ALAMDDIN
AGRICULTURAL RESEARCH INSTITUTE.RAYAK

DATE PLANTED	NOV/28/79	DATE HARVESTED	--/--/--	RAINFALL	850 mm	IRRIGATION
LATITUDE	35 5'N	LONGITUDE	35 28'E	ELEVATION	950m	
NITROGEN	200KG/ha	PHOSPHORUS	150Kg/ha	POTASSIUM		

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
24	National Check	3867	146	179	65	--	--	--	-	-	-
8	Cr 368/4/1	3833	134	173	70	--	--	--	-	-	-
4	Composite 29	3775	145	175	85	--	--	--	-	-	-
21	Beagle (TCL)	3717	144	178	95	--	--	--	-	-	-
11	ER - Apam	3683	133	175	45	--	--	--	-	-	-
7	TJ 70	3642	141	177	75	--	--	--	-	-	-
6	PB(E) NYT/72	3617	146	175	65	--	--	--	-	-	-
19	Carina	3583	151	180	60	--	--	--	-	-	-
3	Cr.366.3/2	3550	140	170	70	--	--	--	-	-	-
15	Purdue 5623A 1315P	3450	150	175	75	--	--	--	-	-	-
2	Bco.mr-Godiva	3292	149	177	55	--	--	--	-	-	-
1	Beecher	3250	134	173	85	--	--	--	-	-	-
16	U.Sask.1766-API	3246	143	177	75	--	--	--	-	-	-
12	CM 67-SV Mari	3208	136	174	55	--	--	--	-	-	-
13	Api-CM 67	3108	143	176	55	--	--	--	-	-	-
17	CI 8887-CI 5761	3050	147	149	70	--	--	--	-	-	-
9	Cr.370/45/2	3008	136	174	65	--	--	--	-	-	-
10	Minn 126-CM 67	2950	138	175	65	--	--	--	-	-	-
22	Navajoa (TCL)	2833	145	180	80	--	--	--	-	-	-
23	Waha 'S' (Durum)	2742	149	179	70	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	2708	138	173	65	--	--	--	-	-	-
14	WI 2198	2667	134	165	55	--	--	--	-	-	-
18	CI 8887-CI 5761	2617	152	176	65	--	--	--	-	-	-
5	CI 13575	2467	147	170	60	--	--	--	-	-	-

GRAND MEAN 3244.3

MAXIMUM 3866.7

MINIMUM 2466.7

COEFFICIENT OF VARIATION AS PC 16.1

LSD VARIETY MAENS 5 PC 736.8

Table 9 Cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST		LEBANON		TERBOL							
CEREAL STAFF											
ICARDA											
DATE PLANTED		NOV/28/79	DATE HARVESTED		--/--/--	RAINFALL		825 mm	IRRIGATION		
LATITUDE		35 52'N	LONGITUDE		36'E	ELEVATION		900 m			
NITROGEN		40 Kg/ha	PHOSPHORUS		60 Kg/ha	POTASSIUM					
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
23	Waha 'S' (Durum)	3176	161	204	75	--	--	--	-	-	-
7	TJ 70	3028	147	188	55	--	--	--	-	-	-
21	Beagle (TCL)	2889	149	201	100	--	--	--	-	-	-
3	Cr.366.3/2	2634	146	188	65	--	--	--	-	-	-
8	Cr 368/4/1	2606	145	187	60	--	--	--	-	-	-
9	Cr.370/45/2	2602	145	187	75	--	--	--	-	-	-
17	CI 8887-CI 5761	2556	155	192	70	--	--	--	-	-	-
15	Purdue 5623A 1315P	2528	156	192	70	--	--	--	-	-	-
4	Composite 29	2394	157	192	65	--	--	--	-	-	-
6	FB(E) NYT/72	2356	152	192	65	--	--	--	-	-	-
18	CI 8887-CI 5761	2315	161	193	60	--	--	--	-	-	-
19	Carina	2296	157	187	65	--	--	--	-	-	-
2	Bco.mr-Godiva	2282	156	189	65	--	--	--	-	-	-
22	Navajoa (TCL)	2269	148	211	85	--	--	--	-	-	-
13	Api-CM 67	2208	148	188	60	--	--	--	-	-	-
10	Minn 126-CM 67	2046	147	187	60	--	--	--	-	-	-
11	ER - Apam	2042	146	178	50	--	--	--	-	-	-
12	CM 67-SV Mari	1949	146	190	50	--	--	--	-	-	-
5	CI 13575	1847	150	160	60	--	--	--	-	-	-
16	U.Sask.1766-Api	1829	146	176	60	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	1671	146	187	45	--	--	--	-	-	-
1	Beecher	1583	143	181	75	--	--	--	-	-	-
14	WI 2198	1458	144	175	55	--	--	--	-	-	-
24	National Check	1287	143	187	70	--	--	--	-	-	-

GRAND MEAN 2243.8

MAXIMUM 3175.9

MINIMUM 1287.0

COEFFICIENT OF VARIATION AS PC 13.3

LSD VARIETY MAENS 5 PC 421.7

* Arabic Abiad

Table 9 cont.

REGIONAL BARLEY YIELD TRIAL 1979-1980

AFRICA MOROCCO

RABAT

DR.LYNN GALLAGHER
HASSAN INSTITUTEDATE PLANTED ---/---/---
LATITUDE 34 02'N
NITROGENDATE HARVESTED ---/---/---
LONGITUDE 6 51'W
PHOSPHORUSRAINFALL
ELEVATION
POTASSIUM

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
2	Bco.mr-Godiva	4576	n/a	n/a	n/a	--	--	--	-	-	-
21	Beagle (TCL)	3890	n/a	n/a	n/a	--	--	--	-	-	-
4	Composite 29	3807	n/a	n/a	n/a	--	--	--	-	-	-
18	CI 8887-CI 5761	3708	n/a	n/a	n/a	--	--	--	-	-	-
24	National Check	3596	n/a	n/a	n/a	--	--	--	-	-	-
14	WI 2198	3555	n/a	n/a	n/a	--	--	--	-	-	-
19	Carina	3488	n/a	n/a	n/a	--	--	--	-	-	-
6	FB(E) NYT/72	3388	n/a	n/a	n/a	--	--	--	-	-	-
10	Minn 126-CM 67	3378	n/a	n/a	n/a	--	--	--	-	-	-
17	CI 8887-CI 5761	3246	n/a	n/a	n/a	--	--	--	-	-	-
1	Beecher	3109	n/a	n/a	n/a	--	--	--	-	-	-
11	ER - Apam	3068	n/a	n/a	n/a	--	--	--	-	-	-
13	Api-CM 67	2934	n/a	n/a	n/a	--	--	--	-	-	-
8	Cr 368/4/1	2868	n/a	n/a	n/a	--	--	--	-	-	-
12	CM 67-SV Mari	2731	n/a	n/a	n/a	--	--	--	-	-	-
9	Cr.370/45/2	2704	n/a	n/a	n/a	--	--	--	-	-	-
15	Purdue 5623A 1315P	2691	n/a	n/a	n/a	--	--	--	-	-	-
3	Cr.366.3/2	2624	n/a	n/a	n/a	--	--	--	-	-	-
22	Navajoa (TCL)	2564	n/a	n/a	n/a	--	--	--	-	-	-
23	Waha 'S' (Durum)	2455	n/a	n/a	n/a	--	--	--	-	-	-
5	CI 13575	2312	n/a	n/a	n/a	--	--	--	-	-	-
7	TJ 70	2258	n/a	n/a	n/a	--	--	--	-	-	-
16	U.Sask.1766-Api	2168	n/a	n/a	n/a	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	2083	n/a	n/a	n/a	--	--	--	-	-	-

GRAND MEAN 3114.9

MAXIMUM 4575.8

MINIMUM 2083.3

COEFFICIENT OF VARIATION AS PC 16.6

LSD VARIETY MAENS 5 PC 731.2

Table 9 Cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST

OMAN

WADI QURYAT

DR. MAHMOUD AKHTAR

AGRICULTURAL RESEARCH STATION

DATE PLANTED NOV/10/79

DATE HARVESTED --/--/--.

RAINFALL

IRRIGATION

LATITUDE 22 50'N

LONGITUDE 57 10'E

ELEVATION 400 mm

NITROGEN 88 Kg/ha

PHOSPHORUS

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
7	TJ 70	2994	n/a	n/a	n/a	--	--	--	-	-	-
2	Bco.mr-Godiva	2593	n/a	n/a	n/a	--	--	--	-	-	-
5	CI 13575	2469	n/a	n/a	n/a	--	--	--	-	-	-
24	National Check	2469	n/a	n/a	n/a	--	--	--	-	-	-
3	Cr.366.3/2	2438	n/a	n/a	n/a	--	--	--	-	-	-
6	FB(E) NYT/72	2130	n/a	n/a	n/a	--	--	--	-	-	-
8	Cr 368/4/1	2099	n/a	n/a	n/a	--	--	--	-	-	-
1	Beecher	2037	n/a	n/a	n/a	--	--	--	-	-	-
9	Cr.370/45/2	2037	n/a	n/a	n/a	--	--	--	-	-	-
11	ER - Apam	1975	n/a	n/a	n/a	--	--	--	-	-	-
14	WI 2198	1975	n/a	n/a	n/a	--	--	--	-	-	-
23	Waha 'S' (Durum)	1944	n/a	n/a	n/a	--	--	--	-	-	-
15	Purdue 5623A 1315P	1914	n/a	n/a	n/a	--	--	--	-	-	-
12	CM 67-SV Mari	1821	n/a	n/a	n/a	--	--	--	-	-	-
16	U.Sask.1766-Api	1728	n/a	n/a	n/a	--	--	--	-	-	-
4	Composite 29	1698	n/a	n/a	n/a	--	--	--	-	-	-
22	Navajoa (TCL)	1636	n/a	n/a	n/a	--	--	--	-	-	-
10	Minn 126-CM 67	1605	n/a	n/a	n/a	--	--	--	-	-	-
19	Carina	1420	n/a	n/a	n/a	--	--	--	-	-	-
13	Api-CM 67	1389	n/a	n/a	n/a	--	--	--	-	-	-
18	CI 8887-CI 5761	1327	n/a	n/a	n/a	--	--	--	-	-	-
17	CI 8887-CI 5761	1111	n/a	n/a	n/a	--	--	--	-	-	-
21	Beagle (TCL)	1080	n/a	n/a	n/a	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	1019	n/a	n/a	n/a	--	--	--	-	-	-

GRAND MEAN 1871.1

MAXIMUM 2993.8

MINIMUM 1018.5

COEFFICIENT OF VARIATION AS PC 39.3

LSD VARIETY MAENS 5 PC 1212.6

* Beecher

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

EUROPE		PORTUGAL		ELVAS									
DR.M.T.BARRADAS NATIONAL PLANT BREEDING STATION													
DATE PLANTED		NOV/26/1979		DATE HARVESTED		--/--/--		RAINFALL		211.7 mm		IRRIGATION	
LATITUDE		38 53'N		LONGITUDE		7 9'W		ELEVATION		208 m			
NITROGEN		80 kg/ha		PHOSPHORUS		63 kg/ha		POTASSIUM		50 kg/ha			
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB		
13	Api-CM 67	4324	135	176	78	--	--	--	-	-	-		
2	Bco.mr-Godiva	3735	141	181	97	--	--	--	-	-	-		
17	CI 8887-CI 5761	3652	138	178	96	--	--	--	-	-	-		
11	ER - Apam	3428	134	175	72	--	--	--	-	-	-		
12	CM 67-SV Mari	3368	134	175	86	--	--	--	-	-	-		
23	Waha 'S' (Durum)	3361	137	184	85	--	--	--	-	-	-		
18	CI 8887-CI 5761	3251	140	181	97	--	--	--	-	-	-		
14	WI 2198	3242	132	172	83	--	--	--	-	-	-		
24	National Check	3155	142	183	82	--	--	--	-	-	-		
9	Cr.370/45/2	3129	133	178	110	--	--	--	-	-	-		
16	U.Sask.1766-Api	3123	134	175	102	--	--	--	-	-	-		
8	Cr 368/4/1	3083	133	179	88	--	--	--	-	-	-		
6	FB(E) NYT/72	3076	140	182	79	--	--	--	-	-	-		
19	Carina	3068	142	181	98	--	--	--	-	-	-		
15	Purdue 5623A 1315P	2993	141	181	100	--	--	--	-	-	-		
3	Cr.366.3/2	2935	133	178	93	--	--	--	-	-	-		
10	Minn 126-CM 67	2931	134	177	108	--	--	--	-	-	-		
20	(CN 42 x CI 7772/Pun x Pun/Tch)Pun x Ri	2763	134	181	84	--	--	--	-	-	-		
1	Beecher	2713	133	179	91	--	--	--	-	-	-		
22	Navajoa (TCL)	2635	135	185	89	--	--	--	-	-	-		
7	TJ 70	2598	132	179	89	--	--	--	-	-	-		
21	Beagle (TCL)	2472	134	173	132	--	--	--	-	-	-		
4	Composite 29	2467	139	181	105	--	--	--	-	-	-		
5	CI 13575	2358	137	179	101	--	--	--	-	-	-		
GRAND MEAN		3077.4											
MAXIMUM		4324.2											
MINIMUM		2357.5											
COEFFICIENT OF VARIATION AS PC		17.0											
LSD VARIETY MAENS 5 PC		738.1											

* Ribeka

Table 9 Cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST

SAUDI ARABIA

AL-GASSIM

SYED AHMED MOHLLDIN IGBAL

AGRICULTURAL RESEARCH CENTER , ONAIZAH

DATE PLANTED JAN/2/80

DATE HARVESTED --/--/--

RAINFALL 55.7 mm

IRRIGATION 12 times

LATITUDE 26 04' N

LONGITUDE 43 59' E

ELEVATION 760 m

NITROGEN 40 Kg/ha

PHOSPHORUS 30 Kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
7	TJ 70	5542	72	99	62	--	--	--	-	-	-
13	Api-CM 67	4667	74	99	62	--	--	--	-	-	-
8	Cr 368/4/1	4500	74	99	58	--	--	--	-	-	-
6	FB(E) NYT/72	4125	75	100	72	--	--	--	-	-	-
9	Cr.370/45/2	4125	72	99	66	--	--	--	-	-	-
11	ER - Apam	3958	72	99	52	--	--	--	-	-	-
14	WI 2198	3625	74	99	69	-	--	--	-	-	-
4	Composite 29	3617	79	103	76	--	--	--	-	-	-
12	CM 67-SV Mari	3292	76	101	58	--	--	--	-	-	-
10	Minn 126-CM 67	3042	72	99	58	--	--	--	-	-	-
22	Navajo (TCL)	3000	72	99	45	--	--	--	-	-	-
23	Waha 'S' (Durum)	2967	75	100	53	--	--	--	-	-	-
5	CI 13575	2958	74	99	58	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	2875	72	99	52	--	--	--	-	-	-
15	Purdue 5623A 1315P	2792	79	103	73	--	--	--	-	-	-
1	Beecher	2625	80	102	70	--	--	--	-	-	-
16	U.Sask.1766-Api	2583	75	100	55	--	--	--	-	-	-
21	Beagle (TCL)	2458	76	101	59	--	--	--	-	-	-
24	National Check	2300	76	101	77	--	--	--	-	-	-
3	Cr.366.3/2	2125	76	101	54	--	--	--	-	-	-
19	Carina	1067	76	101	56	--	--	--	-	-	-
18	CI 8887-CI 5761	975	87	108	64	--	--	--	-	-	-
2	Bco.mr-Godiva	900	87	109	65	--	--	--	-	-	-
17	CI 8887-CI 5761	667	90	110	60	--	--	--	-	-	-

GRAND MEAN 2949.3

MAXIMUM 5541.7

MINIMUM 666.7

COEFFICIENT OF VARIATION AS PC 37.6

LSD VARIETY MAENS 5 PC 1567.6

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST		SAUDI ARABIA		DIRAB							
DR.H.SAYED											
COLLEGE OF AGRICULTURE EXPERIMENTAL REACERCH STATION											
DATE PLANTED DEC/28/79		DATE HARVESTED --/--/--		RAINFALL		IRRIGATION 18 times					
LATITUDE 24 42'N		LONGITUDE 46 44'E		ELEVATION 600 m							
NITROGEN 60 kg/ha		PHOSPHORUS 40 kg/ha		POTASSIUM							
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
14	WI 2198	2101	76	105	70	--	--	--	-	-	-
12	CM 67-SV Mari	2053	77	107	64	--	--	--	-	-	-
21	Beagle (TCL)	1991	75	109	93	--	--	--	-	-	-
11	ER - Apam	1917	72	106	67	--	--	--	-	-	-
10	Minn 126-CM 67	1862	68	106	65	--	--	--	-	-	-
24	National Check *	1761	68	102	67	--	--	--	-	-	-
23	Waha 'S' (Durum)	1569	74	108	71	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	1530	89	102	62	--	--	--	-	-	-
8	Cr 368/4/1	1528	76	104	85	--	--	--	-	-	-
9	Cr.370/45/2	1401	77	104	83	--	--	--	-	-	-
7	TJ 70	1358	77	104	71	--	--	--	-	-	-
3	Cr.366.3/2	1308	77	105	59	--	--	--	-	-	-
17	CI 8887-CI 5761	1252	83	109	64	--	--	--	-	-	-
22	Navajoa (TCL)	1168	72	109	72	--	--	--	-	-	-
1	Beecher	1161	77	104	68	--	--	--	-	-	-
13	Api-CM 67	985	77	105	71	--	--	--	-	-	-
5	CI 13575	972	75	104	70	--	--	--	-	-	-
16	U.Sask.1766-Api	913	80	107	67	--	--	--	-	-	-
6	FB(E) NYT/72	872	77	104	67	--	--	--	-	-	-
15	Purdue 5623A 1315P	703	84	110	74	--	--	--	-	-	-
4	Composite 29	542	82	106	68	--	--	--	-	-	-
2	Bco.mr-Godiva	493	84	116	64	--	--	--	-	-	-
19	Carina	486	84	109	79	--	--	--	-	-	-
18	CI 8887-CI 5761	413	90	109	70	--	--	--	-	-	-
GRAND MEAN		1394.9									
MAXIMUM		2100.8									
MINIMUM		413.3									
COEFFICIENT OF VARIATION AS PC		28.8									
LSD VARIETY MAENS 5 PC		567.6									

* Giza 121

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST		SAUDI ARABIA		DIRAB							
DR.H.SAYED											
COLLEGE OF AGRICULTURE EXPERIMENTAL STATION											
DATE PLANTED		DEC/28/79		DATE HARVESTED		--/--/--		RAINFALL		IRRIGATION	
LATITUDE		24 42'N		LONGITUDE		46 44'E		ELEVATION		600 m	
NITROGEN		60 kg/ha		PHOSPHORUS		40 kg/ha		POTASSIUM			
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
21	Beagle (TCL)	1040	69	114	52	--	--	--	-	-	-
7	TJ 70	824	70	111	42	--	--	--	-	-	-
23	Waha 'S' (Durum)	748	69	104	40	--	--	--	-	-	-
12	CM 67-SV Mari	659	74	109	38	--	--	--	-	-	-
22	Navajoa (TCL)	603	69	113	52	--	--	--	-	-	-
10	Minn 126-CM 67	599	75	109	29	--	--	--	-	-	-
9	Cr.370/45/2	574	72	112	32	--	--	--	-	-	-
14	WI 2198	542	80	109	35	--	--	--	-	-	-
11	ER - Apam	507	75	102	28	--	--	--	-	-	-
17	CI 8887-CI 5761	466	83	107	38	--	--	--	-	-	-
8	Cr 368/4/1	449	74	113	31	--	--	--	-	-	-
24	National Check *	407	77	103	30	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	404	74	109	27	--	--	--	-	-	-
16	U.Sask.1766-API	384	73	108	40	--	--	--	-	-	-
13	API-CM 67	342	77	112	32	--	--	--	-	-	-
1	Beecher	332	77	112	38	--	--	--	-	-	-
15	Purdue 5623A 1315P	326	83	110	43	--	--	--	-	-	-
2	Bco.mr-Godiva	322	80	115	36	--	--	--	-	-	-
19	Carina	303	80	110	47	--	--	--	-	-	-
4	Composite 29	302	83	115	34	--	--	--	-	-	-
3	Cr.366.3/2	288	75	113	36	--	--	--	-	-	-
6	FB(E) NYT/72	279	74	110	38	--	--	--	-	-	-
18	CI 8887-CI 5761	269	84	109	41	--	--	--	-	-	-
5	CI 13575	249	76	111	29	--	--	--	-	-	-
GRAND MEAN		467.5									
MAXIMUM		1040.0									
MINIMUM		248.9									
COEFFICIENT OF VARIATION AS PC		45.1									
LSD VARIETY MAENS 5 PC		348.0									

* Giza 121

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST

SYRIA

IZRAA

DR. L. R. MORSE

ACSAD . DAMASCUS

DATE PLANTED --/--/--

LATITUDE 32 52' N

EXTRACTED NITROGEN

DATE HARVESTED --/--/--

LONGITUDE 36 15'E

PHOSPHORUS

RAINFALL

ELEVATION

POTASSIUM

IRRIGATION

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
8	Cr 368/4/1	5796	111	161	83	--	--	--	-	-	-
4	Composite 29	5208	123	164	91	--	--	--	-	-	-
3	Cr.366.3/2	5100	112	164	83	--	--	--	-	-	-
9	Cr.370/45/2	5087	114	162	95	--	--	--	-	-	-
1	Beecher	5067	114	163	100	--	--	--	-	-	-
2	Bco.mr-Godiva	4929	118	168	78	--	--	--	-	-	-
11	ER - Apam	4888	109	164	66	--	--	--	-	-	-
7	TJ 70	4708	112	163	89	--	--	--	-	-	-
19	Carina	4563	124	170	79	--	--	--	-	-	-
15	Purdue 5623A 1315P	4533	123	160	88	--	--	--	-	-	-
12	CM 67-SV Mari	4496	108	164	78	--	--	--	-	-	-
6	FB(E) NYT/72	4375	117	163	71	--	--	--	-	-	-
13	Api-CM 67	4375	118	161	79	--	--	--	-	-	-
24	National Check	4325	116	164	78	--	--	--	-	-	-
17	CI 8887-CI 5761	4246	120	168	84	--	--	--	-	-	-
14	WI 2198	4200	110	160	78	--	--	--	-	-	-
18	CI 8887-CI 5761	4088	125	172	90	--	--	--	-	-	-
10	Minn 126-CM 67	4033	109	161	84	--	--	--	-	-	-
5	CI 13575	3925	112	159	82	--	--	--	-	-	-
21	Beagle (TCL)	3908	113	174	104	--	--	--	-	-	-
16	U.Sask.1766-Api	3846	112	165	80	--	--	--	-	-	-
23	Waha 'S' (Durum)	3663	123	172	84	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/1)Fun x Ki	3629	108	160	76	--	--	--	-	-	-
22	Navajoa (TCL)	3317	119	170	83	--	--	--	-	-	-

GRAND MEAN 4429.3

MAXIMUM	5795.9
---------	--------

MINIMUM	3316.7
---------	--------

COEFFICIENT OF VARIATION AS PC 16.7

LSO VARIETY MAPS 5 PC	1047.8
-----------------------	--------

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST		SYRIA		TEL HADIA							
CEREAL STAFF (EARLY SET)											
ICARDA , ALEPPO											
DATE PLANTED		OCT/20/79	DATE HARVESTED		--/--/--	RAINFALL		424 mm	IRRIGATION		
LATITUDE		36 N	LONGITUDE		37 E	ELEVATION		292 m			
NITROGEN		60 kg/ha	PHOSPHORUS		60 kg/ha	POTASSIUM					
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
11	ER - Apam	5487	152	198	85	--	--	--	-	-	-
12	CM 67-SV Mari	4763	152	194	95	--	--	--	-	-	-
2	Bco.mr-Godiva	4696	156	195	90	--	--	--	-	-	-
4	Composite 29	4458	154	196	115	--	--	--	-	-	-
3	Cr.366.3/2	4433	150	196	95	--	--	--	-	-	-
13	Api-CM 67	4371	150	196	100	--	--	--	-	-	-
6	FB(E) NYT/72	4250	152	194	110	--	--	--	-	-	-
8	Cr 368/4/1	4225	150	188	100	--	--	--	-	-	-
22	Navajoa (TCL)	4171	152	n/a	110	--	--	--	-	-	-
19	Carina	4150	156	195	95	--	--	--	-	-	-
5	CI 13575	4125	149	195	100	--	--	--	-	-	-
18	CI 8887-CI 5761	4079	156	195	105	--	--	--	-	-	-
14	WI 2198	3992	149	199	110	--	--	--	-	-	-
24	National Check *	3954	146	195	105	--	--	--	-	-	-
17	CI 8887-CI 5761	3821	150	196	100	--	--	--	-	-	-
15	Purdue 5623A 1315P	3729	155	198	110	--	--	--	-	-	-
7	TJ 70	3700	154	195	100	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	3683	n/a	196	90	--	--	--	-	-	-
16	U.Sask.1766-Api	3379	153	199	105	--	--	--	-	-	-
9	Cr.370/45/2	3288	152	188	95	--	--	--	-	-	-
1	Beecher	3283	150	194	100	--	--	--	-	-	-
10	Minn 126-CM 67	3229	152	195	80	--	--	--	-	-	-
21	Beagle (TCL)	3138	n/a	n/a	130	--	--	--	-	-	-
23	Waha 'S' (Durum)	2892	166	n/a	100	--	--	--	-	-	-
GRAND MEAN		3970.7									
MAXIMUM		5487.5									
MINIMUM		2891.7									
COEFFICIENT OF VARIATION AS PC		19.2									
LSD VARIETY MAENS 5 PC		1079.1									

* Arabic Abiad

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST		SYRIA		TEL HADIA							
CEREAL STAFF (NORMAL SET)											
ICARDA . ALEPPO											
DATE PLANTED		NOV/14/79	DATE HARVESTED		--/--/--	RAINFALL		424 mm	IRRIGATION		
LATITUDE		36 N	LONGITUDE		37 E	ELEVATION		292 m			
NITROGEN		60 kg/ha	PHOSPHORUS		60 kg/ha	POTASSIUM					
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
11	ER - Apam	5042	147	191	85	--	--	--	-	-	-
12	CM 67-SV Mari	4829	146	189	95	--	--	--	-	-	-
13	Api-CM 67	4713	150	188	100	--	--	--	-	-	-
2	Bco.mr-Godiva	4704	152	190	90	--	--	--	-	-	-
3	Cr.366.3/2	4442	145	189	95	--	--	--	-	-	-
4	Composite 29	4250	149	190	115	--	--	--	-	-	-
6	FB(E) NYT/72	4204	150	191	110	--	--	--	-	-	-
8	Cr 368/4/1	4133	144	188	100	--	--	--	-	-	-
24	National Check	4096	147	183	105	--	--	--	-	-	-
22	Navajoa (TCL)	4092	147	n/a	110	--	--	--	-	-	-
19	Carina	4075	156	192	95	--	--	--	-	-	-
14	WI 2198	3950	146	188	110	--	--	--	-	-	-
18	CI 8887-CI 5761	3921	155	191	105	--	--	--	-	-	-
5	CI 13575	3800	147	191	100	--	--	--	-	-	-
17	CI 8887-CI 5761	3779	151	188	100	--	--	--	-	-	-
10	Minn 126-CM 67	3754	147	195	80	--	--	--	-	-	-
15	Purdue 5623A 1315P	3663	157	190	110	--	--	--	-	-	-
7	TJ 70	3558	146	189	100	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	3483	144	188	90	--	--	--	-	-	-
16	U.Sask.1766-Api	3438	149	189	105	--	--	--	-	-	-
9	Cr.370/45/2	3363	146	198	95	--	--	--	-	-	-
23	Waha 'S' (Durum)	3229	162	n/a	100	--	--	--	-	-	-
1	Beecher	3171	142	183	100	--	--	--	-	-	-
21	Beagle (TCL)	2983	148	n/a	130	--	--	--	-	-	-
GRAND MEAN		3944.6									
MAXIMUM		5041.7									
MINIMUM		2983.3									
COEFFICIENT OF VARIATION AS PC		19.5									
LSD VARIETY MAENS 5 PC		1089.6									

* Arabic Abiad

Table 9 cont.

REGIONAL BARLEY YIELD TRIAL 1979-1980

MIDDLE EAST		SYRIA		TEL HADIA									
CEREAL STAFF (LATE SET)													
ICARDA , ALEPPO													
DATE PLANTED		JAN/23/80		DATE HARVESTED		--/--/--		RAINFALL		424 mm			
LATITUDE		36 N		LONGITUDE		37 E		ELEVATION		292 m			
NITROGEN		60 kg/ha		PHOSPHORUS		60 kg/ha		POTASSIUM		IRRIGATION			
VAR NO.	VARIETY/CROSS			YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
11	ER - Apam			5767	n/a	n/a	n/a	--	--	--	-	-	-
4	Composite 29			5467	n/a	n/a	n/a	--	--	--	-	-	-
13	Api-CM 67			5283	n/a	n/a	n/a	--	--	--	-	-	-
8	Cr 368/4/1			5033	n/a	n/a	n/a	--	--	--	-	-	-
6	PB(E) NYT/72			4689	n/a	n/a	n/a	--	--	--	-	-	-
9	Cr.370/45/2			4628	n/a	n/a	n/a	--	--	--	-	-	-
3	Cr.366.3/2			4611	n/a	n/a	n/a	--	--	--	-	-	-
1	Beecher			4500	n/a	n/a	n/a	--	--	--	-	-	-
16	U.Sask.1766-Api			4489	n/a	n/a	n/a	--	--	--	-	-	-
7	TJ 70			4478	n/a	n/a	n/a	--	--	--	-	-	-
14	WI 2198			4383	n/a	n/a	n/a	--	--	--	-	-	-
17	CI 8887-CI 5761			4367	n/a	n/a	n/a	--	--	--	-	-	-
18	CI 8887-CI 5761			4267	n/a	n/a	n/a	--	--	--	-	-	-
2	Bco,mr-Godiva			4228	n/a	n/a	n/a	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki			4228	n/a	n/a	n/a	--	--	--	-	-	-
12	CM 67-SV Mari			4200	n/a	n/a	n/a	--	--	--	-	-	-
10	Minn 126-CM 67			4156	n/a	n/a	n/a	--	--	--	-	-	-
15	Purdue 5623A 1315P			3900	n/a	n/a	n/a	--	--	--	-	-	-
24	National Check *			3789	n/a	n/a	n/a	--	--	--	-	-	-
19	Carina			3767	n/a	n/a	n/a	--	--	--	-	-	-
5	CI 13575			3567	n/a	n/a	n/a	--	--	--	-	-	-
22	Navajoa (TCL)			3456	n/a	n/a	n/a	--	--	--	-	-	-
23	Waha 'S' (Durum)			3378	n/a	n/a	n/a	--	--	--	-	-	-
21	Beagle (TCL)			2878	n/a	n/a	n/a	--	--	--	-	-	-
GRAND MEAN				4312.7									
MAXIMUM				5766.7									
MINIMUM				2877.8									
COEFFICIENT OF VARIATION AS PC				19.9									
LSD VARIETY MAENS 5 PC				1414.7									

* Arabic Abiad

Table 9 cont.

REGIONAL BARLEY YIELD TRIAL 1979-1980

AFRICA		TUNISIA		BEJA							
INRAT											
INSTITUT DES GRANDES CULTURES											
DATE PLANTED		DEC/2/1979		DATE HARVESTED		--/--/--		RAINFALL		700 mm	
LATITUDE		36 N		LONGITUDE		9 E		ELEVATION		165 m	
NITROGEN		80 kg/ha		PHOSPHORUS		67.5 kg/ha		POTASSIUM		IRRIGATION 0	
VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
21	Beagle (TCL)	7851	125	n/a	125	---	60MS	---	0	-	9
22	Navajoa (TCL)	6647	122	n/a	115	---	60MS	---	6	-	0
12	CM 67-SV Mari	6110	124	n/a	85	---	60S	---	0	-	7
2	Bco.mr-Godiva	5951	124	n/a	85	---	60S	---	3	-	9
23	Waha 'S' (Durum)	5889	133	n/a	100	---	0	---	0	-	0
14	WI 2198	5750	119	n/a	85	---	80S	---	4	-	0
10	Minn 126-CM 67	5743	115	n/a	85	---	100S	---	0	-	6
11	ER - Apam	5736	122	n/a	80	---	100S	---	0	-	7
19	Carina	5714	130	n/a	85	---	80S	---	0	-	0
17	CI 8887-CI 5761	5453	124	n/a	90	---	80S	---	4	-	0
18	CI 8887-CI 5761	5190	133	n/a	85	---	100S	---	8	-	0
15	Purdue 5623A 1315P	5183	124	n/a	90	---	80S	---	3	-	0
4	Composite 29	4979	128	n/a	105	---	100S	---	4	-	0
6	FB(E) NYT/72	4651	133	n/a	95	---	80S	---	8	-	0
9	Cr.370/45/2	4618	121	n/a	95	---	100S	---	0	-	6
1	Beecher	4602	122	n/a	105	---	80S	---	7	-	0
5	CI 13575	4467	123	n/a	90	---	100S	---	4	-	3
3	Cr.366.3/2	4410	119	n/a	95	---	60S	---	2	-	6
24	National Check "	4363	130	n/a	90	---	0	---	0	-	0
13	Api-CM 67	4223	121	n/a	80	---	80S	---	5	-	0
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	4175	119	n/a	80	---	80S	---	0	-	0
8	Cr 368/4/1	3811	121	n/a	95	---	100S	---	0	-	7
7	TJ 70	3623	123	n/a	85	---	100S	---	7	-	0
16	U.Sask.1766-Api	3266	119	n/a	85	---	80S	---	2	-	0
GRAND MEAN		5100.2									
MAXIMUM		7851.0									
MINIMUM		3266.0									
COEFFICIENT OF VARIATION AS PC		11.0									
LSD VARIETY MAENS 5 PC		790.0									

* Martin

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

AFRICA TUNISIA LE KEF

Mme LARIBI PAPANI
OFFICES DES CEREALES , LE KEF

DATE PLANTED	DEC/24/1979	DATE HARVESTED	--/--/--	RAINFALL	IRRIGATION 0
LATITUDE	36 10'N	LONGITUDE	8 40'E	ELEVATION	
NITROGEN	27 kg/ha	PHOSPHORUS		POTASSIUM	

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
10	Minn 126-CM 67	7050	n/a	n/a	n/a	---	---	---	-	-	-
11	ER - Apam	6600	n/a	n/a	n/a	---	---	---	-	-	-
14	WI 2198	6500	n/a	n/a	n/a	---	---	---	-	-	-
7	TJ 70	6250	n/a	n/a	n/a	---	---	---	-	-	-
12	CM 67-SV Mari	6200	n/a	n/a	n/a	---	---	---	-	-	-
4	Composite 29	6150	n/a	n/a	n/a	---	---	---	-	-	-
1	Beecher	5600	n/a	n/a	n/a	---	---	---	-	-	-
19	Carina	5500	n/a	n/a	n/a	---	---	---	-	-	-
9	Cr.370/45/2	5450	n/a	n/a	n/a	---	---	---	-	-	-
17	CI 8887-CI 5761	5450	n/a	n/a	n/a	---	---	---	-	-	-
3	Cr.366.3/2	5400	n/a	n/a	n/a	---	---	---	-	-	-
18	CI 8887-CI 5761	5400	n/a	n/a	n/a	---	---	---	-	-	-
2	Bco.mr-Godiva	5350	n/a	n/a	n/a	---	---	---	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	5350	n/a	n/a	n/a	---	---	---	-	-	-
23	Waha 'S' (Durum)	5250	n/a	n/a	n/a	---	---	---	-	-	-
13	Api-CM 67	5050	n/a	n/a	n/a	---	---	---	-	-	-
15	Purdue 5623A 1315P	5000	n/a	n/a	n/a	---	---	---	-	-	-
6	FB(E) NYT/72	4900	n/a	n/a	n/a	---	---	---	-	-	-
8	Cr 368/4/1	4700	n/a	n/a	n/a	---	---	---	-	-	-
5	CI 13575	4600	n/a	n/a	n/a	---	---	---	-	-	-
16	U.Sask.1766-Api	4450	n/a	n/a	n/a	---	---	---	-	-	-
22	Navajoa (TCL)	1900	n/a	n/a	n/a	---	---	---	-	-	-

GRAND MEAN 4920.8

MAXIMUM 7050.0

MINIMUM 1900.0

COEFFICIENT OF VARIATION AS PC 22.7

LSD VARIETY MAENS 5 PC 1582.2

Var 21.24 Are missing

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

AFRICA TUNISIA MATEUR

Mme LARIBI PAFANI
OFFICES DES CEREALES , MATEUR

DATE PLANTED	DEC/11/1979	DATE HARVESTED	--/--/--	RAINFALL	468.4 mm	IRRIGATION
LATITUDE	37 03'N	LONGITUDE	9 40'E	ELEVATION		
NITROGEN	70 kg/ha	PHOSPHORUS		POTASSIUM		

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
2	Bco.mr-Godiva	2950	n/a	n/a	n/a	--	--	--	-	-	-
12	CM 67-SV Mari	2900	n/a	n/a	n/a	--	--	--	-	-	-
8	Cr 368/4/1	2600	n/a	n/a	n/a	--	--	--	-	-	-
18	CI 8887-CI 5761	2450	n/a	n/a	n/a	--	--	--	-	-	-
23	Waha 'S' (Durum)	2350	n/a	n/a	n/a	--	--	--	-	-	-
10	Minn 126-CM 67	2300	n/a	n/a	n/a	--	--	--	-	-	-
11	ER - Apam	2300	n/a	n/a	n/a	--	--	--	-	-	-
6	PB(E) NYT/72	2200	n/a	n/a	n/a	--	--	--	-	-	-
15	Purdue 5623A 1315P	2200	n/a	n/a	n/a	--	--	--	-	-	-
17	CI 8887-CI 5761	2150	n/a	n/a	n/a	--	--	--	-	-	-
4	Composite 29	2100	n/a	n/a	n/a	--	--	--	-	-	-
1	Beecher	2050	n/a	n/a	n/a	--	--	--	-	-	-
16	U.Sask.1766-Api	2050	n/a	n/a	n/a	--	--	--	-	-	-
3	Cr.366.3/2	2000	n/a	n/a	n/a	--	--	--	-	-	-
21	Beagle (TCL)	2000	n/a	n/a	n/a	--	--	--	-	-	-
19	Carina	1900	n/a	n/a	n/a	--	--	--	-	-	-
9	Cr.370/45/2	1850	n/a	n/a	n/a	--	--	--	-	-	-
13	Api-CM 67	1750	n/a	n/a	n/a	--	--	--	-	-	-
24	National Check .	1700	n/a	n/a	n/a	--	--	--	-	-	-
5	CI 13575	1650	n/a	n/a	n/a	--	--	--	-	-	-
14	WI 2198	1550	n/a	n/a	n/a	--	--	--	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch)Fun x Ki	1350	n/a	n/a	n/a	--	--	--	-	-	-
7	TJ 70	1150	n/a	n/a	n/a	--	--	--	-	-	-
22	Navajoa (TCL)	1150	n/a	n/a	n/a	--	--	--	-	-	-

GRAND MEAN 2027.1

MAXIMUM 2950.0

MINIMUM 1150.0

COEFFICIENT OF VARIATION AS PC 24.2

LSD VARIETY MAENS 5 PC 694.0

* Martin

Table 9 cont. REGIONAL BARLEY YIELD TRIAL 1979-1980

NORTH AMERICA

U.S.A , OREGON

MERRILL

DR.W.MC CUISTION

OREGON STATE UNIVERSITY

DATE PLANTED --/--/--

DATE HARVESTED --/--/--

RAINFALL

IRRIGATION 38.1 cm

LATITUDE 42 02'N

LONGITUDE 121 37'W

ELEVATION

NITROGEN 21.77 kg/ha

PHOSPHORUS 27,22 kg/ha

POTASSIUM

VAR NO.	VARIETY/CROSS	YIELD KG/HA	HEAD DAYS	MAT DAYS	PLNT HT	YELL RUST	LEAF RUST	STEM RUST	POWD	SEPT TRIT	NB
21	Beagle (TCL)	10848	n/a	n/a	n/a	---	---	---	-	-	-
2	Bco.mr-Godiva	9390	n/a	n/a	n/a	---	---	---	-	-	-
19	Carina	8838	n/a	n/a	n/a	---	---	---	-	-	-
22	Navajoa (TCL)	8818	n/a	n/a	n/a	---	---	---	-	-	-
16	U.Sask.1766-API	8643	n/a	n/a	n/a	---	---	---	-	-	-
17	CI 8887-CI 5761	8235	n/a	n/a	n/a	---	---	---	-	-	-
23	Waha 'S' (Durum)	7893	n/a	n/a	n/a	---	---	---	-	-	-
24	National Check *	7785	n/a	n/a	n/a	---	---	---	-	-	-
1	Beecher	7540	n/a	n/a	n/a	---	---	---	-	-	-
12	CM 67-SV Mari	7530	n/a	n/a	n/a	---	---	---	-	-	-
15	Purdue 5623A 1315P	7498	n/a	n/a	n/a	---	---	---	-	-	-
10	Minn 126-CM 67	7414	n/a	n/a	n/a	---	---	---	-	-	-
18	CI 8887-CI 5761	7358	n/a	n/a	n/a	---	---	---	-	-	-
4	Composite 29	7283	n/a	n/a	n/a	---	---	---	-	-	-
11	ER - Apam	7242	n/a	n/a	n/a	---	---	---	-	-	-
5	CI 13575	7233	n/a	n/a	n/a	---	---	---	-	-	-
6	FB(E) NYT/72	7181	n/a	n/a	n/a	---	---	---	-	-	-
13	Api-CM 67	7178	n/a	n/a	n/a	---	---	---	-	-	-
20	(CN 42 x CI 7772/Fun x Fun/Tch) Fun x Ki	7155	n/a	n/a	n/a	---	---	---	-	-	-
8	Cr 368/4/1	5956	n/a	n/a	n/a	---	---	---	-	-	-
7	TJ 70	5691	n/a	n/a	n/a	---	---	---	-	-	-
14	WI 2198	5537	n/a	n/a	n/a	---	---	---	-	-	-
3	Cr.366.3/2	5397	n/a	n/a	n/a	---	---	---	-	-	-
9	Cr.370/45/2	2667	n/a	n/a	n/a	---	---	---	-	-	-

GRAND MEAN 7346.1

MAXIMUM 10847.5

MINIMUM 2666.7

COEFFICIENT OF VARIATION AS PC 16.6

LSD VARIETY MAENS 5 PC 1726.1

* Steptoe

Preliminary Observation Nurseries.

The Preliminary Observation Nurseries are designed to provide the national programmes, lines having great variability in agronomic traits and wide genetic base out of which lines can be selected either for direct yield trials or utilizing them in their breeding programmes. In these nurseries relatively large number of early generation lines are screened at different locations through out the region. A large number of these entries were already screened for disease resistance and adaptability in the Regional Disease and Insect Screening Nursery (RDISN).

The information gained from the PON is also used in the selection of widely adapted high yielding lines for Regional Yield Trials. The following four PONs were distributed to the cooperators:

- 9th PON Rainfed = 150 entries
- 9th PON Breadwheat = 150 entries
- 9th PON Durum = 100 entries
- 9th PON Barley = 150 entries

The rainfed and barley nurseries were intended for rainfed conditions, using improved practices based on national recommendations. As a guide line the following applications were recommended for these nurseries: 40 kg N/ha, 30 kg P_2O_5 /ha, and if necessary 20 kg K_2O /ha. The breadwheat and durum wheat nurseries are intended for adequate moisture conditions with adequate nutrient availability. The dose of 100 to 150 kg N/ha, 80 kg P_2O_5 /ha and if moisture conditions are not good 60 kg K_2O /ha were recommended as a guide line to the cooperators.

Sufficient seed of each entry was provided for planting two rows, each 2.5 meter long and every 20th entry was a check variety which is known to perform better in this region.

For recording of data on agronomic traits of economic importance guide lines were sent with the seed. However, the data on the following characteristics were

scored for evaluating the performance of these nurseries and different entries.

- Days to heading
- Days to maturity
- Plant height
- 1000 kernel weight
- Diseases: Yellow Rust (YR)
 - Leaf Rust (LR)
 - Stem Rust (SR)
 - Powdery mildew (PM)
 - Septoria (Sept.)

For barley data on Scald (SC), net blotch (NB) and spot blotch were also recorded. The detailed results are given in the following tables.

Ninth. Preliminary Observation Nursery - Rainfed

This nursery comprised of 150 entries of widely adapted lines/varieties with better resistance. Every 10th entry was a check of breadwheat variety Mexipak and cocorit (durum). The nursery was planted at 28 locations.

Each entry was selected at more than one location. However, there were a large number of entries with wider adaptability and 32 lines were selected at 10 or more locations. Twelve entries i.e. Nos. 4, 5, 24, 25, 26, 29, 31, 51, 52, 57, 64 and 127 were selected at more than 50% of the locations. Beside these widely adapted lines some of the lines with specific characteristics and better performance at certain locations were also selected by the cooperators (Table 10).

Agronomic characters

The average number of days to heading for 17 locations ranged from 110 to 124. The number of days to maturity ranged from 158 to 165 when the results were averaged over 11 locations and plant height from 77 to 94 cm.

Diseases

Data were recorded for rusts, powdery mildew, and septoria. The ACI for three rusts varied as follows:

Yellow rust: 0 - 12

Leaf rust : 0 - 38

Stem rust : 0 - 33

The score for powdery mildew and septoria ranged from 0 - 9 and 1 - 5 respectively. However a number of lines seem to have resistance for more than one diseases.

Table 10. NINTH PRELIMINARY OBSERVATION NURSERY-RAINFED
OVERALL PERFORMANCE OF THE ENTRIES(28 LOCATIONS)

ENTRY NO	VARIETY/CROSS PEDIGREE	PROTEIN		DH	DH	PLH	WT 1000 KERNEL	A.C.I				
		FR*	%					YR	LR	SR	PM	SEPT
1	Mexipak Check	-	-	120	162	82	-	4	29	13	1	1
2	Tob"S" - 8156 x Y50E - Ka1 3 CM 1564-4S-2S-1S-OS	6	9.5	112	159	82	45.80	0	10	15	0	2
3	Ka1 - Bb x Super X CM 21586-7S-1S-OS	12	6.61	114	159	87	41.25	2	11	24	2	4
4	(CC - Inia/Tob -Cfn x B)7C CM 8287-G-1M-3Y-3M-OY	15	10.7	120	161	94	38.52	3	11	5	3	1
5	C 26 - Cd1(Cgn/Tob - Cno x Cno - Inia) CM 16722-K-4Y-2M-OY	15	9.6	116	161	85	40.10	5	2	10	1	2
6	(21931/Ch 53 - An x Gb 56) An 64 II 20985-5H-2H-11H-OSK	7	10.3	115	160	79	40.09	0	10	33	2	1
7	HD 1944 x Cno"S" x Gallo CM 15273-1L-2L-OK-OSK	5	10.44	113	162	77	40.31	3	12	8	1	2
8	Limpopo	8	10.6	124	165	85	46.47	0	11	17	5	1
9	(SD 648-5-8156/Chris x Son-KL.Rend)CC - Inia CM 5106-7S-1S-OS	10	10.43	117	161	83	4.21	0	10	4	3	2
10	COCORIT Check	7	-	116	161	84	-	3	3	15	5	1
11	Bb - 7C 2 CM 5449-C-7Y-3M-2Y-2M-1Y-OM	10	11.2	117	161	80	41.46	0	6	4	4	1
12	SAJAME"S" CM 4210-10Y-4M-8Y-5M-1Y-OM	9	8.9	117	161	85	43.12	0	10	6	5	1
13	HL.41B x Az 67 CM 23271-5BJ-1AL-OG	11	9.3	116	160	87	41.55	0	17	5	4	1
14	SK - E.de CH x Mxp L 101-51L-OL-6BJ-1S-OS	10	8.9	120	161	90	33.94	8	21	25	2	2
15	Bb -Ska x Cd1 CM 10744-16Y-1M-1Y-4M-OY	8	10.4	122	165	77	40.28	0	13	0	0	2
16	SPARROW"S" CM 2182-3Y-OM	7	9.5	112	158	81	43.22	2	2	2	0	3
17	(21943/Ch53/LR64 2 x 8156)Nar59"S" Bb-Inia CM 22321-1L-OAP	5	9.7	110	158	79	42.34	0	14	20	3	2
18	Cno"S" - No 66 x Ka1 - Bb/Pj"S" - On 2 x SX CM 12421-F-1Y-1M-6Y-OM	12	9.8	119	162	87	39.90	8	2	11	2	1
19	Ron - Cha CM 6552-16M-1Y-5M-3Y-OM	9	8.5	122	162	85	40.43	3	1	2	3	2
20	Mexipak Check	-	-	120	162	82	-	0	31	13	0	2

21	VANERN"S" CM 5373-F-1Y-1M-3Y-1M-0Y	7	9.5	122	162	77	36.62	3	3	13	2	5
22	CHIROCA"S" CM 8963-A-1M-1Y-1M-4Y-0M	15	9.2	117	161	84	37.88	1	0	3	2	2
23	Tob - 8156 x Ka1 CM 8783-OL-5L-3L-2L-OK-OSK	11	8.9	118	161	81	38.36	5	8	6	1	1
24	Moncho"S" CM 8288-A-3M-6Y-5M-1Y-0M	17	9	118	162	81	45.61	0	2	11	1	1
25	Inia - RL 4220 x 7C/Yr"S" CH 15430-2S-2S-1S-OAP	17	8.4	117	161	84	41.55	1	5	2	4	1
26	Pavon'S' CM 8399-D-4M-3Y-1M-0Y	17	10	120	162	82	41.07	1	4	13	5	2
27	Brochis'S' CM 5872-C-1Y-1M-3Y-2M-0Y-0S	11	8.5	112	159	82	36.89	0	9	2	2	1
28	Pyt - 75/16	9	8.6	114	159	87	36.31	1	3	27	6	1
29	(Pak F 4/Tob - Cfn x Bb)Sam 6313	14	9.0	120	161	94	39.82	5	17	16	7	1
30	COCORIT Check	7	-	116	161	85	-	2	7	15	5	1
31	HD 1220-Ka1 3 72-L 19	15	8.7	115	160	79	42.86	1	4	20	5	1
32	HD 2203	2	8.5	113	162	77	48.00	0	3	5	2	1
33	(No 66 - Bb/Cno x Nad - Chr'S')7C CM5375-F-1Y-1M-1Y-0M	11	8.5	124	165	85	35.80	1	6	25	1	3
34	L 2331/1291	7	9.1	117	161	83	41.51	0	6	4	2	3
35	Pak 20 x IRN 149 - G 271 PK 5795-2A-1A-0A	3	9.3	116	161	84	43.66	0	7	25	2	4
36	Bb - Ca1 30877-301M-500Y-2TZ-OL	5	9.5	117	161	80	41.88	0	4	2	3	2
37	Goldfinch'S' II 23561-EL-500Y	9	8.8	117	161	85	39.66	0	14	6	2	2
38	12300 - Tdo x Jar 66 - Pak 20 PK 6029-1K-7K-OL	11	8.1	116	160	87	36.52	0	5	10	1	2
39	Yr x Son 64 - NY 5207.85/Cno'S' - 7C x Gto CM 871-B-5M-1Y-2M-2Y-0Y	3	9.2	120	161	90	42.06	0	4	5	2	2
40	Mexipak Check	-	-	122	165	77	-	0	29	19	4	1
41	Bbt'S' x Bb - Ka1 CM 32285-4S-1AP-OAP	3	10.3	112	158	81	39.96	0	14	3	2	1
42	Jorvil 2 x Meng - 8156/Cno'S' - Ca1 L 492-4L-1AP-OAP	3	10.5	110	158	79	38.98	0	13	7	6	1
43	Au x K.Et Ch B - Mxp L 762-3L-1AP-OAP	3	10.1	119	162	87	40.10	0	2	4	2	1
44	Bch'S' - Hork	8	12.8	122	162	85	46.43	0	0	4	1	1

	CM 32609-4L-1AP-OAP											
45	Ti 71-Pic "S" CM 27712-3L-1AP-OAP	13	9.3	120	162	82	45.75	0	11	9	5	1
46	Tol 73-Cl CM 35403-1L-4AP-OAP	11	12	122	162	77	33.91	1	1	15	6	1
47	(Yr"S"/Bb-Cal x 7C-Nad63)Hork CM 39845-1S-1AP-OAP	7	7.3	117	161	48	36.04	0	15	13	5	1
48	((Cno-7CxCC-Tob/Cno"S"-No66)Kal)Hork CM 39846-4S-2AP-OAP	8	12.0	118	161	81	35.17	3	25	9	5	1
49	Sap"S"(Lee-KVZ/CCxRon-Cha CM 40404-6S-1AP-OAP	8	10.6	118	162	81	43.35	1	8	2	1	1
50	COCORIT Check	6	-	117	161	84	-	1	4	10	5	1
51	Jup "S" x CD Vg Sel 101 2 SWM 5094-5S-1AP-OAP	17	10.9	120	162	82	44.40	0	12	4	5	1
52	Sturdy-Condor "S" SWM 5138-1S-1AP-OAP	16	11.8	112	159	82	44.90	0	3	16	6	1
53	Sturdy-Condor "S" SWM 5138-2AP-OAP	11	13.6	114	159	87	41.46	0	11	9	3	2
54	R 176/K6035-11//Knk Ncp 59-1KE-2AP-OAP	5	11.9	120	161	94	34.93	0	6	15	2	2
55	Mex 120-We x KNG Ncp 214-C-3KE-2AP-OAP	4	9.8	116	161	85	42.38	1	18	15	6	2
56	Pak 677B/Inia "S"-Napo x Tob 66 L 856-OL-1AP-OAP	2	10.8	115	160	79	42.17	0	10	8	2	2
57	Cno"S"-PJ 62xGallo/Pic "S" CM 35044-OL-1AP-OAP	17	9.4	113	162	77	43.97	0	11	11	5	2
58	Maya 74-choi CM 39427-5AP-OAP	7	9.2	124	165	85	46.27	3	5	16	2	2
59	Cno's'-No 66xCC-Inia/Bb-Nar 59 CM 15650-1S-8S-2S-OAP	5	8.9	117	161	83	39.81	0	10	6	3	2
60	Mexipak Check	-	-	116	161	84	-	10	25	23	2	2
61	SOLSORT'S' CM 10712-1Y-1M-7Y-1M-0Y	8	8.6	117	161	80	40.24	0	4	33	2	2
62	Bobwhite 'S' CM 33203-H-4M-1Y-0M	9	9.9	117	161	85	35.19	0	4	10	1	1
63	Bb x Inia II 30573-16S-1S-2S-OAP	11	9.2	116	160	87	34.97	4	29	10	5	1
64	Ron x CC-Inia L 61-1679-OAP	14	8.7	120	161	90	34.30	1	18	6	5	3
65	(Cno-7C x CC-Tob/Cno'S'-No 66)Kal(R) CM 11377-A-1Y-9M-1Y-0M	13	10.3	122	165	77	36.14	0	3	3	6	1
66	Jup's' - Bjj's' CM 39992-OAP	6	9.1	112	158	81	35.21	1	20	10	6	4

67	Fr/3/MCM/Kt/2/Y50-2/4/4777/Fn/2/K58/N/3/ N10821/Cal//Lu CM 29600-4L-OKE-OS-5S-OAP	3	10.4	110	158	79	34.87	0	11	8	2	2
68	Tob-Chb 70 CM 11L-1L-OKE-OSK-OAP	9	8.7	119	162	87	39.54	0	12	4	1	2
69	Gb x (FKN.II 50-17) II 53-649	3	12.8	122	162	85	36.90	0	3	6	4	1
70	COCORIT Check	4	-	120	162	82	-	1	1	8	7	1
71	COMO CM 4756-12Y-1M-1Y-1M-OY	12	10.0	122	162	77	35.19	2	10	4	5	2
72	Pak F4-6313-Nuri CM 1374-5L-2L-OL	9	9.7	117	161	84	40.40	0	7	4	5	2
73	KVZ(CC-Inia/CnoxEL Gau-Son64) SE 381-4S-1S-6S-OS-OKE	5	10.1	118	161	81	43.34	0	1	1	3	1
74	Pato((JarxSon64-KL.Rend/7C-Tob)II61-107/ Tob-Cal SE 642-16S-4S-OS-OKE	6	10.2	118	162	81	29.36	0	16	3	3	1
75	Ane - My 54 - Tk 71 CM 15928-3M-1Y-7M-OY-OKE	8	9.5	117	161	84	33.65	0	6	6	6	1
76	Nar 59 x Tob - Cno CM 4166-5S-2S-1S-OS	10	10.5	120	162	82	34.14	0	5	15	5	1
77	Qfn/61-130-Lds x G11's' CD 8498	7	9.9	112	159	82	35.03	0	3	5	5	2
78	Gta's'- Stk's' Cu 771-8Y-OY	11	9.1	114	159	87	43.42	0	12	20	5	2
79	Essai P	3	-	120	161	94	-	0	0	16	7	1
80	Mexipak 65 Check	-	-	116	161	85	-	8	26	20	3	1
81	6710 - 6780 x ptl's' CM 17512-2M-1Y-OAP	4	-	115	160	79	-	0	10	21	6	1
82	Rabi's' - PI 94587-I x 101S/Ptl's' CM 17731-A-2Y-1Y-OY	8	-	113	162	77	-	0	4	20	6	1
83	D.Dwarf S15-Cr's'/Cit's'-AA's'xFg's' CD 7443-11Y-4M-OY	10	-	124	165	85	-	0	4	16	5	1
84	Mexi "S" x Chap-21563 CD 1894-18Y-OY	11	-	117	161	83	-	2	4	16	7	2
85	Tell 76 CM 10200-9BK-1BK-7Y-OAP	6	-	116	161	84	-	0	0	20	9	2
86	Mexi x Chap-21563 CD 3909-12Y-OM-OKE	7	-	117	161	80	-	0	0	20	6	1
87	(Gr-Fg/D 21563-Gs x Cit)P66/270 CD 1074-1Y-3Y-OY-OKE	6	-	117	161	85	-	0	0	16	6	1
88	Plc-Cr x Mca/D 67-3-Cit 71 CM 18004-B-6M-3Y-1Y-OY	10	-	116	160	87	-	0	1	25	6	1
89	(VZ 324-CpxVZ 156/Hau-AAU-77)Rabi-D.Dearf. S -15-Cr "S" CD 4775-N-9Y-OY-OKE	10	-	120	161	90	-	0	0	12	5	1
90	COCORIT 71 Check	5	-	122	165	77	-	2	1	20	6	1

91	(21563/KKE-LD 390 x Ch 67)Gs-Cr CM 17264-23M-1Y-9Y-0Y	4	-	112	158	81	-	0	3	20	6	2
92	T.dic.V.Vernum-G11 23636-1M-6R-0M	5	-	110	158	79	-	0	2	0	6	2
93	Turk 1	6	-	119	162	87	-	1	2	12	6	1
94	U.Dwarf S.15-Gei CD 523-3Y-1Y-2M-0Y	5	-	122	162	85	-	0	3	8	7	1
95	Gu "S"-Fg "S" CD 260-3S-4S-0KE	4	-	120	162	82	-	0	2	6	5	2
96	Cit x Gs - AA CM 9911-1S-1S-0KE	9	-	122	162	77	-	4	0	6	6	2
97	Bo-Ggo VZ 385 CM 9-22S-1S-1S-0S-0KE	6	-	117	161	84	-	0	6	8	7	1
98	Gdo VZ 469-Grz CM 459-2S-2S-2S-0S-0KE	6	-	118	161	81	-	0	5	3	7	1
99	D 68-11/G11 2 x T.dic.V.Vernum CD 8642	7	-	118	162	81	-	0	3	12	8	1
100	Mexipak Check	-	-	117	161	84	-	8	38	23	4	2
101	Algerian D 81-57	6	-	120	162	82	-	0	2	3	6	1
102	Jordan 42-81	2	-	112	159	82	-	0	4	1	7	1
103	(VZ324-CpxVZ156/Hau AD-5-77)RabixD.Dwarf S 15-Cr "S" CD 4775-H-4Y-3M-0Y	7	-	114	159	87	-	2	2	3	7	1
104	Gdo VZ 471-Br x Pg CM 13919-11Y-2M-2Y-0Y	11	-	120	161	94	-	0	0	5	7	1
105	Cit x Gs - AA CM 9911-2S-1S	8	-	116	161	85	-	0	0	6	7	1
106	BYE - TC 5 x Gs "S" CM 55-50M-2Y-16M-0Y	6	-	115	160	79	-	0	5	13	6	2
107	((BYE-TcxZBW/Cp-St.464)Ch67)Gta"S" CM 19740-C-1Y-2M	8	-	113	162	77	-	0	2	15	4	2
108	D 67.2xRuff "S"-Fg"S"/Mexi"S" CD 13671.A-3Y-1M-0Y	3	-	124	165	85	-	0	7	4	4	2
109	Rabi "S"-31810xD67.2/Magh"S"-Gta"S" CD 13873-D-1Y-5M-0Y	6	-	117	161	83	-	0	7	4	6	1
110	COCORIT 71 Check	6	-	116	161	84	-	1	0	8	7	1
111	Tc60 x S.15-Cr"S"/Tc60-HO CD 14142-B-2Y-1M-0Y	8	-	117	161	80	-	0	2	4	7	1
112	Chap-21563 x V0 1658/Rabi "S"-Fg"S" CD 10680-A-1M-1Y-1M-0Y	12	-	117	161	85	-	1	10	8	6	2
113	Mexi"S"xChap-21563 CD 3909-3Y-4M-1Y-6M-0Y	11	-	116	160	87	-	12	0	4	6	2
114	S 15-Cr"S"(Cr"S"(21563/61-130xLds)) CD / 454-15Y-1M-1Y-2M-0Y	13	-	120	161	90	-	1	0	8	6	1

	CD/454-15Y-1M-1Y-2H-0Y											
115	Gs "S"-AA"S"xPg"S"/Fg"S"-Cit"S" CM 14587-501Y-1M-0Y	0	-	122	165	77	-	0	0	25	6	2
116	Cr"S"(21563/61-130xLds) CM 225-21M-1Y-0M-0Y	8	-	112	158	81	-	0	1	25	6	2
117	Mexi "S"-Fg "S" CD 1895-12Y-0Y-4E	4	-	110	158	79	-	0	0	8	5	1
118	Boy "S" CD 4404-J-1Y-0M-2E	6	-	119	162	87	-	0	0	6	5	2
119	Can-02109x21563-AA"S"/S.15-Cr"S" CD 10535-D-1M-3Y-0M	7	-	122	162	85	-	2	0	20	6	1
120	Mexipak Check	-	-	120	162	82	-	2	35	17	2	1
121	Corm"S"-Stk "S" CD 9702-2AP-0AP	6	-	122	162	77	-	8	10	5	5	2
122	{{61-130xLds/G11"S"}Gr"S"}Mexi"S" CD 7484-9Y-1M-0Y	7	-	117	161	84	-	1	7	8	5	3
123	Tell 76 CM 10200-1BK	9	-	118	161	81	-	1	1	12	7	1
124	{1110/TxD331x156}(Kara-Ham Dal) D 39-D-5-D-4	2	-	118	162	81	-	4	2	3	6	1
125	Gs"S"-AA"S"xPg"S"/Fg"S"-Cit"S" D 29-U-142-D-61	5	-	117	161	84	-	0	0	8	6	2
126	Kuff x Jo-Cr CM 18537-1Y-0Y	9	-	120	162	82	-	0	0	12	5	1
127	Cr "S"(T.Pol.185 309xT.P)	14	-	112	159	82	-	0	3	12	5	2
128	Waha "S" CM 17904-D-3M-1Y-0Y	5	-	114	159	87	-	0	4	16	5	1
129	Azt-Chaimite PI 3L-2L	2	-	120	161	94	-	0	2	11	6	1
130	COCORIT Check	7	-	116	161	85	-	2	1	16	7	1
131	Balcarceno Inta	3	-	115	160	79	-	0	1	15	5	1
132	Ch 67-Jo"S"xCr"S" CM 12857-10Y-2M-1Y-0Y	8	-	113	162	77	-	0	2	16	6	1
133	A 63040-Sty D 66058-b1T-1T-2T-2T-0T	5	-	124	165	85	-	0	3	22	6	1
134	Bu 1543-Inri69xCoot"S"/Gta"S" CD 13557-J-3Y-3M-1Y-0M	12	-	117	161	83	-	0	0	8	6	1
135	Kla "S" X 2091-100Y-101B-2N-2H-4Y-1M-0Y	4	-	116	161	84	-	0	2	10	0	1
136	M2A 2-UM 940"S"xITA X 11327-B-4M-1Y-1Y-4M-0Y	7	-	117	161	80	-	0	1	23	0	1
137	M2A-Bq1 X 15733-1N-0M	5	-	117	161	85	-	0	1	8	2	1

138	6TA 204/PPV 13 D 71043-20D-2W-5W-0H	9	-	116	160	87	-	2	10	3	0	1
139	Bgl "S" 7 X 1530-A-12M-3Y-3M-1Y-0Y		-	120	161	90	-	0	1	4	0	1
140	Hexipak Check	-	-	122	165	77	-	10	2	10	2	1
141	6TA 204/PPV 13	6	-	122	158	81	-	2	2	1	0	1
142	Cin-Bgl X 15491-0H	7	-	110	158	79	-	0	7	3	0	1
143	Bush-Cin x FS 477 X 22400-2S-0SK	7	-	119	162	87	-	0	2	2	0	1
144	M2A X 2802-38N-5M-5N-2M-3Y-5M-1Y-0H	5	-	122	162	85	-	0	7	2	0	1
145	M2A 2 X 8545B-1Y-8M-0Y	8	-	120	162	82	-	0	2	1	0	1
146	Bgl 71 X 1530A-12M-5N-1M-110Y-0M	12	-	122	162	77	-	1	1	4	0	1
147	Mapache "S"	10	-	118	161	81	-	0	0	1	0	1
148	Rahum	10	-	118	161	81	-	0	0	1	0	1
149	Orira X 7110-1H-3/H-0N-100Y-0Y	7	-	118	162	81	-	0	8	4	0	1
150	COCORIT 71 Check	-	-	117	161	84	-	0	1	5	7	1

* FR(FREQUENCY)- Number of locations at which the line was selected (out of 28 locations)

** A.C.I AVERAGE COEFFICIENT OF INFECTION

Protein, Wt 1000 kernels analysis performed in Tel Hadia, Syria

DH based on 17 locations, DM based on 11, PLH based on 18

YR based on 6 locations, LR based on 9, SR based on 6PM based on 4 locations, SEPT based on 4

9th PON - BREADWHEAT

Ninth Preliminary Observation Nursery-Breadwheat

The ninth PON breadwheat consisted of 150 entries in which every 20th was Mexipak check. The results were returned from 28 locations. Every new line was selected at least-at one location and majority of the lines were selected at more than one locations (Table 12). Twenty three lines were selected at 10-14 locations (Table 11) which appeared to be adapted to a wide range of conditions. Beside widely adapted lines several lines seem to perform better under specific agroclimatic conditions.

Agronomic Traits

The average number of days to heading ranged from 105-119 for 16 locations where as the range in days to maturity was 146-162. The average plant height for 15 locations ranged from 75-90 cm. The average plant height for the Mexipak check was 86 cm. Average thousand kernel weight ranged from 29.76 to 49.17.

In case of 23 widely adapted lines the average number of days to heading and maturity ranged from 105-119 and 146-162, respectively, and plant height ranged from 76-90 cm indicating no big deviation from the rest of the lines in these traits.

Diseases

The data were recorded on three rusts, powdery mildew and Septoria. The range in the ACI for the three rusts is given below:

Yellow rust : 1 - 40
Leaf rust : 2 - 33
Stem rust : 1 - 47

The ACI for 23 widely adapted lines for YR, LR, and SR ranged from 2-37, 3-26 and 1-20, respectively.

The score for powdery mildew and Septoria ranged from 2-8 and 1-4, respectively. However, a number of lines seem to have multiple disease resistance.

Table 11.

PON - BW: Lines Selected at 10 - 14 Locations.

Entry No	Variety / Cross Pedigree	FR	DH	DM	A.C.I.				PM	Sept
					PLH	YR	LR	SR		
77	Bb-GalloxY50E Kal ³ /LfnxHD832-Bb CM 34574-F-1M-14Y-OM	14	114	156	86	3	6	9	6	3
124	Cowbird CM 16716-M-3M-2Y-3M-OY	14	113	152	83	9	5	5	5	2
133	Pato(R)-Cal/7CxBb-Cno)Cno's'-Pj62xG11 CM 30115-1L-1AP-OAP	14	119	162	89	6	20	20	6	2
2	Ron-chaxBb-Nor 67(B) CM 5484-F-4M-3Y-3M-1Y-OY	11	114	156	86	7	10	8	3	3
29	S 270 - CalxTob-8156/7Cx Bb-Cno CM 5813-B-1Y-500M-500Y-OM	11	112	154	79	4	12	5	3	3
30	Bb - Kal CM 9160-11M-5Y-4M-1Y-OM	11	108	146	87	3	18	12	5	4
47	Hugo I	11	108	148	82	37	26	16	4	3
62	TITMOUSE CM 30136-10Y-1Y-OM	11	107	149	84	14	15	12	5	2
90	Ron-chaxBb-Nor 67 (R) CM 5484-F-5Y-4M-3Y-3M-1Y-OM	11	105	147	77	5	7	13	3	3
121	Bb-CnoxJar/Cno-7CxCC-Tob CM 5546-A-5Y-3M-2Y-3M-OY	11	112	151	90	5	4	7	6	2
27	Cno - Son 64 CM 1135-31M-4Y-4M-2Y-2M-OY	10	114	156	86	9	16	3	5	3
33	choli's' II 21515-1P-1P-3P-OBK	10	119	162	89	8	16	8	6	3
36	Pichihiula's' CM 7652-16Y-501M-OY	10	110	149	85	10	13	11	6	3
51	Emu's' CM 8327-C-9M-4Y-3M-OY	10	112	150	86	9	3	3	5	3
57	SOL SORT's' CM 10712-1Y-1M-6Y-1M-1Y-OM	10	106	149	76	6	7	19	5	3
59	Napo-Cd1xZbz CM 8935-D-5M-3Y-1M-2Y-OM	10	111	151	88	14	12	9	6	3
69	Pato-OnxMaya's' CM 16216-41M-1Y-10M-1Y-1Y-OM	10	113	150	87	5	5	32	5	2
76	VEERY's' CM 33027-F-15M-500Y-OM	10	112	150	86	2	10	3	3	2
82	KVZ-Ti 71/Maya's'xBb-Inia CM 33089-F-2M-3Y-OM	10	106	149	76	4	9	1	3	2
126	DZI.Tob66(Nad-LR64-Bb/Bb-Nor67) CM 16705-A-1M-1Y-6M-OY	10	112	150	86	12	9	5	3	3
130	P106-19x(Bb(Son64-An64xNad/Jar's')) L 491-2L-1AP-OAP	10	108	146	87	17	18	17	5	2
137	Hork - Kal CM 39714-5S-2AP-OAP	10	107	149	84	25	8	12	5	3
143	Roussalka - Jup 73 SWM 5083-1S-2AP-OAP	10	106	152	84	25	4	19	7	2

Table 12. NINTH PRELIMINARY OBSERVATION NURSERY-BREADWHEAT
OVERALL PERFORMANCE OF THE ENTRIES(28 LOCATIONS)

ENTRY NO	VARIETY/CROSS PEDIGREE	FR*	PROTEIN %	DH	DM	PLH	WT 1000 KERNEL	MOISTURE	YR	LR	SR	PM	SEPT
1	Mexipak check	-	-	112	150	86	-	-	32	22	15	4	4
2	Ron-Cha x Bb-Nor 67(B) CM 5484-F-4M-3Y-3M-1Y-0Y	11	13.1	114	156	86	30.19	9.3	7	10	8	3	3
3	NPO-Tob"S" x 8456/Kal.Bb CM 7806-15M-2Y-2M-1Y-0M	3	11.7	112	156	86	35.07	7.3	3	3	5	3	3
4	Sakha 7	9	11.7	112	154	79	35.25	7.7	16	8	3	7	3
5	Jup 73 x Y50E-Kal 3 CM 15517-1L-1L-3L-OK-OSK	4	11.4	108	146	87	33.05	7.7	8	12	1	2	2
6	((Cno x K58-N/Tob-Cno)We)SX CM 9821-G-5M-5Y-2M-0Y	6	10.4	110	150	82	42.19	8.2	4	19	3	3	3
7	Bb-CC x Ron	4	11.4	106	149	76	38.82	7.6	9	12	4	2	4
8	(Cno-Tob"S" x Gallo/Tob-CCxPato) 2Jar"S" CM 23519-1S-6S-0S	6	10.3	119	162	89	36.20	6.9	2	15	3	3	3
9	Inia x Tob"S"-Napo CM 746-5L-5L-0L	8	9.6	111	151	88	38.52	7.3	2	7	4	4	2
10	Cal-Lu CM 1076-19M-3Y-8M-2Y-502M-501Y-0M	8	11.1	112	151	82	32.83	7.3	5	4	7	3	3
11	Bb-Nar 67 x Kal 227-A-Bb	9	11.4	110	149	85	35.58	7.8	4	6	9	3	3
12	Inia-R1 4220 x 7C/Yr"S" CM 15430-2S-5S-1S-0S	3	9.5	107	149	84	39.43	7.2	21	7	5	5	3
13	Tob 2-7C CM 5207-C-3Y-1M-1Y-3M-0Y-4Ptz	7	10.4	109	150	83	40.75	6.9	16	4	8	6	4
14	Tob-8156 x Cal S 875-2S-1S	6	10.2	109	149	83	36.05	7.1	17	2	14	6	4
15	GTA - 131	3	10.6	105	147	77	35.62	7.1	28	3	4	7	3
16	Huacamayo "S" CM 8671-B-5M-1Y-2M-1Y-1M-0Y	6	9.8	111	154	84	41.54	7.2	13	6	4	6	3
17	Tob-Cfn x Bb/Ti 71 CM 15097-4M-1Y-2M-1Y-0Y	4	9.8	111	155	75	35.82	7.4	9	4	4	5	4
18	Ron-Tob "S" CM 7705-3M-1Y-2M-2Y-0Y	5	9.9	113	150	87	41.54	7.4	9	14		4	3
19	Alondra "S"	4	9.7	113	150	87	41.54	7.4	9	14	4	5	3
20	Mexipak Check	-	-	111	149	87	-	-	30	26	4	4	4
21	Xevora	7	8.1	112	151	90	36.50	7.4	4	10	18	7	3
22	Nacozari 76	8	8.9	108	148	82	36.26	7.4	18	27	2	7	4

23	Osprey"S"	7	8.2	110	151	81	32.64	7.5	19	9	16	7	4
24	Vanern"S"	7	9.5	113	152	83	35.37	8.3	16	11	9	6	3
25	HU 832-5-5-Bb Cr 48-E 2	6	10.5	112	156	83	36.13	7.5	5	8	47	7	4
26	Bb - Ron x Cno'S' - Gallo CM 7648-2M-500M-502Y-500M-0M	7	10.3	112	150	86	37.51	7.3	14	10	1	4	3
27	Cno - Son 64 CM 1135-41M-4Y-4M-2Y-2M-0Y	10	10.7	114	156	86	32.72	7.7	9	16	3	5	3
28	CC - Inia/Cno x El Gau - Son 64 30565-51M-1MCH-4MCH-0MCH-0BK	6	9.4	112	156	86	33.45	7.3	14	1	18	4	2
29	S 270 - Cal x Tob - 8156/7C x Bb - Cno CM 5813-B-1Y-500M-500Y-0M	11	9.9	112	154	79	36.25	7.4	4	12	5	3	3
30	Bb - Kal CM 9160-11M-5Y-4M-1Y-0M	11	8.7	108	146	87	33.42	7.6	3	18	12	5	4
31	CC x Cno - Son 64 (Tac - Bb/Tob'S'-8156 x Cno) CM 22118-5S-1S-1S-0S	6	8.0	110	150	82	39.74	8.0	13	3	4	5	4
32	Cno - 7C x Cno - Inia/Sx CM 8943-F-1M-3Y-6M-1Y-0M	2	8.6	106	149	76	36.69	7.3	6	2	11	5	3
33	Choli'S' II 21515-1P-1P-3P-0BK	10	8.8	119	162	89	33.53	6.5	8	16	8	6	3
34	Brochis'S' CM 5872-C-1Y-1M-1Y-3M-0Y	7	10.1	111	151	88	32.95	7.3	6	18	5	6	3
35	(Cno - 7C x CC - Tob/Cno'S' - No 66) Kal CM 11377-A-1Y-9M-1Y-0M	5	10.1	112	151	82	36.91	7.6	6	11	8	5	3
36	Pichihuila'S' CM 7652-16Y-501M-0Y	10	9.2	110	149	85	34.66	7.5	10	13	11	6	3
37	Chiroca'S' CM 8963-A-1M-1Y-1M-1Y-0M	9	9.8	107	149	84	32.99	7.6	27	2	8	3	3
38	TITO CM 8212-C-1M-5Y-1M-12Y-500M-0Y	6	9.8	109	150	83	38.24	7.6	29	4	1	3	3
39	Pavon'S' CM 8399-D-4M-2Y-1M-0Y	4	9.6	109	149	83	38.87	8.1	6	3	7	5	2
40	Mexipak Check	-	-	105	147	77	-	-	40	31	17	3	3
41	Ciguena 21406-6-2-300Y-301M-0Y-500M-0Y	7	8.6	111	154	84	47.58	7.5	8	4	15	2	2
42	Carp'S' - Blue Jay'S' CM 40464-0AP	5	8.8	111	155	75	36.69	7.4	14	26	8	5	3
43	MUSALA'S' CM 16780-J-14-1Y-5004-0Y	4	9.9	106	152	84	42.39	7.4	8	8	5	5	3
44	(Cal(21931-Ch 53 x Go^2/S 667)) Cno - No 66 34886-17Y-4M-4Y-3M-3Y-0M-0BH	1	10.7	113	150	87	36.54	7.1	21	9	6	8	3
45	882556	5	8.7	111	149	87	38.51	7.5	24	6	11	7	4

46	CJ x TZPP-Son 64 2 Alg 63-10BK-OBJ	1	8.4	112	151	90	41.41	8.1	27	4	3	7	4
47	Hugo I	11	10.2	108	148	82	41.41	8.1	37	26	16	4	3
48	Bb"S" x CC-Inia 30521-20M-2MCH-2MCH-OMCH-OBK	3	8.9	110	151	81	40.24	7.7	26	17	2	6	3
49	Bb-Cal x Wren CM 7527-3S-4S-1S-OS	9	8.7	113	152	63	42.98	7.4	12	5	8	6	2
50	(Cno 7CxCC-Tob/7C)Cno-ZbxNo66 CM 8607-R-1M-2Y-5M-2Y-OM	7	8.6	112	156	83	39.69	8.0	17	5	9	7	3
51	Emu "S" CM 8327-C-9M-4Y-3M-OY	10	7.7	112	150	86	41.35	7.1	9	3	3	5	3
52	Line 1624	9	9.6	114	156	86	38.39	7.7	24	33	8	6	4
53	Cno 2-Tob66/K1.Pet Raf x 6156(R) 2 II 30646-OM-7S-OS	5	9.9	112	156	86	37.32	7.7	12	5	13	5	3
54	Z1183-Co 652642x1cn-KS 62156 CO 725052	1	7.9	112	154	79	30.73	7.5	13	4	13	5	2
55	Yr x Son64-NY5207-85/Cno"S"-7CxGto CM 871-B-5M-2M-2Y-OY	7	8.4	108	146	87	37.70	7.9	2	15	9	5	3
56	Zp "S"-Ald "S" 4S	7	9.6	110	150	82	36.45	7.6	10	7	14	6	3
57	SOLSORT "S" CM 10712-1Y-1M-6Y-1M-1Y-OM	10	7.8	106	149	76	39.51	7.4	6	7	19	5	3
58	687 VD VIII	5	9.7	119	162	89	46.98	6.6	4	4	10	4	3
59	Napo-Cdl x Zbz CM 8935-D-5M-3Y-1M-2Y-OM	10	9.8	111	151	88	33.68	7.6	14	12	9	6	3
60	Mexipak Check	-	-	112	151	82	-	-	29	24	20	5	3
61	YECURATA "S" II 40041-5M-7R-1M-3S-OM	6	8.4	110	149	85	39.51	8.3	14	4	20	6	3
62	TIIMOUSE CM 30136-10Y-1Y-OM	11	1	107	149	84	39.88	8.0	14	15	12	5	2
63	SX x Gaviion "S" CM 21528-1BJ-2-OK	7	11.1	109	150	83	43.59	7.0	8	11	9	6	2
64	Cno-Son 64xBb/Y50E-Kal 3 CM 15683-2S-2S-13S-OS	6	9.1	109	149	83	34.87	7.2	8	9	5	5	3
65	CC x Ron-Cha CM 10631-2S-3S-OS	6	9.3	105	147	77	40.57	7.9	8	4	7	5	3
66	Bb"S"-Tob 66 26599-2T-1Y-1M-1Y-OM	8	8.7	111	154	84	38.42	8.4	4	2	7	5	2
67	Pima 77 II 21515-1P-1P-3P-5M-OY	8	9.7	111	155	75	33.19	7.1	9	14	9	5	3
68	Cno-No66 x CC- Inia/Kal-Bb CM 15433-45Y-5M-1Y-8Y-OY	7	11.6	106	152	84	34.88	7.3	6	5	9	4	2
69	Pato -On x Maya "S"	10	9.5	113	150	87	46.29	7.4	5	5	32	5	2

	CM 16216-41M-1Y-10M-1Y-1Y-0M												
70	Magpie CM 20668-D-4Y-4M-1Y-0Y	7	10.1	111	149	87	36.61	6.7	11	4	15	6	2
71	TZPP 2 - AnE x Inia/Cno - Jar x KVZ CM 21335-C-9Y-3M-1Y-1Y-0B	8	10.4	112	151	90	34.78	7.4	6	5	8	5	2
72	PV 18A-Cno 67 x Bon CM 21670-8M-1Y-3M-500Y-0M	6	9.3	108	148	82	36.97	7.2	9	6	17	6	3
73	Tuc'S' - Mon'S' CM 30005-8Y-1Y-0B	6	10.4	110	151	81	35.32	7.1	9	3	17	4	3
74	Buteo'S' CM 31070-Y-1Y-2M-1Y-0B	9	10.7	113	152	83	37.53	6.8	9	2	17	3	3
75	Zz'S' - Maya'S' x Zp'S' - Maya'S' CM 31659-G-1Y-14Y-0M	8	9.3	112	156	83	42.22	6.9	6	11	9	4	3
76	VEERY'S' CM 33027-F-15M-500Y-0M	10	9.8	112	150	86	38.08	6.4	2	10	3	3	2
77	Bb - Gallo x Y 50E Kal 3/Lfn x HD 832 - Bb CM 34574-F-1M-14Y-0M	14	8.6	114	156	86	45.51	7.2	3	6	9	6	3
78	Maya'S' -AZ 67 CM 21832-17M-4Y-1Y-3Y-0B	9	11.9	112	156	86	43.04	8.3	8	1	4	5	2
79	Cno'S' - Pj 62 x Gallo/Bon CM 22100-4M-1Y-1Y-1Y-0M	7	11.3	112	154	79	35.14	7.9	20	19	2	6	3
80	Mexipak Check	-	-	108	146	87	-	-	34	18	16	5	2
81	{Zz'S'/Fury x Cno'S' - No 66}Cd1 - AZ 67 CM 31655-J-7Y-2M-1Y-0M	8	9.6	110	150	82	45.18	7.8	8	13	3	6	3
82	KVZ - Ti 71/Maya'S' x Bb - Inia CM 33089-F-2M-3Y-0M	10	10.7	106	149	76	38.21	7.3	4	9	1	3	2
83	KVZ - Ti 71/Maya'S' x Bb - Inia CM 33089-W-3M-11Y-0M	6	9.3	119	162	89	43.55	7.3	5	2	1	3	2
84	CHAT'S' CM 33090-G-1M-6Y-0M	5	9.7	111	151	88	43.34	7.5	2	12	3	3	2
85	Ymh - Jar 66 x Y 50/Ald'S' CM 33168-J-1M-8Y-0M	5	9.8	112	151	82	42.28	7.6	4	3	5	3	3
86	Au x Kal - Bb/Bon CM 33202-E-1M-2Y-0M	4	9.7	110	149	85	33.73	7.8	6	3	4	4	2
87	Bobwhite'S' CM 33203-H-8M-1Y-0M	7	10.0	107	149	84	37.81	7.5	3	2	10	3	2
88	Bobwhite'S' CM 33203-H-1M-2Y-0M	6	9.7	109	150	83	33.70	7.7	3	2	3	3	2
89	KVZ x Cno - Pj 62 SWM 1285-2Y-3M-1Y-0M	3	9.4	109	149	83	41.75	7.3	7	2	18	3	2
90	Ron - Cha x Bb - Hor 67 (R) CM 5484-F-5Y-4M-3Y-3M-1Y-0Y	11	9.4	105	147	77	44.44	7.6	5	7	13	3	3
91	ZZ'S'/Fury x Cno'S' - No 66 CM 25741-48Y-2Y-m	6	9.5	111	154	84	39.03	7.1	6	7	4	4	3

92	MN 72131	7	11.3	111	155	75	38.91	7.4	1	2	1	3	2
93	L 3509-2653	8	9.8	106	152	84	42.17	7.2	11	20	6	7	2
94	Sakha 62	7	9.1	113	150	87	41.77	7.7	15	13	23	6	2
95	L 1628-2981	7	11.3	111	149	87	44.25	7.7	9	25	17	3	3
96	Sakha 69	7	9.5	112	151	90	42.39	7.9	16	9	5	4	2
97	Kal 227A(Nad 63 - Qt 96 x Bt 6) PK 1112-3L-OKE-OS-3S-OAP	4	10.1	108	148	82	36.19	7.7	17	17	18	4	2
98	Chb 70/Jar^2 x Meng - 8156 PK 11139-3L-OKE-OS-5S-OAP	5	9.9	110	151	81	32.88	8.8	23	21	12	5	2
99	Bb - 7C^2 x Y 50E - Kal^3 29014-6S-OAP	4	10.1	113	152	83	39.22	8.4	25	22	16	5	3
100	Mexipak Check	--	-	112	156	83	-	-	28	28	17	4	3
101	Inia - Napo x Tob/Sprw'S' (Cr 43 - EL) L 17-7S-2S-OAP	7	9.5	112	150	86	39.02	7.7	8	7	8	4	2
102	Inia - Napo x Tob/Sprw'S' (Cr 43 - EL) L 17-5S-6S-OAP	4	11.1	114	156	86	38.44	7.5	1	13	14	4	1
103	Cno - Inia x Bb/Cgn CM 28252-2AP-OAP	4	9.7	112	156	86	36.23	7.9	13	9	11	4	3
104	Cno - Inia x Bb/Cgn CM 28252-3AP-OAP	4	9.9	112	154	79	39.12	8.0	14	6	7	5	2
105	Bb - Bbt'S' CM 30068-2L-OAP	7	9.9	108	146	87	30.77	7.5	32	16	9	6	2
106	Roedel - Drc x Kal SWM 1583-1L-OAP	6	11.8	110	150	82	40.11	7.6	6	18	19	7	3
107	Nuri 70 - Choli CM 28108-7L-OAP	4	10.5	106	149	76	38.54	7.4	3	6	27	7	3
108	(Fr 316/MCM - Kt x Y 50) Torim 73 CM 28141-1L-0L-OAP	7	10.8	119	162	89	35.05	7.0	4	5	14	6	3
109	Kvz - Pak 20 SWM 1435-2L-OKE-OS-6S-OAP	4	9.8	111	151	88	39.58	7.7	12	10	15	5	2
110	Aur - Kal SWM 1444-1L-OKE-OS-6S-OAP	4	10.8	112	151	82	44.41	6.8	29	23	20	8	2
111	Kvz - SX SWM 1428-1L-OKE-OS-6S-OAP	6	10.0	110	149	85	43.02	8.8	11	9	13	4	3
112	Tob 66 x HD 832 - Bb CM 23578-4L-1L-OKE-OS-6S-OAP	8	9.7	107	149	84	41.10	7.2	8	3	7	6	2
113	Bb x (Cno'S' - Tob 66) XV 1132 PK 11496-2L-OKE-OSK	4	9.4	109	150	83	40.30	7.9	7	33	18	6	2
114	(Fr/3/MCM/Kt/2/Y50^2/4/4777/Pn/2/K58/N/3/ N10B21/Cal-Lu CM 29600-4L-OKE-OS-3S-OAP	4	9.9	109	149	83	36.05	7.7	5	3	10	5	2
115	Tob - 8156 - Kal CM 8783-0L-5L-2L-OSK-OAP	5	9.8	105	147	77	40.75	8.7	23	11	17	5	3

116	SX x Tob'S' - 8156 CM 21512-4L-1L-OKE-OSK	5	8.8	111	154	84	37.36	7.7	25	14	10	5	4
117	Tob - Chb 70 CM 11L-3L-OKE-OSK	7	9.9	111	155	75	42.08	7.6	8	13	11	5	2
118	YtE - Yalta x Mxp/LR 64 - Son 64 PK 5971-1K-OK-1L-5L-1L-2L-OK-OSK	7	10.5	106	152	84	37.57	7.7	6	21	19	5	3
119	Gto - 7C x Bb - Cno CM 5278-B-4Y-1M-2Y-3M-1Y-OM	2	10.9	113	150	87	38.65	6.8	5	3	22	4	3
120	Mexipak Check	-	-	111	149	87	-	-	3	26	19	6	3
121	Bb - Cno x Jar/Cno - 7C x CC - Tob CM 5546-A-5Y-3M-2Y-3M-0Y	11	10.0	112	151	90	42.61	7.9	5	4	7	6	2
122	Jar 66 - KVZ x Yr 70 CM 20834-A-7Y-50LM-502Y-0B	5	10.5	108	148	82	37.62	7.6	3	10	5	3	2
123	Tzpp - Son 64/Cno - Jar x KVZ CM 20707-A-1Y-8M-1Y-0Y	5	11.2	110	151	81	33.51	7.2	4	2	4	4	2
124	Cowbird CM 16716-M-3M-2Y-3M-0Y	14	10.6	113	152	83	41.96	7.3	9	5	5	5	2
125	MN 6930 S/3/Meng - 8156//At 66	9	9.8	112	156	83	38.31	7.5	9	3	3	5	2
126	DZI - Tob 66(Nad - LR 64 - Bb/Bb - Nor 67) CM 16705-A-1M-1Y-6M-0Y	10	9.7	112	150	86	36.92	8.4	12	9	5	3	3
127	Cno - Gallo x Bb - Inia CM 21849-5S-9S-OKE	7	10.2	114	156	86	44.07	8.1	6	4	3	4	3
128	KVZ(CC - Inia/Cno x El Gau - Son 64) SE 381-2S-5S-US-OKE	1	9.2	112	156	86	42.91	8.0	7	2	4	4	3
129	7C - Nad 63 x Tob - 8156 CM 14960-27M-501Y-504M-0Y	1	10.4	112	154	79	41.34	8.0	5	3	3	5	2
130	P 106-19 x (Bb(Son 64 - An 64 x Nad/Jar'S')) L 491-2L-1AP-OAP	10	12.4	108	146	87	42.39	7.3	17	18	17	5	2
131	Jup"S" (LR 64^2 - Son 64 x CC/Ska) L 764-4L-4AP-OAP	5	11.9	110	150	82	38.54	7.9	11	14	17	5	2
132	Soissonais Desprez - Blo'S' CM 29963-2L-5AP-OAP	7	11.2	106	149	76	40.58	6.8	11	13	23	6	2
133	Pato(R)-Cal/7C x Bb-Cno)Cno'S'-Pj 62 x Gl1 CM 30115-1L-1AP-OAP	14	10.9	119	162	89	44.56	7.5	6	20	20	6	2
134	Toluca 73(Lee - KVZ/CC x Ron - Cha) CM 35430-2L-4AP-OAP	6	10.9	111	151	88	47.89	7.8	30	4	3	7	3
135	Bb x Cno'S' - No 66/Cno'S' - Pj 62 x Gl1 CM 35619-1L-2AP-OAP	8	13.2	112	151	82	40.05	8.1	14	20	21	6	3
136	((Fr 316/MCM-Kt x Y50)Meng-8156)Condor'S' CM 39475-5S-1AP-OAP	5	12.9	110	149	85	45.74	7.7	13	19	8	7	2
137	Hork - Kal CM 39714-5S-2AP-OAP	10	10.5	107	149	84	29.76	8.3	25	8	12	5	3
138	(Yr'S'/Bb - Cal x 7C - Nad 63)Hork	9	12.0	109	150	83	34.72	7.6	7	16	5	5	2

	CM 39845-5S-2AP-OAP												
139	Kal-Bb x Mon "S" CM 40226-2S-1AP-OAP	7	10.5	109	149	83	39.65	8.1	25	11	4	6	3
140	Mexipak Check	-	-	105	147	77	-	-	31	24	14	5	3
141	HD 1220-Kal 3 x Blue Jay "S" CM 40454-4S-3AP-OAP	9	11.6	111	154	84	38.74	7.8	17	18	133	5	3
142	Riebesel 4751-Mochis 73 SWM 4916-4S-1AP-OAP	9	12.8	111	155	75	43.81	8.1	10	11	15	5	2
143	Roussalka-Jup 73 SWM 5083-1S-2AP-OAP	10	10.1	106	152	84	49.17	8.4	25	4	19	7	2
144	Emu "S" - TJB 84.1543 SWM 5207-2S-4AP-OAP	8	12.7	113	150	87	43.89	7.1	7	10	10	6	2
145	Maya 74"S"-Nr 70 Resel CM 40691-1AP-1AP-OAP	8	9.9	111	149	87	42.88	8.0	9	2	15	5	3
146	Mex 120-We x KNG Nep 214-C-2KE-2AP-OAP	3	9.9	112	151	90	44.92	7.4	4	18	11	5	3
147	Sannine/Nai-Weiqui RMxCno 2-Chr L 932-OL-9AP-OAP	7	9.4	106	148	82	40.56	7.7	6	17	33	3	1
148	Cno "S"-PJ 62xGallo/Pic "S" CM 35044-OL-7AP-OAP	8	10.1	110	151	81	44.53	6.9	10	17	9	6	3
149	Maya 74-Choli CM 39427-7AP-OAP	5	11.1	113	152	83	42.50	7.2	4	17	14	5	2
150	Mexipak Check	-	-	112	156	83	-	-	32	26	10	5	3

* FR (FREQUENCY)-Number of locations at which the line was selected (out of 26 locations)

** A.C.I AVERAGE COEFFICIENT OF INFECTION

Protein, Vitreous, Wt 1000 kernels analysis performed in Tel Hadia, Syria

DM based on 16 locations, DM based on 11, PLH based on 15

YR based on 10 locations, LR based on 10, SR based on 8 PM based on 6, SEPT based on 6

9th PON - DURUM

Ninth Preliminary Observation Nursery-Durum

The 9th PON-Durum consisted of 100 lines / varieties in which every 20th entry was durum variety Stork as check . The results were received from 26 locations which has been tabulated in tables 13 and 14. All the new entries were selected at least at one or more locations. However, 20 lines/varieties were selected at 11 to 18 locations which indicate their wide adaptation to varied agroclimatic situations, where as some of the lines seem to be better adapted to specific conditions. The wider adaptation of a fairly large number of lines seem to provide good opportunity of selecting lines which can provide stability in yield under variable climate.

Agronomic Traits

The average days to heading and maturity ranged from 107-118 & 146-154, respectively for 16 locations. The average plant height ranged from 72-82 cm for 15 locations whereas the average for check variety/Stork was 80 cm. Thousand kernel weight ranged from 39-35 to 55-07 gm for all the entries when the results were averaged. The average 1000-kernel weight for Stork check was 47-11 whereas a number of lines showed improved 1000 kw than the check variety: The average vitreous percentage ranged from 14-0 to 100 whereas the average for Stork was 62-0

Diseases

The data were recorded for rusts, powdery mildew and Septoria. The ACI for the rusts is as follows:

Yellow rust:	2	-	25
Leaf rust :	2	-	25
Stem rust :	3	-	33

The average score for powdery mildew and Septoria ranged from 3-6 and 1-2, respectively.

The ACI for 20 widely adapted lines for YR, LR and SR ranged from 3-15 , 2-25 and 16-32 respectively. From these data it appears that there are a number of lines which are superior to the check variety Stork in one or more traits of economic importance and quite a few lines beside wide adaptability have multiple disease resistance.

Table 13. NINTH PRELIMINARY OBSERVATION NURSERY-DURUM

ENTRY NO	VARIETY/CROSS PEDIGREE	OVERALL PERFORMANCE OF THE ENTRIES (26 LOCATIONS)							A.C.I				
		FR*	PROTEIN %	DH	DM	PLH	WT 1000 KERNEL	VITREOUS %	YR	LR	SR	PM	SEPT
1	Stork (Check)	—	10.2	108	146	80	47.11	62.0	5	6	21	4	3
2	Stk'S' x 21563-AA'S' CD 3935-1Y-1M-0Y	7	12.1	111	150	78	50.27	85.5	4	16	27	4	1
3	S15-Cr'S' 33312-7Y-2M-1Y-0M	9	10.1	113	149	82	44.01	78.5	10	11	30	5	1
4	Ruff'S'-Pg'S' CM 9880-25M-3Y-1M-0Y	12	12.9	114	151	76	47.89	97.0	4	6	17	3	1
5	Goose'S' CM 10143-6M-3Y-1M-2Y-0Y	6	9.7	115	150	80	46.84	78.5	5	18	25	4	1
6	Shoveler'S' CD 10569-C-10M-1Y-0M	4	11.1	113	150	77	47.59	95.0	3	5	20	4	1
7	VZ 324 - Cp x VZ 156/Haur AD 5-77-L-0199-61L-0L	9	12.4	116	153	74	50.15	95.5	5	24	21	4	1
8	Gta'S' D 31725-3M-8Y-0M	8	9.4	112	149	72	41.13	75.5	3	17	19	4	1
9	GV2451 (68-1797)-Cp x VZ156 (Rye-Tc ⁵) So 3829W-229A-OAP	10	10.9	115	152	78	49.52	64.0	7	21	23	4	1
10	(Rabi'S'/GII'S' x Lds-RL-3601) Fg'S' CD 7455-4Y-1M-0Y	11	9.3	111	150	81	49.98	78.0	8	12	23	3	2
11	P66/253-Fg'S' x Pg'S'-Cit'S' CM 18040-A-2M-0Y	7	11.2	112	150	79	43.70	88.5	6	7	21	4	1
12	21563-Cr'S' x Pg'S' CM 17274-3L-2L-1L-0K	7	9.7	110	149	78	41.16	48.0	14	14	20	4	1
13	Pg'S' x Cnap-21563	6	10.6	118	154	81	48.83	59.0	6	10	24	4	1
14	S15-Cr'S' D 33312-8Y-4M-2Y-0M	7	8.5	111	150	79	48.89	38.0	6	7	25	5	1
15	Mallard'S' CD 1894-1Y-0Y	10	7.4	111	150	78	43.72	35.0	6	10	24	3	1
16	Fg'S'-Ruff'S' 9210-2SK-0SK	9	9.6	111	149	82	43.32	49.0	6	10	17	3	2
17	Fg'S'-Gta'S' 9262-5SK-0SK	9	9.0	111	149	78	46.64	57.0	12	5	20	4	2
18	Rabi'S'-31810/Inrat 69 x BD1708-BD1416 x BD 1705 9876-10SK-0SK	6	9.9	107	148	80	55.07	27.0	19	8	20	5	2
19	Plc'S'-Cr x Jo-RD 119 CM 17046-10L-13L-2L-0K	8	11.6	113	151	82	46.1	96.5	4	3	20	4	2
20	Stork (Check)	—	10.1	109	151	79	45.85	78.0	11	9	20	4	2

21	Ruff's'-Fg's' CM 9880-25M-1Y-1M-1Y-0Y	9	13.5	114	151	80	42.55	97.5	4	23	22	4	1
22	Gta's' x D 21563-AA's'/Stk's' CD 8193-1SK-0SK	6	13.9	113	151	79	42.14	98.0	6	9	20	4	1
23	Boy's' CD 4404-J-5Y-0Y-0M	5	11.3	116	152	77	36.39	93.5	4	6	18	5	1
24	Gdo 512-Cit's' x Ruff's'-Fg's' CD 10549-H-5M-2Y-5M-0Y	6	12.3	114	152	81	44.85	98.0	3	5	7	3	2
25	Gr's'-Fg's'/21563-Gs's' x Cit's'-P66/270 CD 1074-1Y-3Y	7	10.3	115	152	82	52.28	82.0	7	7	16	4	1
26	Mallard's' CD 1894-15Y-0Y-0Ke	2	9.5	108	146	80	40.82	45.5	6	4	22	4	1
27	Cit-Fg CD 3568-8Y-0M-0Ke	10	10.4	111	150	78	43.16	76.0	8	10	22	4	2
28	P66/270-Gu's' (Rabi x Gs-Cr/Jo-Cr) CD 1276-A-1Y-0Ke	4	10.6	113	149	82	42.57	80.0	5	4	18	5	1
29	Fg-Rabi CM 18552-14Y-3Y-0Y-0Ke	7	11.1	114	151	76	47.67	77.0	7	8	19	3	1
30	21564-Cr's' x Fg's' CD 7491-11Y-1M-0Y-0Ke	8	12.3	115	150	80	45.12	98.5	6	4	26	4	2
31	Mt-Mexi x Chap-21563 CD 4404-G-3Y-4M-0Y-0Ke	5	11.7	113	150	77	39.13	94.5	5	3	23	7	1
32	Jo-Cr x Gs/Pg CD 7474-10Y-2M-0Y	12	10.5	116	153	74	45.58	92.0	7	5	25	4	1
33	Cit x Gs-AA CM 9916-7S-1S-0Ke	14	10.4	112	149	72	40.95	58.0	7	8	21	4	2
34	Gdo VZ 471-Br x Pg CM 13919-34Y-2Y-3Y-0Y-0Ke	11	11.1	115	152	78	49.29	89.5	3	17	21	3	2
35	Magh x Gs-AA/Gta-Cit CM 14472-B-8Y-1M-1Y-0Ke	7	11.4	111	150	81	39.87	100	2	4	18	4	1
36	Ente CM J2-7M-1Y-0M	9	12.9	112	150	79	39.08	99.5	4	4	24	5	1
37	Garza (G11(Dr180-LK/Gb220 x Lds) CM 9648-7S-1S	6	12.7	110	149	78	47.21	99.5	3	10	26	4	1
38	Cit-Fg CM 9927-1S-2S	11	11.1	118	154	81	49.37	91.0	4	2	18	3	1
39	D.S15-Geier's' CD 523-3Y-1Y-2M-0Y	7	11.9	111	150	79	45.84	95.5	11	21	32	4	1
40	Stork (Cneck)	-	9.9	111	150	78	44.22	76.5	10	16	23	4	2
41	Ato's' D 32864	11	11.8	111	149	82	41.04	95.5	9	8	21	5	1
42	wana's' x D.S15-Cr's' 1044d-9SK-0SK	7	11.9	111	149	78	39.47	97.5	8	8	29	6	1

43	Cr'S'-Pg CM 9682-70M-3Y-1M-OY	4	11.1	107	148	80	46.12	91.0	7	7	22	4	1
44	Ibis'S'/Jo'S'-RD119-2W-4Y x AA'S' CM 18578-10Y	5	11.0	113	151	82	48.86	74.5	6	10	20	5	2
45	Mallard'S' CD 1894-3Y-OY	6	10.0	109	151	79	47.69	79.0	5	6	18	4	1
46	Gdo 471-Br'S' x Pg'S'/Rabi'S'-31810 CD 12489-8Y-8M-OY	7	12.1	114	151	80	50.88	78.5	8	4	18	4	1
47	(Cit'S'-Mca'S'(Pg'S'(Gll'S'/Lds x 56-1))) Cr'S'-2-Gs'S' CD 12539-1Y-2M-OY	12	11.5	113	151	79	44.09	82.5	4	15	20	4	2
48	Kif'S'-Ruff'S' CD 12781-5Y-4M-OY	7	11.1	116	152	77	54.68	80.5	4	2	22	4	1
49	(D.Coll.124(Cr'S'(21563/61-130 x Lds)))Pg'S' CD 13570-E-2Y-5M-OY	18	10.0	114	152	81	42.65	78.0	6	4	16	3	2
50	Cr'S'-Tag.B.B x Pg'S'-Ralle'S' CD 14234-G-2Y-3M-OY	8	11.6	115	152	82	52.85	67.0	10	14	24	5	1
51	Ente'S'-Mexi'S' CD 8153-12M-1Y-1M-OY	12	9.9	108	146	80	44.20	69.5	4	13	19	4	1
52	Gdo 512-Cit'S' x Ruff'S'-Pg'S' CD 10549-H-7M-1Y-2M-OY	7	10.8	111	150	78	57.96	81.0	10	10	3	5	2
53	Gdo 512-Cit'S' x Ruff'S'-Pg'S' CD 10549-U-7M-2Y-1M-OY	11	8.4	113	149	82	45.07	25.0	7	17	22	3	1
54	(Cfn^5n-Mca'S' x Cr'S'/Mario'S')Jo'S'-Cr'S' CD 10612-B-4M-1Y-1M-OY	8	7.7	114	151	76	43.54	17.0	8	8	27	3	1
55	Misri-Mexi'S'(Plc'S'-Cr'S'(ZB-LK x 60-120 /Gll'S')) CD 10662-N-14M-3Y-4M-OY	6	10.0	115	150	80	41.65	21.0	17	10	26	5	1
56	AA'S'-Cr'S' x Cit'S'(Cr'S'(21563 /61-130 x Lds)) CD 7657-1Y-2M-1Y-1M-OY	13	10.0	113	150	77	45.46	59.0	5	6	20	4	1
57	Boy'S' CD 4404-J-18Y-13Y-2Y-1M-OY	7	9.3	116	153	74	48.51	65.0	9	6	24	6	1
58	21563-AA'S' D 27625-5M-2Y-2M-1Y-1M-OY-OM	4	9.3	112	149	72	44.40	52.5	4	17	33	5	1
59	Cit'S'-Gta'S' x Ruff'S'/T.dic.V.Vern-Gll'S' CM 14566-E-500Y-12M-OY-OM	9	8.8	115	152	78	43.47	56.0	12	18	25	4	2
60	Stork (Check)	-	8.7	111	150	81	44.01	54.0	5	7	19	4	1
61	Mexi'S'-Pg'S' CD 1895-12Y-OY-2E	7	9.8	112	150	79	51.76	72.5	12	15	31	4	1
62	Mexi'S'-Pg'S' CD 1895-12Y-OY-1E	7	9.8	110	149	78	52.41	74.0	10	9	27	5	1
63	Mexi'S'-Pg'S' CD 1895-12Y-OY-3E	5	10.4	118	154	81	51.22	79.0	16	6	28	5	2
64	Pg'S'-Palestinien 20C-606 x Mexi'S'/Rabi'S' CD 10438-4M-1Y-OM	9	10.1	111	150	79	44.67	68.5	25	18	33	6	1
65	Cit'S'-Pg'S' CD 3568-8Y-1M-3Y-OM	12	10.9	111	150	78	48.15	70.5	7	15	26	4	1

66	Mallard'S' CD 1894-3Y-1Y-8M-1Y-OM	8	9.3	111	149	82	45.56	44.5	13	6	29	4	2
67	Mallard'S' CD 1894-3Y-1Y-5M-1Y-OM	7	10.3	111	149	78	44.18	63.5	11	6	23	4	1
68	Mallard'S' CD 1894-1Y-1Y-1M-2Y-OM	4	9.4	107	148	80	43.42	59.0	6	6	25	4	1
69	Gre'S' CD 14432-C-1Y-3M-1Y	13	8.4	113	151	82	43.92	14.0	9	20	23	5	1
70	Pg'S' x Chap-21563 CM 13113-2Y-2M-4Y	7	9.6	109	151	79	52.78	57.5	9	11	25	4	2
71	Tll'S'-S.Cp x Plc'S' CM 117718-A-1M-1Y	4	9.2	114	151	80	48.86	61.0	14	2	27	4	1
72	Du-Gvz451(68-1797)-Cp x Vz156(Ld357-Fc^2) So 3829W-229B	11	10.9	113	151	79	49.18	44.0	8	25	23	5	1
73	Corm'S'-Ruff'S' x Pg'S' 9545-9S-OSK	3	11.8	116	152	77	48.53	82.5	10	16	17	4	1
74	Cr'S'-Gr'S' x Parana66/270 CM 13053-6Y-1M-OY	9	10.7	114	152	81	45.62	71.0	3	2	23	4	2
75	Rabi'S' x Pg'S'-GdoVZ466 ICD 7437-3L-OAP	8	12.9	115	152	82	53.48	86.0	9	17	25	4	1
76	AA'S'-Cr'S' x Cit'S'-Cr'S' (21563/61-130 x Lds) ICD 7470-3L-OAP	12	8.8	108	146	80	44.68	76.0	6	17	28	5	1
77	Snipe'S'/Jo'S'-Cr'S' x Gs'S'-AA'S' ICD 74119-2L-OAP	12	10.8	111	150	78	51.79	78.0	7	21	32	4	1
78	Ente'S'-Stk'S' CD 8153-2AP-OAP	10	11.0	113	149	82	46.58	82.0	9	12	20	4	1
79	Cr'S'-Gs'S' x Inrat 69 CD 8078-6AP-OAP	5	11.8	114	151	76	46.11	74.5	20	11	23	6	1
80	Stork (Check)	-	10.5	115	150	80	47.37	82.0	16	13	23	4	1
81	Ovi-Amarelejo	10	12.5	113	150	77	53.79	98.5	8	7	26	6	1
82	D.Dwarf S.15-Cr'S' D 33312-7Y-4M-1Y-OM	12	10.2	116	153	74	44.64	64.0	15	15	28	6	1
83	Gll'S' x T.dic.Vernum-Gll'S' CM 86-1M-2Y-6M-OY	10	11.7	112	149	72	47.22	91.0	4	5	21	6	1
84	Cr'S'-Gta'S' D 21-18-1Y-OY	7	10.4	115	152	78	41.28	81.0	2	15	32	6	1
85	Ggo VZ 449	9	11.0	111	150	81	46.92	86.0	8	6	28	4	1
86	Geier'S' x Pg'S'-Cr'S' CM 14461-8-1Y-9M-1Y	11	9.9	112	150	79	41.42	79.0	4	14	26	5	1
87	INT-4793	13	11.5	110	149	78	43.85	84.5	8	10	20	4	1
88	GgoVZ 394((61-130 x Lds/Gll'S')Jo'S' CM 8570-1L-JL	6	11.4	118	154	81	43.92	89.0	12	20	26	4	1

89	Gta'S'-Stk'S' CD 771-17Y-OY	9	12.2	111	150	79	39.49	92.5	10	12	28	4	1
90	D-14	11	11.8	111	150	78	41.88	94.0	4	18	23	5	1
91	P 66/253 12161(7t)-3t-2t-1t-1B-2t-2t-Ot	8	14.1	111	149	82	46.04	96.0	4	6	17	3	1
92	Mexi'S'-Gta'S' CD 1896-12Y-OY-1E	10	12.9	111	149	78	39.35	97.5	10	7	20	3	1
93	Gediz'S' D 27536-1M-1Y-1M-OY	7	13.3	107	148	80	43.84	98.0	9	18	23	4	1
94	Gs'S'-Cr'S' x Ruff'S'/Mexi'S' CD 1314-A-1Y-2Y	8	12.2	113	151	82	50.36	91.0	9	12	18	5	1
95	Ibis'S'-Gta'S' CM 18577-11Y-6Y-2Y-OY	11	12.6	109	151	79	46.18	95.5	7	15	27	4	1
96	Cit'S'-Mca'S'(Pg'S'/G11 x Lds-56-1) CM 14562-J-600Y-1M-2Y	110	12.6	114	151	80	46.05	97.5	5	10	25	4	1
97	Aronas	9	12.1	113	151	79	46.03	98.5	5	14	19	4	1
98	Gezira 17	7	12.9	116	152	77	44.11	98.0	6	5	19	4	1
99	Khroub 76	11	12.4	114	152	81	50.41	94.5	4	18	28	3	2
100	Stork (Check)	-	10.5	115	152	82	47.84	82.5	9	11	20	4	1

* FR(FREQUENCY)-Number of locations at which the line was selected(out of 26 locations)

** A.C.I AVERAGE COEFFICIENT OF INFECTION

Protein,Vitreous,Wt 1000 kernels analysis performed in Tel Hadia,Syria

DM based on 16 locations,DM based on 11,PLH based on 15

YR based on 6 locations,LR based on 7,SR based on 7PM based on 4,SEPT based on 4

Table 14.

PON - D: Lines Selected at 11 - 18 Locations.

Entry No	Variety / Cross Pedigree	FR	DH	DM	A.C.I.				PM	Sept
					PLH	YR	LR	SR		
49	(D.CO11.124(Cr's'(21563/61-130xLds)))Fg's' CD 13570-E-2Y-3M-OY	18	114	152	81	6	4	16	3	2
33	CitxGs - AA CM 9916-7S-1S-Oke	14	112	149	72	7	8	21	4	2
56	AA's'-cr's'xCit's'(Cr's'(21563/61.130xLds)) CD 7657-1Y-2M-1Y-1M-OY	13	113	150	77	5	6	20	4	1
69	Gre's' CD 14432-C-1Y-3M-1Y	13	113	151	82	9	20	23	5	1
87	INT - 4793	13	110	149	78	8	10	20	4	1
32	Jo-CrxGs/Pg CD 7474-10Y-2M-OY	12	116	153	74	7	5	25	4	1
47	(Cit's'-Mca's'(Pg's'(G11's'/Ldsx56-1)) Cr's' ² -Gs's' CD 12539-1Y-2M-OY	12	113	151	79	4	15	20	4	2
51	Ente's'-Mexi's' CD 8153-12M-1Y-1M-OY	12	108	146	80	4	13	19	4	1
65	Cit's' - Fg's' CD 3568-8Y-1M-3Y-OM	12	111	150	78	7	15	20	4	1
76	AA's'-Cr's'xCit's'-Cr's' (21563/61-130xLds)ICD7470-3L-OAP	12	108	146	80	6	17	28	5	1
77	Snipe's'/Jo's'-Cr's'xGs's'-AA's' ICD 74119-2L-OAP	12	111	150	78	7	21	32	4	1
82	D.Dwarf S.15-Cr's' D 33312-7Y-4M-1Y-OM	12	116	153	74	15	15	28	6	1
34	Gdo VZ 471-BrxPg CM 13919-34Y-2Y-3Y-OY-Oke	11	115	152	78	3	17	21	3	2
38	Cit - Fg CM 9927-1S-2S	11	118	154	81	4	2	18	3	1
41	Ato's' D 32864	11	111	149	82	9	8	21	5	1
53	Gdo 512-Cit's'xRuff's'-Fg's' CD 10549-U-7M-2Y-1M-OY	11	113	149	82	7	17	22	3	1
72	Du-Gvz451(68-1797)-CpxVZ156(Ld357-Tc ²) So 3829W - 229B	11	113	151	79	8	25	23	5	1
86	Gcier's'xFg's'-Cr's' CM 14461-B-1Y-9M-1Y	11	112	150	79	4	14	29	5	1
95	Ibis's'-Gta's' CM 18577-11Y-6Y-2Y-OY	11	109	151	79	7	15	27	4	1
99	Khroub 76	11	114	152	81	4	18	28	3	2

9th PON - Barley

Ninth Preliminary Observation Nursery-Barley

The ninth Preliminary Observation Nursery-Barley (9th PON-B) consisted of 150 entries where as every 20th entry was included Beecher check which is widely adapted and cultivated. The data presented here (Table 15) were received from 20 locations.

Out of all the entries 12 lines (Table 16) seem to be widely adapted as those were selected at 8-10 locations in the region. Though in comparison to durum wheat and breadwheat, barley has narrow adaptation however, these data reveal the improvement in this important trait in the new lines which can provide yield stability under variable agroclimatic conditions. A detailed summary for those 12 lines for various traits is presented in table 16.

Agronomic Traits

The average number of days to heading for 16 locations ranged from 107-127 where as the days to maturity ranged from 140-153 for 9 locations. The average plant height for all the entries has been worked out from the data of 13 locations and it ranged from 68-93 cm.

The protein percentage was estimated only at Tel Hadya (Syria) and it ranged from 7.7 to 15.9 where as Beecher check had 13.1%.

Diseases

The data were recorded on rusts, powdery mildew, scald and net blotch. The average coefficient of infection (ACI) for the rusts is as follows:

Yellow rust : 3 - 75
Leaf rust : 2 - 54
Stem rust : 0 - 70

The score for other diseases were:

Powdery mildew from 1 to 7
Scald from 1 to 5
Net blotch from 1 to 5

For the rusts the lines/varieties were considered resistant if ACI were <5. For net blotch and scald an average score of <1 was taken as an indication of resistance where as for powdery mildew the lines having an average score <2 were considered to be resistant.

These data reveal that there are a number of lines which are resistant to one or two diseases. However there is still a need to further incorporate the genes for multiple disease resistance. These data also reveal considerable improvement in the diseases resistance level of the new lines as compared to the check varieties.

Table 15. NINTH PRELIMINARY OBSERVATION NURSERY-BARLEY
OVERALL PERFORMANCE OF THE ENTRIES (20 LOCATIONS)

ENTRY	VARIETY/CROSS PEDIGREE	FR*	PROTEIN %	DH	DM	PLH	A.C.I					
							YL	LR	SR	PM	SC	NB
1	Beecher (Check)	—	13.1	112	144	89	13	35	23	5	3	2
2	Mari - Coho	6	11.7	107	148	69	6	48	23	6	3	2
3	M 69.69 - Apam - RL	8	11.5	114	143	68	16	34	35	6	4	3
4	Arivat - Athenais	8	11.4	112	145	84	20	26	35	5	4	2
5	WI 2127	3	11.6	111	145	80	9	25	18	4	3	2
6	S 72159	9	10.2	121	146	85	5	37	16	2	3	2
7	Mari - CM 67 x Pro CMB 72A-211-C-1B-2Y-1B-1Y-0B	7	11.3	117	145	75	26	35	13	5	3	2
8	Par - EB 1053 x CM 67/H 272 CMB 73A-530-S 3213-OAP	4	10.1	115	145	77	43	33	15	4	3	1
9	WI 2231	7	9.7	115	144	73	19	19	0	3	4	1
10	Ky 63 - 1294	8	10.7	113	140	79	6	11	0	4	4	1
11	Mo - B 1337	6	11.8	112	144	77	52	27	30	5	5	3
12	Rod 586 - 11012.2 CMB 73A-622-7B-1Y-0B	2	11.4	111	144	77	50	45	20	6	2	3
13	Indian Dwarf - CM 67	6	9.8	111	143	79	75	30	20	6	5	2
14	Apam - P 1046 CMB 72-6-4Y-2B-1Y-1B-1Y-0B	4	10.6	113	143	78	9	24	20	5	4	2
15	Vaughn - Athenais CYB 1A-1A-0A-0A-0S	6	9.3	112	145	87	13	37	20	4	3	2
16	CI 8887 - CI 5761 SEA 13-10S-4S-0S	6	10.7	125	151	87	23	26	15	3	3	2
17	CI 8887 - CI 5761 SEA 13-14S-5S-0S	4	9.1	127	152	85	9	25	15	2	3	2
18	CI 8887 - CI 5761 SEA 13-14S-5S-0S	4	10.8	127	153	85	6	26	15	2	4	2
19	CI 8887 - CI 5761 SEA 13-16S-3S-0S	8	10.4	126	152	85	11	32	15	2	3	2
20	Beecher (Check)	—	10.1	114	149	93	5	33	16	4	2	1
21	CI 8887 - CI 5761 SEA 13-16S-5S-0S	3	11.2	126	153	86	5	24	13	2	3	2
22	CI 8887 - CI 5761 SEA 13-16S-6S-0S	3	11.1	126	153	85	13	22	11	2	4	2
23	CI 8887 - CI 5761	5	11.3	120	148	86	6	38	10	2	4	3

SEA 13-23S-3S-0S												
24	CI 8887 - CI 5761 SEA 13-24S-1S-0S	5	10.8	120	147	84	4	47	10	2	2	2
25	CI 8887 - CI 5761 SEA 13-34S-5S-0S	5	10.3	126	153	86	9	23	0	2	3	2
26	Menuet	9	13.1	112	144	89	8	18	13	2	3	2
27	CI 7207 x Olli(10Cr 268/21/2)	5	11.7	107	148	69	10	38	15	4	3	2
28	Tanekase 105	5	11.5	114	143	68	10	30	16	4	3	3
29	CI 4977 - Line 58 (Cr 270/2/3)	2	11.4	112	145	84	4	27	16	4	3	3
30	Unknown	5	11.6	111	145	80	10	40	18	4	5	2
31	Chile Comun - An 57 CMB 73A-8 -3012-OAP	3	10.2	121	146	85	11	14	10	4	2	2
32	Roho 03573	5	11.3	117	145	75	45	22	3	3	4	2
33	Aurore - Experance LB 2L-9L	8	10.1	115	145	77	45	22	0	4	4	2
34	Giza 117 - Api(Cr 272-3-4)	6	9.7	115	144	73	10	31	16	4	4	2
35	As 54/Tra(Cer - Toll)^2 As 46 - (Toll x BZ)VT/Pro - Toll	7	10.7	113	140	79	5	25	15	4	3	2
36	Orge Pays 25 - Zephyr	2	11.8	112	144	77	15	30	15	3	3	2
37	Fun x H 45 - P 136 x Fun/Avt - Nor x 92 Winn /Cer/Pro^2 - 6L	4	11.4	111	144	77	8	25	16	3	3	3
38	Sv.Mari - CM 67 CMB 72-140-4Y-1B-3Y-3B-0Y	8	9.8	111	143	79	28	25	15	4	3	3
39	Mari - Athenais CYB 6A-4A-0A	2	10.6	113	143	78	13	18	21	5	3	3
40	Beecher (Check)	-	9.3	112	145	87	4	35	20	4	1	2
41	Arizona 5908 - Athenais CYB 8-16A-1A-2A-2A-UA	6	10.7	125	151	87	20	32	1	2	5	2
42	M - Attiki 73-335-3	2	9.1	127	152	85	15	15	15	4	4	2
43	Sv.Mari - CM 67 CMB 70-140-4Y-1B-3Y-2B-0B-0Y	6	10.8	127	153	85	7	32	15	4	5	3
44	2762 - 11016.2	7	10.4	126	152	85	10	31	18	5	2	3
45	Por x Os - Apro/CM 67 - Dwg^2	7	10.1	114	149	93	35	32	20	4	3	2
46	Tlaxcala	5	11.2	126	153	86	23	38	21	5	3	2
47	Jussell	4	11.1	126	153	85	46	39	21	5	4	2
48	Trail - 1038 x DL 70 CMB 74A-432-25B-1Y-1B-1Y-0B	4	11.3	120	148	86	10	18	20	4	4	3
49	Piri	1	10.8	120	147	84	8	24	20	3	3	4
50	D 8738	4	10.3	126	153	86	6	25	0	3	2	4

52	Prossdarf 10945	4	9.9	107	148	69	6	6	0	3	2	2
53	10805	3	8.8	114	143	68	5	6	0	4	1	2
54	Ky 63 - 1234	4	10.5	112	145	84	17	23	0	5	3	3
55	Rod 586-11012.2 x Minn 1101 - Atnenais CMB 74A-1673-A-500B-UY	1	8.1	111	145	80	17	31	10	6	3	2
56	CN 100 - DC 23 x Fun-Fun^2/RM 1508 CMB 74A-82-OSK	4	9.9	121	146	85	25	28	20	3	2	3
57	Api - CM 67 x Mzq CMB 73A-367-11B-2Y-UB	2	9.5	117	145	75	23	33	50	6	4	2
58	Api - CM 67 x Mzq CMB 73A-367-13B-1Y-UB	5	15.9	115	145	77	40	19	13	6	2	3
59	Sultan x Cr 115 - Por CMB 79-297-3Y-1B-1Y-UB	4	12.0	115	144	73	23	20	10	2	5	3
60	Beecher (Check)	-	12.5	113	140	79	4	38	15	5	2	1
61	Pro - Kristina CMB 73-18-1Y-3B-1Y-UB	8	12.9	112	144	77	17	31	20	6	3	2
62	CM 67 - U.Sask 1800 x Pro/CM 67 CMB 72A-160-1-2B-1Y-1B-1Y-UB	1	-	111	144	77	35	26	35	7	4	3
63	CM 67 - Bza CMB 72A-34-16B-1B-1Y-UB	4	11.9	111	143	79	45	35	20	6	3	4
64	Nopal CM 73-604-A-17Y-3B-2Y-UB	3	13.1	113	143	78	35	34	20	6	5	3
65	Mari - CM 67 CMB 72-140-8Y-1B-3Y-1B-1Y-UB	2	12.1	112	145	87	35	34	20	4	5	2
66	Bal 16-CM 67 x Bco.Mr.Do.2.391 CMB 72A-206-B-6B-1Y-1B-1Y-UB	3	12.5	125	151	87	23	35	20	4	3	3
67	CI 7117 - 9 x Deir Alla 106 S 3418-OAP	7	11.3	127	152	85	9	36	21	5	4	3
68	A 16-B	3	9.2	127	153	85	10	34	15	5	4	4
69	Masurka	6	11.1	126	152	85	10	30	16	2	5	2
70	CI 03853	2	9.2	114	149	93	4	12	15	6	2	3
71	Avt - Aths LB 4-1L	10	-	126	153	86	22	37	21	4	2	2
72	Composite 29(Kenya Feed Barley)	7	8.3	126	153	85	4	39	20	4	2	3
73	Bal 16 - Pro CMB 72-135-1Y-1B-0Y-OSK	7	8.3	120	148	86	23	40	21	5	4	4
74	Heines Standard	6	8.0	120	147	84	23	24	20	3	4	3
75	H 272 500Y-500B-500Y-OB	3	10.3	126	153	86	11	28	23	5	3	2

76	SD 729 - Por CMB 72-205-2Y-1B-1Y-500B-0Y	3	12.6	112	144	89	30	53	20	6	6	4
77	Lambert - Dann 1	3	9.9	107	148	69	12	34	20	5	1	4
78	M 65.167 - M 66.69 - 1 x IIja 33 CMB 73-348-12Y-3B-1Y-0B	4	8.8	114	143	68	20	28	21	3	3	2
79	Koher	5	10.5	112	145	84	11	22	20	2	3	2
80	Beecher (Check)	-	9.1	111	145	80	10	28	0	4	3	2
81	Dickson 628	6	9.9	121	146	85	9	30	15	4	2	3
82	Unknown	5	9.5	117	145	75	15	18	10	4	3	2
83	Api - 5106 CMB 73A-7-2B-5Y-0B	4	15.9	115	145	77	7	33	30	5	3	2
84	Coho - Zephyr Kronsted 72-73-39-1B-1Y-1B-1Y-0B	5	12.0	115	144	73	3	32	25	3	3	2
85	Vanguard - Julia x Zephyr Kronsted 72-73-39-1B-1Y-1B-1Y-0B	6	12.5	113	140	79	9	31	10	4	4	3
86	CM 67-Apam CMB 72-21-5Y-1B-5Y-1B-1Y-0B	9	12.9	112	144	77	5	32	0	4	3	2
87	H2q - P 71386 CMB 73A-163-3B-1Y-2B-1Y-0B	0	-	111	144	77	3	33	-	4	1	2
88	M 67.18H 14 x 5106 CMB 73A-448-1B-1Y-1B-1Y-0B	4	11.9	111	143	79	30	39	30	6	2	2
89	11012.2 - Por x WPG 708.21 CMB 74-915-A-2Y-1B-1Y-0B	1	13.1	113	143	78	3	45	20	3	4	3
90	Cq - Comum x Apam - 12410		12.1	112	145	87	25	41	45	5	4	3
91	(Giza 117 -FAO 86) Cr 289/53/2	1	12.5	125	151	87	9	12	10	4	4	1
92	(Giza 117 - Giza 1)Cr 474/1	6	11.3	127	152	85	15	22	45	4	4	5
93	Cr 364/2	3	9.2	127	153	85	21	33	40	5	2	2
94	Cr 364/4	1	11.1	126	152	85	6	32	40	6	1	2
95	Cr 364/5	5	9.2	114	149	93	13	41	30	4	2	2
96	CI 2543	3	-	126	153	86	10	40	40	4	1	1
97	Delta	5	8.3	126	153	85	10	33	27	4	4	2
98	FAO - 10	6	8.3	120	148	86	15	30	28	4	4	2
99	Briggs - Research 1	3	8.0	120	147	84	5	39	40	4	3	3
100	Beecher (Check)	-	10.3	126	153	86	15	37	40	5	2	1
101	3309 - Attiki x XV 2240-OSK	5	11.4	112	144	89	8	20	20	5	2	2
102	Streng	2	9.9	107	148	69	15	19	4	4	3	2
103	Martin - Hyproli8	10	9.3	114	143	58	21	11	70	5	3	2
104	Candellila	3	10.1	112	145	87	45	33	50	5	4	2

	CMB 73A-340-15Y-2B-1Y-OB											
105	CM 67 - Apam x Gva CMB 72A-122-C-1B-1Y-1B-1Y-OB	1	11.3	111	145	80	9	38	50	4	4	3
106	H2q - CI 3909.2 CMB 73A-158-4B-3Y-1B-1Y-OB	2	10.8	121	146	85	25	25	38	5	4	3
107	Pro - Toll x Cer 2 - Toll/5106 CMB 73-128-8Y-1B-1Y-1B-1Y-OB	3	9.8	117	145	75	5	42	30	5	3	2
108	CI 3909.2 502Y-500B-500Y-OB	2	10.4	115	145	77	5	54	25	3	4	3
109	CM 67 - Jet CMB 72-2Y-10Y-2B-1Y-OB	2	9.8	115	144	73	9	51	25	5	5	4
110	(Tra - Winn x Pro/CI 4220 - Api)As 46 CMB 73A-246-S 3084-OAP	8	9.6	113	140	79	6	39	38	4	2	2
111	70/22281	1	12.1	112	144	77	5	43	33	3	4	1
112	Alf Mutant in Bomi	2	8.1	111	144	77	5	38	18	2	4	2
113	Emir - Nordgard 265(Ca 3239)	7	9.9	111	143	79	5	26	30	1	2	3
114	Norgdrol - Kristin(Ca 3239)	6	8.0	113	143	78	5	17	30	2	2	2
115	Sv 66344 - Inis(Ca 49201)	4	8.9	112	145	87	10	18	30	1	2	3
116	283-1 Barley Germplasm. Izmir	2	7.7	125	151	87	10	24	5	2	1	2
117	291-3 Barley Germplasm. Izmir	3	10.8	127	152	85	10	43	2	3	3	2
118	297-1 Barley Germplasm. Izmir	3	7.9	127	153	85	6	40	0	3	2	3
119	Gv 380 - Maguelone 1406	6	10.2	126	152	85	5	37	40	3	2	3
120	Beecher (Check)	-	10.5	114	149	93	5	29	63	5	1	3
121	B 106 - Research	2	-	126	153	86	7	30	54	4	3	4
122	CM 67 - Trebi CMB 72A-29-1L-OSK	2	10.7	126	153	85	10	26	30	4	4	2
123	Iris - CI 15017	7	10.0	120	148	86	6	21	30	2	4	3
124	Quinn	3	11.2	120	147	84	6	17	30	4	2	2
125	Ariana	3	12.8	126	153	86	5	5	10	3	2	4
126	Praecox mass selection	0	12.7	112	144	89	6	5	20	3	4	4
127	Cebada capa	2	10.0	107	148	69	5	3	18	4	4	4
128	Lechtaier	2	12.5	114	143	68	5	27	33	4	3	4
129	H 2210	2	10.3	112	145	84	5	2	6	5	3	3
130	H 2211	3	13.1	111	145	80	6	2	15	5	3	4
131	H 2212	4	10.7	121	146	85	5	17	20	5	3	3
132	Hanna (CI 906)	3	11.6	117	145	75	15	46	50	5	3	1

133	Gold Foil(CI 1179)	3	11.1	115	145	77	13	35	55	4	3	2
134	Lyallpur BS(CI 928)	4	9.6	115	144	73	6	36	45	4	3	2
135	Harrison (CI 10667)	5	11.5	113	140	79	35	40	40	2	3	2
136	Abtssian 33	7	11.4	112	144	77	5	42	40	2	4	3
137	Alger - Ceres 362-1-1-OAP	3	10.0	111	144	77	10	30	40	3	2	3
138	CM 67 - U.Sask 1800 x Pro -CM 67	1	12.1	111	143	79	10	47	40	6	3	2
139	Apam - P - 1046 CMB 72-6-4Y-2B-1Y-2B-1Y-OB	4	10.2	113	143	78	5	49	37	4	3	3
140	Beecher (Check)	-	11.0	112	145	87	30	44	50	5	3	3
141	167-2 Barley Germplasm. Izmir	2	11.1	125	151	87	10	36	45	3	1	2
142	Ellis. CI 2107	1	11.0	127	152	85	5	47	45	3	1	2
143	11012.2 - Por x WPG 708.21 CMB 74-915-A-2Y-1B-1Y-OB	3	10.1	127	153	85	54	48	65	6	4	2
144	CM 67-70/22385 x B 4-54 CMB 74A-1693-A-1B-1Y-OB	4	10.8	126	152	85	35	43	41	5	2	2
145	11012.2 - Impala x Birence CMB 74A-1697-D-2B-2Y-OB	7	10.8	114	149	93	49	43	41	3	2	2
146	Suhuar - Shikoku Hadaka x 5106 CMB 73A-1065-B-2B-1Y-OB	3	-	126	153	86	25	48	44	5	4	3
147	Gremleck = (CI 1215)	2	11.8	126	153	85	9	14	15	3	3	4
148	Proughorn = (CI 1640)	1	11.8	120	148	86	15	5	25	4	3	3
149	Cr 451/4	3	-	120	147	84	29	32	30	3	4	2
150	Beecher (Check)	-	11.3	126	153	86	9	35	30	4	2	2

* FR(FREQUENCY) - Number of locations at which the line was selected (out of 20 locations)

Protein analysis performed in Tel Hadya, Syria

DH based on 16 locations, DM based on 9, PLH based on 13, YR based on 4 locations,

LR based on 7, SR based on 2, PM based on 14 locations, SC based on 10, NB based on 7

Table 16.

PON - B: Lines Selected at 8 - 10 Locations.

Entry No	Variety / Cross Pedigree	FR	DH	DM.	A.C.I.				PM	SC	NB
					PLH	YR	LR	SR			
71	Avt - Aths LB - 1L	10	126	153	86	22	37	21	4	2	2
103	Martin - Hyproli 8	10	114	143	68	21	11	70	5	3	2
6	S 72159	9	121	146	85	5	37	16	2	3	2
26	Menuet	9	112	144	89	8	18	13	2	3	2
86	CM 67 - Apam CMB 72-21-5Y-1B-5Y-1B-1Y-OB	9	122	144	77	5	32	0	4	3	2
3	M.69.69 - Apam - RL	8	114	143	68	16	34	35	6	4	3
4	Arivat - Athenais	8	112	145	84	20	26	35	5	4	2
10	KY 63 - 1294	8	113	140	79	6	11	0	4	4	1
19	CI 8887 - CI 5761 SEA 13-16S-3S-OS	8	126	152	85	11	32	15	2	3	2
38	Sv.Mari - CM 67 CMB 72-140-4Y-1B-3Y-3B-OY	8	111	143	79	28	25	15	4	3	3
61	Pro - Kristina CMB 73-18-1Y-3B-1Y-OB	8	112	144	77	17	31	20	6	3	2
110	(Tra - Winn x Pro/CI42220-Api) As46 CMB 73A-246-S 3084 - OAP	8	113	140	79	6	39	38	4	2	2