PNAAQ205

IAN-34924

Results of the Fifteenth International Bread Wheat Screening Nursery (IBWSN) 1981-82

CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO
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CONTENTS

		Page
Glossary		ii
Introduction		1
Some Special Information		2
Table 1.	Locations from which data were reported, with variables reported	4
Table 2.	Summary of means of all variables, across 74 locations and in yield order	6
Table 3.	Highest yielding entries in four locations in Mediterranean North Africa and Iberia	22
Table 4.	Highest yielding entries in three locations in the Middle East and northeast Africa	23
Table 5.	Top performance entries: Days to maturity	24
Table 6.	Entries showing highest level of resistance to leaf rust	27
Table 7.	Entries showing outstanding resistance to stem rust	28
Table 8.	Entries showing acceptable resistance to stripe rust (leaf)	31
Table 9.	Entries showing acceptable resistance to *Septoria tritici*	33
Table 10.	Entries showing acceptable resistance to BYDV	34
Table 11.	Entries showing tolerance to fusarium head scab	35
Table 12.	Entries showing acceptable resistance to helminthosporium	38

GLOSSARY OF VARIABLE NAMES USED IN THE TABLES.
GLOSARIO DE NOMBRES VARIABLES USADOS EN LAS TABLAS.
GLOSSAIRE DES NOMS DES VARIABLES UTILISES DANS LES TABLEAUX.

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

RESULTS OF THE 15TH INTERNATIONAL BREAD WHEAT SCREENING NURSERY

(IBWSN) 1981-82

The 15th International Bread Wheat Screening Nursery (IBWSN) was sent in September 1981 to be grown by cooperators in their spring season of 1982. One hundred forty-seven nurseries went to cooperators in 82 countries. The 206 advanced lines and checks in the nursery had been chosen from among CIMMYT's best materials. All had been grown and observed by CIMMYT scientists under a high yield environment with pressure from major diseases on the CIANO Experiment Station in the Yaqui Valley in northwest Mexico. Here, too, seed for this international nursery was multiplied, cleaned and treated with insecticide and organic fungicide before shipment.

Instructions on nursery management accompanied the mailing of seeds of each cooperator. Enough seed from each line was provided for a single row, unreplicated, of at least 2 m. in length. A field book was included with each nursery set, providing a standard format for recording data desired by CIMMYT. In receiving and processing the data returned by cooperators, CIMMYT assumes that the nursery was properly handled and that accurate results were reported. We cannot, however, attest to the rigor with which the trials were grown and results were obtained.

Seventy-four of the cooperators receiving the 15th IBWSN returned field books with performance data at their locations in time to be included in this report. The choice of variables measured and the data returned rests with the individual cooperator. We have included in this summary all measures of all variables reported to us. The number of observations differs from variable to variable. The reader is urged to note the "NOBS" entry at the head of each variable column in the table that reports all data for all lines—that tells how many observations went into the data reported in that column, which may be an important indicator of the level of credibility that should be conferred. The reader should also bear in mind that the yield reported is from a single plot, essentially grown for observation rather than as a rigorous, replicated yield trial.

Presentation of Results

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

1. One *international summary,* listing the sites from which data were returned, with notations of all variables recorded and reported.
2. A table reporting the *mean of all observations* for each variable measured for each line in the nursery.
3. Selected tables reporting the *best performance by individual lines* on major variables, usually the top 5 to 10 percent. The table of contents lists all variables reported in this way.

Cooperators were asked to use agronomic and disease reporting methodology as described in CIMMYT's Information Bulletin 38. Data reported are simple means computed from those supplied by the cooperators. Data on rusts recorded by the modified Cobb scale were converted to average coefficient of infection (ACI) as explained in the yearly report of the United States Department of Agriculture International Spring Wheat Rust Nursery.

Feedback

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

Some Special Information

Disease scoring

Disease scores for stem, leaf and stripe rust infections recorded in the manner recommended by Dr. W.Q. Loegering (USDA International Spring Wheat Rust Nursery, 1959) are converted to a numeric coefficient of infection (CI) prior to being used in any calculations. Each original reading recorded in this manner consists of a severity (percentage of rust infection on the plants) and response (kind of infection). The severity is recorded as percent of infection according to the modified Cobb scale If only a trace is visible, T or TR may be reported and is given the value of 1 percent.

Responses may be recorded by using one of the following codes. The numeric values assigned to these codes are shown at the right.

Response	Equivalent Numeric Value
VR	.2
R	.2
MR	.4
M or X	.6
MS	.8
S	1.0
VS	1.0

Severity and response are recorded together, with severity first (for example, 5MR). The equivalent coefficient of infection is calculated by multiplying the numeric equivalents of each part. For example:

Disease Score	Coefficient of Infection
5MR	5(0.4)= 2.0
TR	1(0.2)= 0.2
TRR	1(0.2)= 0.2
60S	60(1.0)=60.0
0*	(0) (0)= 0.0

* If there is no visible infection on the plant, only a zero is reported.

Reactions may be more variable than can be represented by a single severity and response. This variability may be recorded in two ways: (1) A comma or slash indicates plants have segregated into clear-cut classes. The first rating reported is included in the computations. (2) If a range of reaction is recorded, it is denoted by a dash In these cases the coefficient of infection is the average of the two scores Examples of these situations are given below:

Disease Score	Coefficient of Infection
5R,40S	The first rating 5R=5(0.2)=1.0 is used in all computations
40M/60S	The first rating 40M=40(0.6)=24.0 is used in all computations
15R-5S	[15(0.2)+5(1.0)]/2=4.0

A range may be reported for severity only or response only. In each of these cases the average severity or average response is calculated before multiplying the two together. For example

Disease Score	Coefficient of Infection
10-20MS	[(10 +20)/2] (0.8) = 12.0
40MR-MS	40[(0.4 +0.8)/2] = 24.0
5-10MR-R	[(5 + 10)/2][(.4 + .2)/2] = 2.25

In most tables only average coefficients of infection (AVE.CI) are reported. However, in some tables the highest rust readings (HR) are reported as severity/response scores.

Table 1. Locations from which data were reported, with variables reported

LOCATION	CONTINENT	COUNTRY	AREA	VARIABLES INCLUD
6	AFRICA	EGYPT	CAIRO	3 4 5 7 8
8	AFRICA	EGYPT	KAFR EL SHEIKH	3 4 5 7 8
14	AFRICA	KENYA	RIFT VALLEY	5 8
27	AFRICA	SOUTH AFRICA	ORANGE FREE STATE	1 3 4 7 8
29	AFRICA	SUDAN	GEZIRA	1 3 4
35	AFRICA	TUNISIA	TUNIS	3
41	ASIA	AFGHANISTAN	KABUL	5 7
42	ASIA	BANGLADESH	JOYDESPUR	1 3 4 70
55	ASIA	NEPAL	RUPANDEHI	3 4 70
61	ASIA	PAKISTAN	PUNJAB	3 4 5 7 8
69	EUROPE	ENGLAND	CAMBRIDGE	3 64
74	EUROPE	GREECE	THESSALONIKI	3 4 8
84	EUROPE	PORTUGAL	ALENTEJO	3 4 5 8
88	EUROPE	SPAIN	MADRID	1 3 4 64
99	MIDDLE EAST	IRAN	GORGAN	3 4
104	MIDDLE EAST	JORDAN	JORDAN VALLEY	3 4
109	MIDDLE EAST	LEBANON	BEKAA VALLEY	3 4
119	OCEANIA	NEW ZEALAND	MANAWATU	8
126	NORTH AMERICA	MEXICO	GUANAJUATO	3 4 5
128	NORTH AMERICA	MEXICO	EDO DE MEXICO	3 4 7 70
129	NORTH AMERICA	MEXICO	EDO DE MEXICO	3 5 7 64 71
132	NORTH AMERICA	MEXICO	SONORA	1 3 4 7
137	NORTH AMERICA	U S. A	CALIFORNIA	3 64 77
143	NORTH AMERICA	U S. A	SOUTH DAKOTA	3 7
150	NORTH AMERICA	U S A	WASHINGTON	3
153	SOUTH AMERICA	ARGENTINA	BUENOS AIRES	3 8
154	SOUTH AMERICA	ARGENTINA	BUENOS AIRES	5 7 8 64
155	SOUTH AMERICA	ARGENTINA	CORDOBA	7
164	SOUTH AMERICA	COLOMBIA	CUNDINAMARCA	3 4 5 64
165	SOUTH AMERICA	CHILE	CAUTIN	5
166	SOUTH AMERICA	CHILE	CHILLAN, NUBLE	1 5 7
168	SOUTH AMERICA	CHILE	SANTIAGO	5 7 8
304	AFRICA	SENEGAL	REGION DU FEEUVE SENEGAL	1 3 4
308	EUROPE	IRELAND	KILDARE	3 64
310	EUROPE	SPAIN	CADIZ	1 3 5
312	SOUTH AMERICA	ARGENTINA	BUENOS AIRES	7 8 64
328	NORTH AMERICA	MEXICO	MICHOACAN	64

Table 1 (con't.).

LOCATION	CONTINENT	COUNTRY	AREA	VARIABLES INCLUDED
350	SOUTH AMERICA	PARAGUAY	CACUPE	7
356	SOUTH AMERICA	BOLIVIA	SANTA CRUZ	3 4 7 8
363	MIDDLE EAST	SYRIA	ALEPPO	1 3 4
368	MIDDLE EAST	CYPRUS	ATHALASSA	3
372	ASIA	INDIA	WEST BENGAL	4
408	AFRICA	RHODESIA	CHIREDZI	4 7 8
421	AFRICA	TANZANIA	IRINGA	1 3 64
426	SOUTH AMERICA	BRAZIL	PARANA	3 4 70
433	MIDDLE EAST	QATAR	BARADA	1 3 4
437	EUROPE	SPAIN	SEVILLA	3 5
440	NORTH AMERICA	MEXICO	GUANAJUATO	7 8
455	EUROPE	ROMANIA		3 4 64
457	CENTRAL AMERICA	COSTA RICA	ALAJUELA	1 3 4
459	AFRICA	BURUNDI	MURAMUYIA	5 7 8
460	NORTH AMERICA	TAMAULIPAS	TAMPICO	3 4 7
463	ASIA	PAKISTAN	PUNJAB	3 4 5 7
465	EUROPE	CZECHOSLOVAKIA		8
473	EUROPE	SPAIN	CORDOBA	1 3
477	EUROPE	NORWAY		1 3 4 13
482	OCEANIA	AUSTRALIA	NEW SOUTH WALES	5 7 8
484	NORTH AMERICA	CANADA	QUEBEC	77
496	EUROPE	POLAND	KRAKOW	3 4 64
497	OCEANIA	NEW ZEALAND	CANTERBURY	3 5
506	AFRICA	SUDAN	EASTERN	3 4 8
507	EUROPE	SPAIN	LLEIDA	1 3 4 13 64
508	NORTH AMERICA	U S A	KENTUCKY	3 7
509	ASIA	PAKISTAN	NWFP	1 3 4 5 7
513	SOUTH AMERICA	BRAZIL	PARANA	3 7 8
530	ASIA	CHINA	SUZHOU, JIANGSU	49
531	AFRICA	ZAMBIA	CENTRAL	8
536	AFRICA	MALAWI	CENTRAL	3 4 5 70
537	AFRICA	SOUTH AFRICA	CAPE PROV	8
540	MIDDLE EAST	TURKEY	IZMIR	5 7 8
542	AFRICA	BURUNDI	MURAMUYA	5 7 64

#VARIABLE IDENTIFICATIONS

1	YIELD	KG/HA	3	FLOW	DAYS	4	MAT	DAYS	5	STRP	RT. L	7	LEAF	RUST
8	STEM	RUST	13	1000	G W.	49	FUS	GRAM	64	SEP S	0-9	70	HEL S	0-9
71	FUS N	0-9	77	BYDV	0-9									

Table 2. Summary of means of all variables, across 74 locations and in yield order

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	STEM RUST
			NOBS	(16)	(48)	(34)	(23)	(27)	(23)
45	VEE"S" CM33027-F-1M-9Y-0M-86Y-0B			4881 7	101 0	147 9	5.6	12 8	3 8
105	NKT"S" CM40454-11M-4Y-2M-3Y-0M			4875 6	103 2	149 3	3 3	25 2	16 3
1	KVZ X CN067-PJ62 SWM1285-2Y-3M-1Y-0M			4630 9	99 4	143 3	1 9	3 4	0 4
50	VEE"S" CM33027-F-12M-1Y-6M-0Y-76B-0Y			4382 5	101 0	144 5	4 5	9 8	0 5
61	VEE"S" CM33027-F-15M-500Y-0M-126B-0Y			4365 3	100 8	146 5	5 0	16 1	0 2
90	JUP73-ZP X COC75 CM37614-B-14Y-3M-1Y-0M			4346 9	97 7	143 9	2 7	6 9	5 5
64	CHAT"S" CM33090-T-1M-4Y-0M-1B-0Y			4324 3	103 9	146.8	6 9	15 4	0 7
53	VEE"S" CM33027-F-15M-4Y-4M-3Y-2M-1Y-0M			4323.5	95 1	139 6	4 3	24 3	5 0
55	VEE"S" CM33027-F-15M-500Y-0M-76B-0Y			4312 9	95 4	141 7	8 2	22 9	1 7
65	CHAT"S" CM33090-T-1M-4Y-0M-57B-0Y			4275 6	102 4	142 7	7 1	14 3	0 8
49	VEE#3 CM33027-F-12M-1Y-6M-0Y			4269 0	98 7	140 2	4 0	10 8	0 8
46	VEE"S" CM33027-F-1M-9Y-0M-97Y-0B			4261 7	102 4	146 3	8 9	18 4	1 8
48	VEE#2 CM33027-F-12M-1Y-4M-2Y-2M-0Y			4252 1	98 8	142 2	5 3	7 5	1 0
56	VEE"S" CM33027-F-15M-500Y-0M-87B-0Y			4243 7	94 2	141 3	3 6	23 9	1 0
102	SAP"S"-HUAC"S" CM40394-20M-1Y-2M-1Y-4M-1Y-0B			4223 4	94 3	139 2	20 8	18 2	17 4
35	COC75-HORK"S" CM32041-3M-3Y-1M-1Y-1M-1Y-0B			4213 6	94 9	140 1	3 1	3 8	2 0
52	VEE#4 CM33027-F-12M-1Y-10M-1Y-3M-1Y-0M			4181 3	102 5	144 0	5 1	8 0	4 7
2	KVZ-CJ71 SWM1430-4Y-3Y-0Y			4176 2	105 8	150 2	1 9	4 5	1 1
63	CHAT"S" CM33090-T-1M-3Y-0M-124B-0Y			4171 8	100 1	145 9	8 3	26 6	0 7
5	MYNA"S" SWM4589-7Y-1BM-1Y-0M-56B-0Y			4170 3	93 7	139 0	14 2	6 4	22 9
28	BUC"S" CM31678-R-4Y-2M-500Y-501M-500Y-500M-0Y			4117 0	95 3	140 1	11 2	14 3	9 7
23	TAN"S" CM30697-2M-8Y-1M-1Y-1B-0Y			4099 9	91 9	138 2	28 2	22 0	1 7
47	VEE"S" CM33027-F-8M-1Y-8M-1Y-2M-0Y			4097 6	98 5	137 8	6 6	11 2	1 9
13	63 130-JAR66 X NAC76 SWM6598-5M-1Y-1M-3Y-0Y			4093 0	96 9	142 4	17 0	11 8	12 6
70	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-0Y			4072 6	96 1	142 8	1 4	1 6	1 0
62	CHAT"S" CM33070-N-1M-1Y-0M-121Y-0B			4065 8	102 9	146 3	9 8	14 4	0 2
116	DGA-BJY"S" CM40610-25Y-3M-3Y-3M-0Y			4062 1	97 7	138 3	8 0	26 1	16 9

VTY	1000 G W.	FUS GRAM	SEP S 0-9	HEL B 0-9	FUS N 0-9	BYDV 0-9
	(2)	(1)	(14)	(5)	(1)	(2)
45	58 5	40 0	3 5	3 2	0 0	5 5
105	49 2	20 0	4 3	3 2	3 0	5 5
1	49 8	10 0	3 6	5 4	5 0	1 0
50	42 2	4 0	4 9	2 3	1 0	5 0
61	41.4	26 0	3 8	3 5	1 0	5 5
90	54 6	26 0	4 8	4 8	5 0	5 5
64	-----	3 0	3 8	4 3	1 0	6 5
57	49 9	23 0	4 9	4 5	3 0	5 0
55	47 4	26 0	5 0	4 3	1 0	4 5
65	42 7	3 0	3 8	3 5	3 0	7.0
49	41 3	13 0	4 5	3 5	0 0	5 0
46	50 1	56 0	3 8	3 3	0 0	5 5
48	41.5	10 0	4 3	4 0	1 0	5 0
56	43 5	20 0	4 8	4 8	3 0	5 0
102	45 0	26 0	4 7	4 3	1 0	5 5
35	48 7	20 0	5 2	5 5	5 0	5 5
52	41 3	3 0	4 8	3 0	1 0	4 5
2	4[illegible] 8	10 0	3 7	3 8	1 0	5.5
63	-----	16 0	4 2	4 7	7 0	6 0
5	46 9	26 0	3 7	5 0	5 0	4 0
28	48 4	20 0	4 9	6 3	1 0	5 0
23	49 7	10 0	4 1	6 8	3 0	6 5
47	49 1	26 0	4 8	3 4	3 0	5 5
13	47 4	30 0	3 8	5 0	3 0	5 0
70	40 9	20 0	3 6	4 3	1 0	6 0
62	40 3	10 0	3 6	3 0	1 0	5 5
116	50 0	20 0	4 6	4 3	7 0	5 5

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	STEM RUST
			NOBS	(16)	(48)	(34)	(23)	(27)	(23)
54	VEE"S" CM33027-F-15M-500Y-0M-3B-0Y			4050 7	95.4	137.3	4.4	21 7	0 6
104	NKT"S" CM40454-11M-4Y-2M-1Y-0M			4049 5	101 4	147 8	5 2	26 0	19.5
76	TI71-TOB66 X ALD"S" CM33217-Q-4M-1Y-0M-136B-0Y			4049.2	97.3	138 6	4 4	3 3	4 4
75	TI71-TOB66 X ALD"S" CM33217-Q-4M-1Y-0M-110B-0Y			4038.3	97 8	139 4	5.9	8 2	4 3
107	YD"S"-BJY"S" CM40456-11Y-1M-2Y-1M-1Y-0B			4017.2	94 3	139 9	32 0	16.8	9 0
57	VEE"S" CM33027-F-15M-500Y-0M-89B-0Y			4013.7	94.1	141 5	4 2	23 0	1 2
171	ORE F1 158-FDL X KAL-BB/NAC76 CM47634-I-2M-3Y-1M-2Y-1Y-0M			4012.0	96.5	138 2	1.4	5 6	4 0
6	CAR422-ANA75 SWM4610-2Y-20M-1Y-0M			3998.9	98 0	141 2	9.6	5 8	14 0
66	CHAT"S" CM33090-T-1M-4Y-0M-154B-0Y			3991 6	104 9	147 3	6 9	13 4	2.3
103	NKT"S" CM40454-11M-4Y-1M-1Y-4M-1Y-0B			3982.1	96.2	137 3	3 2	22 8	29 8
92	MNV"S" CM37705-Q-2Y-3M-1Y-0M-47Y-0B			3979.9	94 4	138 3	19 2	16 9	6 9
34	BUC"S" CM31678-R-4Y-2M-500Y-509M-500Y-501M-500Y-0M			3962.8	96 3	142 5	9 5	11.7	16.2
51	VEE"S" CM33027-F-12M-1Y-6M-0Y-8[illegible]5-0Y			3961 7	99.1	142 3	8 1	7 9	0 3
59	VEE"S" CM33027-F-15M-500Y-0M-110B-0Y			3956 4	94.8	141 8	3 7	21 1	1.4
96	JUP73-BJY"S" CM39992-8M-3Y-2M-0Y			3950 4	95 4	140 3	11 3	15.9	24 4
115	DOA-BJY"S" CM40610-22Y-3M-2Y-1M-1Y-1M-0Y			3943.6	92 8	135 4	10 0	24 0	22 0
12	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-2M-0Y			3942.9	95 4	139 3	8 7	15 9	2 5
30	BUC"S" CM31678-R-4Y-2M-500Y-506M-5[illegible]0Y-500M-0Y			3942 9	96 1	140 2	11 5	12 4	14 7
97	BJY"S"-JUP73 CM40038-6M-4Y-2M-1Y-2M-1Y-0B			3942 1	95 5	138 2	7 2	9 3	19 1
113	DOA-BJY"S" CM40610-15Y-1M-2Y-1M-1Y-0B			3935 1	92 4	135 3	21 3	13 8	17 1
71	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-1Y-0M			3930 5	97 3	141 7	2 2	1 3	1 2
145	LIRA"S" CM43903-H-2Y-1M-5Y-2M-1Y-1M-0Y			3923 4	94 5	137 7	3 0	4 1	1 6
32	BUC"S" CM31678-R-4Y-2M-506M-502Y-500M-0Y			3922 2	96 7	141 2	7 8	12 0	13 9
67	BOW"S" CM33203-H-8M-8Y-1M-1Y-1M-0Y			3914.9	99.4	145 9	2 3	1 1	1 8
82	HAHN"S" CM33682-L-1Y-1Y-1M-3Y-100B-505Y-0M			3899 2	102 3	143 8	3 1	9 3	1 4
165	HER77-NAC76 CM46782-10M-1Y-4M-2Y-0Y			3898 6	99 0	145 8	3 2	26 2	7 1
86	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-503Y-0M			3894 9	104 3	150 5	1.6	5 5	2 0

VTY	1000 Q W	FUS GRAM	SEP S 0-9	HEL S 0-9	FUS N 0-9	BYDV 0-9
	(2)	(1)	(14)	(5)	(1)	(2)
54	47 9	40 0	5 1	3 8	3 0	4 0
104	48 5	26 0	4 3	3 5	1 0	5 5
76	45 1	23 0	4 5	4 6	3 0	5 0
75	43 8	16 0	3 9	4 0	7 0	5 0
107	44 4	13 0	4 8	4 7	-----	6 0
57	48 2	33 0	4 8	4 5	6 0	5 0
171	47 3	30 0	4 5	4 5	3 0	5 0
6	50 5	30 0	4 7	5 5	1 0	3.0
66	45 0	23 0	3 7	3 7	1 0	6.5
103	49 5	16 0	5 2	4 8	3 0	5 0
92	41 2	20 0	4 9	3 8	7.0	5.5
34	44 5	23 0	3 9	6 7	5 0	5 0
51	41.1	13 0	4 9	2 8	1 0	4 5
59	48 1	26 0	4 8	5 7	7 0	5.0
96	48 8	13 0	4 9	5 3	3 0	5 5
115	48.6	16 0	4 9	6 0	8 0	6 0
12	47 8	33 0	3 5	4 8	1 0	5 0
30	45 9	23 0	4 5	6 5	6 0	4 0
97	37.3	23 0	4 9	5 0	3 0	5 5
113	43 7	30 0	5 0	4 7	0 0	6 0
71	39 0	20 0	3 2	4 7	5 0	6 5
145	39 7	23 0	3 3	5 0	1 0	4 0
32	40.8	16 0	4 3	6 3	5 0	3 5
67	43.5	20 0	3 5	3 4	1 0	5 0
82	48 4	16 0	4 7	5 0	3 0	5 0
165	49 0	23 0	3 6	5 3	5 0	6 0
86	45 8	26 0	4 1	4 7	5 0	5 5

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	STEM RUST
			NOBS	(16)	(48)	(34)	(23)	(27)	(23)
143	LIRA"S" CM43903-H-2Y-1M-2Y-1M-1Y-1M-0Y			3893 4	94 4	136 8	2 5	5 2	3 6
146	LIRA"S" CM43903-H-4Y-1M-1Y-3M-3Y-0B			3892 9	94 2	137 2	6 3	12 0	1 6
198	BJY"S"-PRY CM50323-12Y-1M-1Y-0Y			3892 1	94 1	138 2	5 1	17 2	7 0
101	SAP"S"-HUAC"S" CM40394-20M-1Y-2M-1Y-2M-2Y-0B			3891 2	93 3	138 8	21 2	13 5	14 0
142	JUP73-EML"S" X OJO"S" CM43598-II-8Y-1M-5Y-0M			3887 6	92 4	138 8	14 8	7 5	19 6
95	WRB"S" CM39814-40M-1Y-1M-2Y-3M-1Y-0B			3882 1	97 6	142 5	10 7	18 5	16 8
72	BOW"S" CM33203-K-9M-19Y-3M-3Y-2M-1Y-0M			3877 9	101 5	148 2	1 8	2 0	0 1
69	BOW"S" CM33203-K-9M-2Y-1M-1Y-2M-0Y			3877 7	97 5	143 0	2 2	2 6	0 1
14	MON"S" CM8288-A-3M-6Y-5M-1Y-1M-0Y			3874 8	97 2	145 5	7 6	7 3	18 5
81	HAHN"S" CM33682-L-1Y-1Y-1M-3Y-100B-503Y-500B-0Y			3873 5	103 5	146 8	3 4	9 0	0 9
204	CMH76 1084-FLK"S" CMH77A 894-1B-1Y-4B-1Y-0B			3867.1	100 6	141 1	7 7	8 0	21 9
74	BOW"S" CM33203-K-10M-7Y-3M-2Y-1M-0Y			3863 3	99 5	143 8	1 6	1 2	0 1
169	V6707-COC75/TI71-PCI"S" X KVZ-TI71 CM47566-H-2M-4Y-2M-5Y-2Y-0M			3857 4	95 2	141 3	0 1	6 3	3 2
25	PEW"S" CM31630-I-1Y-2M-4Y-0M-125B-0Y			3857 1	93 2	137 7	7 9	22 4	10 5
22	SPRW"S"-BJY"S" CM30137-1M-1Y-1M-1Y-1B-0Y			3832 0	93 1	135 0	8 8	27 5	8 2
153	TE876-PAM"S" CM45984-9Y-1M-1Y-0Y			3821.8	101 4	148 0	2 1	1.2	1 7
44	YD"S"[(FN-TH(3) X II44 29-TH(2)/CTFN (4)SR70] CM35735-1M-2Y-1M-1Y-1B-0Y			3815 9	95 4	143 4	7 4	9 0	15 6
4	MYNA"S" SWM4589-7Y-1M-3Y-0M-49B-0Y			3809.1	97.6	139 2	11.0	3 9	13 1
80	"LOCAL CHECK"			3805.6	95 5	136 8	4.7	15 1	14 4
78	BOW"S" CM33203-K-9M-24Y-0M-15Y-0B			3803 8	96.3	136 7	7 3	1 8	0 0
181	FURY-SLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-3Y-0Y			3793 0	92 7	139 8	3 0	9 9	3 6
42	SNB"S" CM34630-D-3M-3Y-1M-1Y-0M			3790 4	98.2	144 6	2.3	2 3	1 1
29	BUC"S" CM31678-R-4Y-2M-500Y-501M-502Y-502M-0Y			3778 4	95 6	137 7	11 6	12 9	8 9
58	VEE"S" CM33027-F-15M-500Y-0M-98B-0Y			3768 5	94 6	142 0	3 8	22 5	1 2
7	F3 71-TRM73 SWM5704-10Y-1M-3Y-3M-2Y-3M-0Y			3756 0	97 8	144 3	4 8	7 3	5 5
167	F3 71-TI71RESEL X ANA75 CM47441-G-1M-1Y-4M-1Y-0Y			3755 4	99 3	144 4	1 4	2 2	3 7
170	KKK-TOL73 X NAC76 CM47615-A-1M-2Y-2M-4Y-2Y-0M			3747 8	95 4	141 9	4 6	6 0	3 5
16	PRL"S" CM25988-8Y-3Y-2Y-1M-1Y-100B-0Y			3742 9	94 1	139 7	10 1	2 6	7 7

VTY	1000 Q W	FUS GRAM	SC S 0-9	HEL S 0-9	FUS N 0-9	BYDV 0-9
	(2)	(1)	(14)	(5)	(1)	(2)
143	43 9	23 0	4 5	5 8	3 0	5 0
146	42 3	16 0	4 4	5 5	3 0	4 0
198	39 7	40 0	5 3	5 0	1 0	5 0
101	49 6	40 0	4 7	5 0	1 0	4 0
142	49 3	20 0	5 1	5 7	3 0	5 0
95	51 3	10 0	4 6	4 3	5 0	5 5
72	37 1	16 0	2 7	4 5	1 0	6 0
69	35 3	26 0	3 1	5 3	3 0	6 0
14	52 9	30 0	4 4	2 8	1 0	6 0
81	48 5	26 0	4 8	4 8	3 0	5 5
204	36. 6	20 0	5 2	4 5	1 0	6 0
74	38 6	20 0	3 2	3 8	1 0	6 0
169	44 2	56 0	4 5	5 5	5 0	5 0
25	51 3	23 0	4 3	6 7	1 0	5 0
22	45 7	36 0	4 5	6 8	3 0	5 5
153	40 0	13 0	3 9	4 8	6 0	3 5
44	52 5	20 0	4 9	5 6	1 0	6 5
4	52 8	46 0	4 9	4 3	5 0	4 5
80	40 4	10 0	4 6	6 0	6 0	4 5
78	44 2	16 0	3 7	4 0	7 0	6 0
181	56 4	26 0	4 8	5 3	3 0	6 5
42	55 4	13 0	3 7	3 5	3 0	4 5
29	42 3	16 0	4 2	6 5	3 0	5 0
58	46 7	26 0	5 0	4 7	5 0	5 0
7	42 4	3 0	4 3	3 8	0 0	4 5
167	43 3	13 0	4 6	6 0	3 0	4 5
170	42 9	33 0	4 1	6 3	3 0	4 0
16	49 4	46 0	4 6	3 8	0 0	4 5

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	STEM RUST
			NOBB	(16)	(48)	(34)	(23)	(27)	(23)
73	BOW"S" CM33203-K-10M-7Y-3M-1Y-2M-0Y			3740 5	99 3	145.8	2 7	1 1	0 2
126	(CHR-5948 X CHR(4)/IIB156(B)/JUP73 CM43054-1M-1Y-1M-1Y-0Y			3733 8	93 7	139 4	12 9	13 5	4 5
110	CARP"S"-BJY"S" CM40464-11M-1Y-2M-2Y-2M-2Y-0B			3713 5	97 5	142 1	6 4	12 2	17 7
84	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-501Y-500B-0Y			3712.5	105 0	147 9	1 8	6 2	1 7
20	"LOCAL CHECK"			3708 7	95 2	136 6	12 3	14 4	16 0
24	PHO"S" CM30831-D-4Y-2M-0Y-82Y-0B			3702 6	99 7	142 6	13 9	9 8	3 3
189	BUC"S"-BJY"S" CM49641-9Y-1M-1Y-1Y-0M			3700 8	96 0	141 7	11 9	14 7	19 5
106	YO"S"-BJY"S" CM40456-9Y-1M-1Y-1M-0Y			3696.9	93 6	138 8	9 1	19 6	5 4
15	CKR"S" CM20769-A-8Y-1M-2Y-5M-1Y-0M-39B-0Y			3693 3	95 2	139 4	25 0	6.7	4 2
91	JUP73-ZP X COC75 CM37614-B-14Y-4M-1Y-0M			3689 4	99 2	142 2	4 1	6 7	4 9
175	(MO73/HN4 X KT54E-NAR)PVN76"S" CM47864-A-3M-2Y-1M-1Y-0Y			3674 5	95 3	139 6	26 2	26 7	3 5
18	MAYA74"S"-MON"S" CM29251-3M-17Y-1M-1Y-1B-0Y			3674.4	93 7	137 0	28 4	2 0	13 8
94	MAYA74"S"-NAC76 CM39424-1Y-1M-4Y-1M-2Y-1M-0Y			3673 9	95 0	142 5	8 0	9 1	11 9
129	CNO X YMH-TOB66/HUAC"S" CM43330-L-2Y-3M-1Y-1M-1Y-2M-0Y			3662 3	95 9	139 5	4 4	11 4	1 8
83	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-500Y-0M			3657 7	103 8	150 3	1 6	6 2	0 6
111	K4500 2-BJY"S" CM40480-23M-2Y-2M-2Y-4M-2Y-0B			3642 9	92 9	138 8	6 3	7 5	1 2
19	MAYA74"S"-MON"S" CM29251-3M-17Y-4M-0Y-35Y-0B			3641 2	92 1	134 9	29 8	5 5	12 3
122	BAYA"S" CM42374-1Y-1M-2Y-0M			3637 4	95 3	139 2	8 1	25 8	11 9
205	CMH76 1084-FLK"S" CMH77A 894-1B-2Y-1B-1Y-0B			3634 7	98 8	138 0	11 9	11 2	21 8
144	LIRA"S" CM43903-H-2Y-1M-5Y-1M-1Y-1M-0Y			3627 1	95 4	138 3	5 3	3 9	1 2
27	PEW"S" CM31630-I-1Y-2M-5Y-0M-114B-0Y			3612 3	95 7	141 9	4 6	19 4	5 4
17	ANI"S" CM26346-A-11Y-1M-3Y-1M-1Y-0B			3611 4	92 3	135 1	7 6	6 8	11 0
100	"LOCAL CHECK"			3609 9	94 9	139 9	14 1	13 1	14 7
151	MON"S"-TI71RESEL CM45075-6M-1Y-1M-1Y-0Y			3599 9	100 3	146 5	11 0	8 3	18 6
163	BB-CAL X NAC76 CM46781-25M-1Y-3M-1Y-0Y			3591 8	95 1	139 7	8 8	19 0	12 2
98	KAL-BB X MON"S" CM40226-2Y-1M-1Y-1M-2Y-2M-0Y			3577 5	94 7	135 2	13 6	5 7	15 5
85	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-502Y-0M			3573 6	104 8	145 6	2 1	6 5	0 4
166	FATH-FLK"S" CM46851-4Y-2M-2Y-1Y-0M			3565 3	87 7	136 8	15 5	30 2	8 4

VTY	1000 Q W	FUS GRAM	SEP S 0-9	HEL S 0-9	FUS N 0-9	BYDV 0-9
	(2)	(1)	(14)	(5)	(1)	(2)
73	38 2	20 0	3 5	4 3	5 0	6 0
126	28 3	16 0	3 8	4 3	6 0	5 0
110	52 1	20 0	4 6	4 3	3 0	6 0
84	42 4	30 0	4 1	4 5	1 0	4 5
20	44 7	16 0	4 8	6 7	3 0	4 5
24	42 7	10 0	4 5	5 3	5 0	6 0
189	41 9	33 0	4 3	6 0	5 0	4 0
106	50 9	43 0	4 9	4 5	1 0	5 0
15	45 7	40 0	5 0	4 8	1 0	4 5
91	41 9	23 0	4 8	5 0	5 0	5 0
175	41 5	20 0	4 2	5 3	8 0	5 0
18	59 3	13 0	4 7	6 7	1 0	5 0
94	49 7	23 0	5 4	6 3	7 0	4 5
129	26. 4	20 0	4 9	6 0	7 0	6 0
83	45 4	23 0	4 4	4 3	5 0	5 0
111	46 3	20 0	4 6	4 7	5 0	5 5
19	53 0	43 0	4 9	5 8	1 0	5 5
122	50 0	23 0	4 4	5 3	3 0	5 5
205	40 9	36 0	5 9	4 7	6 0	5 0
144	44 0	26 0	3 6	5 8	3 0	5 0
27	48 3	16 0	4 3	6 5	7 0	4 5
17	52 5	26 0	4 7	7 0	1 0	5 0
100	43 2	26 0	5 0	6 0	7 0	4 0
151	51 2	26 0	3 4	3 7	1 0	4 5
163	38 3	13 0	4 7	4 6	3 0	4 5
98	45 2	20 0	4 9	4 6	3 0	5 5
85	47 5	20 0	4 4	4 7	1 0	4 0
166	51 4	46 0	4 7	6 3	5 0	5 0

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	STEM RUST
			NOBS	(16)	(48)	(34)	(23)	(27)	(23)
114	DGA-BJY"S" CM40610-22Y-1M-2Y-3M-0Y			3558 8	94 7	139 6	8 4	14 7	12 4
147	LIRA"S" CM33903-H-4Y-1M-2Y-2M-2Y-0B			3553 8	93 3	136 4	3 0	5 9	1 1
159	BLT"S"-PVN76"S" CM46715-11Y-1M-1Y-2Y-0M			3551 7	94 9	136 4	20 8	24 2	15 4
40	"LOCAL CHECK"			3537 2	95 9	138 8	13 5	10 9	16 4
68	BOW"S" CM33203-K-9M-2Y-1M-1Y-1M-0Y			3536 8	97 3	143 4	2 8	2 3	0 4
174	BSV50-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-4Y-0Y			3532 2	94 2	138 1	5 0	10 0	0 9
89	MOR"S" CM37130-15Y-1M-3Y-0M			3531.3	93 7	134 2	8 9	24 2	13 4
150	{COC75[(FN-TP X K58N/MY54-N10B X AN" ")TT-SN64 Y BZA]}[(FR316/MCM-KT X Y50)ZA75]]JY"S" CM43956-A-1Y-1M-3Y-0M			3530.2	95 1	140 4	3 9	7.0	7 7
197	BUC"S"-FLK"S" CM50070-24Y-1M-1Y-0Y			3528 1	97 4	144 6	2 8	11 9	14 1
60	"LOCAL CHECK"			3520 3	95 7	145 2	9 4	15 2	17 9
31	BUC"S" CM31678-R-4Y-2M-500Y-506M-501Y-501M-502Y-0M			3516 4	95 2	137 4	11 3	10 8	15 5
127	BEZ-ZA75 X CAN"S" CM43297-G-3Y-1M-1Y-1M-2Y-1M-0Y			3511.6	101 0	144 1	4 1	0 7	0 1
10	F12 71-COC75 SWM5784-17Y-1M-5Y-1M-1Y-0B			3505 8	96 0	143 8	9 4	20 6	2 5
138	HER77-MAYA74 CM46680-5M-1Y-3M-1Y-1Y-0M			3493 7	92 1	140 4	3 6	6 0	15 4
117	DGA-BJY"S" CM40610-31Y-2M-2Y-1M-0Y			3488 1	96 3	137 1	7 1	17 3	10 3
41	KOEL"S" CM34574-F-1M-14Y-0M-111Y-0B			3487 6	95 2	140 7	4 8	6 5	7 1
11	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-1M-0Y			3470 4	95 3	133 9	10 0	12 4	2 6
43	MO73-PVN76"S" CM35269-2Y-1M-1Y-0M			3458 8	99 2	139 5	33 8	2. 0	4 9
9	F12 71-COC75 SWM5784-17Y-1M-4Y-5M-1Y-0B			3455 1	99 4	146 7	6 9	19 0	1 4
185	BAGE-HORK"S" X ALDAN"S" CM48016-G-2M-1Y-1M-1Y-3Y-0M			3454 6	100 1	143 3	1 9	10 8	2 5
156	COC75-BJY"S" CM46452-12M-1Y-5M-1Y-0Y			3454 1	96 9	142 0	15 2	1 7	8 1
162	(LR(2)-SN64 X CC/SKA)NAC CM46779-8M-1Y-1M-3Y-1Y-0M			3451 7	94 5	141 0	7 3	25 1	8 9
124	MN72131-PVN76"S" CM42402-30Y-1M-1Y-1M-1Y-2M-0Y			3450 3	97 0	136 9	19 9	5 1	3 6
160	"LOCAL CHECK"			3449 3	96 4	144 7	6 1	15 3	18 1
21	MAYA74"S"-MON"S" CM29251-4M-3Y-2M-2Y-1B-0Y			3444 2	90 7	133 9	22 7	8 1	8 8
99	SAP"S"-HUAC"S" CM40394-3Y-2M-2Y-2M-1Y-1M-0Y			3441 9	93 8	138 7	22 0	10 8	7 6
120	"LOCAL CHECK"			3431 8	95 8	137 8	8 8	13 0	18 1
194	RRL X KAL-BB CM49799-10Y-1M-1Y-2Y-0M			3431 5	93 5	135 5	7 3	18 0	12 3
188	ANA75-HUAC"S" CM49258-2Y-2M-3Y-0Y			3429 6	98 0	143 3	10 0	6 6	8 3

VTY	1000 G W	FUB QRAM	SEP S 0-9	HEL S 0-9	FUB N 0-9	BYDV 0-9
	(2)	(1)	(14)	(5)	(1)	(2)
114	38 4	30 0	4 5	6 0	7 0	5 5
147	38 8	23 0	4 5	6 0	3 0	4 5
159	50 5	16 0	5 1	6 0	3 0	5 0
40	45 3	23 0	3 9	6 3	5 0	4 5
68	35 0	23 0	3 4	4 2	1 0	6 0
174	46 9	33 0	5 1	4 2	3 0	5 5
89	43 3	36 0	5 1	5 8	8 0	6 0
150	34 4	23 0	4 6	7 0	3 0	5 5
197	43 2	50 0	4 9	4 6	8 0	4 0
60	43 8	23 0	4 3	4 8	6 0	5 5
31	42 0	23 0	3 9	6 0	7 0	3 5
127	43 0	6 0	3 8	4 7	5 0	6 5
10	48 1	30 0	3 6	4 4	1 0	5 0
158	53 0	30 0	4 2	5 0	3 0	5 5
117	49 2	26 0	4 4	5 0	3 0	5 5
41	57 1	20 0	4 0	6 8	3 0	5 0
11	45 8	33 0	3 7	4 4	1 0	5 0
43	45 6	16 0	6 2	5 3	-----	5 0
9	49 2	30 0	3 9	4 8	3 0	4 5
185	47 2	50 0	3 8	5 0	3 0	4 0
156	43 4	26 0	4 4	5 7	1 0	3 5
162	43 3	13 0	4 4	4 0	5 0	5 0
124	44 1	6 0	3 9	5 3	1 0	6 0
160	43 9	26 0	4 3	5 0	6 0	5 0
21	53 2	40 0	4 9	5 8	1 0	6 0
99	52 4	13 0	5 2	6 0	7 0	6 0
120	45 9	16 0	4 8	6 3	3 0	6 0
194	48 0	46 0	5 2	5 3	1 0	3 0
188	46 4	23 0	4 2	4 7	3 0	4 5

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	STEM RUST
			NOBS	(16)	(48)	(34)	(23)	(27)	(23)
109	CROW"S" CM40457-5M-3Y-2M-2Y-0M			3418 1	95 3	137 1	5 4	6 2	10 8
190	BUC"S"-BJ\"S" CM49641-9Y-1M-1Y-5Y-0M			3415 3	94 1	140 3	13 7	20 2	18 0
157	HER77-MAYA74 CM46680-5M-1Y-2M-6Y-0Y			3400 5	93 6	142 6	6 2	13 0	18 5
140	"LOCAL CHECK"			3393 9	96 1	142 1	12 6	17 4	19.7
8	F3 71-TRM73 SWM5704-10Y-1M-3Y-4M-1Y-1M-0Y			3392 2	96 8	146 6	5 0	6 5	5 5
128	CMO X YMH-TOB66/MUAC"S" CM43330-L-2Y-2M-1Y-1M-1Y-0B			3386 1	92 8	140 3	9 0	9 4	3 5
196	BUC"S" X KAL-BB CM49834-9Y-4M-2Y-2Y-0M			3384 8	93 8	141.7	7 5	13 6	9 6
155	HER77-SAP"S" CM46050-3Y-2M-1Y-2Y-0M			3380 8	91 6	139 8	16 3	19 8	16 6
177	[(KT-BQ X FN-U/BZA)TRM73]ALDAN"B" CM47941-G-2M-1Y-4M-1Y-0Y			3377 2	92 0	138 9	10 5	13 6	10 1
200	"LOCAL CHECK"			3375 0	95 1	142 1	8 8	16 8	16 7
141	JUP73-EMU"S" X GJO"S" CM43598-II-8Y-1M-3Y-1M-2Y-0B			3372 3	90 1	136 4	12 1	7 8	20 2
206	CMH76 1084-FLK"S" CMH77A 894-1B-2Y-1B-4Y-0B			3370 3	97 6	137 7	16 2	13 1	22 7
88	MOR"S" CM37130-15Y-1M-1Y-0M			3370 0	93 5	134 6	6 7	23 2	10 7
26	PEW"S" CM31630-I-1Y-2M-5Y-0M-95B-0Y			3367 5	91 5	139 2	4 8	21 1	6 7
33	BUC"S" CM31678-R-4Y-2M-500Y-503M-500Y-500M-501Y-JM-113B-0Y			3364 6	95 7	140 4	9 4	14 2	13 7
199	ALD"S"-MN72130 CM50361-8Y-6M-1Y-2Y-0M			3355 7	95 3	139 3	12 1	3 7	4 1
108	CROW"S" CM40457-5M-3Y-1M-2Y-0M			3349 1	94 2	136 2	7 9	4 6	12 2
186	AZT67 X CHR-DD 05P/F12 71-BLO"S" CM48326-A-3M-1Y-1M-2Y-1Y-0M			3347 3	89 5	136 1	9 5	17 8	6 6
36	PSN"S" CM32418-1M-1Y-1M-0Y-2PTZ-0Y			3343 2	97 0	141 1	3 6	8 9	5 1
93	DOVE"S" CM38199-A-1Y-7M-0Y-93Y-0B			3327 2	95 3	136 8	3 1	15 5	4 6
148	LIRA"S" CM43903-H-4Y-1M-3Y-2M-1Y-1M-0Y			3317 8	93 8	136 0	3 3	14 7	2 0
87	FURY-ANA75 CM37027-37Y-2M-4Y-1M-3Y-0M			3312 8	88 3	136 2	1 3	11 5	22 2
195	BUC"S" X KAL-BB CM49834-9Y-1M-2Y-3Y-0M			3309 6	93 7	139 7	14 8	42 5	13 8
118	PAT7268-HORK"S" CM40803-2M-2Y-2M-1Y-1M-3Y-0B			3308 8	91 8	137 4	6 5	11 1	11 8
201	ALD"S"-MN72130 CM50361-8Y-6M-1Y-4Y-0M			3304 5	96 4	141 5	7 6	3 9	3 4
119	YACO"S" CM41195-A-13M-2Y-0M			3301 2	92 0	138 2	11 7	3 7	17 9
152	PVN76"S"-7C CM45470-6M-1Y-2M-1Y-1Y-0M			3277 0	102 8	146 7	9 0	18 1	7 9
203	IAS64-ALD"S" X CGT-ALD"S"[(BMAN-ON X CAL/SR70)ALD"S"] CM55486-D-1M-1Y-2Y-0M			3273 6	95 3	142 4	16 0	6 9	4 2
79	MAI"S"-PJ62 X EMU"S" CM33234-T-1M-1Y-6M-500Y-0M-96Y-0B			3269 3	97 6	141 4	7 0	6 8	6 5

VTY	1000 G W	FUS GRAM	SEP S 0-9	HEL S 0-9	FUS N 0-9	BYDV 0-9
	(2)	(1)	(14)	(5)	(1)	(2)
109	45 3	30 0	5 2	5 7	6 0	5 5
190	43 0	40 0	4 2	6 3	3 0	4 0
157	49 7	36 0	4 0	4 8	3 0	4 5
140	42 5	23 0	4 8	6 7	3 0	5 0
8	40 8	6 0	4 2	4 3	0 0	5 0
128	24 2	16 0	4 7	6 3	6 0	6 0
196	40 7	20 0	5 0	5 3	6 0	4 0
155	45 6	30 0	4 6	6 0	3 0	4 5
177	39 8	40 0	4 9	6 0	3 0	5 5
200	43 3	33 0	4 8	5 5	3 0	4 0
141	43 7	23 0	5 1	6 7	5 0	5 0
206	41 8	50 0	5 7	5 0	-----	5 5
88	47 8	40 0	5 3	6 0	8 0	6 0
26	55 2	10 0	4 8	6 5	1 0	5 5
33	47 7	26 0	3 5	6 0	5 0	4 5
199	46 9	26 0	3 9	4 0	0 0	5 0
108	46 0	10 0	4 7	5 7	3 0	4 5
186	47 5	26 0	4 6	4 3	1 0	5 0
36	56 8	46 0	4 4	4 3	3 0	5 0
93	46 8	36 0	5 4	6 3	6 0	6 0
148	38 5	16 0	5 1	5 3	-----	4 5
87	49 8	23 0	4 8	6 3	8 0	5 5
195	44 1	80 0	5 2	4 7	5 0	3 5
118	40 7	16 0	4 7	6 7	5 0	5 5
201	45 4	43 0	3 7	5 0	3 0	4 0
119	42 6	40 0	4 8	6 0	5 0	6 0
152	48 0	16 0	2 9	3 5	1 0	4 5
203	43 6	26 0	4 9	4 0	5 0	3 5
79	47 5	23 0	4 8	6 7	5 0	4 5

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	STEM RUST
			NOBS	(16)	(48)	(74)	(23)	(27)	(23)
178	FURY-SLM75 X ALDAN"S" CM47967 (1M-1Y-2M 2Y-4Y-0M			3268 5	95 2	139 3	8 2	6 6	14 6
180	"LOCAL CHECK"			3267 8	94 5	139 3	4 4	11 6	14 8
176	(M073/HNIV X KT54E-NAR)PVN76"S" CM47864-A-3M-3Y-1M-2Y-1Y-0M			3258 8	95 4	136 6	21 3	25 8	3 1
135	CMT-M073 X TRM73 CM43381-D 1Y-4M-4Y-1M-1Y-0B			3220 6	96 6	141 1	3 3	1 4	1 1
191	BUC-BJY"S" CM49641-9Y-1M-4Y-0Y			3220 5	93 3	[illegible] 8	13 5	17 9	17 6
121	YACO"S" CM41195-A-13M-2Y-3M-1Y-1M-0Y			3219 5	92 3	133 3	3 1	4 9	15 6
172	BSV50-CAN"S" X VEE"S" CM47768 A 1M-1Y-5M-2Y-1Y-0M			3202 4	94 2	139 6	6 8	11 7	1 7
38	PSN 6" CM32418-1M-1Y-6M-1Y-1M-1Y-0M-71B-0Y			3194 9	94 9	137 0	11 9	10 1	4 1
136	CMT-M073 X TRM73 CM43381-D-1Y-4M 4Y-2M-2Y-0B			3192 7	96 9	137 3	5 1	1 5	0 [illegible]
39	PSN"S" CM32418-1M-1Y-6M-1Y-1M-1Y-0M-107B-0Y			3167 9	95 3	141 2	8 8	[illegible] 7	4 3
77	MAI"S"-PJ62 X EMU"S" CM33254-T-1M-1Y-6M-5007-0M-27Y-0B			3160 4	94 0	135 8	4 1	7 1	7 8
173	BSV50-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-2Y-2Y-0M			3160 1	95 0	140 6	7 1	8 1	1 0
192	BUC"S"-BJY"S" CM49641-32Y-1M-3Y-2Y-0M			3159 2	91 2	138 2	17 5	36 2	19 1
182	FURY-SLM75 X ALDAN"S" CM47967-H-4M-2Y-4M-1Y-0Y			3155 2	92 4	137 6	1 3	6 4	3 3
133	CMT-M073 X TRM73 CM43381-D-1Y-4M-2Y-2M-1Y-0B			3140 3	96 1	139 3	7 2	3 7	1 5
131	CMT-M073 X TRM73 CM43381-D-1Y-3M-1Y-1M-1Y-0B			3135 5	99 4	142 8	7 1	3 0	1 5
179	FURY-SLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-1Y-0Y			3134 5	93 3	138 8	1 5	10 3	2 0
154	TES76-MUS"S" CM45966-5M-2Y-2M-1Y-0Y			3127 3	95 5	139 4	11 5	3 9	4 3
149	LIRA"S" CM43903-H 4Y-2M-1Y-2M-1Y-0B			3117 0	94 9	138 6	5 7	10 6	2 4
183	FURY-SLM75 X ALDAN S' CM47967-H 4M-2Y 4M-2Y-0Y			3113 8	93 0	138 0	4 7	6 0	2 7
202	BUC"S"-PVN"S" CM52359-12M-2Y-4B-4Y-0B			3110 5	93 5	138 8	13 5	14 2	5 0
138	COC75 X MD-VG9052/SIS"S" CM43469-F 1Y-1M 1Y-1M 2Y-0B			3075 5	100 9	146 3	2 8	15 1	23 8
3	R37-GHL121/CNO-INIA"S" X HD832-ON SWM4505-74M 1Y-5M-1Y-1M-0Y			3075 1	104 6	150 0	3 3	3 4	1 9
161	BLT"S"-PVN76"S" CM46715-11Y-1M-3Y-3Y-0M			3054 3	90 7	133 7	21 7	25 6	17 2
130	RSK-M073 X EMU"S" CM43376-N-1Y-2M 4Y-3M-3Y-0B			3030 4	99 1	143 0	6 8	4 1	0 8
139	CMT-COC75 X PLO CM43473-J-1Y-3M 1Y-2M-1Y-1M-0Y			3015 7	97 5	139 7	8 3	11 4	1 3
164	HER77-NAC76 CM46726 10M 1Y 4M 1Y-0Y			2990 7	99 1	146 1	6 6	18 4	5 0
112	HI666 PVN S CM40 09-H 2M-1Y-2M-1Y-0B			2931 1	94 5	140 7	19 0	9 5	1 [illegible]

VTY	1000 G W	FUS GRAM	SEP S 0-9	HEL S 0-9	FUS N 0-9	BYDV 0-9
	(2)	(1)	(14)	(5)	(1)	(2)
178	57 5	53 0	5 1	4 8	1 0	4 0
180	53 6	33 0	4 7	4 3	7 0	5 0
176	42 7	33 0	4 3	5 5	8 0	3 0
135	45 3	6 0	4 9	6 3	6 0	5 5
191	54 8	36 0	4 1	6 3	6 0	4 0
121	44 4	13 0	4 8	6 0	6 0	5 5
172	46 1	10 0	5 1	4 3	5 0	5 5
38	53 6	40 0	4 4	3 8	7 0	5 5
136	44 9	23 0	5 1	6 7	5 0	6 5
39	55 5	16 0	4 1	4 5	5 0	5 5
77	49 3	33 0	5 2	4 8	3 0	5 0
173	46 6	13 0	5 3	5 7	3 0	5 5
192	46 8	30 0	5 1	4 5	5 0	3 5
182	56 5	63 0	4 1	6 7	3 0	6 5
133	44 5	20 0	4 7	5 0	7 0	5 5
131	46 7	13 0	4 2	4 5	5 0	5 0
179	53 7	43 0	4 9	5 3	6 0	6 0
154	53 1	13 0	3 5	5 5	1 0	5 0
149	40 0	23 0	4 8	6 0	3 0	4 0
183	57 0	23 0	4 5	6 0	6 0	7 0
202	47 3	36 0	4 5	6 7	3 0	5 5
138	44 0	16 0	4 7	6 0	6 0	4 0
3	51 3	16 0	4 4	3 8	1 0	5 0
161	44 9	36 0	5 1	4 6	5 0	5 0
130	45 4	20 0	4 6	5 3	5 0	6 0
139	46 8	20 0	3 6	6 7	3 0	6 0
164	47 2	36 0	3 7	5 7	3 0	5 5
112	51 1	13 0	3 9	6 3	5 0	6 0

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT. L	LEAF RUST	STEM RUST
			NOBS	(16)	(48)	(34)	(23)	(27)	(23)
37	PSN"B" CM32418-1M-1Y-6M-1Y-1M-1Y-0Y			2900 3	95 2	136 8	6 7	7 8	4 7
193	RRL X KAL-BB CM49799-5Y-2M-2Y-0Y			2898 5	96 9	141 3	22 1	24 6	21 9
187	CLP74-YD"B"(BAP"S"/ANE-MY64 X TI71) CM4U983-A-2M-1Y-1M-1Y-0Y			2858 4	97 8	143 4	8.3	5 3	20 3
134	CMT-MO73 X TRM73 CM43381-D-1Y-4M-3Y-4M-1Y-0B			2844 5	96 1	140 1	2 0	2 5	0 8
132	CMT-MO73 X TRM73 CM43381-D-1Y-4M-1Y-1M-1Y-0B			2733.3	99 7	144 5	2 1	2 1	0 7
123	TOB66-CNO X TOB66-ERA/BJY"S" CM42376-15Y-1M-1Y-2M-0Y			2673.6	93 0	134 5	2 9	22 2	7 3
137	CMT-MO73 X TRM73 CM43381-D-1Y-4M-4Y-2M-3Y-1M-0Y			2574.8	97 8	140 4	6 1	4 8	1 1
168	AU-YR70 X ANA75 CM47481-A-2M-1Y-3M-1Y-0Y			2527 8	99 4	143 9	0 8	3 2	19 1
184	IA562-ZP"S" X ALDAN"S" CM47978-AA-3M-2Y-1M-2Y-0Y			2447 9	91 9	137 2	5 1	14 4	4 6
125	TOB66-ERA X TOB66-CNO(BB X CNO"B"-JAR60/ORZ"S") CM42440-41Y-3M-1Y-1M-1Y-1M-0Y			2286.2	98 0	142 7	15 3	8 4	7 0

VTY	1000 Q W	FUS GRAM	SEP S 0-9	HEL S 0-9	FUS N 0-9	BYDV 0-9
	(2)	(1)	(14)	(5)	(1)	(2)
37	54 3	20 0	4 4	3 7	5 0	5 5
193	53 6	63 0	4 8	4 5	3 0	3 5
187	42 0	43 0	4 1	3 8	3 0	4 5
134	46 8	16 0	4 6	5 7	5 0	6 0
132	47 7	10 0	4 3	5 3	3 0	5 5
123	48 2	20 0	4 8	6 7	5 0	5 0
137	45 2	10 0	4 6	6 7	3 0	7 0
168	54 0	10 0	4 5	5 0	5 0	4 5
184	49 2	20 0	4 4	6 0	1 0	5 0
125	50 0	20 0	4 3	3 7	3 0	6 0

Table 3. Highest yielding entries in four locations in Mediterranean North Africa and Iberia, along with disease reactions, 1,000 grain weight and days to maturity.

LOCATION	CONTINENT	COUNTRY	AREA	VARIABLES INCLUDED
35	AFRICA	TUNISIA	TUNIS	3
84	EUROPE	PORTUGAL	ALENTEJO	3 4 5 8
88	EUROPE	SPAIN	MADRID	1 3 4 64
310	EUROPE	SPAIN	CADIZ	1 3 5
473	EUROPE	SPAIN	CORDOBA	1 3
507	EUROPE	SPAIN	LLEIDA	1 3 4 13 64
437	EUROPE	SPAIN	SEVILLA	3 5

*VARIABLE IDENTIFICATIONS

1	YIELD	KG/HA	3	FLOW	DAYS	4	MAT	DAYS	5	STRP	RT L	8	STEM RUST
13	1000	G W	64	SEP S	0-9								

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	STEM RUST	1000 G.W	SE
			NOES	(4)	(7)	(3)	(3)	(1)	(1)	(
13	63 130-JAR66 X NAC76 SWM6398-5M-1Y-1M-3Y-0Y			5981 5	107 1	159 0	38 7	0 0	44.8	
32	BUC"S" CM31678-R-4Y-2M-506M-502Y-500M- 0Y			5613 5	108 7	175 3	0 0	0 0	39 8	
175	(M073/HN4 X KT54E-NARIPVN76"S" CM47864-A-3M-3Y-1M-1Y-0Y			5412 5	108 0	159 0	52 7	0 0	36 5	
167	F3 71-TI71REBEL X ANA75 CM47441-0-1M-1Y-4M-1Y-0Y			5393.5	110 0	159 5	0 0	0 0	-----	
90	JUP73-ZP X COC75 CM37614-B-14Y-3M-1Y-0M			5358 5	108 0	153 5	1 3	0 0	-----	
113	DGA-BJY"S" CM40610-15Y-1M-2Y-1M-1Y-0B			5325 7	105 6	158 0	13 0	1.0	37 5	

Table 4. Highest yielding entries in three locations in the Middle East and northeast Africa, along with disease reactions and days to maturity.

LOCATION	CONTINENT	COUNTRY	AREA	VARIABLES INCLUDED
6	AFRICA	EGYPT	CAIRO	3 4 5 7 8
8	AFRICA	EGYPT	KAFR EL SHEIKH	3 4 5 7 8
506	AFRICA	SUDAN	EASTERN	3 4 8
29	AFRICA	SUDAN	GEZIRA	1 3 4
41	ASIA	AFGHANISTAN	KABUL	5 7
74	EUROPE	GREECE	THESSALONIKI	3 4 8
99	MIDDLE EAST	IRAN	GORGAN	3 4
368	MIDDLE EAST	CYPRUS	AYHALASSA	3
104	MIDDLE EAST	JORDAN	JORDAN VALLEY	3 4
105	MIDDLE EAST	LEBANON	BEKAA VALLEY	3 4
433	MIDDLE EAST	QATAR	BARADA	1 3 4
363	MIDDLE EAST	SYRIA	ALEPPO	1 3 4
540	MIDDLE EAST	TURKEY	IZMIR	5 7 8

*VARIABLE IDENTIFICATIONS
1 YIELD KG/HA 3 FLOW DAYS 4 MAT DAYS 5 STRP RT L 7 LEAF RUST
8 STEM RUST

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	FLOW DAYS	MAT DAYS	STRP RT L	LEAF RUST	STEM RUST
			NOBS	(3)	(11)	(10)	(4)	(4)	(5)
105	NKT"S" CM40454-11M-4Y-2M-3Y-0M			5600 7	112 6	158 8	1 7	37 5	17 8
1	KVZ X CND67-PJ62 SWM1285-2Y-3M-1Y-0M			5434 0	108 9	151 5	0 0	0 3	0 3
45	VEE"S" CM33027-F-1M-9Y-0M-86Y-0B			5239 3	108 5	158 3	0 0	0 3	4 8

Table 5. Top performance entries: Days to maturity (6 locations).

LOCATION	CONTINENT	COUNTRY	AREA	VARIABLES INCLUDED
61	ASIA	PAKISTAN	PUNJAB	3 4 5 7 8
309	ASIA	PAKISTAN	NWFP	1 3 4 5 7
55	ASIA	NEPAL	RUPANDEHI	3 4 70
372	ASIA	INDIA	WEST BENGAL	4
463	ASIA	PAKISTAN	PUNJAB	3 4 5 7
42	ASIA	BANGLADESH	JOYDEBPUR	1 3 4 70

*VARIABLE IDENTIFICATIONS
1 YIELD KG/HA 3 FLOW DAYS 4 MAT DAYS 5 STRP RT.L 7 LEAF RUST
8 STEM RUST 70 HEL S 0-9

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	MAT DAYS	YIELD KG/HA	FLOW DAYS	STRP RT L	LEAF RUST	STEM RUST	HEL 0-
			NOBS	(6)	(2)	(5)	(3)	(3)	(1)	(
141	JUP73-EMU"S" X OJO"S" CM43598-II-8Y-1M-3Y-1M-2Y-0B			128.8	3723.0	99.3	21.5	0 0	0 0	6
80	"LOCAL CHECK"			129.3	2876 5	99 8	21.0	50 5	0 0	5
87	FURY-ANA75 CM37027-37Y-2M-4Y-1M-3Y-0M			134.0	2990 0	90 4	0 2	0 2	0.0	6
21	MAYA74"S"-MON"S" CM29251-4M-3Y-2M-2Y-1B-0Y			135.7	4233.0	95 8	10 7	0 5	0 0	5
155	HER77-BAP"S" CM46060-3Y-2M-1Y-2Y-0M			136 2	3660 0	100 4	3 5	0 0	0 0	5
166	FATH-FLK"S" CM46851-4Y-2M-2Y-1Y-0M			137.0	3946 5	93 2	5 3	2 3	0 0	5
89	MOR"S" CM37130-15Y-1M-3Y-0M			137 2	3926 5	101 0	2 0	0 5	0 0	5
186	AZT67 X CHR-DD 05P/F12 71-BLO"S" CM48326-A-3M-1Y-1M-2Y-1Y-0M			137.2	3863 0	96 0	2 3	0.0	0.0	5
88	MOR"S" CM37130-15Y-1M-1Y-0M			137.3	3334 5	101 0	2 3	0 0	0 0	5
118	PAT7268-HORK"S" CM40803-2M-2Y-2M-1Y-1M-3Y-0B			137.3	3416 5	99 8	2.0	0 2	0 0	6
161	BLT"S"-PVN76"S" CM46715-11Y-1M-3Y-3Y-0M			137.5	3820.0	99.0	5 5	1 0	0 0	5
23	TAN"S" CM30697-2M-8Y-1M-1Y-1B-0Y			137.7	4246 5	100 6	28 0	0.0	0 0	6
192	BUC"S"-BJY"S" CM49641-32Y-1M-3Y-2Y-0M			138 3	3590 0	99.8	65.3	15.0	-----	4.
159	BLT"S"-PVN76"S" CM46715-11Y-1M-1Y-2Y-0M			138 3	4113 0	104 0	11 0	0.0	0 0	5
22	SPRW"S"-BJY"S" CM30137-1M-1Y-1M-1Y-1B-0Y			138 5	4500 0	104.2	0 7	0 5	0 0	6
147	LIRA"S" CM43903-H-4Y-1M-2Y-2M-2Y-0B			138.5	3500 0	99 6	0 0	0 0	0 0	5
146	LIRA"S" CM43903-H-4Y-1M-1Y-3M-3Y-0B			138.7	3550 0	102 4	0 0	0 0	0 0	5
181	FURY-BLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-3Y-0Y			138 8	4513.0	101.0	0 5	0 0	0 0	6
183	FURY-BLM75 X ALDAN"S" CM47967-H-4M-2Y-4M-2Y-0Y			139.0	2866 5	99 4	0 0	0 0	0 0	5
158	HER77-MAYA74 CM46680-5M-1Y-3M-1Y-1Y-0M			139 0	3700 0	101 8	6 0	0 0	0 0	5
156	COC75-BJY"S" CM46452-12M-1Y-5M-1Y-0Y			139.0	3610 0	105 4	9.0	0 0	0.0	4
35	COC75-HORK"S" CM32041-3M-3Y-1M-1Y-1M-1Y-0B			139.0	5666 5	104 4	4 3	0 3	0 0	5
121	YACO"S" CM41195-A-13M-2Y-3M-1Y-1M-0Y			139.0	3100 0	102 8	2 0	0 2	0 0	5

Table 5 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	MAT DAYS	YIELD KG/HA	FLOW DAYS	STRP RT L	LEAF RUST	STEM RUST	HEL S 0-9
			NOBS	(6)	(2)	(5)	(3)	(3)	(1)	(2)
182	FURY-SLM75 X ALDAN"S" CM47967-H-4M-2Y-4M-1Y-0Y			139 2	3659 0	99 6	0 0	0 0	0 0	6 0
149	LIRA"S" CM43903-H-4Y-2M-1Y-2M-1Y-0B			139 2	3460 0	101 6	0 0	0 0	0 0	5 0
177	[(KT-BG X FN-U/BZA)TRM73]ALDAN"S" CM47941-G-2M-1Y-4M-1Y-0Y			139 3	3033 0	99 8	17 7	0 2	0 0	5 0
169	V6707-COC75/TI71-PCI"S" X KVZ-TI71 CM47566-H-2M-4Y-2M-5Y-2Y-0M			139 3	4486 5	106 4	0 5	0 0	0 0	4.5
170	KKK-TOL73 X NAC76 CM47615-A-1M-2Y-2M-4Y-2Y-0M			139 3	4000 0	106 0	0 6	0 5	0 0	5 5
123	TOB66-CNO X TOB66-ERA/BJY"S" CM42376-15Y-1M-1Y-2M-0Y			139 5	2760 0	101 0	4 3	0 7	0 0	6.0
19	MAYA74"S -MON"S" CM29251-3M-17Y-4M-0Y-35Y-0B			139 5	3496 5	101 8	18 0	0 2	0 0	6 0
5	MYNA'S" SWM4589-7Y-18M-1Y-0M-56B-0Y			139 5	4583 0	102 8	38 3	0 0	0 0	5 0
15	CKR"S" CM20769-A-8Y-1M-2Y-5M-1Y-0M-39B-0Y			139 5	4576 5	102 8	36 3	0 7	0 0	5 0
148	LIRA"S" CM43903-H-4Y-1M-3Y-2M-1Y-1M-0Y			139 5	3600 0	103 2	0 0	0 0	0 0	4 5
128	CNO X YMH-TOB66/HUAC"S" CM43330-L-2Y-2M-1Y-1M-1Y-0B			139 5	2350 0	103 0	11 3	0 0	0 0	5 5
11	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-1M-0Y			139 5	4386 5	104 0	0 2	0 0	0 0	4.5
184	IA562-ZP"S" X ALDAN"S" CM47978-AA-3M-2Y-1M-2Y-0Y			139 5	2313 0	102 8	0 3	0 0	0 0	5 0
129	CNO X YMH-TOB66/HUAC"S" CM43330-L-2Y-3M-1Y-1M-1Y-2M-0Y			139 7	3304 5	106 8	1 0	0 0	0 0	5 0
93	DOVE"S" CM38199-A-1Y-7M-0Y-93Y-0B			139 7	3633 0	104 2	2 5	0 0	0 0	5 0
142	JUP73-EMU"S" X GJO"S" CM43598-II-8Y-1M-5Y-0M			139 7	3906 5	102 6	6 3	0 0	0 0	5 5
195	BUC"S" X KAL-BB CM49834-9Y-1M-2Y-3Y-0M			139 7	2333 0	102 6	59 0	14 5	0 0	5 5
18	MAYA74"S"-MON'S' CM29251-3M-17Y-1M-1Y-1B-0Y			139 7	3806 5	102 2	24 1	0 2	0 0	6 0
12	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-2M-0Y			139 7	4700 0	102 8	0 2	0 0	0 0	5 0
150	{COC75[(FN-TH X K58N/MY54-N10B X AN" ")TT-SN64 X BZA]}[(FR316/MCM-KT X Y50)ZA75]BJY"S" CM43956-A-1Y-1M-3Y-0M			139 7	3516 5	102 4	0 0	0 0	0 0	6 0
1	CMT-M073 X TRM73 CM43381-D-1Y-4M-3Y-4M-1Y-0B			139 8	2946 5	104 6	1 0	0 0	0 0	5 5
26	PEW"S" CM31630-I-1Y-2M-5Y-0M-95B-0Y			139 8	4480 0	96 8	1 1	0 5	0 0	6 0
122	BAYA"S" CM42374-1Y-1M-2Y-0M			139 8	3650 0	106 6	0 2	4 5	0 0	4 5
99	SAP"S"-HUAC"S" CM40394-3Y-2M-2Y-2M-1Y-1M-0Y			139 8	3446 5	102 2	37 7	0 0	0 0	4 5
43	M073-PVN76"S" CM35269-2Y-1M-1Y-0M			139 8	2020 0	111 4	63 0	0 5	0 0	4 0
34	BUC"S" CM31678-R-4Y-2M-500Y-509M-500Y-501M-500Y-0M			140 0	3466 5	103 6	56 2	0 0	0 0	5 5
107	YD'S"-BJ'"S" CM40456-11Y-1M-2Y-1M-1Y-0B			140 0	4240 0	103 8	9 0	0 5	0 0	3 0
30	BUC"S' CM31678-R-4Y-2M-500Y-506M-500Y-500M-0Y			140 0	3316 5	104 0	57 0	1 2	0 0	5 5

Table 5 (cont.).

VIY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	MAT DAYS	YIELD KG/HA	FLOW DAYS	STRP RT L	LEAF RUST	STEM RUST	HEL S 0-9
			NOBS	(6)	(2)	(5)	(3)	(3)	(1)	(2)
77	MAI"S"-PJ62 X EMU"S" CM33254-T-1M-1Y-6M-500Y-0M-27Y-CB			140 0	3833 0	104.6	0 5	0 2	0 0	4 0
58	VEE"S" CM33027-F-15M-500Y-0M-98B-0Y			140 0	4966 5	103 9	0 8	0 0	0 0	4 0
175	(MO73/HN4 X KT54E-NAR)PVN75"S" CM47864-A-3M-3Y-1M-1Y-0Y			140 0	3133 0	105 8	25 0	0 0	0 0	5 5
145	LIRA"S" CM43903-H-2Y-1M-5Y-2M-1Y-1M-0Y			140 0	3860 0	103.4	0 0	0 0	0 0	5 0
157	HER77-MAYA74 CM46680-[illegible]-1Y-2M-6Y-0Y			140.0	4369 0	103 8	3 0	0 0	0 0	4 5
106	YD"S"-JJY"S" CM40456-9Y-1M-1Y-1M-0Y			140 0	3936 5	103 8	0 0	1 7	0.0	4.0
143	LIRA"S" CM43903-H-2Y-1M-2Y-1M-1Y-1M-0Y			140.0	3786.5	102 2	4.0	0 0	0 0	6.0

Table 6. Entries showing highest level of resistance to leaf rust (23 locations), along with their reactions to stem rust and helminthosporium.

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	LEAF RUST	STEM RUST	HEL S 0-9
			NOBS	(27)	(23)	(5)
127	BEZ-ZA75 X CAN"S" CM43297-G-3Y 1M-1Y-1M-2Y-1M-0Y			0 7	0 1	4 7
73	BOW"S" CM33203-K-10M-7Y-3M-1Y-2M-0Y			1 1	0 2	4 3
67	BOW"S" CM33203-K-8M-8Y-1M-1Y-1M-0Y			1 1	1 8	3 4
74	BOW"S" CM33203-K-10M-7Y-3M-2Y-1M-0Y			1 2	0 1	3 8
153	TES76-PAM"S" CM45984-9Y-1M-1Y-0Y			1 2	1 7	4 8
71	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-1Y-0M			1 3	1 2	4 7
135	CMT-M073 X TRM73 CM43381-D-1Y-4M-4Y-1M-1Y-0B			1 4	1 1	6 3
136	CMT-M073 X TRM73 CM43381-D-1Y-4M-4Y-2M-2Y-0B			1 5	0 9	6 7
70	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-0Y			1 6	1 0	4 3
156	COC75-BJY"S" CM46452-12M-1Y-5M-1Y-0Y			1 7	8 1	5 7
78	BOW"S" CM33203-K-9M-24Y-0M-15Y-0B			1 8	0 0	4 0
72	BOW"S" CM33203-K-9M-19Y-3M-3Y-2M-1Y-0M			2 0	0 1	4 5
18	MAYA74"S"-MON"S" CM29251-3M-17Y-1M-1Y-1B-0Y			2 0	13 8	6 7
132	CMT-M073 X TRM73 CM43381-D-1Y-4M-1Y-1M-1Y-0B			2 1	0 7	5 3
167	F3 71-TI71RESEL X ANA75 CM47441-G-1M-1Y-4M-1Y-0Y			2 2	3 7	6 0
42	SNB"S" CM34630-D-3M-3Y-1M-1Y-0M			2 3	1 1	3 5
68	BOW"S" CM33203-K-9M-2Y 1M-1Y-1M-0Y			2 3	0 4	4 2
134	CMT-M073 X TRM73 CM43381-D-1Y-4M-3Y-4M-1Y-0B			2 5	0 8	5 7
69	BOW'S" CM33203-K-9M-2Y-1M-1Y-2M-0Y			2 6	0 1	5 3
16	PRL"S" CM25988-8Y-3Y-2Y-1M-1Y-100B-0Y			2 6	7 7	3 8
131	CMT-M073 X TRM73 CM43381-D-1Y-3M-1Y-1M-1Y-0B			3 0	1 5	4 5
168	AU-YR70 X ANA75 CM47481-A-2M-1Y-3M-1Y-0Y			3 2	19 1	5 0
76	TI71-TOB66 X ALD"S' CM33217-G-4M-1Y-0M-136B-0Y			3 3	4 4	4 6
3	R37-GHL121/CNO-INIA"S" X HD832-ON SWM4585-74M-1Y-5M-1Y-1M-0Y			3 4	1 9	3 8
1	KVZ X CN067-PJ62 SWM1285-2Y-3M-1Y-0M			3 4	0 4	5 4
119	YACO'S" CM41195-A-13M-2Y-0M			3 7	17 9	6 0
199	ALD'S'-MN72130 CM50361-8Y-6M-1Y-2Y-0M			3 7	4 1	4 0
133	CMT-M073 X TRM73 CM43381-D-1Y-4M-2Y-2M-1Y-0B			3 7	1 5	5 0
35	COC75-HORK"S" CM32041-3M-3Y-1M-1Y-1M-1Y-0B			3 8	2 0	5 5
4	MYNA"S" SWM4589-7Y-1M-3Y-0M-49B-0Y			3 9	13 1	4 3
154	TES76-MUS"S" CM45986-5M-2Y-2M-1Y-0Y			3 9	4 3	5 5
201	ALD"S"-MN72130 CM50361-8Y-6M-1Y-4Y-0M			3 9	3 4	5 0
144	LIRA"S" CM43903-H-2Y-1M-5Y-1M-1Y-1M-0Y			3 9	1 2	5 8

Table 7. Entries showing outstanding resistance to stem rust (23 locations), along with their reactions to leaf rust and helminthosporium.

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	STEM RUST	HEL S 0-9	LEAF RUST
			NOBS	(23)	(5)	(27)
79	BOW"S" CM33203-K-9M-24Y-0M-15Y-0B			0 0	4 0	1 8
127	WEZ-ZA75 X CAN"S" CM43297-0-3Y-1M-1Y-1M-2Y-1M-0Y			0 1	4 7	0 7
74	BOW"S" CM33203-K-10M-7Y-3M-2Y-1M-0Y			0.1	3.8	1.2
69	BOW"S" CM33203-K-9M-2Y-1M-1Y-2M-0Y			0 1	5 3	2 4
72	BOW"S" CM33203-K-9M-19Y-3M-3Y-2M-1Y-0M			0.1	4 5	2 0
73	BOW"S" CM33203-K-10M-7Y-3M-1Y-2M-0Y			0.2	4 3	1.1
61	VEE"S" CM33027-F-15M-500Y-0M-126B-0Y			0.2	5 5	16.1
62	CHAT"S" CM33090-N-1M-1Y-0M-121Y-0B			0.2	3 0	14 4
51	VEE"S" CM33027-F-12M-1Y-6M-0Y-83B-0Y			0 3	2 8	7.9
85	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-502Y-0M			0 4	4 7	6 5
1	KVZ X CN067-PJ62 BWM1285-2Y-3M-1Y-0M			0.4	5 4	3 4
68	BOW"S" CM33203-K-9M-2Y-1M-1Y-1M-0Y			0 4	4.2	2.3
50	VEE"S" CM33027-F-12M-1Y-6M-0Y-76B-0Y			0.5	2 3	9 8
83	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-500Y-0M			0.6	4.3	6 2
54	VEE"S" CM33027-F-15M-500Y-0M-3B-0Y			0.6	3.8	21 7
64	CHAT"S" CM33090-T-1M-4Y-0M-1B-0Y			0 7	4.3	15 4
132	CMT-M073 X TRM73 CM43381-D-1Y-4M-1Y-1M-1Y-0B			0 7	5 3	2.1
63	CHAT"S" CM33090-T-1M-3Y-0M-124B-0Y			0 7	4 7	26 6
134	CMT-M073 X TRM73 CM43381-D-1Y-4M-3Y-4M-1Y-0B			0.8	5 7	2 5
49	VEE"3 CM33027-F-12M-1Y-6M-0Y			0 8	3 5	10 8
130	RSK-M073 X EMU"S" CM43376-N-1Y-2M-4Y-3M-37-0B			0.8	5 3	4 1
65	CHAT"S" CM33090-T-1M-4Y-0M-57B-0Y			0 8	3 5	14.3
174	BSV50-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-4Y-0Y			0 9	4 2	10 0
136	CMT-M073 X TRM73 CM43381-D-1Y-4M-4Y-2M-2Y-0B			0 9	6 7	1 5
81	HAHN"S" CM33682-L-1Y-1Y-1M-3Y-100B-503Y-500B-0Y			0 9	4 8	9 0
70	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-0Y			1.0	4 3	1.6

Table 7 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	STEM RUST	HEL S 0-9	LEAF RUST
			NOBS	(23)	(5)	(27)
48	VEE#2 CM33027-F-12M-1Y-4M-2Y-2M-0Y			1 0	4 0	7 5
173	BSV30-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-2Y-2Y-0M			1 0	5 7	8 1
56	VEE"S" CM33027-F-15M-500Y-0M-87B-0Y			1 0	4 8	23 9
2	KVZ-CJ71 SWM1430-4Y-3Y-0Y			1 1	3 8	4 5
42	SNB"S" CM34630-D-3M-3Y-1M-1Y-0M			1 1	3 5	2 3
135	CMT-M073 X TRM73 CM43381-D-1Y-4M-4Y-1M-1Y-0B			1 1	6 3	1 4
147	LIRA"S" CM43903-H-4Y-1M-2Y-2M-2Y-0B			1 1	6 0	5 9
137	CMT-M073 X TRM73 CM43381-D-1Y-4M-4Y-2M-3Y-1M-0Y			1.1	6 7	4 8
111	K4500 2-BJY"S" CM40480-23M-2Y-2M-2Y-4M-2Y-0B			1 2	4 7	7 5
71	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-1Y-0M			1 2	4 7	1 3
144	LIRA"S" CM43903-H-2Y-1M-5Y-1M-1Y-1M-0Y			1 2	5 8	3 9
57	VEE"S" CM33027-F-15M-500Y-0M-89B-0Y			1 2	4 5	23 0
58	VEE"S" CM33027-F-15M-500Y-0M-98B-0Y			1 2	4 7	22 5
139	CMT-COC75 X PLO CM43473-J-1Y-3M-1Y-2M-1Y-1M-0Y			1 3	6 7	11 4
82	HAHN"S" CM33682-L-1Y-1Y-1M-3Y-100B-505Y-0M			1 4	5 0	9 3
9	F12 71-COC75 SWM5784-17Y-1M-4Y-5M-1Y-0B			1 4	4 8	19 0
59	VEE"S" CM33027-F-15M-500Y-0M-110B-0Y			1 4	5 7	21 1
131	CMT-M073 X TRM73 CM43381-D-1Y-3M-1Y-1M-1Y-0B			1 5	4 5	3 0
133	CMT-M073 X TRM73 CM43381-D-1Y-4M-2Y-2M-1Y-0B			1 5	5 0	3 7
145	LIRA"S" CM43903-H-2Y-1M-5Y-2M-1Y-1M-0Y			1 6	5 0	4 1
146	LIRA"S" CM43903-H-4Y-1M-1Y-3M-3Y-0B			1 6	5 5	12 0
23	TAN"S" CM30697-2M-8Y-1M-1Y-1B-0Y			1 7	6 8	22 0
55	VEE"S" CM33027-F-15M-500Y-0M-76B-0Y			1 7	4 3	22 9
84	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-501Y-500B-0Y			1 7	4 5	6 2
172	BSV50-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-2Y-1Y-0M			1 7	4 3	11 7
112	HI666-PVN S' CM40608-BY-2M-1Y-2M-1Y-0B			1 7	6 3	9 5
153	TES76-PAM"S" CM45984-9Y-1M-1Y-0Y			1 7	4 8	1 2
46	VEE"S" CM33027-F-1M-9Y-0M-97Y-0B			1 8	3 3	18 4

Table 7 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	STEM RUST	HEL S 0-9	LEAF RUST
			NOBS	(23)	(5)	(27)
129	CNO X YMH-TOB66/HUAC"S" CM43330-L-2Y-3M-1Y-1M-1Y-2M-0Y			1 8	6 0	11 4
67	BOW"S" CM33203-H-8M-8Y-1M-1Y-1M-0Y			1 8	3 4	1 1
3	R37-OHL121/CNO-INIA"S" X MD832-ON SWM4505-74M-1Y-5M-1Y-1M-0Y			1 9	3 8	3 4
47	VEE"S" CM33027-F-8M-1Y-8M-1Y-2M-0Y			1 9	3 4	11 2
148	LIRA"S" CM43903-H-4Y-1M-3Y-2M-1Y-1M-0Y			2 0	5 3	14 7
35	COC75-HORK"S" CM32041-3M-3Y-1M-1Y-1M-1Y-0B			2 0	5 5	3 8
86	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-503Y- 0M			2 0	4 7	5 5
179	FURY-SLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-1Y-0Y			2 0	5 3	10 3
66	CHAT"S" CM33090-.-1M-4Y-0M-154B-0Y			2 3	3 7	13 4
149	LIRA"S" CM43903-H-4Y-2M-1Y-2M-1Y-0B			2 4	4 0	10 6
12	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-2M-0Y			2 5	4 8	15 9
185	BAQE-HORK"S" X ALDAN"S" CM48016-0-2M-1Y-1M-1Y-3Y-0M			2 5	5 0	10 8
10	F12 71-COC75 SWM5784-17Y-1M-5Y-1M-1Y-0B			2.5	4 4	20 4
11	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-1M-0Y			2 6	4 4	12 4
183	FURY-SLM75 X ALDAN"S" CM47967-H-4M-2Y-4M-2Y-0Y			2 7	6 0	6.0
176	(MO73/HNIV X KT54E-NAR)PVN76"S" CM47864-A-3M-3Y-1M-2Y-1Y-0M			3 1	5 5	25 8
169	V6707-COC75/TI71-PCI"S" X KVZ-TI71 CM47566-H-2M-4Y-2M-5Y-2Y-0M			3 2	5 5	6 3
182	FURY-SLM75 X ALDAN"S" CM47967-H-4M-2Y-4M-1Y-0Y			3 3	4 7	6 4
24	PHO"S" CM30831-D-4Y-2M-0Y-82Y-0B			3 3	5 3	9 8
201	ALD"S"-MN72130 CM50361-8Y-6M-1Y-4Y-0M			3 4	5 0	3 9
128	CNO X YMH-TOB66/HUAC"S" CM43330-L-2Y-2M-1Y-1M-1Y-0B			3 5	6 3	9 4
175	(MO73/HN4 X KT54E-NAR)PVN76"S" CM47864-A-3M-3Y-1M-1Y-0Y			3 5	5 3	26 7
170	KKK-TOL73 X NAC76 CM47615-A-1M-2Y-2M-4Y-2Y-0M			3 5	6 3	6 0
124	MN72131-PVN76"S" CM42402-30Y-1M-1Y-1M-1Y-2M-0Y			3 6	5 3	5 1
181	FURY-SLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-3Y-0Y			3 6	5 3	9 9
143	LIRA"S" CM43903-H-2Y-1M-2Y-1M-1Y-1M-0Y			3 6	5 8	5 2
167	F3 71-TI71RESEL X ANA75 CM47641-G-1M-1Y-4M-1Y-0Y			3.7	6 0	2 2
45	VEE"S" CM33027-F-1M-9Y-0M-86Y-0B			3 8	3 2	12 8
171	ORE F1 158-FDL X KAL-BB/NAC76 CM47634-I-2M-3Y-1M-2Y-1Y-0M			4 0	4 5	5 6

Table 8. Entries showing acceptable resistance to stripe rust (leaf) in 23 locations, along with their reactions to scab, *Septoria tritici* and BYDV.

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	STRP RT L	SCAB %	SEP T 0-9	BYDV 0-9
			NOBS	(23)	(1)	(1)	(2)
169	V6707-COC75/TI71-PCI"S" X KVZ-TI71 CM47366-H-2M-4Y-2M-5Y-2Y-0M			0 1	-----	-----	5 0
168	AU-YR70 X ANA75 CM47481-A-2M-1Y-3M-1Y-0Y			0 8	-----	7 0	4 5
182	FURY-SLM75 X ALDAN"S" CM47967-H-4M-2Y-4M-1Y-0Y			1 3	-----	-----	6 5
87	FURY-ANA75 CM37027-37Y-2M-4Y-1M-3Y-0M			1.3	-----	-----	5 5
167	F3 71-TI71RESEL X ANA75 CM47441-G-1M-1Y-4M-1Y-0Y			1 4	-----	5 0	4 5
171	ORE F1 158-FDL X KAL-BB/NAC76 CM47634-I-2M-3Y-1M-2Y-1Y-0M			1 4	20 0	7 0	5 0
70	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-0Y			1 4	20 0	-----	6 0
179	FURY-SLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-1Y-0Y			1 5	-----	-----	6 0
74	BOW"S" CM33203-K-10M-7Y-3M-2Y-1M-0Y			1 6	-----	-----	6 0
86	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-503Y- 0M			1 6	-----	-----	5 5
83	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-500Y- 0M			1.6	-----	-----	5 0
84	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-501Y- 500B-CY			1 8	-----	-----	4 5
72	BOW"S" CM33203-K-9M-19Y-3M-3Y-2M-1Y-0M			1 8	-----	-----	6 0
1	KVZ X CN067-PJ62 SWM1285-2Y-3M-1Y-0M			1 9	20 0	-----	4 0
185	BAGE-HORK'S' X ALDAN"S" CM48016-G-2M-1Y-1M-1Y-3Y-0M			1 9	-----	-----	4 0
2	KVZ-CJ71 SWM1430-4Y-3Y-0Y			1 9	-----	-----	5 5
134	CMT-M073 X TRM73 CM43381-D-1Y-4M-3Y-4M-1Y-0B			2 0	-----	-----	6 0
153	TES76-PAM"S' CM45984-9Y-1M-1Y-0Y			2 1	-----	7 0	3 5
85	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-502Y- 0M			2 1	-----	-----	4 0
132	CMT-M073 X TRM73 CM43381-D-1Y-4M-1Y-1M-1Y-0B			2 1	-----	2 0	5 5
69	BOW"S" CM33203-K-9M-2Y-1M-1Y-2M-0Y			2 2	20 0	-----	6 0
71	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-1Y-0M			2 2	-----	-----	6 5
67	BOW"S" CM33203-H-8M-8Y-1M-1Y-1M-0Y			2 3	20 0	-----	5 0
42	SNB"S" CM34630-D-3M-3Y-1M-1Y-0M			2 3	20 0	-----	4 5
143	LIRA"S" CM43903-H-2Y-1M-2Y-1M-1Y-1M-0Y			2 5	20 0	-----	5 0
73	BOW"S" CM33203-K-10M-7Y-3M-1Y-2M-0Y			2 7	-----	-----	6 0

Table 8 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	STRP RT. L	SCAB %	SEP T 0-9	SYDV 0-9
			NOBS	(23)	(1)	(1)	(2)
90	JUP73-ZP X COC75 CM37614-B-14Y-3M-1Y-0M			2 7	20 0	-----	5 5
197	BUC"S"-FLK"S" CM50070-24Y-1M-1Y-0Y			2 8	20 0	-----	4 0
138	COC75 X MD-V09052/SIB"S" CM43469-F-1Y-1M-1Y-1M-2Y-0B			2.8	-----	-----	4.0
68	BOW"S" CM33203-K-9M-2Y-1M-1Y-1M-0Y			2.8	20 0	-----	6.0
123	T0866-CNO X T0866-ERA/BJY"S" CM42376-19Y-1M-1Y-2M-0Y			2.9	-----	-----	5.0
145	LIRA"S" CM43903-H-2Y-1M-5Y-2M-1Y-1M-0Y			3.0	20.0	-----	4 0
147	LIRA"S" CM43903-H-4Y-1M-2Y-2M-2Y-0B			3.0	-----	3 0	4.5
181	FURY-SLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-3Y-0Y			3.0	-----	-----	6.5
121	YACO"S" CM41199-A-13M-2Y-3M-1Y-1M-0Y			3.1	-----	7.0	5.5
93	DOVE"S" CM38199-A-1Y-7M-0Y-93Y-0B			3.1	-----	-----	6.0
35	COC75-HORK"S" CM32041-3M-3Y-1M-1Y-1M-1Y-0B			3 1	-----	-----	5.5
82	HAHN"S" CM33682-L-1Y-1Y-1M-3Y-1008-503Y- 0M			3.1	-----	-----	5 0
103	NKT"S" CM40454-11M-4Y-1M-1Y-4M-1Y-0B			3 2	-----	7.0	5 0
165	HER77-NAC76 CM46782-10M-1Y-4M-2Y-0Y			3.2	-----	-----	6.0
3	R37-GHL121/CNO-INIA"S" X HD832-ON SWM4585-74M-1Y-5M-1Y-1M-0Y			3.3	-----	-----	5.0
148	LIRA"S" CM43903-H-4Y-1M-3Y-2M-1Y-1M-0Y			3 3	20 0	4.0	4.5
135	CMT-MD73 X TRM73 CM43381-D-1Y-4M-4Y-1M-1Y-0B			3.3	-----	-----	5.5
105	NKT"S" CM40454-11M-4Y-2M-3Y-0M			3 3	20 0	5 0	5.5
81	HAHN"O" CM33682-L-1Y-1Y-1M-3Y-1008-503Y- 5008-0Y			3.4	-----	-----	5.5
56	VEE"S" CM33027-F-15M-500Y-0M-878-0Y			3.6	20 0	-----	5.0
158	HER77-MAYA74 CM46680-5M-1Y-3M-1Y-1Y-0M			3.6	20 0	-----	5.5
36	PGN"S" CM32418-1M-1Y-1M-0Y-2PTZ-0Y			3 6	-----	-----	5.0
59	VEE"S" CM33027-F-15M-500Y-0M-1108-0Y			3 7	-----	-----	5.0
58	VEE"S" CM33027-F-15M-500Y-0M-988-0Y			3 8	-----	-----	5 0
150	{COC75[(FN-TH X K5BN/MY54-N108 X AN" ")TT-BN64 X BZA]}[(FR316/MCM-KT X Y50)ZA75]BJY"S" CM43956-A-1Y-1M-3Y-0M			3 9	-----	-----	5 5

Table 9. Entries showing acceptable resistance to *Septoria tritici* at Cadiz, Spain, along with their reactions to BYDV, stripe rust and head scab.

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	SEP T 0-9	BYDV 0-9	STRP RT L	SCAB %
			NOBS	(1)	(2)	(23)	(1)
132	CMT-M073 X TRM73 CM43381-0-1Y-4M-1Y-1M-1Y-0B			2 0	5 5	2 1	-----
126	(CHR-S948 X CHR(4)/II8156(8))JUP73 CM43054-1M-1Y-1M-1Y-0Y			3 0	5 0	12 9	20 0
146	LIRA"S" CM43903-H-4Y-1M-1Y-3M-3Y-0B			3 0	4 0	6 3	-----
147	LIRA"S" CM43903-H-4Y-1M-2Y-2M-2Y-0B			3 0	4 5	3 0	-----
127	BEZ-ZA75 X CAN'S' CM43297-G-3Y-1M-1Y-1M-2Y-1M-0Y			3 0	6 5	4 1	-----
148	LIRA"S CM43903-H-4Y-1M-3Y-2M-1Y-1M-0Y			4 0	4 5	3 3	20 0
51	VEE'S CM33027-F-12M-1Y-6M-0Y-83B-0Y			4 0	4 5	8 1	20 0
108	CROW"S" CM40457-5M-3Y-1M-2Y-0M			4 0	4 5	7 [illegible]	-----
163	BB-CAL X NAC76 CM46781-23M-1Y-3M-1Y-0Y			4 0	4 5	8 8	20 0
113	DGA-BJY"S" CM40610-15Y-1M-2Y-1M-1Y-0B			4 0	6 0	21 3	-----
114	DGA-BJY"S" CM40610-22Y-1M-2Y-3M-0Y			4 0	5 5	8 4	-----
124	MN72131-PVN76"S" CM42402-30Y-1M-1Y-1M-1Y-2M-0Y			4 0	6 0	19 9	-----
109	CROW'S" CM40457-5M-3Y-2M-2Y-0M			4 0	5 5	5 4	-----

Table 10. Entries showing acceptable resistance to BYDV (2 locations), along with their reactions to stripe rust, scab and *Septoria tritici*.

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	BYDV 0-9	STRP RT L	SCAB %	SEP T 0-9
			NOBS	(2)	(23)	(1)	(1)
194	RRL X KAL-BB CM49799-10Y-1M-1Y-2Y-0M			3 0	7 3	20 0	-----
6	CAR422-ANA75 SWM4610-2Y-20M-1Y-0M			3 0	9 6	20 0	-----
192	BUC"S"-BJY"S" CM49641-33Y-1M-3Y-2Y-0M			3 5	17 5	-----	-----
156	COC75-BJY"S" CM46452-12M-1Y-5M-1Y-0Y			3 5	15 2	-----	-----
195	BUC"S" X KAL-BB CM49834-9Y-1M-2Y-3Y-0M			3 5	14 8	-----	6 0
193	RRL X KAL-BB CM49799-5Y-2M-2Y-0Y			3 5	22 1	20 0	-----
32	BUC"S" CM31678-R-4Y-2M-506M-502Y-500M-0Y			3.5	7 8	-----	-----
203	IAS64-ALD"S" X CGT-ALD"S"[(BMAN-ON X CAL/SR70)ALD"S"] CM55466-D-1M-1Y-2Y-0M			3 5	16 0	-----	-----
153	IES76-PAM"S" CM45984-9Y-1M-1Y-0Y			3 5	2 1	-----	7 0
31	BUC"S" CM31678-R-4Y-2M-500Y-506M-501Y-501M-502Y-0M			3 5	11 3	20 0	-----
5	MYNA"S" SWM4589-7Y-18M-1Y-0M-56B-0Y			4 0	14 2	20 0	-----
190	BUC"S"-BJY"S" CM49641-9Y-1M-1Y-5Y-0M			4 0	13 7	-----	7 0
85	HAHN"S" CM33693-L-1Y-1Y-4M-4Y-100B-502Y-0M			4 0	2 1	-----	-----
185	BACE-HORK'S' X ALDAN"S" CM48016-G-2M-1Y-1M-1Y-3Y-0M			4 0	1 9	-----	-----
94	VEE"S" CM33027-F-15M-500Y-0M-3B-0Y			4 0	4 4	20 0	-----
138	COC75 X MD-VG9052/SIB"S" CM43769-F-1Y-1M-1Y-1M-2Y-0B			4 0	2 8	-----	-----
145	LIRA"S" CM43903-H-2Y-1M-5Y-2M-1Y-1M-0Y			4 0	3 0	20 0	-----
146	LIRA"S" CM43903-H-4Y-1M 1Y-3M-3Y-0B			4 0	6 3	-----	3 0
201	ALD"S"-MN/2130 CM50261-8Y-6M-1Y-4Y-0M			4 0	7 6	-----	-----
101	SAP'S"-HUYC'S" CM40394-20M-1Y-2M-1Y-2M-2Y-0B			4 0	21 2	-----	8 0
149	LIRA"S" CM43903-H-4Y-2M-1Y-2M-1Y-0B			4 0	5 7	-----	-----
1	KVZ X CN067-PJ62 SWM1165-2Y-3M-1Y-0M			4 0	1 9	20 0	-----
200	"LOCAL CHECK"			4 0	8 8	-----	-----
191	BUC-BJY"S CM49641-9Y-1M-4Y-0Y			4 0	13 5	-----	6 0
197	BUC S"-FLA'S' CM50[illegible]-24Y-1M-1Y-0Y			4 0	2 8	20 0	-----
177	ARK-TOL7[illegible] X NA276 CM4[illegible]-A-1M-2Y-2M-4Y-2Y-0M			4 0	4 6	-----	-----
100	"LOCAL CHECK"			4 0	14 1	-----	8 0
178	FURY-SLM75 X ALDAN"S" CM47967-C-1M-1Y-2M-2Y-4Y-0M			4 0	8 2	-----	-----
30	BUC"S" CM31678-R-4Y-2M-500Y-506M-500Y-500M-0Y			4 0	11 5	-----	-----
196	BUC"S" X KAL-BB CM49834-9Y-4M-2Y-2Y-0M			4 0	7 5	-----	-----
189	BUC"S"-BJY"S" CM39641-9Y-1M-1Y-1Y-0M			4 0	11 9	-----	6 0

Table 11. Entries showing tolerance to fusarium head scab at Parana, Brazil, along with their reactions to *Septoria tritici*, BYDV and stripe rust.

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	SCAB %	SEP T 0-9	BYDV 0-9	STRP RT L
			NOBS	(1)	(1)	(2)	(23)
1	KVZ X CN067-PJ62 SWM1285-2Y-3M-1Y-0M			20 0	-----	4 0	1 9
105	NKT"S" CM40454-11M-4Y-2M-3Y-0M			20 0	5 0	5 5	3 3
54	VEE"S" CM33027-F-15M-500Y-0M-3B-0Y			20 0	-----	4 0	4 4
158	HER77-MAYA74 CM46680-5M-1Y-3M-1Y-1Y-0M			20 0	-----	5 5	3 6
5	MYNA"S" SWM4589-7Y-18M-1Y-0M-56B-0Y			20 0	-----	4 0	14 2
6	CAR422-ANA75 SWM4610-2Y-20M-1Y-0M			20 0	-----	3 0	9 6
7	F3 71-TRM73 SWM5704-10Y-1M-3Y-3M-2Y-3M-0Y			20 0	-----	4 5	4 8
187	CLP74-YD"S"(SAP"S"/ANE-MY64 X TI71) CM48983-A-2M-1Y-1M-1Y-0Y			20 0	-----	4 5	8 3
163	BB-CAL X NAC76 CM46781-25M-1Y-3M-1Y-0Y			20 0	4 0	4 5	8 8
10	F12 71-COC75 SWM5784-17Y-1M-5Y-1M-1Y-0B			20 0	-----	5 0	9 4
11	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-1M-0Y			20 0	-----	5 0	10 0
12	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-2M-0Y			20 0	-----	5 0	8 7
76	TI71-TOB66 X ALD"S" CM33217-Q-4M-1Y-0M-136B-0Y			20 0	-----	5 0	4 4
14	MON"S" CM9288-A-3M-6Y-5M-1Y-1M-0Y			20 0	-----	6 0	7 6
15	CKR"S" CM20769-A-8Y-1M-2Y-5M-1Y-0M-39B- 0Y			20 0	5 0	4 5	25 0
16	PRL"S" CM25988-8Y-3Y-2Y-1M-1Y-100B-0Y			20 0	5 0	4 5	10 1
68	BOW"S" CM33203-K-9M-2Y-1M-1Y-1M-0Y			20 0	-----	6 0	2 8
69	BOW"S" CM33203-K-9M-2Y-1M-1Y-2M-0Y			20 0	-----	6 0	2 2
19	MAYA74'S'-MON S" CM29251-3M-17Y-4M-0Y-35Y-0B			20 0	-----	5 5	29 8
174	BSV50-CAN'S" X VEE'S' CM47768-A-1M-1Y-5M-4Y-0Y			20 0	-----	5 5	5 0
46	VEE"S' CM33027-F-1M-9Y-0M-97Y-0B			20 0	-----	5 5	8 9
47	VEE"S CM33027-F-8M-1Y-8M-1Y-2M-0Y			20 0	-----	5 5	6 6
126	(CHR-594E X CHR(4)/II8156(B))JUP73 CM43054-1M-1Y-1M-1Y-0Y			20 0	3 0	5 0	12 9
75	TI71-TOB66 X ALD"S" CM33217-Q-4M-1Y-0M-110B-0Y			20 0	-----	5 0	5 9
62	CHAT"S" CM33090-N-1M-1Y-0M-121Y-0B			20 0	-----	5 5	9 8
77	MAI"S"-PJ62 X EMU"S' CM33254-T-1M-1Y-6M-500Y-0M-27Y- 0B			20 0	-----	5 0	4 1
78	BOW"S" CM33203-K-9M-24Y-0M-15Y-0B			20 0	-----	6 0	7 3
131	CMT-MO73 X TRM73 CM43381-D-1Y-3M-1Y-1M-1Y-0B			20 0	-----	5 0	7 1
104	NKT"S" CM40454-11M-4Y-2M-1Y-0M			20 0	5 0	5 5	5 2

Table 11 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	SCAB %	SEP T 0-9	BYDV 0-9	STRP RT.L
			NOBS	(1)	(1)	(2)	(23)
157	HER77-MAYA74 CM46680-5M-1Y-2M-6Y-0Y			20.0	------	4 5	6.2
31	BUC"S" CM31678-R-4Y-2M-500Y-506M-501Y-501M-502Y-0M			20 0	------	3 5	11 3
186	AZT67 X CHR-DD 05P/F12 71-BLO"S" CM40326-A-3M-1Y-1M-2Y-1Y-0M			20 0	------	5.0	9.5
161	BLT"S"-PVN76"S" CM46715-11Y-1M-3Y-3Y-0M			20.0	------	5 0	21.7
199	ALD"S"-MN72130 CM50361-8Y-6M-1Y-2Y-0M			20 0	------	5 0	12.1
148	LIRA"S" CM43903-H-4Y-1M-3Y-2M-1Y-1M-0Y			20 0	4 0	4 5	3 3
98	KAL-BB X RON"S" CM40226-2Y-1M-1Y-1M-2Y-2M-0Y			20 0	------	5 5	13 6
49	VEE93 CM33027-F-12M-1Y-6M-0Y			20.0	------	5 0	4.0
152	PVN76"S"-7C CM45470-8M-1Y-2M-1Y-1Y-0M			20.0	------	4.5	9 0
90	JUP73-ZP X COC/5 CM37614-B-14Y-3M-1Y-0M			20.0	------	5.5	2.7
143	LIRA"S" CM43903-H-2Y-1M-2Y-1M-1Y-1M-0Y			20.0	------	5.0	2 5
92	MNV"S" CM37705-G-2Y-3M-1Y-0M-47Y-0B			20 0	------	5 5	19.2
42	SNB"S" CM34630-D-3M-3Y-1M-1Y-0M			20.0	------	4 5	2 3
197	BUC"S"-FLK"S" CM50070-24Y-1M-1Y-0Y			20 0	------	4 0	2 9
44	YD"S"[(FN-TH(3) X II44 29-TH(2)/CTFN (4)SR70] CM35735-1M-2Y-1M-1Y-1B-0Y			20 0	5 0	6 5	7.4
45	VEE"S" CM33027-F-1M-9Y-0M-86Y-0B			20 0	------	5 5	5 6
70	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-0Y			20.0	------	6.0	1 4
172	BSV50-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-2Y-1Y-0M			20 0	------	5 5	6 8
194	RRL X KAL-BB CM49799-10Y-1M-1Y-2Y-0M			20 0	------	3 0	7 3
67	BOW"S" CM33203-H-8M-8Y-1M-1Y-1M-0Y			20 0	------	5.0	2 3
56	VEE"S" CM33027-F-15M-500Y-0M-878-0Y			20.0	------	5 0	3 6
51	VEE"S" CM33027-F-12M-1Y-6M-0Y-838-0Y			20 0	4 0	4 5	8 1
206	CMH76 1084-FLK"S" CMH77A 894-1B-2Y-1B-4Y-0B			20 0	8.0	5 5	16 2
53	VEE"S" CM33027-F-15M-4Y-4M-3Y-2M-1Y-0M			20 0	------	5 0	4 3
180	"LOCAL CHECK"			20 0	------	5 0	4 4

Table 11 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	SCAB %	SEP T 0-9	BYDV 0-9	STRP RT. L
			NOBS	(1)	(1)	(2)	(23)
145	LIRA"S" CM43903-H-2Y-1M-5Y-2M-1Y-1M-0Y			20 0	-----	4 0	3 0
193	RRL X KAL-BB CM49799-5Y-2M-2Y-0Y			20 0	-----	3 5	22.1
57	VEE"S" CM33027-F-15M-500Y-0M-89B-0Y			20 0	-----	5 0	4 2
95	WRB"S" CM39814-40M-1Y-1M-2Y-3M-1Y-0B			20 0	-----	5 5	10 7
171	ORE F1 158-FDL X KAL-BB/NAC76 CM47634-I-2M-3Y-1M-2Y-1Y-0M			20.0	7 0	5 0	1 4
65	CHAT"S" CM33090-T-1M-4Y-0M-57B-0Y			20.0	-----	7 0	7 1

Table 12. Entries showing acceptable resistance to helminthosporium (5 locations), along with their reactions to stem rust and leaf rust.

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	HEL S 0-9	STEM RUST	LEAF RUST
			NOBS:	(5)	(23)	(27)
50	VEE"S" CM33027-F-12M-1Y-6M-0Y-76B-0Y			2.3	0.5	9.8
51	VEE"S" CM33027-F-12M-1Y-6M-0Y-83B-0Y			2.8	0.3	7.9
14	MON"S" CM8288-A-3M-6Y-5M-1Y-1M-0Y			2.8	18.5	7.3
62	CHAT"S" CM33090-N-1M-1Y-0M-121Y-0J			3.0	0.7	14.4
52	VEE84 CM33027-F-12M-1Y-10M-1Y-3M-1Y-0M			3.0	4.7	8.0
45	VEE"S" CM33027-F-1M-9Y-0M-86Y-0B			3.2	3.8	12.8
105	NKT"S" CM40454-11M-4Y-2M-3Y-0M			3.2	16.3	26.2
46	VEE"S" CM33027-F-1M-9Y-0M-97Y-0B			3.3	1.8	18.4
67	BOW"S" CM33203-H-8M-8Y-1M-1Y-1M-0Y			3.4	1.8	1.1
47	VEE"S" CM33027-F-8M-1Y-8M-1Y-2M-0Y			3.4	1.9	11.2
49	VEE83 CM33027-F-12M-1Y-6M-0Y			3.5	0.8	10.8
65	CHAT"S" CM33090-T-1M-4Y-0M-57B-0Y			3.5	0.8	14.3
104	NKT"S" CM40454-11M-4Y-2M-1Y-0M			3.9	19.8	26.0
61	VEE"S" CM33027-F-15M-500Y-0M-126B-0Y			3.5	0.2	16.1
152	PVN76"S"-7C CM45470-8M-1Y-2M-1Y-1Y-0M			3.5	7.9	18.1
42	BNB"S" CM34630-D-3M-3Y-1M-1Y-0M			3.9	1.1	2.3
66	CHAT"S" CM33090-T-1M-4Y-0M-154B-0Y			3.7	2.3	13.4
37	PSN"S" CM3241B-1M-1Y-6M-1Y-1M-1Y-0Y			3.7	4.7	7.8
151	MON"S"-TI71RESEL CM45075-6M-1Y-1M-1Y-0Y			3.7	18.6	8.3
129	TOB66-ERA X TOB66-CNO(BB X CNO"S"-JAR66/ORZ"S") CM42440-41Y-3M-1Y-1M-1Y-1M-0Y			3.7	7.0	8.4
38	PSN"S" CM3241B-1M-1Y-6M-1Y-1M-1Y-0M-71B-0Y			3.8	4.1	10.1
74	BOW"S" CM33203-K-10M-7Y-3M-2Y-1M-0Y			3.8	0.1	1.2
2	KVZ-CJ71 BWM1430-4Y-3Y-0Y			3.8	1.1	4.5
7	F3 71-TRM73 BWM5704-10Y-1M-3Y-3M-2Y-3M-0Y			3.8	5.5	7.3
3	R37-OHL121/CNO-INIA"S" X HD832-ON BWM4585-74M-1Y-5M-1Y-1M-0Y			3.8	1.9	3.4
54	VEE"S" CM33027-F-15M-500Y-0M-3B-0Y			3.8	0.6	21.7

Table 12 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	HEL S 0-9	STEM RUST	LEAF RUST
			NOBS	(5)	(23)	(27)
16	PRL"S" CM25988-8Y-3Y-2Y-1M-1Y-100B-0Y			3 8	7 7	2 6
187	CLP74-YD'S"(SAP"S"/ANE-MY64 X TI71) CM48983-A-2M-1Y-1M-1Y-0Y			3 8	20 3	5 3
92	MNV"S" CM37705-G-2Y-3M-1Y-0M-47Y-0B			3 8	6 9	16 9
75	TI71-TOB66 X ALD"S" CM33217-G-4M-1Y-0M-110B-0Y			4 0	4 3	8 2
162	(LR(2)-SN64 X CC/SKA)NAC CM46779-8M-1Y-1M-3Y-1Y-0M			4 0	8 9	25 1
199	ALD"S"-MN72130 CM50361-8Y-6M-1Y-2Y-0M			4 0	4 1	3 7
78	BOW"S" CM33203-K-9M-24Y-0M-15Y-0B			4 0	0 0	1 8
203	IAS64-ALD"S" X CQT-ALD"S"[(BMAN-ON X CAL/SR70)ALD"S"] CM55486-D-1M-1Y-2Y-0M			4 0	4 2	6 9
48	VEE#2 CM33027-F-12M-1Y-4M-2Y-2M-0Y			4 0	1 0	7 5
174	BSV50-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-4Y-0Y			4 2	0 9	10 0
68	BOW"S" CM33203-K-9M-2Y-1M-1Y-1M-0Y			4 2	0 4	2 3
172	BSV50-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-2Y-1Y-0M			4 3	1 7	11 7
83	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-500Y-0M			4 3	0 6	6 2
180	"LOCAL CHECK"			4 3	14 8	11 6
70	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-0Y			4 3	1 0	1 6
95	WRB"S" CM39814-40M-1Y-1M-2Y-3M-1Y-0B			4 3	10 8	18 5
126	(CHR-S948 X CHR(4)/II8156(8))JUP73 CM43054-1M-1Y-1M-1Y-0Y			4 3	4 5	13 5
55	VEE"S" CM33027-F-15M-500Y-0M-76B-0Y			4 3	1 7	22 9
36	PSN"S" CM32418-1M-1Y-1M-0Y-2PTZ-0Y			4 3	5 1	8 9
8	F3 71-TRM73 SWM5704-10Y-1M-3Y-4M-1Y-1M-0Y			4 3	5 5	6 5
73	BOW"S" CM33203-K-10M-7Y-3M-1Y-2M-0Y			4 3	0 2	1 1
64	CHAT"S" CM33090-T-1M-4Y-0M-1B-0Y			4 3	0 7	15 4
186	AZT67 X CHR-DD 05P/F12 71-BLO"S" CM48326-A-3M-1Y-1M-2Y-1Y-0M			4 3	6 6	17 8
110	CARP"S'-BJY"S" CM40464-11M-1Y-2M-2Y-2M-2Y-0B			4 3	17 7	12 2
4	MYNA"S" SWM4589-7Y-1M-3Y-0M-49B-0Y			4 3	13 1	3 9
116	DGA-BJY"S" CM40610-25Y-3M-3Y-3M-0Y			4 3	16 9	26 1
102	SAP"S"-HUAC"S' CM40394-20M-1Y-2M-1Y-4M-1Y-0B			4 3	17 4	18 2
11	F12 71-COC75 SWM5764-17Y-2M-2Y-2M-1Y-1M-0Y			4 4	2 6	12 4

Table 12 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	HEL S 0-9	STEM RUST	LEAF RUST
			NOBS	(5)	(23)	(27)
10	F12 71-COC75 SWM5"84-17Y-1M-5Y-1M-1Y-0B			4 4	2 5	20 6
57	VEE"S" CM33027-F-15M-500Y-0M-89B-0Y			4 5	1 2	23 0
204	CMH76 1084-FLK"S" CMH77A 894-1B-1Y-4B-1Y-0B			4 5	21 9	8 0
171	ORE F1 158-FDL X KAL-BB/NAC76 CM47634-I-2M-3Y-1M-2Y-1Y-0M			4 5	4 0	5 6
131	CMT-M073 X TRM73 CM43381-D-1Y-3M-1Y-1M-1Y-0B			4 5	5	3 0
106	YD"S"-BJY"S" CM40456-9Y-1M-2Y-1M-0Y			4.5	5 4	19 6
84	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-501Y-500B-0Y			4 5	1 7	6 2
39	PBN"S" CM32418-1M-1Y-6M-1Y-1M-1Y-0M-107B-0Y			4 5	4 3	9 7
72	BOW"S" CM33203-K-9M-19Y-3M-3Y-2M-1Y-0M			4.5	0 1	2 0
53	VEE"S" CM33027-F-15M-4Y-4M-3Y-2M-1Y-0M			4 5	5 0	24.3
193	RRL X KAL-BB CM49799-5Y-2M-2Y-0Y			4 5	21 9	24 6
192	BUC"S"-BJY"S" CM49641-32Y-1M-3Y-2Y-0M			4 5	19 1	36 2
163	BB-CAL X NAC76 CM46781-25M-1Y-3M-1Y-0Y			4 6	12 2	19 0
76	TI71-T0866 X ALD"S" CM33217-G-4M-1Y-0M-136B-0Y			4.6	4 4	3 3
197	BUC"S"-FLK"S" CM50070-24Y-1M-1Y-0Y			4.6	14 1	11 9
161	BLT"S"-PVN76"S" CM46715-11Y-1M-3Y-3Y-0M			4.6	17 2	25 6
98	KAL-BB X MON"S" CM40226-2Y-1M-1Y-1M-2Y-2M-0Y			6	15 5	5 7
205	CMH76 1084-FLK"S" CMH77A 894-1B-2Y-1B-1Y-0B			4 7	21 8	11 2
113	DGA-BJY"S" CM40610-15Y-1M-2Y-1M-1Y-0B			4 7	17 1	13 8
86	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-503Y-0M			4 7	2 0	5 5
107	YD"S"-BJY"S" CM40456-11Y-1M-2Y-1M-1Y-0B			4 7	9 0	16 8
50	VEE"S" CM33027-F-15M-500Y-0M-98B-0Y			4 7	1.2	22 5
127	BEZ-ZA75 X CAN"S" CM43297-G-3Y-1M-1Y-1M-2Y-1M-0Y			4 7	0 1	0 7
71	BOW"S" CM33203-K-9M-9Y-4M-4Y-1M-1Y-0M			4 7	1 2	1 3
111	K4500 2-BJY"S" CM40480-23M-2Y-2M-2Y-4M-2Y-0B			4 7	1 2	7 5
195	BUC"S" X KAL-BB CM49834-9Y-1M-2Y-3Y-0M			4 7	13 8	42 5
63	CHAT"S" CM33090-T-1M-3Y-0M-124B-0Y			4.7	0 7	26 6
188	ANA75-HUAC"S" CM49258-2Y-2M-3Y-0Y			4 7	8 3	6 6

Table 12 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	HEL S 0-9	STEM RUST	LEAF RUST
			NOBS	(5)	(23)	(27)
85	HAHN"S" CM33682-L-1Y-1Y-4M-4Y-100B-502Y-0M			4 7	0 4	6 5
157	HER77-MAYA74 CM46680-5M-1Y-2M-6Y-0Y			4 8	18 5	13 0
9	F12 71-COC75 SWM5784-17Y-1M-4Y-5M-1Y-0B			4 8	1 4	19 0
103	NKT"S" CM40454-11M-4Y-1M-1Y-4M-1Y-0B			4 8	29 8	22 8
77	MAI"S"-PJ62 X EMU"S" CM33254-T-1M-1Y-6M-500Y-0M-27Y-0B			4 8	7 8	7 1
60	"LOCAL CHECK"			4 8	17 9	15 2
15	CKR"S" CM20769-A-8Y-1M-2Y-5M-1Y-0M-398-0Y			4 8	4 2	6 7
56	VEE"S" CM33027-F-15M-500Y-0M-87B-0Y			4 8	1 0	23 9
90	JUP73-ZP X COC75 CM37614-B-14Y-3M-1Y-0M			4 8	5 5	6 9
81	HAHN"S" CM33682-L-1Y-1Y-1M-3Y-100B-503Y-500B-0Y			4 8	0 9	9 0
178	FURY-BLM75 X ALDAN"S" CM47967-C-1M-1Y-2M-2Y-4Y-0M			4 8	14 6	6 6
153	TEB76-PAM"S" CM45984-9Y-1M-1Y-0Y			4 8	1 7	1 2
12	F12 71-COC75 SWM5784-17Y-2M-2Y-2M-1Y-2M-0Y			4 8	2 5	19 9
206	CMH76 1084-FLK"S" CMH77A 894-1B-2Y-1B-4Y-0B			5 0	22 7	13 1
5	MYNA"S" SWM4589-7Y-18M-1Y-0M-56B-0Y			5 0	22 9	6 4
97	BJY"S"-JUP73 CM40038-6M-4Y-2M-1Y-2M-1Y-0B			5 0	19 1	9 3
82	HAHN"S" CM33682-L-1Y-1Y-1M-3Y-100B-505Y-0M			5 0	1 4	9 3
145	LIRA"S" CM43903-H-2Y-1M-5Y-2M-1Y-1M-0Y			5 0	1 6	4 1
185	BAGE-HORK"S" X ALDAN"S" CM48016-G-2M-1Y-1M-1Y-3Y-0M			5 0	2 5	10 8
168	AU-YR70 X ANA75 CM47481-A-2M-1Y-3M-1Y-0Y			5 0	19 1	3 2
91	JUP73-ZP X COC75 CM37614-B-14Y-4M-1Y-0M			5 0	4 9	6 7
117	DGA-BJY"S" CM40610-31Y-2M-2Y-1M-0Y			5 0	10 3	17 3
201	ALD"S"-MN72130 CM50361-8Y-6M-1Y-4Y-0M			5 0	3 4	3 9
133	CMT-MO73 X TRM73 CM43381-D-1Y-4M-2Y-2M-1Y-0B			5 0	1 5	3 7
101	SAP"S"-HUAC"S" CM40394-20M-1Y-2M-1Y-2M-2Y-0B			5 0	14 0	13 5
158	HER77-MAYA74 CM46680-5M-1Y-3M-1Y-1Y-0M			5 0	15 4	6 0
160	"LOCAL CHECK"			5 0	18 1	15 3
198	BJY"S"-PRT CM50723-12Y-1M-1Y-0Y			5 0	7 0	17 2

Table 12 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	HEL S 0-9	STEM RUST	LEAF RUST
			NOBS	(5)	(23)	(27)
13	63 130-JAR66 X NAC76 SWM6598-5M-1Y-1M-3Y-0Y			5 0	12 8	11 8
194	RRL X KAL-BB CM49799-10Y-1M-1Y-2Y-0M			5.3	12 3	18 0
69	BOW"S" CM33203-K-9M-2Y-1M-1Y-2M-0Y			5.3	0 1	2 6
165	HER77-NAC76 CM46782-10M-1Y-4M-2Y-0Y			5 3	7 1	26 2
179	FURY-BLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-1Y-0Y			5.3	2 0	10 3
196	BUC"S" X KAL-BB CM49834-9Y-4M-2Y-2Y-0M			5 3	0 6	13 6
181	FURY-BLM75 X ALDAN"S" CM47967-H-3M-2Y-2M-3Y-0Y			5.3	3 6	9 9
96	JUP73-BJY"S" CM39992-8M-3Y-2M-0Y			5.3	24 4	15 9
148	LIRA"S" CM43903-H-4Y-1M-3Y-2M-1Y-1M-0Y			5 3	2 0	14 7
43	MO73-PVN76"S" CM35269-2Y-1M-1Y-0M			5.3	4.9	21 0
132	CMT-MO73 X TRM73 CM43381-D-1Y-4M-1Y-1M-1Y-0B			5.3	0.7	2 1
175	(MO73/HN4 X KT54E-NAR)PVN76"S" CM47864-A-3M-3Y-1M-1Y-0Y			5.3	3 5	26 7
122	BAYA"S" CM42374-1Y-1M-2Y-0M			5 3	11 9	25.8
124	MN72131-PVN76"S" CM42402-30Y-1M-1Y-1M-1Y-2M-0Y			5 3	3 6	5.1
130	RSK-MO73 X EMU"S" CM43376-N-1Y-2M-4Y-3M-3Y-0B			5.3	0 8	4 1
24	PHO"S" CM30831-D-4Y-2M-0Y-82Y-0B			5 3	3 3	9 8
1	KVZ X CN067-PJ62 SWM1285-2Y-3M-1Y-0M			5.4	0 4	3 4
169	V6707-COC75/TI71-PCI"S" X KVZ-TI71 CM47566-H-2M-4Y-2M-5Y-2Y-0M			5 5	3 2	6 3
146	LIRA"S" CM43903-H-4Y-1M-1Y-3M-3Y-0B			5.5	1 6	12 0
154	TES76-MUS"S" CM45986-5M-2Y-2M-1Y-0Y			5.J	4 3	3 9
176	(MO73/HNIV X KT54E-NAR)PVN76"S" CM47864-A-3M-3Y-1M-2Y-1Y-0M			5 5	3 1	25 8
200	"LOCAL CHECK"			5 5	16 7	16 8
35	COC75-HORK"S" CM32041-3M-3Y-1M-1Y-1M-1Y-0B			5 5	2 0	3 8
0	CAR422-ANA75 SWM4610-2Y-20M-1Y-0M			5 5	14 0	5 8
44	YD"S"[(FN-TH(3) X II44 29-TH(2)/CTFN (4)SR70] CM35735-1M-2Y-1M-1Y-1B-0Y			5.6	15 6	9 0
109	CROW"S" CM40457-5M-3Y-2M-2Y-0M			5.7	10 8	6 2
59	VEE"S" CM33027-F-15M-500Y-0M-110B-0Y			5.7	1 4	21 1
134	CMT-MO73 X TRM73 CM43381-D-1Y-4M-3Y-4M-1Y-0B			5 7	0 8	2 5
164	HER77-NAC76 CM46782-10M-1Y-4M-1Y-0Y			5 7	5 0	18 4

Table 12 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	HEL S 0-9	STEM RUST	LEAF RUST
			NOBS	(5)	(23)	(27)
173	BSV50-CAN"S" X VEE"S" CM47768-A-1M-1Y-5M-2Y-2Y-0M			5 7	1 0	8 1
108	CROW"S" CM40457-5M 3Y-1M-2Y-0M			5 7	12 2	4 6
156	COC75 BJY"S" CM46452-12M-1Y-5M-1Y-0Y			5 7	8 1	1 7
142	JUP73-EMU"S" X GJO"S" CM43598-II-8Y-1M-5Y-0M			5 7	19 6	7 5
89	MOR"S" CM37130-15Y-1M-3Y-0M			5 8	13 4	24 2
143	LIRA"S" CM43903-H-2Y-1M-2Y-1M-1Y-1M-0Y			5 8	3 6	5 2
144	LIRA"S" CM43903-H-2Y-1M-5Y-1M-1Y-1M-0Y			5 8	1 2	3 9
19	MAYA74"S"-MON"S" CM29251-3M-17Y-4M-0Y-35Y-0B			5 8	12.3	5 5
21	MAYA74"S"-MON"S" CM29251-4M-3Y-2M-2Y-18-0Y			5 8	8 8	8 1
115	DGA-BJY"S" CM40610-22Y-3M-2Y-1M-1Y-1M-0Y			6 0	22 0	24 0
31	BUC"S" CM31678-R-4Y-2M-500Y-506M-501Y- 501M-502Y-0M			6 0	15 5	10 8
121	YACO"S" CM41195-A-13M-2Y-3M-1Y-1M-0Y			6 0	15 6	4 9
114	DGA-BJY"S" CM40510-22Y-1M-2Y-3M-0Y			6 0	12 4	14 7
129	C'4D X YMH-T0866/HUAC"S" CM43330-L-2Y-3M-1Y-1M-1Y-2M-0Y			6 0	1 8	11 4
177	[(KT-BQ X FN-U/BZA)TRM73]ALDAN"S" CM47941-G-2M-1Y-4M-1Y-0Y			6 0	10 1	13 6
88	MOR"S" CM37130-15Y-1M-1Y-0M			6 0	10 7	23 2
155	HER77-SAP"S" CM46060-3Y-2M-1Y-2Y-0M			6 0	16 6	19 8
183	FURY-SLM75 X ALDAN"S" CM47967-H-4M-2Y-4M-2Y-0Y			6 0	2 7	6 0
184	IA662-ZP"S" X ALDAN"S" CM47978-AA-3M-2Y-1M-2Y-0Y			6 0	4 6	14 4
159	BLT"S"-PVN76"S" CM46715-11Y-1M-1Y-2Y-0M			6 0	15 4	24 2
33	BUC"S" CM31678-R-4Y-2M-500Y-503M-500Y- 500M-501Y-0 1-113B-0Y			6 0	13 7	14 2
147	LIRA"S" CM43903-H-4Y-1M-2Y-2M-2Y-0B			6 0	1 1	5 9
189	BUC"S"-BJY"S' CM49541-9Y-1M-1Y-1Y-0M			6 0	19 5	14.7
94	SAP"S"-HUAC"S" CM40394-3Y-2M-2Y-2M-1Y-1M-0Y			6 0	7 6	10 8
14[illegible]	'IRA"S" CM43903-H-4Y-2M-1Y-2M-1Y-0B			6 0	2 4	10 6
138	COC75 X MD-VG9052/SIS"S" CM43469-F-1Y-1M-1Y-1M-2Y-0B			6 0	23 8	15 1
100	"LOCAL CHECK"			6 0	14 7	13 1
80	"LOCAL CHECK"			6 0	14 4	15 1
119	YACO"S" CM41195-A-13M-2Y-0M			6 0	17 9	3 7

Table 12 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	HEL S 0-9	STEM RUST	LEAF RUST
			NOBS.	(5)	(23)	(27)
167	F3 71-T171REGEL X ANA75 CM47441-0-1M-1Y-4M-1Y-0Y			6 0	3 7	2 2
40	"LOCAL CHECK"			6 3	16 4	10 9
28	BUC"S" CM31678-R-4Y-2M-500Y-501M-500Y-500M-0Y			6 3	9 7	14 3
87	FURY-ANA75 CM37027-37Y-2M-4Y-1M-3Y-0M			6 3	22 2	11 5
191	BUC-BJY"S" CM49641-9Y-1M-4Y-0Y			6 3	17 6	17 9
93	DOVE"S" CM38199-A-1Y-7M-0Y-93Y-0B			6.3	4 6	15.5
94	MAYA74"S"-NAC76 CM39424-1Y-1M-4Y-1M-2Y-1M-0Y			6.3	11 9	9 1
170	KKU-TOL73 X NAC76 CM47615-A-1M-2Y-2M-4Y-2Y-0M			6 3	3 5	6 0
190	BUC"S"-BJY"S" CM49641-9Y-1M-1Y-5Y-0M			6.3	18 0	20 2
166	FATH-FLK"S" CM46851-4Y-2M-2Y-1Y-0M			6.3	8 4	30 2
135	CMT-M073 X TRM73 CM43381-D-1Y-4M-4Y-1M-1Y-0B			6.3	1 1	1.4
112	HI666-PVN"S" CM40608-8Y-2M-1Y-2M-1Y-0B			6 3	1 7	9.5
32	BUC"S" CM31678-R-4Y-2M-506M-502Y-500M-0Y			6.3	13 9	12 0
120.	"LOCAL CHECK"			6 3	18 1	13 0
128	CND X YMH-TOB66/HUAC"S" CM43330-L-2Y-2M-1Y-1M-1Y-0B			6 3	3 5	9 4
27	PEW"S" CM31630-I-1Y-2M-5Y-0M-114B-0Y			6 5	5 4	19 4
29	BUC"S" CM31678-R-4Y-2M-500Y-501M-502Y-502M-0Y			6 5	8 9	12 9
30	BUC"S" CM31678-R-4Y-2M-500Y-506M-500Y-500M-0Y			6.5	14 7	12 4
26	PEW"S" CM31630-I-1Y-2M-5Y-0M-95B-0Y			6 5	6 7	21 1
34	BUC"S" CM31678-R-4Y-2M-500Y-509M-500Y-501M-500Y-0M			6 7	16 2	11 7
182	FURY-SLM75 X ALDAN"S" CM47967-H-4M-2Y-4M-1Y-0Y			6 7	3 3	6 4
202	BUC"S"-PVN"S" CM32359-12M-2Y-4B-4Y-0B			6 7	5 0	14 2
137	CMT-M073 X TRM73 CM43381-D-1Y-4M-4Y-2M-3Y-1M-0Y			6 7	1 1	4 8
141	JUP73-EMU"S" X OJO"S" CM43598-II-8Y-1M-3Y-1M-2Y-0B			6 7	20 2	7 8
139	CMT-COC75 X PLO CM43473-J-1Y-3M-1Y-2M-1Y-1M-0Y			6 7	1 3	11 4
118	PAT7268-HORK"S" CM40803-2M-2Y-2M-1Y-1M-3Y-0B			6 7	11 8	11 1
20	"LOCAL CHECK"			6 7	16 0	14 4
136	CMT-M073 X TRM73 CM43381-D-1Y-4M-4Y-2M-2Y-0B			6 7	0 9	1 5

Table 12 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	HEL S 0-9	STEM RUST	LEAF RUST
			NOBS	(5)	(23)	(27)
18	MAYA74"S' MON"S" CM29251-3M-17Y-1M-1Y-1B-0Y			6 7	13 8	2 0
25	PEW"S" CM31630-I-1Y-2M-4Y-0M-125B-0Y			6 7	10 5	22 4
123	TOB66-CNO X TOB66-ERA/BJY"S" CM42376-15Y-1M-1Y-2M-0Y			6 7	7 3	22 2
79	MAI"S"-PJ62 X EMU"S" CM33254-T-1M-1Y-6M-500Y-0M-96Y- 0B			6 7	6 5	6 8
140	"LOCAL CHECK"			6 7	19 7	17 4
41	KOEL"S" CM34574-F-1M-14Y-0M-111Y-0B			6 8	7 1	6 5
23	TAN"S" CM30697-2M-8Y-1M-1Y-1B-0Y			6 8	1 7	22 0
22	SPRW"S"-BJY"S" CM30137-1M-1Y-1M-1Y-1B-0Y			6 8	8 2	27 5
150	{COC75[(FN-TH X K58N/MY54-N10B X AN" ")TT-SN64 X BZA]}[(FR316/MCM-KT X Y50)ZA75]BJY"S" CM43956-A-1Y-1M-3Y-0M			7 0	7 7	7 0
17	ANI"S" CM26346-A-11Y-1M-3Y-1N-1Y-0B			7 0	11.0	6 8