

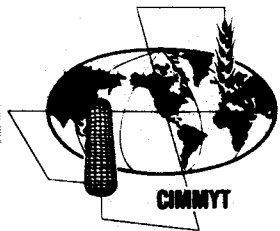


# Results of the Thirteenth International Triticale Screening Nursery (ITSN) 1981-82



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**CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO**  
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**GLOSSARY OF VARIABLE NAMES USED IN THE TABLES.**  
**GLOSARIO DE NOMBRES VARIABLES USADOS EN LAS TABLAS.**  
**GLOSSAIRE DES NOMS DES VARIABLES UTILISES DANS LES TABLEAUX.**

TABLE ABBREVIATION	VARIABLE NAME	NOMBRE DE LA VARIABLE	NOM DE LA VARIABLE
ALT BLT	Alternaria blight (0-9 scale)	Tizón por Alternaria (escala 0-9)	Alternaria (échelle 0-9)
ANT DMGE	Ant Damage percentage	Porcentaje de daño de hormigas	Dégâts dus aux fourmis en pourcentage
APHD DMGE	Aphid damage percentage	Porcentaje de daño de áfidos	Dégâts dus aux pucerons en pourcentage
ARMY WORM	Army worm percentage	Porcentaje de gusano cogollero	Chenille soldat en pourcentage
BACT STRP	Bacterial stripe (0-9 scale)	Rayado bacteriano (escala 0-9)	Rayée bacterienne (échelle 0-9)
BACT B	Bacterial blight (0-9 scale)	Tizón bacteriano (escala 0-9)	Tache bacterienne (échelle 0-9)
BARL S	Barley stripe (0-9 scale)	Rayado de la cebada (escala 0-9)	Moucheture de l'orge (échelle 0-9)
BIRD DMGE	Bird damage percentage	Porcentaje de daño de pájaros	Dégâts dus 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 <sup>2</sup>	Ears per square meter	Espigas o mazorcas por metro cuadrado	Epis par mètre <sup>2</sup>
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 a la floraison
FRST DMGE	Frost damage percentage	Porcentaje de daño por heladas	Dégâts par la gelée en pourcentage
FUS N	Fusarium nivale (0-9 scale)	Moho niveo (escala 0-9)	Moissure 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 dus 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 <sup>2</sup> )
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)	Mildew 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 raíz	Putréfaction du maïs 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)	Rhynchosporium (échelle 0-9)
SDMT INDX	Sedimentation index (cc)	Índice de sedimentación (cc)	Indice de sédimentation (cc)
SEED TYPE	Seed type (L=large, M=medium, S=small)	Tipo de semilla (L=grande, M=mediano, S=pequeño)	Type de grain (L=large, M=moyen, S=petit)
SEPT NODO	Septoria nodorum (0-9 scale)	Septoria nodorum (escala 0-9)	Septoria nodorum (échelle 0-9)
SEPT SPP.	Septoria spp. (0-9 scale)	Septoria spp. (escala 0-9)	Septoria spp. (échelle 0-9)
SEPT TRIT	Septoria tritici (0-9 scale)	Septoria tritici (escala 0-9)	Septoria tritici (échelle 0-9)
SHTR HEAD	Shattering head (%/o)	Porcentaje de desgrane	Chute de grains en pourcentage
SMLS SMUT	Semi-loose smut percentage	Porcentaje de carbón semi-volador	Charbon semi-nu en pourcentage
SPOT BLOT	Spot blotch (0-9 scale)	Tizón de la hoja (escala 0-9)	Tache de la feuille (échelle 0-9)
SPOT BLOTCH/HELM SATV	Spot blotch (0-9 scale)	Tizón de la hoja (escala 0-9)	Tache de la feuille (échelle 0-9)
STEM RUST	Stem rust (Cobb scale)	Roya del tallo (escala de Cobb)	Rouille noire (échelle de Cobb)
STRP RT.H	Stripe rust (head) percentage	Porcentaje de roya lineal (espiga)	Rouille jaune sur l'épi en pourcentage
STRP RT. L	Stripe rust (leaf) (Cobb scale)	Roya lineal (hoja) (escala de Cobb)	Rouille jaune sur feuilles (échelle de Cobb)
TAN S	Tan spot (0-9 scale)	Mancha de cobre (escala 0-9)	Tache de cuivre (échelle 0-9)
TEST WT	Test weight (kg/hi)	Peso hectolítrico (kg/hi)	Poids spécifique (kg/hi)
1000 G.W.	1000 grain weight (grams)	Peso de 1000 granos (gramos)	Poids de 1000 grains (grames)
YELL BERR	Yellow berry percentage	Porcentaje de panza blanca	Mitadinage en pourcentage
YIELD KG/HA	Yield kg/ha	Rendimiento kg/ha	Rendement kg/ha

# RESULTS OF THE 13TH INTERNATIONAL TRITICALE SCREENING NURSERY

(ITSN) 1981-82

The 13th International Triticale Screening Nursery (ITSN) was sent in September 1981 to be grown by cooperators in their spring season of 1982. One hundred nurseries went to cooperators in 67 countries. The 172 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.

Fifty-five of the cooperators receiving the 13th ITSN 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	$[(5 + 10)/2][(0.4 + 0.2)/2] = 2.25$

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 INCLUDED
6	AFRICA	EGYPT	CAIRO	3 4 7 9
14	AFRICA	KENYA	RIFT VALLEY	8 50
35	AFRICA	TUNISIA	TUNIS	50
80	EUROPE	POLAND	DANKOW	1 2 3 9 13 50
84	EUROPE	PORTUGAL	ALENTEJO	3 4 7 8 50
88	EUROPE	SPAIN	MADRID	1 3 4 9 10 50
99	MIDDLE EAST	IRAN	CORGAN	3 4 9
104	MIDDLE EAST	JORDAN	JORDAN VALLEY	3 4 9
119	OCEANIA	NEW ZEALAND	MANAMATU	1 2 77
121	NORTH AMERICA	CANADA	MANITOBA	1 3 4 9
126	NORTH AMERICA	MEXICO	GUANAJUATO	1 4
128	NORTH AMERICA	MEXICO	EDO DE MEXICO	1 2 3 4 7 9 13
129	NORTH AMERICA	MEXICO	EDO DE MEXICO	1 2 3 9 13
132	NORTH AMERICA	MEXICO	SONORA	1 2 3 9 13
133	NORTH AMERICA	MEXICO	SONORA	1 2 13
143	NORTH AMERICA	U. S. A.	SOUTH DAKOTA	3 7
161	SOUTH AMERICA	BRAZIL	RIO GRANDE DO SUL	7
164	SOUTH AMERICA	COLOMBIA	CUNDINAMARCA	3 4 6 64
169	SOUTH AMERICA	ECUADOR	QUITO, PICHINCHA	
190	AFRICA	SOUTH AFRICA	CAPE PROVINCE	3 9 50 62
211	ASIA	TAIWAN	TAIPEI	1 3 4 9 13 45
213	CARIBBEAN	DOMINICAN REP.	SANTIAGO	3 4 9 70
232	EUROPE	FRANCE	MONTPELLIER	3 9 10 50
265	NORTH AMERICA	MEXICO	CHIHUAHUA	1 3 4
270	NORTH AMERICA	U. S. A.	GEORGIA	1 3 7 9
328	NORTH AMERICA	MEXICO	MICHOACAN	1 3 4 7 9 70
350	SOUTH AMERICA	PARAGUAY	CAUCUPE	7 8
351	NORTH AMERICA	MEXICO	TLAXCALA	1 2 3 4 9 13
356	SOUTH AMERICA	BOLIVIA	SANTA CRUZ	3 4 7 8 10 50
363	MIDDLE EAST	SYRIA	ALEPPO	1 3 50
368	MIDDLE EAST	CYPRUS	ATHALASSA	3 9 50
372	ASIA	INDIA	WEST BENGAL	4 7 9 80
382	AFRICA	ZAMBIA	NORTHERN PROVINCE	3 50 68
386	ASIA	BANGLADESH	JAMALPUR	1 3 4 70
421	AFRICA	TANZANIA	IRINGA	1 3 50 64
426	SOUTH AMERICA	BRAZIL	PARANA	36 50 70
427	SOUTH AMERICA	BRAZIL	PARANA	36 50 70
433	MIDDLE EAST	QATAR	BARADA	1 3 4 9 50
442	ASIA	NEPAL	KABRE	1 3 4 7 50 70
457	CENTRAL AMERICA	COSTA RICA	ALAJUELA	1 3 4 9 10
459	AFRICA	BURUNDI	MURAMUYIA	7
462	SOUTH AMERICA	ARGENTINA	LA PAMPA	3 9 25
467	NORTH AMERICA	CANADA	SASKATCHEWAN	50
472	EUROPE	SPAIN	BADAJOS	1 3 50



Table 1 (con't.).

LOCATION	CONTINENT	COUNTRY	AREA	VARIABLES INCLUDED
476	ASIA	BURMA	SOUTHERN SHAN STATE	3 4 7 9 13
477	EUROPE	NORWAY		1 3 4 9 13
484	NORTH AMERICA	CANADA	QUEBEC	50 77
496	EUROPE	POLAND	KRAKOW	3 4 7 9 64
497	OCEANIA	NEW ZEALAND	CANTERBURY	3 9 50
498	NORTH AMERICA	MEXICO	MICHOACAN	1 3 4 9 62
511	EUROPE	BELGIUM	WEMBLoux	1 3 4 9
513	SOUTH AMERICA	BRAZIL	PARANA	3 4 7 8 9 50
541	SOUTH AFRICA	BRAZIL	R. S.	36 50 64
542	AFRICA	BURUNDI	MURAMUYA	7
543	AFRICA	UPPER VOLTA		50

\*VARIABLE IDENTIFICATIONS

1	YIELD	KG/HA	2	TEST	WT	3	FLOW	DAYS	4	MAT	DAYS	6	STRP	RT. H
7	LEAF	RUST	8	STEM	RUST	9	PLNT	HT	10	LODG	%	13	1000	G. W.
25	FRST	DMGE	36	SCAB	%	43	EARS	/M2	50	CHECK	MARK	62	SEP T	0-9
64	SEP S	0-9	68	SPT B	0-9	70	HEL S	0-9	77	BYDV	0-9	80	L FIR	0-9

**Table 2. Summary of means of all variables**

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT. H	LEAF RUST	STEM RUST	MOBS:					
											( 24 )	( 7 )	( 38 )	( 26 )	( 1 )	( 16 )
1	CANANEA79			3757.3	63.4	86.2	137.3	0.0	1.0	3.3						
2	BEAGLE			4188.4	63.8	89.1	142.3	10.0	13.2	8.5						
3	CABORCA79			3734.9	65.7	86.2	138.5	0.0	0.8	20.0						
4	CHIVA"S"			4131.4	66.9	88.1	141.7	0.0	5.8	16.7						
5	RAHUM			4013.6	64.1	85.6	138.2	0.0	0.5	13.3						
6	ARABIAN			3683.2	64.8	88.1	141.8	0.0	18.3	1.9						
7	SETTER			3846.5	65.1	93.7	141.3	0.0	4.6	3.3						
8	NAVDJDA			3646.0	64.9	88.9	142.6	0.0	7.1	13.3						
9	MUSKOX"S" X-15570-5M-1Y-1M-3Y-0M			4468.6	65.8	93.3	144.2	0.0	2.7	0.1						
10	MUSKOX 658 X-15570			4431.6	69.2	89.8	144.3	0.0	5.9	6.7						
11	MULA"S" X-18330-3M-2Y-2M-1Y-2M-0Y			4343.2	66.4	93.4	147.2	0.0	10.0	7.0						
12	LECHON"S" X-27605-11M-1Y-1M-1Y-0M			4142.7	68.9	85.9	141.5	0.0	5.7	15.8						
13	LECHON"S" X-27605-11M-1Y-1M-1Y-2M-0Y			3941.9	68.8	86.5	140.8	0.0	6.5	19.0						
14	TIGRE"S" X-27947-22M-1Y-0M			4326.9	68.6	86.8	139.0	0.0	4.0	10.8						
15	JUPPA"S" X-28579-1KE-0KE-1Y-1B-0Y			3563.7	68.0	87.4	140.9	0.0	7.9	12.0						
16	M2A(2)-M1A X IA X-29557-H-3M-1Y-1M-2Y-2M-0Y			3490.7	67.4	91.2	140.0	0.0	3.5	18.0						
17	ABN-M1A X M2A X-29642-A-2M-500Y-500M-500Y-504B 500Y-501Y-0M			3561.8	68.5	87.6	140.8	0.0	7.4	8.5						
18	YE75 X IA-BUSH X-31095-1Y-1M-1Y-1M-1Y-0Y			3747.5	68.9	85.9	140.6	0.0	10.7	6.0						
19	YE75 X IA-BUSH X-31095-1Y-1M-1Y-1M-1Y-1Y-0M			3466.0	70.0	85.7	140.8	0.0	7.1	10.5						
20	YE75 X IA-BUSH X-31095-1Y-4M-1Y-3M-1Y-1Y-0M			3513.0	69.0	85.9	140.0	0.0	23.4	6.2						
21	M2A-BULK2925 X-31158-1Y-2M-2Y-2M-1Y-0Y			3694.0	65.8	93.9	145.2	0.0	11.3	14.7						
22	BCM"S"-IA X-31186-6Y-4M-1Y-2M-0Y			4278.3	65.3	86.5	140.3	0.0	1.7	11.5						
23	M1A-IA X-31247-2Y-1M-2Y-4M-1Y-0Y			3898.0	68.4	86.4	140.2	0.0	16.7	6.5						
24	M1A-IA X-31247-2Y-1M-2Y-3M-1Y-1Y-0M			3865.8	68.0	87.4	138.9	0.0	16.4	4.5						
25	CANANEA79			3882.3	63.5	85.8	137.1	0.0	5.5	8.0						
26	IA X M2A-ARM"S" X-34657-B-3M-1Y-1M-2Y-0Y			3931.4	66.5	84.9	139.2	0.0	8.6	14.0						
27	PTR"S"-STR"S" X-31730-A-1Y-1M-1Y-1M-2Y-1Y-0M			4121.5	68.1	86.3	137.3	0.0	10.8	1.0						
28	PTR"S"-CASTOR"S" X-31731-8Y-3M-1Y-2M-1Y-1Y-0M			3998.0	71.7	88.9	138.8	0.0	5.4	3.1						
29	PTR"S"-CASTOR"S" X-31731-10Y-1M-2Y-1M-1Y-1Y-0M			3771.3	69.4	91.2	140.9	0.0	7.1	12.7						
30	PTR"S"-STR"S" X-31730-E-3Y-1M-1Y-1M-0Y			3905.6	65.6	88.2	141.5	0.0	1.9	5.3						

VTY	PLNT HT	LOAD %	1000 G.M.	FRST DNAGE	SCAB %	EARS /M2	CHECK MARK	SEP T 0-9	SEP S 0-9	SPT B 0-9	MEL S 0-9	BYDV 0-9	L FIR 0-9
	( 28 )	( 4 )	( 9 )	( 1 )	( 3 )	( 1 )	( 23 )	( 2 )	( 4 )	( 1 )	( 6 )	( 2 )	( 1 )
1.	99.2	56.0	41.2	100.0	38.0	114.0	8.7	5.5	3.5	7.0	5.0	5.5	7.0
2	113.4	24.5	45.2	33.0	16.5	106.0	39.1	3.5	3.0	3.0	3.4	4.0	6.0
3	91.9	56.0	37.9	100.0	13.0	112.0	0.0	6.0	3.5	7.0	5.8	5.5	6.0
4	93.0	56.0	39.8	100.0	17.7	102.0	21.7	5.5	3.5	6.0	4.7	5.0	7.0
5	98.5	67.0	41.0	100.0	13.0	82.0	8.7	5.0	3.5	7.0	5.8	5.0	7.0
6	90.0	67.0	41.9	100.0	38.0	104.0	17.4	6.0	4.3	5.0	6.0	5.0	6.0
7	97.5	67.0	36.8	100.0	13.0	122.0	17.4	4.0	3.8	6.0	6.0	5.5	6.0
8	91.0	67.0	38.9	67.0	13.0	102.0	8.7	5.0	3.8	7.0	5.8	5.5	6.0
9	106.9	28.5	44.5	33.0	29.0	116.0	21.7	4.0	3.3	4.0	5.3	4.0	7.0
10	110.7	44.0	44.7	33.0	22.5	94.0	34.8	3.5	3.3	5.0	5.0	3.5	6.0
11	108.5	-----	46.3	0.0	0.0	106.0	30.4	3.0	3.3	5.0	5.0	5.0	7.0
12	91.9	44.0	41.3	100.0	38.0	106.0	4.3	4.5	4.0	6.0	5.3	4.0	6.0
13	91.0	22.0	40.6	100.0	25.0	98.0	0.0	5.0	3.5	8.0	6.0	4.0	6.0
14	99.1	22.0	41.7	100.0	16.5	104.0	30.4	4.5	4.5	7.0	5.4	5.0	7.0
15	95.9	44.0	38.1	100.0	16.5	112.0	17.4	4.5	4.5	5.0	5.0	5.0	6.0
16	96.8	16.5	40.5	67.0	35.0	128.0	13.0	4.5	3.3	7.0	4.8	5.5	6.0
17	87.0	33.0	37.0	67.0	13.0	110.0	26.1	6.0	3.8	8.0	6.5	4.5	6.0
18	98.6	33.0	36.5	100.0	22.5	126.0	13.0	4.0	4.3	8.0	5.2	4.5	6.0
19	97.9	33.0	33.9	100.0	32.5	110.0	13.0	3.0	4.0	7.0	5.0	4.5	6.0
20	94.2	16.5	35.8	67.0	22.5	96.0	8.7	3.0	4.0	7.0	5.4	5.5	7.0
21	96.1	22.0	37.5	67.0	22.5	112.0	17.4	2.5	3.3	5.0	5.2	5.5	6.0
22	96.2	27.3	41.2	100.0	39.0	106.0	21.7	4.0	4.5	6.0	5.0	4.5	6.0
23	91.1	44.0	39.2	100.0	25.0	96.0	17.4	4.0	5.5	7.0	6.0	5.0	7.0
24	94.0	33.0	37.6	67.0	25.0	122.0	8.7	5.0	5.8	7.0	6.3	5.0	6.0
25	98.1	22.0	41.6	100.0	13.0	116.0	4.3	5.5	5.3	6.0	6.0	6.0	6.0
26	89.1	16.5	42.6	33.0	38.0	102.0	8.7	6.0	5.3	7.0	6.0	5.0	6.0
27	91.9	22.0	42.9	0.0	13.0	110.0	30.4	5.0	4.5	7.0	5.8	4.5	5.0
28	102.0	11.0	40.1	33.0	13.0	162.0	21.7	4.0	4.8	7.0	6.0	6.0	6.0
29	97.9	22.0	36.7	33.0	16.5	110.0	26.1	3.0	4.0	4.0	4.4	5.5	6.0
30	95.7	22.0	43.1	33.0	26.5	134.0	30.4	4.5	3.8	6.0	5.6	5.0	5.0

Table 2 (con't.).

VITY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT H	LEAF RUST	STEM RUST	NOBS:			
											( 24 )	( 7 )	( 38 )	( 26 )
31	PTR"S"-CASTOR"S" X-31731-8Y-3M-1Y-1M-0Y			3794.8	71.0	87.0	138.6	0.0	7.2	8.0				
32	PTR"S"-CASTOR"S" X-31731-8Y-3M-1Y-2M-1Y-0Y			3817.1	70.6	87.1	141.3	0.0	8.1	5.8				
33	PTR"S"-CASTOR"S" X-31731-10Y-1M-1Y-2M-0Y			3814.8	69.9	86.1	141.3	0.0	21.4	14.8				
34	PTR"S"-CASTOR"S" X-31731-10Y-1M-2Y-0M			3923.3	69.8	86.3	141.4	0.0	13.9	3.0				
35	PTR"S"-CASTOR"S" X-31731-10Y-1M-2Y-1M-1Y-0Y			4186.8	70.1	89.6	141.4	0.0	10.8	10.7				
36	PND"S"-ABN X-31785-5Y-1M-1Y-1M-1Y-0Y			3708.5	65.5	83.2	141.5	0.0	5.6	13.0				
37	RAT"S" X-31976-A-1Y-500M-501Y-500B-503Y 501Y-0M			4088.1	67.3	86.3	138.6	0.0	1.1	6.5				
38	RAT"S" X-31976-A-1Y-500M-501Y-500B-503Y 504Y-0M			3949.4	66.9	85.8	140.8	0.0	0.8	8.3				
39	M2A(2)-YE75 X-32034-4M-1Y-1M-2Y-0Y			3655.6	67.2	86.3	140.3	0.0	1.9	16.6				
40	GIRAF"S" X-32636-2Y-3B-1Y-5B-1Y-1B-0Y			4611.5	67.2	91.1	145.0	10.0	1.8	2.5				
41	GIRAF"S" X-32636-2Y-3B-4Y-3B-6Y-0Y			4269.2	66.1	91.1	145.2	5.0	3.1	0.0				
42	GIRAF"S" X-32636-2Y-4B-1Y-1B-4Y-1B-0Y			4207.7	66.6	93.2	145.8	0.0	1.3	0.0				
43	GIRAF"S" X-32636-2Y-4B-2Y-2B-3Y-0Y			4547.1	66.8	92.6	145.8	0.0	1.0	0.0				
44	MEX64-K664 X M1A/YE"R" X-32972-A-1Y-1M-1Y-1M-1Y-0Y			4497.1	68.9	91.6	141.8	0.0	6.4	0.4				
45	MEX64-K664 X M1A/YE"R" X-32972-A-1Y-1M-1Y-2M-2Y-0Y			4347.6	68.0	92.7	142.0	0.0	4.7	0.3				
46	LEMMING"S" X-33208-I-500Y-500M-500Y-503B- 503Y-0Y			3841.0	67.3	88.0	142.7	0.0	5.0	18.0				
47	LEMMING"S" X-33208-I-500Y-505M-500Y-500B- 503Y-504Y-0M			3195.1	64.7	88.1	140.4	0.0	1.0	0.0				
48	MISI X IA-IRA/16B.3-BGL"S" X-33312-C-1Y-1M-1Y-1M-2Y-0Y			3834.6	68.5	86.4	139.0	0.0	18.1	0.7				
49	M74.103-ADX/BGL"S"-M2A X IRA X-33470-C-1Y-3M-2Y-2M-0Y			3794.7	70.6	90.2	144.3	0.0	21.6	0.0				
50	LOCAL CHECK			4333.5	65.0	87.8	143.4	-----	29.0	15.5				
51	STR-PND"S" X-34530-110H-1Y-1M-1Y-0Y			3540.5	68.8	89.6	139.5	0.0	6.6	7.6				
52	STR-PND"S" X-34530-564H-1Y-1M-1Y-0Y			3471.3	71.2	85.3	137.8	0.0	6.5	20.0				
53	BCH"S" X IA-BUSH X-34590-9Y-1M-1Y-0Y			4414.9	68.0	88.1	140.6	0.0	14.4	13.0				
54	BCH"S" X IA-BUSH X-34590-9Y-1M-2Y-0Y			3983.8	68.5	88.6	140.2	0.0	14.4	15.1				
55	CASTOR"S" X IRA-CAL X-34727-1M-1Y-1M-1Y-1Y-0M			4236.8	68.2	88.9	141.3	0.0	2.3	1.0				
56	PTR"S"-QZL"S" X-34819-11M-1Y-1M-0Y			3699.2	68.6	82.8	139.7	0.0	6.4	0.3				
57	PTR"S"-QZL"S" X-34819-500M-501Y-500B-500Y-503Y 0M			3461.1	70.4	81.8	139.6	0.0	5.4	0.3				

VTY	PLNT HT	LODC %	1000 G.W.	FRST DMGE	SCAB %	EARS /M2	CHECK MARK	SEP T 0-9	SEP S 0-9	SPT B 0-9	HEL S 0-9	BYDV 0-9	L FIR 0-9
	( 28)	( 4)	( 9)	( 1)	( 3)	( 1)	( 23)	( 2)	( 4)	( 1)	( 6)	( 2)	( 1)
31	97.9	22.0	40.0	67.0	13.0	150.0	13.0	4.5	3.8	7.0	6.3	5.5	5.0
32	101.2	22.0	39.4	33.0	13.0	140.0	21.7	3.0	4.3	7.0	6.0	6.0	6.0
33	94.3	33.0	43.6	67.0	25.0	186.0	8.7	3.5	4.0	8.0	5.8	5.5	7.0
34	95.1	22.0	43.0	67.0	22.5	126.0	26.1	4.0	4.5	6.0	4.6	4.5	6.0
35	99.2	44.0	39.0	67.0	16.5	136.0	26.1	3.0	3.5	6.0	4.8	5.0	5.0
36	85.9	22.0	36.5	100.0	25.0	102.0	0.0	5.0	4.5	7.0	6.5	4.5	6.0
37	89.6	22.0	42.4	100.0	0.0	144.0	17.4	4.0	4.3	8.0	5.8	4.5	6.0
38	89.9	22.0	44.0	100.0	0.0	128.0	17.4	4.5	4.5	8.0	5.8	4.0	6.0
39	99.7	44.0	42.9	67.0	13.0	110.0	8.7	6.0	3.8	7.0	6.0	5.5	7.0
40	104.5	56.0	48.6	0.0	0.0	132.0	30.4	3.5	3.8	5.0	5.3	4.5	5.0
41	104.6	56.0	47.2	33.0	0.0	150.0	26.1	3.5	3.0	6.0	5.8	4.5	5.0
42	106.1	44.0	45.1	0.0	0.0	114.0	34.8	3.0	3.5	6.0	4.8	5.0	6.0
43	105.6	44.0	43.1	33.0	0.0	106.0	21.7	3.0	3.3	7.0	5.3	5.0	6.0
44	97.8	16.5	42.6	33.0	22.5	148.0	26.1	4.5	3.5	6.0	4.8	5.5	7.0
45	98.0	22.0	40.0	33.0	22.5	98.0	21.7	4.0	4.0	8.0	5.4	5.5	6.0
46	92.0	22.0	39.9	33.0	29.0	118.0	21.7	3.5	3.3	6.0	5.2	5.0	7.0
47	72.4	22.0	32.8	33.0	13.0	144.0	4.3	6.0	5.5	8.0	5.8	4.5	7.0
48	87.3	11.0	37.7	33.0	13.0	124.0	13.0	5.0	3.8	7.0	5.8	5.5	6.0
49	107.0	33.0	43.3	67.0	25.0	116.0	39.1	3.0	3.3	2.0	5.5	3.5	7.0
50	103.4	33.0	40.8	0.0	10.0	96.0	17.4	4.0	5.0	6.0	5.3	4.5	-----
51	93.1	16.5	36.7	67.0	0.0	122.0	21.7	4.5	4.0	4.0	5.3	5.0	6.0
52	94.3	22.0	40.7	100.0	0.0	118.0	13.0	5.0	4.8	5.0	5.3	4.0	6.0
53	90.9	33.0	40.7	67.0	13.0	132.0	17.4	3.0	3.8	3.0	5.5	4.5	7.0
54	91.1	33.0	39.6	100.0	24.3	130.0	17.4	3.0	4.3	6.0	4.3	4.5	6.0
55	95.3	22.0	45.3	100.0	16.5	104.0	21.7	3.0	3.5	2.0	5.2	5.5	6.0
56	88.5	22.0	44.6	100.0	38.0	114.0	8.7	5.5	4.3	7.0	6.3	4.5	5.0
57	86.7	22.0	42.1	100.0	38.0	110.0	8.7	5.0	3.8	8.0	6.3	4.5	6.0

Table 2 (con't.).

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT. H	LEAF RUST	STEM RUST	NOBS:						
											( 24 )	( 7 )	( 38 )	( 26 )	( 1 )	( 16 )	( 5 )
58	PTR"S"-M1A X-34824-501M-500Y-501B-503Y-501Y OH			3771.1	69.4	84.9	139.8	0.0	1.2	5.3							
59	PTR"S"-M1A X-34824-501M-500Y-501B-503Y-507Y OH			3868.5	68.7	89.4	143.1	0.0	0.8	7.8							
60	PTR"S"-M1A X-34824-501M-500Y-504B-500Y-501Y OH			4127.5	71.1	88.9	143.1	0.0	1.3	9.0							
61	PTR"S"-M1A X-34824-501M-500Y-504B-504Y-501Y OH			3495.9	69.9	88.9	142.8	0.0	1.4	36.3							
62	PTR"S"-M1A X-34824-501M-500Y-505B-500Y-502Y OH			3821.2	68.3	88.5	140.4	0.0	1.4	19.5							
63	PTR"S"-M1A X-34824-501M-500Y-509B-500Y-506Y OH			3481.0	67.1	87.1	139.0	0.0	0.9	2.8							
64	ABN"R"-M1A X-35414-D-1M-1Y-2M-0Y			4205.3	68.1	85.8	141.1	0.0	2.0	2.5							
65	BOL"S" X IRA-BOL"S"/FS 477 X-35633-500H-502Y-506B-500Y-0Y			3352.4	66.4	86.4	139.0	0.0	31.3	6.6							
66	Z4			4907.6	66.9	85.7	140.2	0.0	14.5	7.5							
67	PND"S"-CASTOR"S" X-35781-30H-2Y-1M-1Y-1Y-OH			4063.3	70.4	90.2	139.9	0.0	1.8	4.5							
68	PND"S"-CASTOR"S" X-35781-82H-1Y-1M-1Y-1Y-OH			4956.1	67.4	86.4	139.3	0.0	10.6	9.0							
69	PND"S"-CASTOR"S" X-35781-121H-3Y-1M-3Y-2Y-OH			3850.7	70.8	87.9	137.3	0.0	12.0	11.0							
70	PND"S"-CASTOR"S" X-35781-182H-1Y-2M-1Y-0Y			4378.7	71.7	87.8	139.3	0.0	20.7	23.0							
71	PND"S"-CASTOR"S" X-35781-193H-3Y-1M-1Y-0Y			3051.5	70.4	83.7	134.8	0.0	2.7	6.5							
72	PND"S"-CASTOR"S" X-35781-241H-1Y-1M-1Y-1Y-OH			4291.0	70.4	88.2	139.8	0.0	3.5	11.0							
73	PND"S"-CASTOR"S" X-35781-497H-2Y-3M-3Y-0Y			4084.4	67.7	87.5	138.3	0.0	15.1	20.5							
74	PND"S"-LNC X-35786-658H-1Y-1M-1Y-2Y-OH			3842.8	68.9	87.2	137.8	0.0	7.6	22.1							
75	BEAGLE			4256.0	63.8	88.2	144.0	0.0	18.4	33.5							
76	PND"S"-LNC X-35786-658H-1Y-1M-1Y-3Y-OH			3814.0	72.3	85.9	138.0	0.0	4.7	22.2							
77	PND"S"-LNC X-35786-717H-1Y-2M-1Y-0Y			3415.2	70.9	88.2	138.3	0.0	0.5	18.5							
78	PND"S"-ADX"S" X-35905-423H-2Y-1M-1Y-1Y-OH			3430.4	71.3	85.4	137.0	0.0	11.5	5.1							
79	PND"S"-ADX"S" X-35905-423H-2Y-1M-1Y-2Y-OH			3539.5	70.6	85.0	137.1	0.0	9.6	0.3							
80	M2A-F8722 X MPE"R" X-36044-1M-1Y-1M-0Y			3593.8	69.6	84.1	137.8	0.0	16.9	10.0							
81	RM X BOL"S"-M2A/BCH"S" X-36135-7M-1Y-1M-0Y			4182.0	69.4	87.5	139.3	0.0	8.6	15.5							
82	IRA-M1A X-36445-16M-1Y-1M-0Y			4029.4	69.8	83.5	139.6	0.0	21.3	12.0							
83	PTR"S"-M1A X-36471-22M-2Y-1M-1Y-0Y			3831.1	70.2	84.3	137.6	0.0	0.8	11.0							
84	PTR"S"-M1A X-36471-22M-2Y-1M-2Y-2Y-OH			4070.2	71.2	84.9	138.1	0.0	0.9	15.1							

VTY	PLNT HT	LODGE %	1000 G W.	FRST DNDE	SCAB %	EARS /M2	CHECK MARK	SEP T 0-9	SEP S 0-9	SPT B 0-9	HEL S 0-9	BYDV 0-9	L FIR 0-9
	( 28)	( 4)	( 9)	( 1)	( 3)	( 1)	( 23)	( 2)	( 4)	( 1)	( 6)	( 2)	( 1)
58	91.2	22.0	42.4	100.0	13.0	114.0	17.4	5.0	3.8	6.0	5.5	5.0	6.0
59	93.8	22.0	43.3	67.0	22.5	118.0	26.1	3.5	3.8	7.0	4.3	5.0	7.0
60	91.4	16.5	43.6	67.0	30.0	124.0	21.7	4.0	4.8	7.0	5.0	4.5	6.0
61	90.7	33.0	43.2	33.0	29.0	108.0	13.0	4.5	5.0	6.0	5.4	4.5	6.0
62	91.7	33.0	40.9	67.0	22.5	100.0	13.0	4.5	5.3	6.0	5.6	5.5	7.0
63	96.0	42.0	41.8	67.0	30.0	120.0	0.0	4.0	3.5	7.0	5.8	5.0	6.0
64	92.7	27.0	36.8	33.0	0.0	92.0	21.7	5.0	4.8	8.0	5.8	5.0	7.0
65	87.3	33.0	41.2	67.0	63.0	120.0	0.0	6.0	4.0	6.0	5.0	5.0	6.0
66	111.6	48.0	47.3	67.0	38.0	140.0	56.5	5.0	3.3	4.0	5.5	3.0	4.0
67	96.5	23.3	35.2	67.0	20.0	204.0	34.8	3.0	3.3	6.0	4.8	5.0	6.0
68	96.5	44.0	39.7	100.0	25.0	166.0	21.7	4.5	4.0	7.0	6.0	5.0	7.0
69	93.6	22.0	37.4	67.0	22.5	196.0	13.0	4.5	4.3	8.0	5.6	4.5	6.0
70	101.4	44.0	44.7	67.0	16.5	148.0	30.4	6.0	4.0	6.0	5.3	5.0	6.0
71	92.3	56.0	41.6	100.0	25.0	128.0	4.3	7.5	5.3	9.0	6.3	5.5	6.0
72	99.7	22.0	40.9	100.0	25.0	140.0	21.7	4.0	5.0	7.0	5.5	5.5	7.0
73	96.0	33.0	36.9	67.0	25.0	132.0	0.0	5.0	4.5	7.0	5.5	5.0	6.0
74	91.9	33.0	37.8	67.0	13.0	150.0	17.4	4.0	3.8	7.0	6.0	5.5	6.0
75	112.6	19.0	45.1	33.0	25.0	112.0	13.0	4.0	3.3	7.0	5.3	4.5	5.0
76	89.4	22.0	40.3	100.0	13.0	138.0	21.7	6.5	3.5	8.0	5.8	5.5	6.0
77	91.5	33.0	35.1	67.0	16.5	128.0	17.4	5.0	4.0	5.0	5.2	6.5	7.0
78	92.9	33.0	41.1	67.0	63.0	112.0	8.7	6.0	4.3	7.0	6.0	6.0	6.0
79	93.2	33.0	39.0	67.0	63.0	94.0	4.3	6.0	5.3	7.0	6.0	5.5	6.0
80	90.5	33.0	39.9	100.0	25.0	166.0	4.3	6.5	5.0	7.0	7.8	6.0	7.0
81	97.3	33.0	42.8	67.0	21.7	150.0	17.4	4.0	3.5	5.0	5.5	7.0	6.0
82	92.9	33.0	37.6	67.0	10.0	140.0	13.0	5.0	4.0	8.0	5.6	6.0	7.0
83	85.9	33.0	37.0	67.0	63.0	110.0	8.7	5.5	3.3	8.0	6.0	4.5	6.0
84	89.1	22.0	41.5	67.0	13.0	168.0	8.7	4.5	4.5	7.0	5.8	4.0	7.0

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT H	LEAF RUST	STEM RUST	NOBS:									
											( 24 )	( 7 )	( 38 )	( 26 )	( 1 )	( 16 )	( 5 )			
85	PND"S"-RM X-36517-558H-1Y-1M-1Y-0Y			3720.7	69.5	89.9	140.2	0.0	4.0	16.0										
86	PND"S"-RM X-36517-782H-3Y-1M-1Y-0Y			3706.1	68.2	84.4	140.8	0.0	5.1	15.1										
87	PND"S"-RM X-36517-782H-3Y-1M-2Y-2Y-0H			3442.5	67.7	84.3	140.3	0.0	6.5	13.3										
88	BTA"B"-LNC X-36535-2H-2Y-1M-2Y-0Y			4257.0	68.8	90.5	142.9	0.0	2.3	5.0										
89	IRA-CAL X BCM X-37314-9M-1Y-1M-1Y-0Y			3623.1	67.4	88.1	138.5	0.0	0.3	0.9										
90	Z.9			4402.8	70.6	85.8	139.1	0.0	16.1	5.5										
91	PG"S"-CENT. BULK X ABN/MPE X-38714-45H-5Y-1Y-0H			3922.0	66.2	88.9	140.2	0.0	6.6	2.0										
92	PTR"S"-M1A X-38824-501M-500Y-504B-500Y-504Y OH			3773.6	69.5	87.4	140.2	0.0	1.5	11.0										
93	PTR"S"-M1A X-38824-501M-500Y-504B-500Y-505Y OH			3792.6	69.6	89.5	141.4	0.0	1.4	11.6										
94	PND"S"-LNC X-39243-5Y-1M-1Y-0Y			3502.8	67.8	83.3	137.4	0.0	1.4	9.2										
95	PND"S"-OPR X-39253-21Y-1M-4Y-0Y			4007.2	70.8	84.7	137.4	0.0	1.0	11.0										
96	PND"S"-M1A X-39246-11Y-2M-1Y-0Y			3279.9	69.3	86.2	137.0	0.0	1.3	12.0										
97	MSF"S"-FAWN"S" X-39335-2Y-2M-1Y-0Y			3806.3	68.7	83.8	136.7	0.0	0.5	9.5										
98	FS477-CASTOR"S" X-39461-14Y-2M-2Y-0Y			3687.3	67.5	82.9	136.4	0.0	2.1	8.0										
99	PTR"S" X CIN-FS65B X-39595-4Y-2M-2Y-0Y			4067.4	69.4	85.5	138.2	0.0	0.9	1.3										
100	CABORCA 79 (TCL)			4005.0	67.0	86.6	137.9	0.0	3.8	9.0										
101	PAVON 76 (HARI)			3439.2	77.3	87.0	138.2	0.0	17.1	12.5										
102	PTR"S" X CIN-FS65B X-39597-4Y-2M-1Y-2Y-0H			3798.1	70.0	87.3	139.6	0.0	3.9	0.8										
103	PTR"S"-PND"S" X-39599-7Y-1M-1Y-2Y-0H			3973.0	69.9	87.6	138.0	0.0	1.6	0.3										
104	IRA-CAL X PTR"S" X-39609-6Y-1M-1Y-0Y			3921.6	66.4	87.8	140.3	0.0	0.3	0.3										
105	CHL"S"-KAL X IA-IRA X-39651-1Y-1M-2Y-1Y-0H			3091.1	70.1	85.8	136.2	0.0	5.9	2.8										
106	PG"S"-CENT. BULK X ABN/IRA-CHL X-39697-7Y-1M-2Y-0Y			5029.7	68.4	92.8	144.0	0.0	11.9	22.8										
107	PTR"S"-MA106 X-39860-2Y-7M-1Y-0Y			3854.6	67.6	86.2	141.1	0.0	8.5	2.3										
108	PTR"S"-MA106 X-39860-7Y-1M-2Y-2Y-0H			3456.2	68.4	86.1	140.9	0.0	0.4	0.0										
109	PTR"S"-MA106 X-39860-7Y-1M-3Y-0Y			4050.8	69.1	83.9	137.1	0.0	0.5	0.2										
110	PTR"S"-MA106 X-39860-7Y-1M-3Y-2Y-0H			3974.4	67.4	85.6	137.9	0.0	0.8	0.1										
111	PTR"S"-MA106 X-39860-7Y-2M-2Y-0Y			4117.9	69.5	87.5	142.7	0.0	0.4	0.3										
112	PTR"S"-MA106 X-39860-7Y-2M-3Y-2Y-0H			4344.1	68.2	85.1	139.7	0.0	0.4	0.0										
113	PTR"S"-MA106 X-39860-7Y-3M-1Y-2Y-0H			3830.0	68.6	86.6	138.7	0.0	1.5	0.0										



VTY	PLNT HT	LODG %	1000 G. W.	FRST DNGE	SCAB %	EARS /M2	CHECK MARK	SEP T 0-9	SEP S 0-9	SPT B 0-9	MEL S 0-9	BYDV 0-9	L FIR 0-9
	( 28)	( 4)	( 9)	( 1)	( 3)	( 1)	( 23)	( 2)	( 4)	( 1)	( 6)	( 2)	( 1)
85	93.1	33.0	35.8	33.0	42.5	118.0	30.4	4.0	4.0	6.0	5.6	5.5	7.0
86	89.6	67.0	39.0	67.0	13.0	142.0	8.7	5.0	4.5	7.0	5.8	5.0	6.0
87	87.9	67.0	37.8	67.0	13.0	96.0	8.7	6.0	4.0	8.0	6.0	5.5	7.0
88	113.9	52.7	49.9	0.0	0.0	140.0	30.4	4.0	3.5	4.0	5.5	4.0	6.0
89	94.1	56.0	41.4	67.0	41.5	136.0	17.4	4.0	3.8	6.0	4.6	6.0	6.0
90	108.6	56.0	50.2	67.0	25.0	112.0	34.8	3.5	3.5	6.0	5.5	3.0	7.0
91	88.7	56.0	41.6	67.0	13.0	140.0	17.4	5.5	4.5	8.0	6.0	6.0	6.0
92	91.6	56.0	42.7	67.0	16.5	142.0	17.4	5.5	5.0	7.0	5.2	6.0	6.0
93	90.6	56.0	43.2	67.0	29.0	136.0	13.0	4.0	4.5	6.0	4.8	6.0	7.0
94	88.6	56.0	39.3	67.0	13.0	150.0	0.0	6.0	4.3	8.0	6.8	6.0	6.0
95	89.3	56.0	42.1	67.0	25.0	106.0	26.1	5.0	4.3	8.0	6.3	5.5	6.0
96	98.3	44.0	39.4	67.0	25.0	122.0	4.3	6.0	5.3	8.0	6.5	6.5	6.0
97	102.2	44.0	38.7	100.0	50.0	138.0	13.0	6.0	5.0	8.0	6.5	5.5	7.0
98	95.7	44.0	46.3	100.0	13.0	135.0	4.3	5.5	4.8	8.0	6.3	6.0	6.0
99	91.0	44.0	43.4	100.0	38.0	146.0	8.7	6.0	3.5	6.0	6.0	5.0	7.0
100	93.0	56.0	38.1	100.0	0.0	120.0	4.3	5.0	4.3	8.0	6.8	4.5	6.0
101	86.5	33.0	38.6	33.0	50.0	128.0	0.0	5.5	4.3	9.0	5.3	6.0	7.0
102	89.5	16.5	41.0	67.0	13.0	134.0	47.8	5.0	4.3	8.0	6.5	5.0	7.0
103	89.5	33.0	39.1	67.0	16.5	146.0	26.1	5.5	3.8	8.0	6.0	5.0	6.0
104	84.7	33.0	39.7	100.0	24.3	134.0	17.4	5.0	3.8	7.0	4.8	5.0	6.0
105	89.3	33.0	38.4	100.0	13.0	136.0	8.7	7.5	5.8	9.0	6.5	5.5	5.0
106	111.9	56.0	48.3	33.0	0.0	106.0	52.2	3.0	2.8	2.0	4.8	3.5	5.0
107	85.8	56.0	41.7	100.0	13.0	144.0	8.7	7.0	3.8	8.0	6.0	5.0	6.0
108	78.6	33.0	35.5	67.0	16.5	160.0	8.7	6.0	4.3	8.0	5.4	4.5	6.0
109	81.5	16.5	38.8	67.0	36.5	120.0	30.4	7.5	4.0	8.0	5.6	5.0	7.0
110	82.7	33.0	37.0	100.0	0.0	130.0	8.7	7.0	3.5	7.0	5.7	5.5	6.0
111	84.6	33.0	39.0	100.0	16.5	140.0	13.0	6.5	3.3	8.0	6.0	4.5	6.0
112	86.7	22.0	39.7	67.0	26.5	124.0	26.1	6.5	3.3	6.0	5.6	4.5	6.0
113	91.9	20.0	36.4	100.0	13.0	94.0	26.1	6.0	3.5	6.0	5.8	4.5	7.0

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD	TEST	FLOW	MAT	STRP	LEAF	STEM
				KG/HA	WT	DAYS	DAYS	RT. H	RUST	RUST
				NOBS: ( 24)	( 7)	( 38)	( 26)	( 1)	( 16)	( 5)
114	PTR"S"-MA106 X-39860-7Y-5M-1Y-0Y			3787.1	68.9	87.2	142.0	0.0	1.9	0.6
115	PTR"S" X IGA-IRA X-39862-3Y-1M-1Y-0Y			3542.1	70.2	89.2	141.2	0.0	1.7	0.0
116	FAMN-M1A X-38864-16Y-2M-1Y-0Y			3999.1	70.5	85.5	136.4	0.0	1.8	7.6
117	CHA-CHAPALA X SPY/TERRIER X-40120-8Y-1M-2Y-0Y			3674.3	67.9	87.2	138.4	0.0	14.1	1.9
118	(KLA X OCTO-HEXA/IRA-CAL)M1A X-40912-J-1Y-1M-1Y-0Y			3584.2	71.2	84.0	137.4	0.0	5.8	10.4
119	M2A-CIN X M1A/PO"S"-CENT. BULK X ABN X-40933-D-1Y-3M-1Y-0Y			3755.3	69.6	85.9	136.6	0.0	0.6	4.2
120	PTR"S" X OCTO BULK-ARB/CASTOR"S" X-40941-T-1Y-1M-1Y-0Y			3802.2	67.5	86.9	137.8	0.0	9.8	0.0
121	M2A X IRA-CAL/IGA X-40994-AB-1Y-1M-2Y-1Y-0H			3869.7	69.5	88.0	139.3	0.0	0.1	6.7
122	M2A X IRA-CAL/IGA X-40994-V-1Y-2M-1Y-0Y			3678.4	70.0	85.5	138.0	0.0	0.3	6.7
123	M2A-CIN X IRA-CML/IGA X-41021-G-1Y-2M-2Y-0Y			3249.7	69.0	84.3	137.5	0.0	8.0	0.0
124	M2A(2)-1A X MPE"S"-M2A X-41033-K-2Y-2M-1Y-0Y			3691.2	67.0	84.6	138.7	0.0	12.8	5.0
125	CANANEA 79 (TCL)			3915.7	63.8	85.7	137.2	0.0	6.1	5.1
126	BCM"S" X M2A-IRA/FS1897 X IRA-CAL X-41047-A-1Y-2M-1Y-3Y-0H			3709.8	71.7	85.3	138.6	0.0	1.7	15.1
127	BCM"S" X M2A-IRA/FS1897 X IRA-CAL X-41047-A-1Y-2M-1Y-2Y-0H			3845.8	72.0	84.4	139.1	0.0	0.5	16.7
128	M2A-CIN X ABN/CASTOR"S"-DACH X-41061-A-1Y-1M-2Y-0Y			3262.9	68.7	84.3	141.2	0.0	2.3	0.7
129	M2A(2) X IRA-CAL/M2A-FS722 X BCM"S" X-41250-V-1Y-2M-1Y-0Y			3329.4	67.5	85.9	140.8	0.0	3.0	5.0
130	IRA(2) X M2A-CML/IA-TERRIER X-41312-H-1Y-1M-1Y-0Y			4251.5	68.8	85.5	140.3	0.0	3.4	15.6
131	BTA"S"-YO"R" X M1A-M2A(2) X-41441-C-2Y-6M-1Y-0Y			4422.1	67.3	86.6	140.3	0.0	4.5	1.0
132	M2A-IRA X TRR"R" X-44407-1M-1Y-2Y-0H			3468.9	67.8	85.7	140.1	0.0	1.2	15.0
133	CML-M2A X PTR"S" X-45306-6M-1Y-2Y-0H			4337.0	67.2	86.1	142.3	0.0	5.5	1.4
134	WELSH X KAL-BB X-46937-2B-3Y-1B-0Y			4079.7	66.5	87.9	141.7	0.0	1.0	20.1
135	WELSH X KAL-BB X-46937-5B-1Y-1B-0Y			4063.5	65.7	88.0	142.2	0.0	0.8	20.3
136	WELSH X KAL-BB X-46937-5B-1Y-7B-0Y			3999.7	66.8	88.2	141.6	0.0	1.2	23.0
137	TRR"R"-MPE/PND"S" X M2A-IRA X-47220-A-2M-1Y-1Y-0H			2996.5	71.4	85.3	136.9	0.0	9.4	17.8
138	(IGA/UM940"S"-ARM"S" X IRA-BGL"S") MPE"S"/IRA-M2A X BUSH X-47373-A-1M-2Y-1Y-0H			3786.1	68.0	87.6	139.7	0.0	3.3	10.8
139	LT338. 75-GPR X-51544-120C-0B			3843.8	69.0	86.2	140.4	0.0	6.7	10.5
140	CMH74. 1211-BGL(4) CMH77A. 1122-7B-3Y-1B-501Y-0M			3570.3	67.2	88.6	140.5	0.0	8.2	0.0
141	JUANILLO			4515.6	67.3	88.9	141.8	0.0	22.5	2.8
142	JUANILLO 230			4836.3	67.0	89.8	142.2	0.0	22.5	5.5

VTY	PLNT HT	LODG %	1000 Q. W.	FRST DMGE	SCAB %	EARS /M2	CHECK MARK	SEP T 0-9	SEP S 0-9	SPT B 0-9	HEL S 0-9	BYDV 0-9	L FIR 0-9
	( 28)	( 4)	( 9)	( 1)	( 3)	( 1)	( 23)	( 2)	( 4)	( 1)	( 6)	( 2)	( 1)
114	87.4	33.0	35.4	67.0	13.0	90.0	21.7	6.0	3.3	7.0	5.8	5.0	6.0
115	89.5	16.5	41.5	67.0	35.0	112.0	17.4	6.0	3.5	6.0	5.4	5.5	6.0
116	93.0	44.0	41.1	67.0	25.0	116.0	34.8	6.0	4.3	8.0	5.8	5.5	7.0
117	94.2	27.5	42.7	100.0	25.0	76.0	17.4	6.0	4.3	7.0	5.8	5.5	7.0
118	89.1	22.0	37.6	100.0	13.0	100.0	4.3	7.0	4.3	8.0	6.8	6.0	6.0
119	94.9	16.5	40.5	100.0	42.5	110.0	34.8	6.0	4.8	8.0	5.8	6.0	7.0
120	93.0	16.5	43.6	100.0	38.0	134.0	21.7	6.0	5.0	6.0	5.5	6.0	5.0
121	88.9	22.0	38.5	67.0	22.5	190.0	17.4	6.0	5.3	7.0	6.4	6.0	6.0
122	92.3	22.0	41.8	100.0	38.0	130.0	8.7	7.5	5.8	8.0	6.0	5.0	6.0
123	92.0	22.0	40.9	67.0	38.0	122.0	8.7	7.0	5.5	7.0	5.8	4.5	7.0
124	83.6	44.0	37.2	100.0	13.0	120.0	8.7	6.5	5.0	8.0	5.8	6.0	6.0
125	97.8	24.0	40.7	100.0	13.0	156.0	8.7	6.0	4.0	8.0	5.5	5.5	6.0
126	95.1	44.0	38.3	100.0	36.5	130.0	30.4	6.0	3.8	6.0	5.0	5.5	7.0
127	91.8	44.0	40.8	100.0	13.0	108.0	21.7	6.0	3.8	6.0	5.5	5.0	6.0
128	89.5	44.0	42.0	100.0	50.0	160.0	13.0	4.5	4.3	7.0	5.8	6.0	6.0
129	89.2	56.0	36.5	67.0	13.0	200.0	13.0	5.0	4.8	7.0	6.0	6.0	7.0
130	89.1	22.0	39.9	100.0	13.0	112.0	13.0	5.0	4.3	8.0	5.8	5.0	7.0
131	99.1	16.5	43.5	67.0	22.5	124.0	39.1	3.5	4.5	7.0	5.4	5.0	5.0
132	89.9	27.5	39.6	67.0	29.0	106.0	13.0	5.0	4.8	6.0	5.8	5.5	-----
133	92.1	44.0	42.5	67.0	13.0	116.0	13.0	4.5	4.3	7.0	6.3	5.0	6.0
134	90.4	56.0	39.2	67.0	16.5	146.0	30.4	5.0	4.3	8.0	5.4	5.0	6.0
135	91.8	56.0	38.7	33.0	13.0	110.0	13.0	5.0	4.5	8.0	6.0	5.0	7.0
136	91.0	33.5	40.4	67.0	13.0	124.0	21.7	5.0	4.3	8.0	7.3	4.5	6.0
137	86.8	56.0	37.1	67.0	50.0	126.0	8.7	6.5	4.5	6.0	7.7	5.5	6.0
138	88.7	56.0	38.5	33.0	13.0	122.0	13.0	5.0	4.3	7.0	7.7	5.5	7.0
139	90.1	33.0	32.3	67.0	22.5	178.0	26.1	6.0	4.0	7.0	6.3	4.5	-----
140	106.3	27.0	42.5	33.0	25.0	156.0	17.4	4.5	3.0	4.0	7.0	4.5	6.0
141	115.6	11.0	48.8	67.0	38.0	138.0	34.8	3.5	3.5	5.0	4.7	3.5	7.0
142	117.1	11.0	50.0	67.0	38.0	134.0	34.8	3.5	2.8	5.0	5.0	4.0	6.0

Table 2 (con't.).

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD	TEST	FLOW	MAT	STRP	LEAF	STEM
				KG/HA	WT	DAYS	DAYS	RT. H	RUST	RUST
				NOBS: ( 24)	( 7)	( 38)	( 26)	( 1)	( 16)	( 5)
143	JUANILLO 231			4467.3	68.4	89.3	142.1	0.0	20.8	5.5
144	JUANILLO 234			4385.8	67.5	89.7	142.3	0.0	20.8	4.3
145	JUANILLO			4559.8	68.7	90.4	142.3	0.0	22.0	5.6
146	LYNX"S"-M1A B-2182-1Y-1Y-0Y			3517.7	69.3	83.8	137.6	0.0	3.8	10.5
147	BGL-COG X IRA-CML B-2264			4751.2	69.7	91.9	143.8	0.0	4.4	3.0
148	JUANILLO-M1A B-2637			4272.6	69.9	89.6	143.0	0.0	21.5	4.1
149	IRA-BGL X DRIRA-KANG B-2658			4629.0	71.8	85.6	139.4	0.0	2.4	0.5
150	LOCAL CHECK			3780.7	66.1	86.7	144.3	---	26.4	10.1
151	IRA-BGL X DRIRA-KANG B-2658			4231.7	68.8	87.2	141.6	0.0	1.5	0.1
152	IRA-BGL X JUANILLO B-2659			4158.8	69.0	88.9	142.8	0.0	8.2	9.8
153	IRA-BGL X JUANILLO B-2659			4806.9	71.7	86.5	141.1	0.0	9.0	4.3
154	IRA-BGL X JUANILLO B-2659			4233.9	71.2	90.2	142.8	0.0	10.0	4.0
155	IRA-BGL X JUANILLO B-2659			4484.5	69.2	89.8	143.2	0.0	13.0	29.0
156	(IRA-BGL)(2) B-2670			3971.8	71.7	89.6	139.6	0.0	6.1	8.8
157	BGL DERIV (CIN-PI62 X PATO/BGL) B-2824			5283.9	68.2	89.8	144.7	0.0	26.4	10.8
158	IRA-BGL X JUANILLO B-2671			4631.1	71.3	92.0	144.2	0.0	3.7	13.6
159	IRA-BGL X JUANILLO B-2671			4181.3	69.7	92.0	144.8	0.0	16.9	11.0
160	IRA-BGL X MERINO"S" B-2672			4069.8	71.1	89.1	144.1	0.0	6.4	1.3
161	IRA-BGL X MERINO"S" B-2672			4075.7	70.1	89.1	142.9	0.0	1.4	19.6
162	IRA-BGL X MERINO"S" B-2672			4257.5	69.0	89.8	143.4	0.0	8.4	1.6
163	M2A-BUI X DRIRA-KANG B-2683			3940.1	67.3	84.9	138.2	0.0	21.2	15.0
164	CIN-CND X BGL/MERINO"S" B-2700			4244.5	70.3	89.7	143.5	0.0	2.5	15.6
165	CIN-CND X BGL/MERINO"S" B-2700			4280.3	72.6	89.0	141.5	90.0	4.9	30.9
166	CIN-CND X BGL/MERINO"S" B-2700			4306.2	72.0	88.1	140.9	0.0	5.0	36.0
167	CIN-CND X BGL/MERINO"S" B-2700			4142.3	71.8	87.8	142.5	0.0	4.8	19.5
168	MERINO"S"-JUANILLO B-2709			4522.7	68.8	88.8	142.9	0.0	2.5	6.7
169	MERINO"S"-JUANILLO B-2709			4795.4	69.0	89.0	143.0	0.0	6.9	10.2
170	MERINO"S"-JUANILLO B-2736			4444.0	68.8	89.4	143.7	0.0	2.3	6.7
171	M2A-BGL X JUANILLO B-2762			4234.9	68.7	95.5	145.5	60.0	7.1	9.3
172	M2A-BGL X JUANILLO B-2762			4487.5	67.8	96.5	146.5	60.0	9.8	7.7

VTY	PLNT HT	LOAD %	1000 G. W.	FRST DMGE	SCAB %	EARS /M2	CHECK MARK	SEP T 0-9	SEP S 0-9	SPT B 0-9	HEL S 0-9	BYDV 0-9	L FIR 0-9
	( 28)	( 4)	( 9)	( 1)	( 3)	( 1)	( 23)	( 2)	( 4)	( 1)	( 6)	( 2)	( 1)
143	117.4	12.3	49.3	67.0	38.0	190.0	30.4	3.5	2.8	5.0	5.0	4.0	7.0
144	115.0	11.0	48.7	67.0	38.0	180.0	39.1	3.0	2.8	5.0	6.7	3.0	6.0
145	115.9	9.0	50.9	100.0	38.0	110.0	21.7	3.0	3.5	4.0	5.0	3.0	7.0
146	97.0	22.0	44.3	100.0	10.0	136.0	4.3	6.0	3.3	7.0	6.3	5.5	6.0
147	109.2	11.0	46.3	33.0	11.0	140.0	56.5	3.0	4.3	5.0	4.6	3.0	6.0
148	115.8	13.3	44.6	33.0	38.0	158.0	22.7	3.0	4.0	6.0	7.0	4.0	6.0
149	105.3	11.0	47.2	33.0	50.0	160.0	43.5	5.5	4.5	7.0	7.7	4.0	7.0
150	101.2	22.0	43.0	0.0	13.0	118.0	4.3	7.0	4.3	6.0	8.0	5.0	---
151	108.1	22.0	49.6	33.0	50.0	192.0	26.1	6.0	3.5	7.0	5.5	4.5	6.0
152	110.7	22.0	49.8	33.0	13.0	130.0	13.0	4.0	3.5	5.0	5.8	4.5	7.0
153	113.1	22.0	49.7	67.0	13.0	136.0	47.8	4.0	4.0	7.0	6.0	3.5	6.0
154	114.5	21.0	47.7	67.0	38.0	160.0	30.4	3.5	3.8	3.0	5.0	3.5	6.0
155	110.5	22.0	48.0	33.0	25.0	134.0	17.4	3.5	3.3	4.0	5.0	4.5	7.0
156	106.9	18.5	44.7	0.0	0.0	136.0	21.7	5.0	3.5	7.0	6.0	4.0	6.0
157	114.0	14.0	47.4	0.0	10.0	144.0	34.8	4.0	3.5	5.0	5.4	4.5	6.0
158	116.6	10.7	45.7	0.0	25.0	156.0	34.8	4.5	3.3	6.0	6.3	4.5	5.0
159	114.1	10.7	47.8	33.0	13.0	130.0	21.7	3.5	3.5	4.0	5.8	4.5	6.0
160	118.4	16.5	49.5	0.0	25.0	140.0	21.7	3.5	3.3	5.0	5.8	4.5	5.0
161	111.9	36.0	44.3	33.0	25.0	150.0	21.7	4.0	3.5	7.0	6.0	4.5	6.0
162	113.6	22.0	50.2	0.0	25.0	98.0	8.7	3.0	2.5	7.0	5.5	5.0	6.0
163	103.5	22.0	44.0	33.0	13.0	142.0	21.7	5.5	2.8	7.0	6.5	3.5	7.0
164	108.0	22.0	43.0	0.0	13.0	114.0	47.8	4.0	2.5	5.0	4.8	3.5	6.0
165	107.8	22.0	45.5	33.0	13.0	170.0	47.8	4.0	2.3	4.0	5.5	3.0	7.0
166	106.9	13.5	44.0	0.0	13.0	134.0	39.1	4.0	2.3	4.0	5.0	3.5	6.0
167	104.6	22.0	45.2	33.0	13.0	182.0	26.1	4.0	2.5	4.0	5.5	3.0	7.0
168	112.5	9.0	49.8	67.0	63.0	130.0	21.7	4.5	3.0	6.0	5.8	4.5	6.0
169	117.5	29.3	50.9	67.0	63.0	152.0	21.7	4.0	2.5	6.0	5.0	4.0	7.0
170	115.1	23.0	50.0	100.0	25.0	146.0	30.4	4.0	2.3	6.0	5.5	4.0	6.0
171	110.9	20.7	43.2	33.0	0.0	132.0	17.4	3.5	3.8	5.0	5.0	4.0	6.0
172	109.9	28.5	42.7	0.0	0.0	144.0	34.8	3.5	3.3	3.0	4.8	4.0	7.0

Table 3. Top performance entries: Yield

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	YIELD KG/HA	TEST WT	FLOW DAYS	MAT DAYS	STRP RT. L	STRP RT. H	LEAF RUST
			NOBB:	( 24)	( 7)	( 38)	( 26)	( 6)	( 1)	( 16)
137	BGL DERIV (CIN-PI62 X PATO/BGL) B-2624			5283.9	68.2	89.8	144.7	0.0	0.0	26.4
106	PG"S"-CENT. BULK X ABN/IRA-CML X-39697-7Y-1M-2Y-0Y			5029.7	68.4	92.8	144.0	0.1	0.0	11.9
68	PND"S"-CASTOR"S" X-35781-82H-1Y-1M-1Y-1Y-0H			4956.1	67.4	86.4	139.3	0.3	0.0	10.6
66	Z4			4907.6	66.9	85.7	140.2	0.0	0.0	14.5
142	JUANILLO 230			4836.3	67.0	89.8	142.2	0.7	0.0	22.5
153	IRA-BGL X JUANILLO B-2659			4806.9	71.7	86.5	141.1	0.1	0.0	9.0
169	MERINO"S"-JUANILLO B-2709			4795.4	69.0	89.0	143.0	1.1	0.0	6.9
147	BGL-COO X IRA-CML B-2264			4751.2	69.7	91.9	143.8	0.1	0.0	4.4
198	IRA-BGL X JUANILLO B-2671			4631.1	71.3	92.0	144.2	0.0	0.0	3.7
149	IRA-BGL X DRIRA-KANG B-2658			4629.0	71.8	85.6	139.4	0.1	0.0	2.4
40	GIRAF"S" X-32636-2Y-3B-1Y-5B-1Y-1B-0Y			4611.5	67.2	91.1	145.0	7.5	10.0	1.8
145	JUANILLO			4599.8	68.7	90.4	142.3	1.6	0.0	22.0
43	GIRAF"S" X-32636-2Y-4B-2Y-2B-3Y-0Y			4547.1	66.8	92.6	145.8	6.8	0.0	1.0
168	MERINO"S"-JUANILLO B-2709			4522.7	68.8	88.8	142.9	0.4	0.0	2.5
141	JUANILLO			4515.6	67.3	88.9	141.8	0.9	0.0	22.5
44	MEX64-KB64 X MIA/YE"R" X-32972-A-1Y-1M-1Y-1M-1Y-0Y			4497.1	68.9	91.6	141.8	0.5	0.0	6.4
172	M2A-BGL X JUANILLO B-2762			4487.5	67.8	96.5	146.5	8.1	60.0	9.8
155	IRA-BGL X JUANILLO B-2659			4484.5	69.2	89.8	143.2	0.2	0.0	13.0
9	MUSKOX"S" X-15570-5H-1Y-1M-3Y-0H			4468.6	65.8	93.3	144.2	0.2	0.0	2.7
143	JUANILLO 231			4467.3	68.4	89.3	142.1	1.3	0.0	20.8
170	MERINO"S"-JUANILLO B-2736			4444.0	68.8	89.4	143.7	0.1	0.0	2.3
10	MUSKOX 698 X-15570			4431.6	69.2	89.8	144.3	1.0	0.0	5.9
131	BTA"S"-YO"R" X MIA-M2A(2) X-41441-C-2Y-6M-1Y-0Y			4422.1	67.3	86.6	140.3	0.0	0.0	4.3
53	BCM"S" X IA-BUSH X-34390-9Y-1M-1Y-0Y			4414.9	68.0	88.1	140.6	0.0	0.0	14.4
90	Z.9			4402.8	70.6	85.8	139.1	0.4	0.0	16.1

Table 4. Top performance entries: Test weight

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	TEST WT	YIELD KG/HA	1000 O. M.		
						NOBS:	( 7)	( 24)
101	PAVON 76 (HARI)			77.3	3439.2		38.6	
165	CIN-CND X BGL/MERIND"S" B-2700			72.6	4280.3		45.5	
76	PND"S"-LNC X-35786-698H-1Y-1M-1Y-3Y-OH			72.3	3814.0		40.3	
127	BCH"S" X M2A-IRA/FS1897 X IRA-CAL X-41047-A-1Y-2M-1Y-2Y-OH			72.0	3845.8		40.8	
166	CIN-CND X BGL/MERIND"S" B-2700			72.0	4306.2		44.0	
167	CIN-CND X BGL/MERIND"S" B-2700			71.8	4142.3		45.2	
149	IRA-BGL X DRIRA-KANG B-2658			71.8	4629.0		47.2	
70	PND"S"-CASTOR"S" X-39781-182H-1Y-2M-1Y-0Y			71.7	4378.7		44.7	
133	IRA-BGL X JUANILLO B-2659			71.7	4806.9		49.7	
28	PTR"S"-CASTOR"S" X-31731-8Y-3M-1Y-2M-1Y-1Y-OH			71.7	3998.0		40.1	
126	BCH"S" X M2A-IRA/FS1897 X IRA-CAL X-41047-A-1Y-2M-1Y-3Y-OH			71.7	3709.8		38.3	
156	(IRA-BGL)(2) B-2670			71.7	3971.8		44.7	
137	TRR"R"-HPE/PND"S" X M2A-IRA X-47220-A-2M-1Y-1Y-OH			71.4	2996.8		37.1	
78	PND"S"-ADX"S" X-38905-423H-2Y-1M-1Y-1Y-OH			71.3	3430.4		41.1	
158	IRA-BGL X JUANILLO B-2671			71.3	4631.1		45.7	
52	STR-PND"S" X-34530-564H-1Y-1M-1Y-0Y			71.2	3471.3		40.7	
154	IRA-BGL X JUANILLO B-2659			71.2	4233.9		47.7	
84	PTR"S"-M1A X-36471-22H-2Y-1M-2Y-2Y-OH			71.2	4070.2		41.5	
118	(KLA X OCTO-HEXA/IRA-CAL)M1A X-40912-J-1Y-1M-1Y-0Y			71.2	3984.2		37.6	
160	IRA-BGL X MERIND"S" B-2672			71.1	4069.8		49.5	
60	PTR"S"-M1A X-34824-501M-300Y-504B-500Y-501Y OH			71.1	4127.5		43.6	
31	PTR"S"-CASTOR"S" X-31731-8Y-3M-1Y-1M-0Y			71.0	3794.8		40.0	

Table 5. Top performance entries: Days to flower

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	NOBS:		
				( 38)	( 26)	( 24)
57	PTR"S"-02L"S" X-34819-500H-501Y-500B-500Y-503Y OH			81.8	139.6	3461.1
56	PTR"S"-02L"S" X-34819-11H-1Y-1M-0Y			82.8	139.7	3699.1
98	FB477-CASTOR"S" X-39441-14Y-2H-2Y-0Y			82.9	136.4	3687.3
36	PND"S"-ASN X-31785-3Y-1M-1Y-1M-1Y-0Y			83.2	141.5	3708.9
94	PND"S"-LNC X-39243-5Y-1M-1Y-0Y			83.3	137.4	3502.8
82	IRA-M1A X-36445-16M-1Y-1M-0Y			83.5	139.6	4029.4
71	PND"S"-CASTOR"S" X-35781-192H-3Y-1M-1Y-0Y			83.7	134.8	3051.5
146	LYNX"S"-M1A B-2182-1Y-1Y-0Y			83.8	137.6	3517.7
97	MSF"S"-FAMN"S" X-39235-2Y-2H-1Y-0Y			83.8	136.7	3806.3
109	PTR"S"-MA106 X-39860-7Y-1M-3Y-0Y			83.9	137.1	4050.8
118	(KLA X OCTO-HEXA/IRA-CAL)M1A X-40912-1Y-1M-1Y-0Y			84.0	137.4	3584.2
80	M2A-F8722 X MPE"R" X-36044-1M-1Y-1M-0Y			84.1	137.8	3593.8
128	M2A-CIN X ASN/CASTOR"S"-DACH X-41061-A-1Y-1M-2Y-0Y			84.3	141.2	3262.9
87	PND"S"-RM X-36317-782H-3Y-1M-2Y-2Y-0H			84.3	140.3	3442.5
83	PTR"S"-M1A X-36471-22H-2Y-1M-1Y-0Y			84.3	137.6	3831.1
123	M2A-CIN X IRA-CML/IGA X-41021-0-1Y-2H-2Y-0Y			84.3	137.5	3249.7
127	SCM"S" X M2A-IRA/FS1897 X IRA-CAL X-41067-A-1Y-2H-1Y-2Y-0H			84.4	139.1	3845.8
124	M2A(2)-1A X MPE"S"-M2A X-41033-K-2Y-2H-1Y-0Y			84.6	138.7	3691.2
86	PND"S"-RM X-36317-782H-3Y-1M-1Y-0Y			84.6	140.8	3706.1
95	PND"S"-QPR X-39233-21Y-1M-4Y-0Y			84.7	137.4	4007.2
84	PTR"S"-M1A X-36471-22H-2Y-1M-2Y-2Y-0H			84.9	138.1	4070.2
163	M2A-BUI X DRIRA-KANG B-2683			84.9	138.2	3940.1
26	IA X M2A-ARM"S" X-34657-B-3H-1Y-1M-2Y-0Y			84.9	139.2	3931.4
58	PTR"S"-M1A X-34824-501H-500Y-501B-503Y-501Y OH			84.9	139.8	3771.1
79	PND"S"-ADX"S" X-35905-423H-2Y-1M-1Y-2Y-0H			85.0	137.1	3539.5
112	PTR"S"-MA106 X-39860-7Y-2H-3Y-2Y-0H			85.1	139.7	4344.1



Table 6. Top performance entries: Days to maturity

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN ORIGIN	MAT DAYS	FLOW DAYS	YIELD KG/HA
		NOBS:	( 26 )	( 38 )	( 24 )
71	PND"S"-CASTOR"S" X-35781-193H-3Y-1M-1Y-0Y		134.8	83.7	3031.5
105	CML"S"-KAL X IA-IRA X-39651-1Y-1M-2Y-1Y-0H		136.2	85.8	3091.1
98	FS477-CASTOR"S" X-39461-14Y-2M-2Y-0Y		136.4	82.9	3687.3
116	FAMN-M1A X-38864-16Y-2M-1Y-0Y		136.4	85.5	3999.1
119	M2A-CIN X M1A/PG"S"-CENT. BULK X ABN X-40933-D-1Y-3M-1Y-0Y		136.6	85.9	3735.3
97	MSF"S"-FAMN"S" X-39335-2Y-2M-1Y-0Y		136.7	83.8	3806.3
137	TRR"R"-MPE/PND"S" X M2A-IRA X-47220-A-2M-1Y-1Y-0H		136.9	85.3	2996.5
96	PND"S"-M1A X-39246-11Y-2M-1Y-0Y		137.0	86.2	3279.9
78	PND"S"-ADX"S" X-35905-423H-2Y-1M-1Y-1Y-0H		137.0	85.4	3430.4
25	CANANEA79		137.1	85.8	3882.3
-79	PND"S"-ADX"S" X-35905-423H-2Y-1M-1Y-2Y-0H		137.1	85.0	3539.5
109	PTR"S"-MA106 X-39860-7Y-1M-3Y-0Y		137.1	83.9	4050.8
125	CANANEA 79 (TCL)		137.2	85.7	3915.7
69	PND"S"-CASTOR"S" X-35781-121H-3Y-1M-3Y-2Y-0H		137.3	87.9	3850.7
1	CANANEA79		137.3	86.2	3757.3
27	PTR"S"-STR"S" X-31730-A-1Y-1M-1Y-1M-2Y-1Y-0H		137.3	86.3	4121.5
95	PND"S"-CPR X-39253-21Y-1M-4Y-0Y		137.4	84.7	4007.2
94	PND"S"-LNC X-39243-3Y-1M-1Y-0Y		137.4	83.3	3502.8
118	(KLA X OCTO-HEXA/IRA-CAL)M1A X-40912-J-1Y-1M-1Y-0Y		137.4	84.0	3584.2
123	M2A-CIN X IRA-CML/IGA X-41021-G-1Y-2M-2Y-0Y		137.5	84.3	3249.7
146	LYNX"S"-M1A B-2182-1Y-1Y-0Y		137.6	83.8	3517.7
83	PTR"S"-M1A X-36471-22M-2Y-1M-1Y-0Y		137.6	84.3	3831.1
120	PTR"S" X OCTO BULK-ARS/CASTOR"S" X-40941-T-1Y-1M-1Y-0Y		137.8	86.9	3802.2
80	M2A-FS722 X MPE"R" X-36044-1M-1Y-1M-0Y		137.8	84.1	3593.8
52	STR-PND"S" X-34530-564H-1Y-1M-1Y-0Y		137.8	85.3	3471.3
74	PND"S"-LNC X-35786-638H-1Y-1M-1Y-2Y-0H		137.8	87.2	3842.8
110	PTR"S"-MA106 X-39860-7Y-1M-3Y-2Y-0H		137.9	85.6	3974.4
100	CABORCA 79 (TCL)		137.9	86.6	4005.0

Table 7. Top performance entries: Leaf rust

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	NOBS:		
				( 16 )	( 5 )	( 1 )
121	MZA X IRA-CAL/IGA X-40994-AB-1Y-1M-2Y-1Y-OH			0.1	6.7	0.0
89	IRA-CAL X BCM X-37314-9M-1Y-1M-1Y-OY			0.3	0.9	0.0
104	IRA-CAL X PTR"S" X-39609-6Y-1M-1Y-OY			0.3	0.3	0.0
122	MZA X IRA-CAL/IGA X-40994-V-1Y-2M-1Y-OY			0.3	6.7	0.0
112	PTR"S"-MA106 X-39860-7Y-2M-3Y-2Y-OH			0.4	0.0	0.0
108	PTR"S"-MA106 X-39860-7Y-1M-2Y-2Y-OH			0.4	0.0	0.0
111	PTR"S"-MA106 X-39860-7Y-2M-2Y-OY			0.4	0.3	0.0
77	PND"S"-LNC X-35786-717M-1Y-2M-1Y-OY			0.5	18.5	0.0
127	BCM"S" X MZA-IRA/FS1897 X IRA-CAL X-41047-A-1Y-2M-1Y-2Y-OH			0.5	16.7	0.0
109	PTR"S"-MA106 X-39860-7Y-1M-3Y-OY			0.5	0.2	0.0
97	MSF"S"-FAMN"S" X-39335-2Y-2M-1Y-OY			0.5	9.5	0.0
5	RAHUM			0.5	13.3	0.0
119	MZA-CIN X M1A/PO"S"-CENT. BULK X ABN X-40933-D-1Y-3M-1Y-OY			0.6	4.2	0.0
110	PTR"S"-MA106 X-39860-7Y-1M-3Y-2Y-OH			0.8	0.1	0.0
3	CABORCA79			0.8	20.0	0.0
83	PTR"S"-M1A X-36471-2M-2Y-1M-1Y-OY			0.8	11.0	0.0
135	WELSH X KAL-BB X-46937-5B-1Y-1B-OY			0.8	20.3	0.0
38	RAT"S" X-31976-A-1Y-500M-501Y-500B-503Y 504Y-OH			0.8	8.3	0.0
59	PTR"S"-M1A X-34824-501M-500Y-501B-503Y-507Y OH			0.8	7.8	0.0
63	PTR"S"-M1A X-34824-501M-500Y-507B-500Y-508Y OH			0.9	2.8	0.0
84	PTR"S"-M1A X-36471-2M-2Y-1M-2Y-2Y-OH			0.9	15.1	0.0
99	PTR"S" X CIN-FB658 X-39393-4Y-2M-2Y-OY			0.9	1.3	0.0

**Table 8. Top performance entries: Stem rust**

VTV NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	STEM	LEAF	STRP	
				RUST	RUST	RT. H	
				NOBS	( 5)	( 16)	( 1)
108	PTR"S" -MA106 X-39860-7Y-1M-2Y-2Y-0H			0.0	0.4	0.0	
43	GIRAF"S" X-32636-2Y-4B-2Y-2B-3Y-0Y			0.0	1.0	0.0	
120	PTR"S" X OCTO BULK-ARS/CASTOR"S" X-40941-T-1Y-1M-1Y-0Y			0.0	9.8	0.0	
47	LEMMING"S" X-33208-I-500Y-505M-500Y-500B- 503Y-504Y-0M			0.0	1.0	0.0	
112	PTR"S" -MA106 X-39860-7Y-2M-3Y-2Y-0H			0.0	0.4	0.0	
49	W74 103-ADX/BGL"S"-M2A X IRA X-33470-C-1Y-3M-2Y-2M-0Y			0.0	21.6	0.0	
113	PTR"S" -MA106 X-39860-7Y-3M-1Y-2Y-0H			0.0	1.5	0.0	
115	PTR"S" X IGA-IRA X-39862-3Y-1M-1Y-1Y-0H			0.0	1.7	0.0	
140	CMH74 1211-BGL(4) CMH77A: 1122-7B-3Y-1B-501Y-0M			0.0	8.2	0.0	
41	GIRAF"S" X-32636-2Y-3B-4Y-3B-6Y-0Y			0.0	3.1	5.0	
42	GIRAF"S" X-32636-2Y-4B-1Y-1B-4Y-1B-0Y			0.0	1.3	0.0	
123	M2A-CIN X IRA-CML/IGA X-41021-G-1Y-2M-2Y-0Y			0.0	8.0	0.0	

**Table 9. Top performance entries: *Septoria tritici***

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	NOBS:	
				SEP T 0-9	SEP S 0-9
				( 2)	( 4)
21	M2A-BULK2925 X-31158-1Y-2M-2Y-2M-1Y-0Y			2.5	3.3
59	CASTOR"S" X IRA-CAL X-34727-1M-1Y-1M-1Y-1Y-0M			3.0	3.5
67	PND"S"-CASTOR"S" X-35781-30M-2Y-1M-1Y-1Y-0M			3.0	3.3
39	PTR"S"-CASTOR"S" X-31731-10Y-1M-2Y-1M-1Y-0Y			3.0	3.5
144	JUANILLO 234			3.0	2.8
49	W74. 103-ADX/BGL"S"-M2A X IRA X-33470-C-1Y-3M-2Y-2M-0Y			3.0	3.3
32	PTR"S"-CASTOR"S" X-31731-8Y-3M-1Y-2M-1Y-0Y			3.0	4.3
29	PTR"S"-CASTOR"S" X-31731-10Y-1M-2Y-1M-1Y-1Y-0M			3.0	4.0
19	YE75 X IA-BUSH X-31095-1Y-1M-1Y-1M-1Y-1Y-0M			3.0	4.0
53	BCM"S" X IA-BUSH X-34590-9Y-1M-1Y-0Y			3.0	3.8
43	GIRAF"S" X-32636-2Y-4B-2Y-2B-3Y-0Y			3.0	3.3
42	GIRAF"S" X-32636-2Y-4B-1Y-1B-4Y-1B-0Y			3.0	3.5
162	IRA-BGL X MERINO"S" B-2672			3.0	2.5
54	BCM"S" X IA-BUSH X-34590-9Y-1M-2Y-0Y			3.0	4.3
20	YE75 X IA-BUSH X-31095-1Y-4M-1Y-3M-1Y-1Y-0M			3.0	4.0
145	JUANILLO			3.0	3.5
11	MULA"S" X-18330-3M-2Y-2M-1Y-2M-0Y			3.0	3.3
147	BGL-COG X IRA-CML B-2264			3.0	4.3
106	PS"S"-CENT BULK X ABN/IRA-CML X-39697-7Y-1M-2Y-0Y			3.0	2.8
148	JUANILLO-MIA B-2627			3.0	4.0

Table 10. Top performance entries: Spot blotch

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	SPT B 0-9	MEL S 0-9
			NOBS:	( 1)	( 6)
49	M74. 103-ADX/BGL"S"-M2A X IRA X-33470-C-1Y-3M-2Y-2M-0Y			2.0	5.5
55	CASTOR"S" X IRA-CAL X-34727-1M-1Y-1M-1Y-1Y-0H			2.0	5.2
106	PG"S"-CENT. BULK X ABN/IRA-CML X-39697-7Y-1M-2Y-0Y			2.0	4.8
154	IRA-BGL X JUANILLO B-2659			3.0	5.0
2	BEAGLE			3.0	3.4
172	M2A-BGL X JUANILLO B-2762			3.0	4.8
53	BCM"S" X IA-BUSH X-34590-9Y-1M-1Y-0Y			3.0	5.5
88	BTA"S"-LNC X-36535-2H-2Y-1M-2Y-0Y			4.0	5.5
9	MUSKOX"S" X-13570-3M-1Y-1M-3Y-0M			4.0	5.3
51	STR-PND"S" X-34530-110H-1Y-1M-1Y-0Y			4.0	5.3
140	CMH74. 1211-BGL(4) CMH77A. 1122-7B-3Y-1B-301Y-0M			4.0	7.0
167	CIN-CND X BGL/MERINO"S" B-2700			4.0	5.5
66	Z4			4.0	5.5
29	PTR"S"-CASTOR"S" X-31731-10Y-1M-2Y-1M-1Y-1Y-0H			4.0	4.4
155	IRA-BGL X JUANILLO B-2659			4.0	5.0
145	JUANILLO			4.0	5.0
166	CIN-CND X BGL/MERINO"S" B-2700			4.0	5.0
165	CIN-CND X BGL/MERINO"S" B-2700			4.0	5.5
159	IRA-BGL X JUANILLO B-2671			4.0	5.8

Table 11. Top performance entries: Check mark

VTY NO.	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	CHECK MARK	YIELD NB/HA	TEST WT
			NEWS: ( 23) ( 24) ( 7)			
147	BOL-COG X IRA-CML B-2264			56.5	4751.2	69.7
66	Z4			56.5	4907.6	66.9
106	PQ"S"-CENT. BULK X ABN/IRA-CML X-39697-7Y-1M-2Y-0Y			52.2	5029.7	68.4
102	PTR"S" X CIN-FS658 X-39597-4Y-2M-1Y-2Y-0M			47.8	3798.1	70.0
164	CIN-CND X BOL/MERIND"S" B-2700			47.8	4244.5	70.3
133	IRA-BOL X JUANILLO B-2659			47.8	4806.9	71.7
165	CIN-CND X BOL/MERIND"S" B-2700			47.8	4280.3	72.6
149	IRA-BOL X DRIRA-KANG B-2658			43.5	4629.0	71.8
49	W74. 103-ADX/BOL"S"-M2A X IRA X-33470-C-1Y-3M-2Y-2M-0Y			39.1	3794.7	70.6
131	STA"S"-YO"R" X M1A-M2A(2) X-41441-C-2Y-6M-1Y-0Y			39.1	4422.1	67.3
166	CIN-CND X BOL/MERIND"S" B-2700			39.1	4306.2	72.0
144	JUANILLO 234			39.1	4385.8	67.5
2	BEAGLE			39.1	4188.4	63.8
172	M2A-BOL X JUANILLO B-2762			34.8	4487.5	67.8
141	JUANILLO			34.8	4515.6	67.3
67	PND"S"-CASTOR"S" X-35781-3M-2Y-1M-1Y-1Y-0M			34.8	4063.3	70.4
157	BOL DERIV (CIN-PI62 X PATD/BOL) B-2824			34.8	5283.9	68.2
158	IRA-BOL X JUANILLO B-2671			34.8	4631.1	71.3
90	Z. 9			34.8	4402.8	70.6
10	MUSKDX 658 X-15570			34.8	4431.6	69.2
116	FANN-M1A X-38864-16Y-2M-1Y-0Y			34.8	3999.1	70.5
42	GIRAF"S" X-32636-2Y-4B-1Y-1B-4Y-1B-0Y			34.8	4207.7	66.6
142	JUANILLO 230			34.8	4836.3	67.0
119	M2A-CIN X M1A/PQ"S"-CENT. BULK X ABN X-40933-D-1Y-3M-1Y-0Y			34.8	3755.3	69.6
134	WELSH X KAL-BB X-46937-2B-3Y-1B-0Y			30.4	4079.7	66.5
40	GIRAF"S" X-32636-2Y-3B-1Y-5B-1Y-1B-0Y			30.4	4611.5	67.2
109	PTR"S"-MA106 X-39860-7Y-1M-3Y-0Y			30.4	4050.8	69.1
88	STA"S"-LNC X-36535-2H-2Y-1M-2Y-0Y			30.4	4259.0	68.8
14	TIGRE"S" X-27947-22M-1Y-0M			30.4	4326.9	68.6

Table 11 (con't.)

VTY NO	VARIETY OR CROSS AND PEDIGREE	GRAIN	ORIGIN	CHECK	YIELD	TEST
				MARK	KG/HA	WT
				NOBS: ( 23)	( 24)	( 7)
27	PTR"S"-STR"S" X-31730-A-1Y-1M-1Y-1M-2Y-1Y-0H			30.4	4121.5	68.1
11	MULA"S" X-18330-3M-2Y-2M-1Y-2M-0Y			30.4	4343.2	66.4
85	PND"S"-RM X-36517-55BH-1Y-1M-1Y-0Y			30.4	3720.7	69.5
70	PND"S"-CASTOR"S" X-35781-182H-1Y-2M-1Y-0Y			30.4	4378.7	71.7
30	PTR"S"-STR"S" X-31730-E-3Y-1M-1Y-1M-0Y			30.4	3905.6	65.6
143	JUANILLO 231			30.4	4467.3	68.4
126	BCM"S" X M2A-IRA/FS1897 X IRA-CAL X-41047-A-1Y-2M-1Y-3Y-0H			30.4	3709.8	71.7
170	MERINO"S"-JUANILLO B-2736			30.4	4444.0	68.8
154	IRA-BGL X JUANILLO B-2657			30.4	4233.9	71.2

GRAIN TECHNOLOGY OF THE VARIETIES INCLUDED IN THE 13TH. ITSM, USING  
SEED FROM CIANO, YAQUI VALLEY, MEXICO (1980-81), DETERMINED IN  
CIMMYT WHEAT QUALITY LABORATORY

Lab. No.	Origin Y80-81	% Flour Yield	Grain Falling Number (SEC)	% Flour Protein	Sedimentation c.c.	Baking		Cookies Overall Rating
						Loaf Vol.	H <sub>2</sub> O % Abs.	
1992	S- 1	66.0	72	9.3	19	675	58.0	VG
1993	2	65.1	101	9.6	20	470	58.7	R
1994	3	60.0	91	9.4	23	695	58.0	VG
1995	4	61.2	172	9.6	19	625	58.0	R
1996	5	58.2	73	10.1	28	745	59.0	G
1997	6	63.8	116	9.0	19	590	58.1	R
1998	7	66.6	155	8.9	16	615	58.1	VG
1999	8	64.0	129	8.7	17	550	57.9	G
2000	9	58.8	74	9.3	29	560	59.4	R
2001	10	63.8	120	8.9	23	505	58.1	R
2002	11	67.9	172	8.8	19	450	58.1	R
2003	12	58.2	83	9.1	22	675	58.4	G
2004	13	58.4	81	9.3	23	710	58.4	G
2005	14	61.0	148	9.1	15	555	57.4	VG
2006	15	60.2	143	10.1	20	630	59.0	R
2007	16	62.8	118	9.2	25	660	58.4	G
2008	17	64.8	128	9.1	17	560	57.4	G
2009	18	60.1	183	10.3	22	705	59.3	VG
2010	19	61.0	173	10.1	22	735	59.3	R
2011	20	60.7	272	10.6	25	765	59.6	R
2012	21	67.1	238	10.0	17	660	58.0	VG
2013	22	66.8	247	8.7	13	475	56.9	VG
2014	23	69.3	226	8.8	19	720	58.1	VG
2015	24	69.4	163	9.0	18	745	58.1	VG
2016	25	64.7	93	9.0	20	745	58.1	VG
2017	26	67.3	201	9.3	21	625	58.4	VG
2018	27	65.8	122	8.8	11	500	57.1	VG
2019	28	63.0	260	9.4	12	535	57.7	VG
2020	29	64.4	131	9.1	10	445	56.4	VG
2021	30	67.3	304	8.9	16	650	58.1	G
2022	31	65.3	298	9.4	12	545	57.7	VG
2023	32	63.7	198	9.8	11	545	58.0	VG
2024	33	64.5	172	8.9	10	465	57.1	VG
2025	34	64.0	235	9.0	10	465	57.1	G
2026	35	64.4	137	9.7	10	480	57.0	VG
2027	36	59.7	100	9.2	21	625	58.4	R
2028	37	64.1	63	9.8	15	550	58.0	R
2029	38	62.8	67	9.7	16	585	58.0	R
2030	39	51.2	163	9.0	27	610	59.6	P
2031	40	64.7	62	9.3	24	545	58.4	P
2032	41	68.0	61	9.0	22	505	58.1	P
2033	42	68.6	72	8.7	21	540	57.9	R
2034	43	69.0	69	8.7	22	505	57.9	R
2035	44	69.1	252	9.5	11	460	56.7	VG
2036	45	66.3	153	9.6	12	470	56.7	G
2037	46	65.4	198	9.4	18	575	58.0	VG
2038	47	66.5	317	9.6	22	700	57.0	VG
2039	48	65.9	180	8.5	18	575	57.0	G
2040	49	67.0	63	8.7	23	545	58.9	R
2041	50	67.3	89	8.6	16	575	57.9	VG
2042	51	67.7	219	9.4	17	640	58.0	VG
2043	52	64.6	73	10.3	19	600	58.3	G
2044	53	64.6	94	8.6	17	570	57.9	VG
2045	54	64.4	136	8.8	19	580	58.1	VG
2046	55	67.3	165	8.7	23	670	57.9	G
2047	56	64.8	184	9.2	18	650	58.4	VG
2048	57	66.5	94	9.3	19	650	58.4	G
2049	58	61.6	110	9.8	23	725	59.0	G
2050	59	66.5	326	9.6	21	700	58.7	G
2051	60	66.9	324	9.6	25	720	58.7	VG
2052	61	66.2	118	10.0	25	740	59.3	VG
2053	62	66.5	219	9.8	23	755	59.0	VG
2054	63	62.0	178	9.1	16	665	58.1	VG
2055	64	63.0	87	9.0	29	715	58.1	VG
2056	65	67.2	113	8.6	19	660	57.9	VG
2057	66	68.3	132	8.7	31	620	58.9	R
2058	67	68.0	290	9.0	19	575	58.1	G
2059	68	68.3	305	8.9	18	675	58.1	R
2060	69	64.3	120	9.0	19	625	58.1	*R
2061	70	64.8	72	10.2	22	705	59.3	VG



GRAIN TECHNOLOGY OF THE VARIETIES INCLUDED IN THE 13TH. ITSN. USING  
SEED FROM CIANO, YAQUI VALLEY, MEXICO (1980-81), DETERMINED IN  
CIMMYT WHEAT QUALITY LABORATORY.

Lab. No.	Origin Y80-81	% Flour Yield	Grain Falling Number (SEC)	% Flour Protein	Sedimentation c.c.	Baking		Cookies Overall Rating
						Loaf Vol.	H <sub>2</sub> O % Abs.	
2062	S- 71	65.1	83	10.1	20	655	59.3	G
2063	72	67.9	86	10.3	21	680	59.3	VG
2064	73	67.1	100	9.4	20	625	58.7	R
2065	74	65.2	78	9.1	25	735	58.1	R
2066	75	67.5	129	9.6	19	500	58.7	G
2067	76	65.9	83	9.0	24	715	59.1	G
2068	77	64.9	267	9.3	18	610	58.4	G
2069	78	65.5	261	9.4	21	650	58.7	G
2070	79	66.0	304	9.3	20	640	58.4	G
2071	80	66.7	296	8.9	13	500	58.1	G
2072	81	67.6	262	8.5	17	525	57.9	VG
2073	82	66.8	132	9.7	21	665	59.0	VG
2074	83	64.4	320	9.6	17	625	58.7	G
2075	84	65.6	303	9.3	17	600	58.4	G
2076	85	67.5	136	9.9	22	640	59.0	G
2077	86	65.1	144	10.3	26	700	59.3	R
2078	87	62.7	169	9.6	25	710	58.7	G
2079	88	63.1	66	9.7	29	515	60.0	P
2080	89	69.6	284	8.7	22	630	57.9	G
2081	90	66.6	140	9.9	23	600	59.0	P
2082	91	67.8	295	9.9	16	650	59.0	VG
2083	92	66.0	160	10.3	26	745	59.3	VG
2084	93	66.9	86	10.2	28	730	59.3	G
2085	94	60.6	68	10.1	20	605	59.3	G
2086	95	65.0	189	9.6	22	675	58.7	G
2087	96	62.0	66	9.9	24	630	59.0	VG
2088	97	61.6	114	9.6	21	610	58.7	P
2089	98	62.0	79	9.7	19	685	59.0	G
2090	99	67.3	239	9.7	16	620	59.0	VG
2091	100	63.2	146	9.7	24	775	59.0	VG
2092	101	68.9	775	11.9	40	900	66.0	R (wheat)
2093	102	67.9	234	9.8	16	675	59.0	VG
2094	103	65.4	147	9.4	17	470	58.0	VG
2095	104	63.9	177	9.3	25	510	58.4	G
2096	105	66.3	404	8.4	20	650	58.6	R
2097	106	65.4	106	8.9	21	450	59.1	R
2098	107	61.9	210	8.4	16	525	57.6	G
2099	108	63.2	288	9.2	24	740	58.4	G
2100	109	65.0	162	9.7	24	730	59.0	VG
2101	110	62.9	297	10.1	26	720	59.6	G
2102	111	65.3	242	9.3	20	640	58.4	R
2103	112	62.1	141	9.1	20	655	58.4	G
2104	113	67.0	237	9.2	23	710	58.4	G
2105	114	66.7	208	9.5	18	525	58.7	G
2106	115	66.6	143	10.0	19	555	59.3	R
2107	116	67.1	244	9.4	16	650	58.7	G
2108	117	67.0	345	9.9	15	575	58.0	VG
2109	118	65.1	177	9.5	21	620	58.7	G
2110	119	64.7	308	9.8	16	560	58.7	VG
2111	120	66.8	87	9.1	22	640	58.1	G
2112	121	68.6	139	9.9	22	740	59.0	G
2113	122	68.9	131	9.9	22	625	59.0	P
2114	123	63.8	264	11.0	20	645	60.1	G
2115	124	66.0	115	9.8	21	740	59.0	G
2116	125	65.5	114	9.3	19	730	57.4	G
2117	126	66.9	160	9.4	18	560	58.7	G
2118	127	66.0	89	9.4	20	520	58.7	R
2119	128	66.3	162	9.5	24	690	58.7	P
2120	129	68.0	173	9.1	17	625	58.1	R
2121	130	58.2	146	9.2	20	610	58.4	R
2122	131	68.0	169	9.8	21	680	59.0	G
2123	132	66.1	160	9.3	18	640	58.4	G
2124	133	64.7	98	8.7	20	630	57.9	R
2125	134	65.2	92	9.0	22	675	58.1	VG
2126	135	64.6	98	9.2	23	695	58.4	VG
2127	136	64.7	83	9.1	21	705	58.1	VG
2128	137	70.5	323	10.0	20	685	59.0	G
2129	138	67.9	101	8.0	12	500	57.3	R
2130	139	61.6	106	9.8	24	700	59.0	R
2131	140	67.5	222	9.6	28	610	58.7	P

GRAIN TECHNOLOGY OF THE VARIETIES INCLUDED IN THE 13TH. ITSN. USING  
SEED FROM CIANO, YAQUI VALLEY, MEXICO (1980-81), DETERMINED IN  
CIMMYT WHEAT QUALITY LABORATORY

Lab. No.	Origin Y80-81	% Flour Yield	Grain Falling Number (SEC)	% Flour Protein	Sedimentation c.c.	Baking		Cookies Overall Rating
						Loaf Vol.	H <sub>2</sub> O % Abs.	
2132	S-141	69.6	129	9.3	26	570	58.4	R
2133	142	68.6	79	9.3	28	560	59.4	P
2134	143	66.7	123	9.2	29	595	59.4	P
2135	144	67.7	142	9.3	28	570	59.4	P
2136	145	67.7	100	9.3	29	575	59.4	P
2137	146	56.2	137	9.9	28	680	61.0	P
2138	147	67.7	92	7.9	20	470	59.0	R
2139	148	64.3	102	9.4	23	505	60.7	P
2140	149	70.6	424	9.1	22	520	58.4	G
2141	150	65.8	156	9.1	16	545	58.4	G
2142	151	69.0	138	8.9	28	605	58.1	R
2143	152	66.6	84	10.0	26	545	59.0	R
2144	153	68.4	153	9.0	25	520	58.1	P
2145	154	65.5	140	9.0	22	525	58.1	P
2146	155	66.7	279	8.9	19	465	58.1	P
2147	156	63.7	111	9.1	21	485	58.4	P
2148	157	67.4	115	9.8	15	475	59.0	P
2149	158	64.1	140	9.3	28	580	58.4	P
2150	159	66.2	326	9.4	27	525	58.4	R
2151	160	67.2	95	9.2	24	535	58.4	R
2152	161	68.8	148	9.5	29	615	58.7	P
2153	162	67.3	109	9.3	23	575	58.4	R
2154	163	68.8	191	9.2	29	610	58.4	P
2155	164	68.4	155	8.1	15	450	57.3	G
2156	165	67.5	165	9.1	16	490	58.1	P
2157	166	68.9	115	8.6	17	485	57.9	R
2158	167	68.3	124	8.1	14	450	57.3	G
2159	168	69.3	81	8.7	25	610	57.9	P
2160	169	68.4	103	9.2	28	610	58.1	R
2161	170	69.6	356	8.5	20	430	57.6	R
2162	171	70.8	194	9.1	31	550	59.1	P
2163	172	71.9	326	8.7	30	500	58.9	P



**CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO**  
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