1997 Wheat Performance Trial Results

Last Updated on 8/14/97 By Rick Ward Email: <u>wardri@pilot.msu.edu</u>

1997 MSU Wheat Performance Trial Results

Rick Ward, Lee Siler, S.P. Hazen, R. Bafus, L. Fitzpatrick, and R. Gopalachar

Department of Crop and Soil Sciences

Michigan State University.

Wheat variety performance trials are conducted by Michigan State University (MSU) each year at several locations throughout Michigan's winter wheat production area. Entries to the trials include MSU experimental lines, promising lines from neighboring states and commercial varieties from other universities and private seed companies. The primary objective of this testing program is to provide the agronomic data needed to determine which lines to release as commercial varieties. A second objective is to show Michigan wheat growers which varieties perform best in Michigan. This year's results are summarized in the accompanying tables.

Although wheat producers are always interested in how varieties perform in a given year and location, performance in single year and location should <u>never</u> be used in selecting a variety to plant. It is best to select a variety on the basis of data from at least three years of testing. Varieties selected with such comparisons are more likely to perform well under a wide range of conditions.

Multi-Year Performance Summary (Table 1)

Each line in the table has data for a single variety. The column bordered by double lines has this year's average yield. The table is arranged so that the varieties appear in order of '97 average yield with the highest yielding variety first and the lowest yielding variety last. Not all varieties have been tested in all years so the table has several blank cells. To the right of the '97 yield column are multi-year yield averages. Only data for varieties included in the relevant year's tests are included here. See the section titled 'Experimental' for details on how the trials were conducted and more detail on what the data in each column's data represent.

At the bottom of each table are the means, L.S.D.s, and C.V.s for the 1997 data columns. The L.S.D. (least significant difference) is the statistical measure of how big a difference needs to be to be considered real. If the difference between two means is greater than or equal to the L.S.D., then the varieties are probably really different for that trait. Otherwise, there is insufficient evidence to claim that the varieties are actually different. The C.V. (coefficient of variation) is indicative of the trial's precision for a given trait. Lower C.V. values indicate more precise trials.

In any given year or at any given site, several varieties will usually fall into the group of 'highest yielding' varieties. The composition of that group and the identity of the absolute "winner" can and do change from location to location and year to year. This means that the single best variety cannot be determined in advance for a specific site. What you can do is identify a group of varieties whose past performance and agronomic characteristics indicate that they are most likely to be winners in the upcoming season. It is a good idea to plant two or more varieties. That increases the chance of having the best adapted variety for the particular conditions that are likely to prevail during the ensuing season. Selecting two varieties can reduce losses from diseases and insects that occur when a given variety's pest resistance is overcome by a change in the pest population.

Single Site Yield Performance Summary (Table 2)

Columns in this table represent yield (bushels/acre) at each of the eight sites. The last column is the average of all sites. Each row in the Table represents a single variety in the test.

Experimental

The 1997 State Wheat Variety Trial was harvested at eight county sites: Lenawee, Ionia, Saginaw, Kalamazoo, Huron, Tuscola, Sanilac, and Ingham. Plots were 11 feet long and had 7 rows at 6" row spacing. Individual sites were implemented as three replication alpha lattices (15 blocks of 5 plots each). Seeding rates were standardized to 1.8 million seeds per acre. Planting dates were all within normal ranges. Fall fertility varied with cooperator practice. Spring nitrogen was applied as urea (80 lbs/acre) at greenup. No fungicides were applied. All plots at a site are harvested on a single day. Yield was calculated using the entire area of the plot including the wheel tracks between plots. Yield, test weight, and moisture data were acquired electronically on the plot combine at the time of harvest. Yield comparisons are only valid within a column. All scores are based on a 0-9 scale, where 0 is the best possible score. "Septoria leaf blotch" scores are for foliar symptoms only and probably reflect both S. nordorum and S. tritici infections. Sprouting score data are based on greenhouse evaluation of 5 heads from all three replications at both the Ingham and Ionia county sites. Heads were picked immediately before those sites were harvested. After two days of drying, the heads were subjected to continuous misting for 5 days. Data for 50% pollen shed indicates the number of days past January 1st before that variety reached the point where 1/2 of its heads where flowering. Plant height was measured at the tip of average heads in a plot.

MSU makes no endorsement of any wheat variety or brand. Cooperator support is gratefully acknowledged.

Site summary information:

County	Cooperator	Nearest Town
Saginaw	S. Reinbold	Frankenmuth
Lenawee	P. Vergote	Blissfield
Ingham	MSU	Mason
Ionia	MSU	Clarksville
Sanilac	A. Stoutenburg	Sandusky
Barry	MSU	Delton
Tuscola	R. Ackerman	Reese
Huron	Huron County Extension	Bad Axe

Go to Experimental Details

back to main wheat page

 $Yield\ (bushels/acre), Test\ weight\ (lbs/bushel),\ plant\ height\ (inches\ to\ tip\ of\ head).$

пате	grain color	yld 1997	yld 96 / 97	yld 95 - 97	yld 94 - 97	test wt 97	test wt 96/97	test wt 95-97	test wt 94-97	height 97	height 96/97
Pioneer(R) variety 2552	R	84.0	64.1	70.6	71.0	59.1	58.5	59	59	36.6	32.5
Hopewell	R	81.5	66.8			56.6	56.9			37.5	34.5
Pioneer(R) variety 25R26	R	80.1				55.9				35.9	
Freedom	R	79.7	63.5	68.1	68.6	56.2	56.3	56.7	56.7	39.3	36.6
Glory	R	79.6	60.8			57.4	56.7			37.3	34.6
Pioneer(R) variety 2568	R	79.4	64.2			57-4	57.2			35.9	33.4
TW 93211	W	79.4				57.6				41.9	
Wakefield	R	79.2	63.2	68.6	70.7	57.8	57.6	57.8	57.9	39.2	36.5
Caledonia	W	78.7				56.6				37.3	
Genesis 95 . 1	R	78.6	59.9			55.7	55.4			39.3	36.2
MSU Line D4045	W	77.8				57.5				41.3	
Emily	R	77.7				60.0				39.2	
GR 962	R	77.7	55.1	1.	1.	55.6	54.9	1.	1.	36.2	32.9
MSU Line D2103	W	77.5	61.5	65.5	<u> </u>	56.0	55.4	55.5	1.	42.1	40.5
Ramrod	W	76.9	62.9	66.0	66.7	55.6	55.2	55.6	55.8	40.6	38.7
NC RW151	R	76.9	1.	1.	<u> </u>	59.5	59.5		1.	1.	1.
AC Ron	W	76.8	62.3	1.	1.	56.9	56.1	1.	1.	43.0	41.2
L15	R	76.5	61.7			59.7	59.4	1.	1.	40.4	38.5
Brandy	R	76.5	61.8			59.2	59.3	+	<u> </u>	40.7	36.9
Terra SR204	R	76.4	60.3	•	•			•	<u> </u>	38.5	+
Pioneer(R) variety 2540	R	76.4	63.4			59·3 57·5	59·3 57.6			37.4	36.5 33.8
Pioneer(R) variety 25W33	W	76.2				55.6				36.3	
TW 94104	w	76.2				57.8		1.	1.	41.3	1.
Stine 480	R	76.0	62.8			56.1	56.5			40.2	37.6
558 W	R	76.0				57.6		1.	1.	39.2	1.
Pioneer(R) variety 25R57	R	75.9				56.5				37.3	
Mendon	R	75.6	60.1	65.2	67.8	55.6	55.4	55.6	55.5	43.0	40.2
569 w	R	75.3				56.9		1.	1.	40.8	1.
577 W	R	74.9				53.4		1.		37.2	1.
Foster	R	74.9	62.5			57.3	57.1	1.		37.1	34.2
Cardinal	R	74.7	61.8	64.7	65.6	57.0	56.7	57.3	57.4	40.9	37.9
Bavaria	W	74.5	58.5	64.1	66.7	57.5	57.0	57.3	57.3	43.4	40.9
NC Marilee	w	74.4			1.	55.2				40.7	1.
NC Harold	R	74.4	1.	 	 	57.4	 	1.	+	39.6	†
Pioneer(R) variety 2737W	W	74.4	59.8	64.7	64.5	55.3	55.3	55.9	55.8	38.1	35.5
NC Karena	W	74.3	1.	1.	 	57.2	<u> </u>	1.	1.	42.3	1.
Lowell	w	74.2	60.1	64.3	66.0	55.1	54.9	55	54.9	43.8	40.9
MSU Line D4081	w	74.2	1.		1.	56.5				44.1	1.
Navigator	R	+	54.9	62.2	 	55.0	54.8	55.9	<u> </u>	34.4	31.5
L25	R	73.9 73.8	54.3 61.2	64.6		58.7	58.4			46.3	
	+	+		04.0	ļ.	-		59.1	•		42.5
MSU Line D3913	W	73.7	59.2	•		55.9	55.4	1	•	42.2	40.4
PS 1359	R	73.1			ļ.	56.5		+		37.1	·
MSU Line D4125	R	73.1			•	55.8	•	1	•	42.3	ļ.
MSU Line D2150	W	73.1	61.1	65.1	•	57.0	57-4	57.4	•	41.9	40.4
GR 942	R	72.9	51.7	60.9	·	55.3	54.3	55.5	·	33.5	30.2
MSU Line D3234	R	72.9	61.1			58.1	58.1	<u> </u> .		43.4	40.7

MSU Line D3991	M	72.9	•			56.1		•		41.9	
RS 927	R	72.1	59.8	62.9	64.1	59.1	59.3	57.7	58.1	40.2	37.0
Chelsea	W	71.8	57.7	62.8	60.9	56.8	56.2	56.6	56.9	43.4	40.2
MSU Line D2295	W	71.6	58.8	62.9		58.4	58.1	58.3		39.6	37.4
Harus	W	71.5	57.8	61.2	62.9	57.1	57.3	57.4	57.2	42.0	39.8
Packard Brand	R	71.5	56.6			53.0	53.1			37.7	34.9
MSU Line D2088	W	71.5	57.1			56.0	55.3			43.4	41.4
Casey	R	71.2	58.0			55.6	55.6			39.9	38.0
Diana	W	71.2	58.1			56.0	54.9			40.6	39.8
Cyrus Brand	R	71.2	54.3			54.9	54.4			33.2	31.3
Absolut	R	71.0				58.7				41.5	
EX 971	R	71.0				55.9				36.7	
Elkhart	R	71.0	59.3			58.4	59.1			39.2	36.0
MSU Line D1176	W	70.9	56.5			57.3	56.8			44.6	41.0
TW 91203	W	70.8				55.6				43.1	
92405R	R	70.6				56.9				44.4	
MSU Line D3176	R	69.6	56.9			56.0	55.4			39.0	37.3
SW403	R	68.8	52.8	59.0		55.8	56.1	56.7		39.9	36.0
MSU Line D3414	R	67.2				58.2				41.1	
Terra SR211 (Exp 211)	R	67.0	51.0			55.9	56.2			36.3	33.1
Patterson	R	66.9				56.3				39.6	
94334R	R	66.7		•		58.5		•		44.4	
Terra SR205	R	65.4	54.0	61.0		53.2	53.9	54.9		37.5	35.2
Clemens	R	64.7	54.8	59.0		56.6	57.0	57.5		39.7	36.6
NC John	W	64.1				54.0				41.8	
Rupp X6-289	R	62.9				55.7				38.9	
Pontiac	R	61.1	52.0	55.5	T.	56.8	57.9	58.2		35.5	33.5

<u>Go to Experimental Details</u>

back to main wheat page

name	lodge 97	lodge 96/97	flowering date 97	flowering date 96/97	moist. At harvest 97	wssv 97	wssvy 96/97	powdery mildew 97	powdery mildew 96/97	lower leaf septoria 97	lower leaf septoria 96/97	flag leaf septoria 97	septoria glume blotch 97	awned
Pioneer(R) variety 2552	0.7	0.9	65.0	66.2	13.6	1.5	1.8	0.6	0.8	0.9	1.6	3.5	2.5	awned
Hopewell	0.7	0.7	65.5	66.7	12.8	1.1	1.4	3.4	2.9	3.1	3.2	4.0	5.0	awnless
Pioneer(R) variety 25R26	2.0		65.0		12.1	1.5		5.4		2.5		4.5	1.3	awned
Freedom	3.7	2.9	65.0	66.4	13.1	4.1	3.6	5.1	4.1	4.6	3.8	3.5	2.6	awnless
Glory	3.7	2.4	63.5	65.3	12.6	4.3	3.2	5.5	4.8	3.7	3.1	4.0	2.2	awnless
Pioneer(R) variety 2568	2.0	1.7	64.0	65.4	12.6	1.3	1.5	7.1	6.3	4.6	4.3	6.5	2.6	awned
TW 93211	4.7		68.0		13.5	8.1		3.9		4.6		5.0	0.8	awnless
Wakefield	5.4	3.2	64.0	66.2	13.2	5.7	3.7	5.0	2.9	2.8	2.5	4.5	2.6	awnless
Caledonia	3.2		66.0		12.6	3.2		5.1		4.6	•	4.0	2.8	awnless
Genesis 95 . 1	3.9	2.6	64.0	65.9	12.1	1.5	1.3	5.5	4.9	4.6	4.2	5.0	3.6	awned
MSU Line D4045	3.6		65.0		13.2	3.4		4.4	•	2.7		3.5	2.1	awnless
Emily	3.4		64.0		15.0	5.0		6.6		5.1		4.0	2.4	awnless
GR 962	1.1	1.3	63.5	65.1	11.8	1.2	1.5	6.0	4.8	5.5	5.2	3.0	8.5	awnless
MSU Line D2103	3.9	3.1	66.5	68.2	12.9	6.6	4.2	5.4	4.4	4.7	4.3	4.0	2.0	awnless

Ramrod	1.7	2.2	69.0	68.9	12.6	2.2	1.6	5.2	4.5	5.3	4.7	5.5	2.9	awnless
NC RW151					14.9	4.1		4.9				2.9	2.5	awnless
AC Ron	3.9	2.8	66.0	67.2	12.7	7.8	5.4	5.7	4.5	4.6	4.3	3.5	2.5	awnless
L15	3.6	2.8	64.5	64.9	15.4	4.0	3.2	5.7	4.7	5.6	5.7	4.0	2.2	awnless
Brandy	4.4	3.1	64.5	65.3	14.7	4.6	4.1	6.5	5.1	4.7	4.9	3.0	2.3	awnless
Terra SR204	3.4	2.4	63.5	65.0	14.8	5.5	3.7	6.2	4.9	4.3	4.6	4.5	2.3	awnless
Pioneer(R) variety 2540	0.4	0.7	68.0	67.9	12.7	2.4	1.9	4.5	4.2	1.7	2.0	3.5	1.0	awned
Pioneer(R) variety 25W33	3.0		66.0		11.9	1.1	•	2.3		3.7		5.5	2.1	awned
TW 94104	3.7		67.5		13.2	8.7		5.6		5.2		4.0	2.1	awnless
Stine 480	4.0	2.7	65.0	65.5	12.7	1.8	1.6	8.4	6.8	4.3	4.2	5.5	2.8	awnless
558 W	3.1		66.0		13.4	4.4	•	7.3		6.6		4.5	2.1	awnless
Pioneer(R) variety 25R57	3.0		64.5		12.4	7.1		3.1	•	4.6	•	4.0	3.0	awnless
Mendon	4.6	3.7	64.5	65.3	12.5	1.3	1.0	7.9	6.3	2.3	3.5	3.5	2.3	awnless
569 w	4.7	.	65.0		13.1	2.4		5.6		3.1		4.5	3.9	awnless
577 W	3.9		65.0		11.6	7.6		8.0		5.2		3.5	3.4	awnless
Foster	1.9	1.8	66.0	66.0	13.0	5.7	3.8	7.0	5.6	4.6	3.7	5.0	3.4	awnless
Cardinal	4.7	3.2	65.0	66.3	13.1	3.2	2.9	8.0	6.3	6.0	5.3	5.0	3.5	awnless
Bavaria	2.4	2.1	67.5	68.1	13.1	2.6	1.8	6.9	5.6	4.8	4.6	3.0	3.1	awnless
NC Marilee	5.0		67.5		13.1	7.2		7.3		4.6		3.5	2.3	awnless
NC Harold	4.7		64.5		13.3	6.6		5.3		6.0		5.0	3.2	awnless
Pioneer(R) variety 2737W	2.0	1.7	65.0	66.4	12.0	1.7	1.4	7.1	5.7	2.3	3.5	2.5	2.3	awnless
NC Karena	3.6		68.0		13.5	8.5		3.2		3.7		4.0	4.2	awnless
Lowell	4.3	3.0	64.5	65.1	12.3	1.4	1.4	7.2	5.3	4.0	4.6	3.0	1.3	awnless
MSU Line D4081	4.7		65.0		12.7	3.0		4.7		3.3		4.0	4.4	awnless
Navigator	2.5	1.8	64.0	66.2	11.8	7.1	5.9	3.6	2.7	5.7	4.6	5.0	4.0	awnless
L25	4.0	4.0	65.0	66.4	14.0	2.1	1.5	9.0	7.5	4.8	4.8	4.0	1.2	awnless
MSU Line D3913	4.4	3.2	67.5	68.3	12.7	4.2	4.8	6.1	5.0	4.6	4.7	4.0	2.9	awnless
PS 1359	3.7		64.0		12.4	2.9		4.5		5.0		4.5	4.3	awnless
MSU Line D4125	5.3		64.0		12.9	1.8		5.5		5.5		3.5	3.4	awnless
MSU Line D2150	3.8	2.6	63.5	65.9	12.7	7.6	4.5	5.3	4.4	4.7	4.4	3.5	4.2	awnless
GR 942	2.3	1.7	65.0	66.7	11.8	6.0	5.5	3.1	3.2	5.3	4.6	4.0	4.7	awnless
MSU Line D3234	5.2	4.3	67.5	67.8	15.7	4.2	2.8	3.0	2.2	3.2	3.8	3.0	1.0	awned
MSU Line D3991	4.7		68.5	•	15.3	8.5	•	5.7	•	4.1		4.0	2.3	awnless
RS 927	4.7	3.2	63.0	64.5	14.5	5.1	4.3	8.4	6.3	4.8	4.9	5.5	3.2	awnless
Chelsea	5.7	3.9	68.0	70.5	13.1	2.8	1.9	6.9	5.4	3.9	3.8	3.0	3.5	awned
MSU Line D2295	3.0	3.0	69.5	69.4	13.6	8.5	6.8	3.8	3.2	3.8	3.9	4.0	1.0	awned
Harus	4.0	2.7	64.0	66.0	12.7	8.4	5.4	4.7	3.9	4.7	4.5	4.0	5.0	awnless
Packard Brand	4.7	3.2	65.0	66.7	11.5	7.8	6.4	7.8	6.2	4.9	4.0	3.5	3.6	awnless
MSU Line D2088	4.4	3.6	67.5	68.5	12.8	7.6	6.3	4.7	3.8	4.0	4.5	4.5	1.0	awned
Casey	5.0	3.2	65.5	66.8	12.2	7.1	4.6	3.0	3.4	6.8	5.4	4.0	2.5	awnless
Diana	4.3	2.7	65.0	66.9	12.9	7.5	6.9	4.0	3.7	3.9	3.8	2.5	1.8	awnless

Cyrus Brand	2.6	1.8	65.5	66.8	11.9	6.7	5.7	3.7	3.4	5.1	4.3	4.5	6.0	awnless
Absolut	4.8		62.5		13.4	3.5		7.9		4.4		3.5	3.8	awnless
EX 971	2.0	Ţ	63.5		12.5	2.3		4.0		3.8		6.0	4.7	awnless
Elkhart	5.6	3.5	65.0	65.4	12.8	5.4	5.2	5.5	4.8	4.4	3.9	5.0	3.0	awned
MSU Line D1176	4.6	3.5	68.0	69.0	13.3	3.5	2.4	3.4	2.6	4.3	4.3	4.5	1.8	awned
TW 91203	3.3		68.0		13.1	5.3		6.2		3.8	•	1.5	3.2	awnless
92405R	4.3		66.5		12.6	7.4		7.5		4.6	•	3.0	1.2	awnless
MSU Line D3176	3.7	3.2	67.5	69.1	12.9	6.4	3.9	4.5	4.1	3.7	3.4	4.5	2.0	awned
SW403	4.9	3.0	62.5	64.0	12.2	3.4	2.4	8.4	6.5	3.7	3.9	5.5	6.0	awnless
MSU Line D3414	3.6		63.5	•	13.4	1.9		8.8		5.8		4.5	4.3	awnless
Terra SR211 (Exp 211)	6.4	3.7	64.0	65.0	12.3	2.5	2.8	5.5	4.2	2.7	3.1	5.0	7.2	awnless
Patterson	5.3		63.0		12.4	2.1		8.7		4.0		5.9	9.0	awnless
94334R	2.5		69.0		14.0	8.6		8.4		3.3		1.5	1.2	awnless
Terra SR205	4.8	3.2	65.0	65.7	11.2	2.0	2.0	8.6	7.2	6.4	5.7	4.5	5.7	awnless
Clemens	5.0	3.4	66.0	67.2	12.7	6.6	6.0	7.8	6.8	5.0	4.4	4.5	2.9	awnless
NC John	5.4		67.5		12.0	7.4		3.0		3.7		4.5	3.4	awnless
Rupp X6-289	4.9		62.5		12.2	1.6		8.6		3.4		3.5	5.6	awnless
Pontiac	6.1	3.9	62.0	62.7	12.3	5.1	5.4	9.2	7.7	5.0	5.2	6.9	4.7	awnless

Go to Experimental Details

back to main wheat page

name	scab incidence score 97	scab severity score 97	flour yield 96	% protein 96	alkaline water retention 96	softness eq. 96	sprout 97	sprout 96/97	origin
Pioneer(R) variety 2552	8.2	4.1	70.1	10.2	57-7	54.6	1.8	1.5	Pioneer Hi-bred Int.
Hopewell	8.0	6.3	68.9	9.6	57.1	56.7	1.4	1.4	Ohio Foundation Seed
Pioneer(R) variety 25R26	6.9	3.7	0.0	0.0	0.0	0.0	1.3		Pioneer Hi-bred Int.
Freedom	7.7	3.7	68.7	9.7	57.1	50.5	2.0	1.7	MI. Crop Imp. Assoc.
Glory	7.6	5.4	68.8	9.3	58.9	53.5	3.8	3.0	Ohio Foundation Seed
Pioneer(R) variety 2568	8.2	6.6	68.5	9.9	58.2	59.5	1.1	1.5	Pioneer Hi-bred Int.
TW 93211	7.9	5.9	0.0	0.0	0.0	0.0	8.3		Harrington Seeds Inc.
Wakefield	7.6	6.3	70.4	10.1	56.1	54.9	1.2	2.1	MI. Crop Imp. Assoc.
Caledonia	7.6	6.6	0.0	0.0	0.0	0.0	8.6		GenesisAg- Harrington
Genesis 95 . 1	7.8	6.9	71.0	9.8	56.0	60.7	1.5	1.8	Genesis Ag Ltd.
MSU Line D4045	7.7	5.0	0.0	0.0	0.0	0.0	7.4		
Emily	7.6	6.3	0.0	0.0	0.0	0.0	2.4		Harrington Seeds Inc.
GR 962	7.7	6.0	67.5	10.4	57.8	57.6	1.2	1.5	AGRA Inc.
MSU Line D2103	8.0	6.4	66.9	10.1	57-3	56.8	8.3	6.8	
Ramrod	7.2	3.3	68.6	10.3	57-3	54.5	7.9	7.0	GHG
NC RW151	7.6	8.0	0.0	0.0	0.0	0.0	2.2		The Andersons
AC Ron	8.3	6.8	69.6	9.2	55.9	55.0	8.0	6.9	MI. Crop Imp. Assoc.

5 of 7 6/12/2020, 11:37 AM

L15	8.0	7.6	70.4	10.3	56.9	48.6	2.0	3.5	Stewart Seed Inc.
Brandy	7.3	5.7	70.8	10.2	56.3	46.4	3.5	3.4	Lakeside States Inc.
Terra SR204	7.5	5.9	70.2	10.8	56.7	46.3	3.0	3.9	Terra
Pioneer(R) variety 2540	8.0	3.6	68.4	10.5	56.3	54.0	1.6	2.4	Pioneer Hi-bred Int.
Pioneer(R) variety 25W33	8.2	5-7	0.0	0.0	0.0	0.0	6.4		Pioneer Hi-bred Int.
TW 94104	7.3	6.6	0.0	0.0	0.0	0.0	8.0		Harrington Seeds Inc.
Stine 480	8.0	6.4	69.9	10.0	56.7	49.8	1.9	2.8	Stine Seed Co.
558 W	7.2	5.3	0.0	0.0	0.0	0.0	2.9	ŀ	Countrymark Co-op
Pioneer(R) variety 25R57	8.7	7.1	0.0	0.0	0.0	0.0	1.5		Pioneer Hi-bred Int.
Mendon	7.8	6.0	70.7	9.7	56.9	57.9	2.1	3.4	Lakeside States Inc.
569 w	7.4	5.7	0.0	0.0	0.0	0.0	4.1	•	Countrymark Co-op
577 W	7.7	7.0	0.0	0.0	0.0	0.0	1.8		Countrymark Co-op
Foster	7-7	4.4	71.8	11.0	54.1	54.9	1.4	1.6	Agripro Seeds Inc.
Cardinal	7.2	4.7	70.8	10.1	55-9	54.3	6.0	5.8	MI. Crop Imp. Assoc.
Bavaria	8.0	5.6	70.3	10.1	56.0	51.4	6.0	6.0	Greater MI Seed
NC Marilee	8.1	4.2	0.0	0.0	0.0	0.0	8.0		The Andersons
NC Harold	7.1	6.0	0.0	0.0	0.0	0.0	3.8		The Andersons
Pioneer(R) variety 2737W	8.4	7.4	70.4	9.7	56.1	58.1	8.0	7.2	Pioneer Hi-bred Int.
NC Karena	7.7	6.4	0.0	0.0	0.0	0.0	7.4		The Andersons
Lowell	8.7	7.5	71.0	9.2	56.6	60.1	8.5	7.9	MI. Crop Imp. Assoc.
MSU Line D4081	6.6	5.9	0.0	0.0	0.0	0.0	7.9	·	
Navigator	7-7	3.4	68.6	8.7	60.0	61.2	1.1	1.1	Wilson Tri State Seed
L25	6.9	5.3	71.1	9.5	57.2	53.6	4.1	4.4	Stewart Seeds Inc.
MSU Line D3913	7.0	5.7	70.8	10.0	55.9	54.4	8.6	7.8	
PS 1359	7.8	6.0	0.0	0.0	0.0	0.0	1.0		Pro-Seed, Inc.
MSU Line D4125	7-7	5.2	0.0	0.0	0.0	0.0	4.6		
MSU Line D2150	7.8	5.7	70.0	10.0	55.6	53.6	7.6	6.7	
GR 942	7.6	3.7	68.2	9.2	59.6	60.8	1.1	1.4	AGRA Inc.
MSU Line D3234	6.8	3.9	68.3	10.7	58.8	49.9	6.3	5.2	
MSU Line D3991	7.0	4.3	0.0	0.0	0.0	0.0	5.5		
RS 927	7.8	5.7	70.5	10.4	56.8	48.6	2.2	2.6	Rupp Seeds, Inc.
Chelsea	7-7	5.1	70.9	9.6	54.5	54.3	7.8	6.7	MI. Crop Imp. Assoc.
MSU Line D2295	7.6	4.6	68.9	10.4	57.7	52.8	8.2	7.3	
Harus	7.9	5.7	69.9	10.1	55.8	54.4	7.1	6.1	MI. Crop Imp. Assoc.
Packard Brand	7.8	6.3	69.3	9.7	56.7	58.5	2.0	1.7	Coomer Seeds, Inc.
MSU Line D2088	8.0	5.8	69.3	9.8	57.5	50.6	8.8	7.9	
Casey	8.4	7.4	70.1	9.4	57.7	57-3	4.2	4.4	Lakeside States Inc.

Diana	8.1	5.7	69.8	9.0	56.5	55.0	8.3	6.7	Harrington Seeds Inc.
Cyrus Brand	7.2	4.3	68.3	8.9	60.5	62.0	1.3	2.0	Coomer Seeds, Inc.
Absolut	8.0	4.0	0.0	0.0	0.0	0.0	1.2		Lakeside States Inc.
EX 971	8.2	6.3	0.0	0.0	0.0	0.0	1.0		Coomer Seeds, Inc.
Elkhart	7.6	6.0	70.4	11.6	57.2	51.5	1.2	1.5	Agripro Seeds Inc.
MSU Line D1176	7.0	4.4	69.6	10.9	56.5	54.0	7.1	5.2	
TW 91203	7.3	4.8	0.0	0.0	0.0	0.0	7.7		Harrington Seeds Inc.
92405R	6.1	3.7	0.0	0.0	0.0	0.0	8.3		Lakeside States Inc.
MSU Line D3176	8.0	7.0	71.0	9.8	53.7	55.2	2.2	3.6	
SW403	7.8	7.5	69.4	10.2	55-9	56.0	2.0	1.8	Stewart Seed Inc.
MSU Line D3414	8.4	7.7	0.0	0.0	0.0	0.0	3.1		
Terra SR211 (Exp 211)	8.4	6.8	69.0	10.1	57.8	58.3	2.0	1.8	Terra Industrie
Patterson	8.4	7.0	0.0	0.0	0.0	0.0	5.2		MI. Crop Imp. Assoc.
94334R	7.0	4.0	0.0	0.0	0.0	0.0	6.3		Lakeside States Inc.
Terra SR205	8.4	6.7	69.4	9.0	57.3	52.8	2.0	3.1	Terra Industrie
Clemens	7.6	5.0	70.0	10.6	57.4	56.3	1.7	2.5	Agripro Seeds Inc.
NC John	8.0	6.4	0.0	0.0	0.0	0.0	8.2		The Andersons
Rupp X6-289	7.9	6.3	0.0	0.0	0.0	0.0	3.4		Rupp Seeds, In
Pontiac	8.2	7.4	68.8	10.8	58.2	50.9	4.9	3.3	Agripro Seeds Inc.

Last Updated on 8/14/97 By Rick Ward Email: <u>wardri@pilot.msu.edu</u>