

# 1989 Michigan Soybean Performance Report

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By

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This bulletin provides information on the performance of soybean varieties available in Michigan.

Comprehensive variety yield trials were conducted in Southeastern Michigan (Lenawee County), Southwestern Michigan (St. Joseph County), far Southwestern Michigan (Van Buren County), South Central Michigan (Ingham County), Central Michigan (Saginaw County), East Central Michigan (Sanilac and St. Clair Counties), and in Michigan's "Thumb" (Huron County).

## Testing Procedures

Commercial varieties voluntarily entered were obtained from seed companies. Public varieties were supplied by the Michigan Foundation Seed Association.

Cooperators, planting and harvest dates, fertilizer practices, previous crops, and soil management groups at the eight locations are listed in Table 1.

Maturity groups of all varieties tested are listed in Table 2. Seed of entries was planted in 4-row plots 20 feet long with a 20-inch row spacing, 1½ inches deep at 4.5 seeds per foot of row. Each variety was randomized in the trial and replicated 3 times in a lattice design. Fourteen feet of the center two rows were harvested for yield.

## Evaluating Characteristics

**YIELD**—Yield is expressed in bushels per acre at 13% moisture.

**MATURITY DATE**—Entries were considered mature when 95% of the pods had attained their final color and would crack under finger pressure. Additional field drying was required before the plants were ready to harvest. Dates were recorded by month and day, (Table 2) or as days relative to the check cultivar.

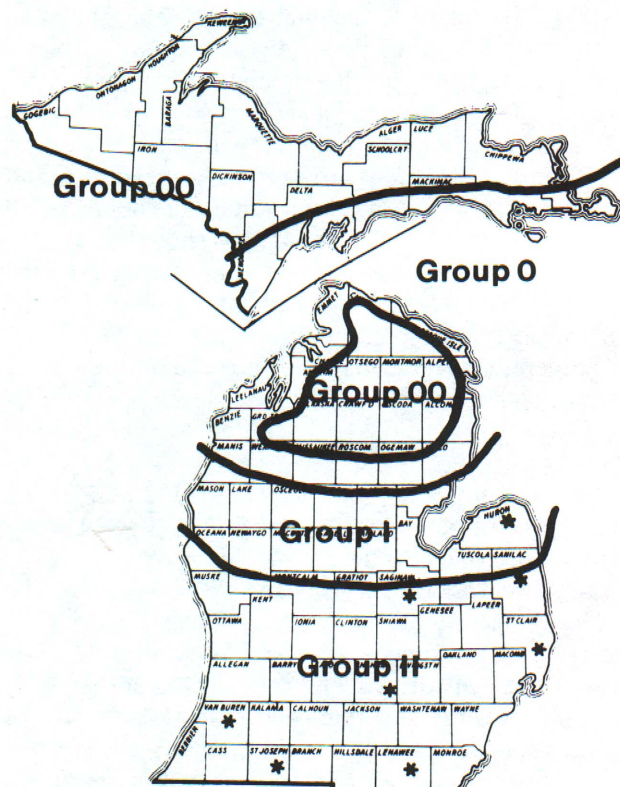
**HEIGHT**—Plant height, in inches, was measured at maturity from the soil surface to the tip of the main stem.

**LODGING**—Lodging scores reflect the erectness of the plants before harvest. Ratings are based on the following scale:

1. Almost all plants erect
2. All plants leaning slightly, or fewer than 25% of the plants down
3. All plants leaning moderately (45%), or 25% to 50% of the plants down
4. All plants leaning considerably, or 50% to 80% of the plants down
5. Almost all plants down

## Results

Tables 2-5 show results of 1989 soybean variety trials. Values given are the averages of all replications harvested at each location. Heavy rains in early June damaged plots at Lenawee, Ingham and Saginaw Counties. The St. Joseph County site was irrigated.



Soybean Maturity Zones for Full-Season Varieties in Michigan, and Locations (\*) of Trials.

The LSD (least significant difference) value is useful when comparing two varieties in the same table. Two varieties with the same genetic potential for yield may have different yields due to variation in soil fertility, compaction, and other environmental factors. If the difference is less than the LSD value, the difference between the varieties may be due to chance or minor environmental differences. However, if the difference between two varieties is greater than the LSD, there is a 95%, or better, probability that the performance is actually different. The CV value is an indicator of the degree of precision for a particular test. The lower the CV value, the more discriminating the test.

## Selecting a Variety

The primary consideration in selecting a variety is yield. When evaluating a variety, consider yield performance over several years, if available. Give preference to data obtained in the nearest variety trial. Use all trials in determining a variety's performance under various environmental conditions.

Considerations other than yield are important in selecting a variety, and in some cases result in choosing a variety with only moderate performance. It is especially important to select a variety with proper maturity. From past weather data, farmers can determine the percent probability of the first fall frost. A general rule of thumb is to choose a variety that will mature (see maturity date definition) before the average date for 25% chance of the first killing frost in the fall. Farmers growing soybeans for the first time may wish to contact neighbors to determine what varieties mature before frost in their area. When large acreages of soybeans are planted, varieties of different maturities provide staggered maturity dates for a longer harvest season.

The degree of lodging varies among varieties. Lodged plants in variety trials are manually picked up and threshed, thus yield losses from lodging are not reflected in the yields reported. Lodging ratings should be used to evaluate potential losses. Farmers who have experienced lodging in the past and have had harvest problems may select a more lodging-resistant variety. Alternately, a variety susceptible to lodging may be planted at a slightly lower population to increase standability. Evaluate lodging data over all locations to determine a variety's lodging characteristics.

Note seed size when selecting planting rates. Planting rates should be based on number of seeds per foot of row and not on pounds per acre.

Many diseases occur in soybean fields in Michigan. The diseases which contribute most significantly to yield reduction are seed and seedling diseases and those causing root and stem rots. Root rots of soybeans are generally recognized when plants turn yellow prematurely, wilt, or die. Less noticeable is the yield reduction that occurs when root rot destroys part of the root system, but causes no vis-

ible symptoms to above-ground parts. The fungi that cause root rots often survive in the soil for several years, even in the absence of a host plant. Once root rot fungi are established in a field, control is difficult, even with crop rotation.

The most important and widespread root disease is Phytophthora root rot. New varieties with resistance to several races of the fungus have been developed, but no variety is resistant to all races. Disease resistance characteristics of varieties to Phytophthora root rot, where known, are given in Table 2. Growers who have experienced losses due to this disease would increase their chances of success by using one of the multi-race resistant varieties.

It often benefits growers to select a few good varieties for planting each year. Yield determination and careful field evaluation during the growing season will add to the grower's knowledge of varietal performance and allow better selection.

More information about variety selection and cultural practices can be found in Extension Bulletin E-1549, "Soybean Production in Michigan," and E-2080, "Producing Soybeans in Narrow Rows."

## Using Data

Table 2 presents multiple-environment averages from all tests in the Southern and Central Michigan regions since 1975. The column labeled n refers to the number of tests in which each variety was included. The column labeled DEV. refers to the difference (in bushels per acre) between the mean yield of the variety over n tests and the mean yield of all varieties in those tests. The maturity checks used for tests of Group I and Group II varieties were "Hodgson 78" (H78) and "Corsoy 79" (C79), respectively. A positive relative maturity value means that the variety matured later than the check and a negative value means that the variety matured earlier than the check. The value is the actual number of days in either direction.

Data presented in Tables 3 through 5 are from both regional and site-specific performance trials. Both 1989 yields and multiple-year average yields from all tests since 1975 are given. Maturity, height (in inches), and lodging scores are the 1989 regional averages. Maturity is expressed as + or - days when compared with the check variety. For 1989 yield data, starred(\*) entries designate yields not significantly different from the highest for that location. Multiple-environment and multiple-year averages comprised of a greater number of tests (greater n) should be considered more reliable.

The presentation of data for the entries tested does not suggest approval or endorsement of varieties by the authors or by those responsible for conducting the performance trials.

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**TABLE 1. 1989 Michigan State University Soybean Variety Test, site information.**

County	Lenawee	St. Joseph	Van Buren	Ingham	Saginaw	Sanilac	St. Clair	Huron
<b>CES Dir.</b>	N.R. Bless	R. King	P. Vergot	M.M. Preston	J.E. Thews	M. Nagelkirk	L.B. Thompson	R.A. Johnson
<b>Agent</b>	G.A. Wuethrich	M.J. Kaercher	D.B. Rajzer	D.R. Batchelor	S.S. Poindexter	B. Troyer	L.J. Jess	J.P. LeCureux
<b>Farmer Cooperator</b>	David Woods	Ray Gentz	G. Houdek J. Sheppard		C. Gosen	W. Horst	R.A. Greenia	J. Jurgess
<b>Address</b>	Woods Seed Farm 10992 Holloway Rd. Britton, MI	MFI 25660 Simpson Rd. Mendon, MI	27536 68th St. Covert, MI	MSU Campus E. Lansing, MI	8735 Swan Creek Rd. Saginaw, MI	634 E. Sanilac Rd. Sandusky, MI	Greenia Bros. Farms 1395 Kronner Rd. Richmond, MI	4300 Sand Beach Rd. Bad Axe, MI
<b>Soil Type</b>	Lenawee silty clay loam	Elston sandy loam	Capac loam and Tuscola silt loam	Capac loam	Pella silt loam and Kibbie fine sandy loam	Capac loam and silt loam and Parkhill loam and clay loam	Parkhill loam	Shebeon loam and Kilmanagh loam
<b>Soil Mgt Group</b>	1.5c	4a	2.5b and 2.5a-s	2.5b	2.5c-s and 2.5b-s	2.5b and 2.5c	2.5c	2.5b-d and 2.5c
<b>Previous Crop</b>	Soybeans	Corn	Soybeans	Corn	Soybeans	Corn	Oats	Corn
<b>Fertilizer</b>	150# 0-0-60 10# Mn	140# 15-0-17 10# Mn	150# 0-0-60	200# 6-24-24	200# 4-10-47		175# 0-0-60	300# 20-7-12
<b>Planting Date</b>	5/10/89	5/17/89	6/9/89	5/18/89	5/23/89	5/15/89	5/16/89	5/22/89
<b>Harvest Date</b>	10/5/89	10/13/89	10/25/89	10/14/89	10/27/89	10/24/89	10/23/89	10/26/89

**TABLE 2. Performance Summary for varieties entered in the Michigan trials in 1989. Phytophthora resistance designations denote the following: Type 1a resistant to Races 1, 2, and 10; Type 1b resistant to Races 1 and 3-9; Type 1c resistant to Races 1-3 and 6-10; Type 1k resistant to Races 1-10; Type 3 resistant to Races 1-5, 8, and 9; Type 6 resistant to Races 1-4 and 10.**

Brand / Entry	Phyt. Res. MG Type	Yield (bu/A) with deviation from mean						Maturity Relative to Checks						Lodging Score	
		Southern			Central			Southern			Central			South.	Central
		Yield (n)	Dev.	Yield (n)	Dev.	Date	H78	C79	Date	H78	C79				
Public															
Amcor	II 1a	43.8 (29)	-1.0	45.7 (30)	-0.6	9-27	12	5	10-6	12	4	3.0	2.8		
Beeson 80	II 1c	37.4 (29)	-7.4 *	39.7 (32)	-6.1 *L	9-26	10	3	10-6	11	4	2.0	2.1		
BSR 101	I 1a	47.6 (23)	1.3	46.9 (28)	1.6 *	9-20	5	-3	10-2	8	0	1.6	1.8		
BSR 201	II 1b	48.6 (26)	1.5 *	47.3 (25)	0.4	9-26	11	4	10-5	12	3	2.4	2.7		
Burlison	II 1b,3	53.2 (11)	3.7	59.0 (11)	3.2	9-27	19	10	10-5	17	7	2.0	2.3		
Century	II 1a	46.0 (30)	1.1	45.4 (33)	0.0	9-27	11	4	10-6	11	4	1.8	2.0		
Century 84	II 1k	46.0 (21)	0.2	48.0 (22)	1.2	9-27	12	5	10-6	13	4	1.6	1.8		
Conrad	II None	51.5 (16)	3.5 *	53.7 (15)	3.7 *	9-26	13	5	10-4	14	4	2.4	2.5		
Corsoy 79	II 1c	43.3 (36)	-0.6	44.4 (45)	0.1 L	9-23	7	0	10-2	7	0	2.5	2.4		
Dassel	0 6	--	--	40.4 (14)	-4.9 *	--	--	--	9-23	-2	-9	--	1.3		
Dawson	0 1a	40.2 (5)	-2.4	40.4 (29)	-3.3 *	9-19	0	-7	9-19	-5	-12	1.3	1.6		
Elgin	II None	47.9 (27)	2.6 *	49.3 (29)	3.5 *	9-24	8	1	10-2	8	0	2.1	2.1		
Elgin 87	II 1k	52.1 (20)	3.6 *	50.7 (22)	3.7 *H	9-23	11	3	10-2	11	2	2.4	2.6		
Glenwood	0 1a	--	--	38.9 (12)	-2.7 *	--	--	--	9-19	-5	-12	--	1.3		
Gnome 85	II 1k	46.8 (16)	-1.1	43.0 (9)	-2.2	9-28	13	6	10-7	15	6	1.4	1.5		
Hack	II 1a	48.5 (22)	2.3 *	48.6 (23)	2.0 *	9-26	11	3	10-4	11	3	1.5	1.6		
Hardin	I 1a	44.0 (29)	-0.3	46.5 (37)	1.4	9-20	5	-2	9-30	5	-2	2.4	2.3		
Hobbit	III None	44.6 (27)	1.4	47.5 (6)	0.5	10-1	15	8	10-10	16	7	1.3	1.4		
Hobbit 87	III 1k	48.6 (4)	1.8	--	--	10-7	23	13	--	--	--	1.1	--		
Hodgson 78	I 1a	41.0 (38)	-2.4 *	43.0 (48)	-1.2	9-17	0	-7	9-25	0	-7	1.9	1.8		
Hoyt	II 1a	49.9 (19)	2.6	46.4 (21)	-0.5	9-26	12	5	10-4	11	3	1.6	1.5		
Kenwood	II None	54.8 (11)	5.2 *	61.7 (11)	5.9 *	9-21	12	3	10-1	13	2	2.5	3.3		
Miami	II 1c,3	40.2 (21)	-5.5 *	42.4 (22)	-4.4 *L	9-21	6	-2	9-30	8	-1	1.9	1.8		
Ozzie	0 1a	36.0 (5)	-6.6 *	37.4 (24)	-5.6 *	9-18	-1	-8	9-17	-8	-15	1.1	1.2		
Pella	III 1a	46.1 (25)	2.2	49.3 (25)	2.8 *	9-30	15	7	10-7	13	6	-1.9	2.0		
Pella 86	III 1k	48.7 (9)	1.4	56.5 (3)	5.2	9-30	16	9	10-4	18	10	1.7	1.9		
Preston	II None	49.6 (18)	2.4 *	47.9 (20)	1.0	9-27	14	7	10-5	13	5	2.0	2.2		
Resnik	III 1k	48.4 (8)	2.0	--	--	10-4	20	13	--	--	--	1.9	--		
Sherman	III None	55.3 (8)	6.1	--	--	10-4	25	15	--	--	--	2.7	--		
Sibley	I 1a	46.5 (20)	-0.3	45.0 (25)	-1.1	9-15	2	-6	9-25	2	-6	2.0	1.9		
Simpson	0 1a	37.8 (4)	-3.8 *	37.9 (22)	-4.6 *	9-15	-3	-8	9-20	-4	-11	1.0	1.3		
Sturdy	II 1a	47.4 (16)	0.8	50.2 (19)	2.5 *	9-20	8	0	10-3	10	1	1.7	2.0		
Vickery	II 1c	43.6 (30)	-1.3	44.1 (34)	-1.0	9-23	7	0	10-2	7	0	2.8	2.5		

(cont'd)

\* Statistically significant deviation (P<0.05).  
H Variety exhibits higher than average response to highly productive environments.  
L Variety exhibits lower than average response to highly productive environments.

**TABLE 2. (Continued) Performance Summary for varieties entered in the Michigan trials in 1989. Phytophthora resistance designations denote the following: Type 1a resistant to Races 1, 2, and 10; Type 1b resistant to Races 1 and 3-9; Type 1c resistant to Races 1-3 and 6-10; Type 1k resistant to Races 1-10; Type 3 resistant to Races 1-5, 8, and 9; Type 6 resistant to Races 1-4 and 10.**

Brand / Entry	Phyt. Res. MG Type	Yield (bu/A) with deviation from mean						Maturity Relative to Checks						Lodging Score	
		Southern			Central			Southern			Central				
		Yield (n)	Dev.	Yield (n)	Dev.	Date	H78	C79	Date	H78	C79	South.	Central		
Vinton 81	II 1b	39.7 (8)	-6.8 *	42.6 (9)	-5.9 *	9-21	7	-1	9-30	9	1	1.8	1.8		
Weber 84	I 1c	40.5 (25)	-4.5 *	42.0 (30)	-2.8 *	9-20	4	-3	9-29	5	-3	2.5	2.3		
Wells II	II 1c	42.3 (32)	-2.5 *	43.1 (35)	-1.7 *L	9-22	6	-1	10-1	7	-1	1.7	1.6		
Williams 82	III 1k	39.6 (18)	-3.6 *	36.5 (4)	-9.3	10-6	18	11	10-16	18	9	2.6	2.7		
Zane	III None	47.6 (19)	2.0	49.8 (16)	1.3	9-30	15	7	10-7	14	5	2.1	2.3		
<b>Agripro</b>															
AP1776	I 1a	50.3 (3)	-1.0	49.6 (15)	-0.7	9-19	3	-5	9-22	2	-6	1.0	1.1		
AP1989	I 1c	52.9 (3)	1.6	54.0 (15)	3.7 *	9-24	8	0	9-27	8	0	2.1	2.0		
AP2292	II 1c	--	--	49.2 (9)	0.7	--	--	--	9-29	8	0	--	1.1		
AP2324	II None	48.5 (12)	0.3	50.6 (10)	1.5	9-22	11	3	9-30	11	3	1.6	1.4		
AP2740	II 1c	44.6 (8)	-1.9	51.7 (6)	-0.9	9-27	12	5	10-6	13	4	1.5	1.6		
AP3220	III 1k	49.6 (4)	2.8	--	--	10-5	21	12	--	--	--	1.2	--		
AP3800	III 1k	47.8 (8)	1.4	--	--	10-7	23	15	--	--	--	2.1	--		
<b>Asgrow Seed Company</b>															
A1929	I 1k	45.5 (4)	-1.3	51.6 (5)	-2.3	9-18	4	-6	9-29	6	-4	1.0	1.2		
A2234	II 1k	49.4 (12)	1.3	51.3 (10)	2.2	9-19	7	-1	9-28	9	1	1.3	1.4		
A2543	II 1k	52.2 (4)	5.4	--	--	9-29	15	6	--	--	--	1.1	--		
A2943	II 1a	49.9 (23)	5.1 *	48.8 (6)	1.9	10-2	16	9	10-10	16	7	1.7	2.2		
<b>Atlas Seed Company</b>															
280 Brand	II None	50.1 (5)	2.4	56.2 (6)	3.6 *	9-28	12	6	10-6	13	4	1.5	1.4		
<b>Callahan Seeds</b>															
1150X Brand	I 1c	--	--	49.6 (5)	-4.2	--	--	--	9-28	5	-5	--	1.0		
1170X Brand	I None	--	--	55.5 (5)	1.7	--	--	--	9-30	7	-3	--	1.0		
1280X Brand	II None	47.8 (4)	1.0	58.3 (5)	4.5	9-30	16	7	10-7	14	4	1.5	2.0		
1290X Brand	II None	51.2 (4)	4.4	57.8 (5)	3.9	10-6	22	13	10-12	18	9	1.3	1.5		
6180 Brand	I None	49.6 (5)	2.3	48.5 (23)	2.2 *	9-26	3	-6	9-26	3	-5	1.5	1.3		
7299 Brand	II None	52.8 (12)	4.7 *	55.9 (10)	1.1 H	9-29	18	10	10-5	15	6	2.4	2.4		
8252 Brand	II None	53.1 (12)	5.0 *	56.6 (13)	5.1 *	9-24	13	5	10-2	12	4	1.9	1.9		
9191X Brd Blend	I None	--	--	46.6 (10)	0.2	--	--	--	9-26	5	-3	--	1.5		
9222X Brd Blend	II None	--	--	49.3 (9)	0.7	--	--	--	9-30	9	1	--	1.7		
9270X Brand	II None	50.6 (8)	4.1 *H	53.9 (9)	5.3 *	9-29	15	7	10-3	12	4	1.3	1.2		
9299X Brd Blend	II None,3	47.3 (8)	0.9	--	--	9-29	15	7	--	--	--	1.8	--		
<b>Countrymark</b>															
EXP 16076	II 1k	43.4 (4)	-3.4	53.7 (5)	-0.1	9-28	14	5	10-5	12	2	1.5	1.8		
FFR 190	I None	--	--	46.1 (10)	-0.4	--	--	--	9-30	9	1	--	1.5		
FFR 218	II 1c	43.8 (4)	-3.0	49.0 (5)	-4.8 *	9-28	14	5	10-5	12	2	1.0	1.0		
<b>Dairyland Seed Company</b>															
DSR-122 (DST-1104)	I None	--	--	50.8 (5)	-3.1	--	--	--	9-20	-3	-13	--	1.1		
DSR-128	I 1c	47.3 (5)	-0.1	45.1 (23)	-1.2	9-24	0	-8	9-23	0	-8	1.3	1.3		
DSR-157	I 1c	44.8 (5)	-2.9	44.9 (10)	-1.6 L	9-19	3	-4	9-25	4	-4	1.6	1.4		
DSR-165	I None	--	--	54.0 (5)	0.2	--	--	--	9-27	4	-6	--	1.0		
DSR-170	I None	--	--	55.3 (5)	1.5	--	--	--	9-29	6	-4	--	1.5		
DSR-196 (DST-1303)	I None	--	--	49.5 (10)	3.1 *	--	--	--	9-29	9	1	--	1.4		
DSR-206 (DST-2106)	II None	--	--	47.8 (9)	-0.7	--	--	--	9-26	5	-3	--	1.4		
DSR-252	II None	49.9 (12)	1.8	53.2 (13)	1.7	9-21	10	2	9-29	9	1	1.7	1.6		
DSR-262	II None	55.1 (12)	6.9 *	57.4 (3)	6.1	9-27	16	8	10-2	16	8	2.4	2.5		
DSR-270	II None	53.7 (12)	5.5 *	50.3 (6)	4.4 *H	9-27	16	8	10-1	14	8	1.6	1.7		
DSR-284	II 1c	47.7 (8)	1.2	--	--	10-1	16	9	--	--	--	1.9	--		
DSR-290	II None	51.2 (8)	4.7 *	--	--	9-30	16	9	--	--	--	1.5	--		
DSR-304	III None	54.3 (12)	6.1 *	55.4 (3)	4.2	10-2	21	13	10-6	20	12	2.3	2.5		
<b>DeKalb-Pfizer Genetics</b>															
CX187	I None	52.2 (3)	0.9	49.6 (15)	-0.7 H	9-20	4	-4	9-23	4	-4	1.1	1.2		
CX265	II 1a	44.3 (8)	-0.3	47.8 (18)	-0.2 L	10-4	11	3	10-5	13	4	2.0	1.9		
CX298	II 1k	47.5 (8)	1.0	--	--	10-2	18	10	--	--	--	1.6	--		
CX326	III 1c	48.3 (15)	1.7	43.9 (4)	-3.6	10-1	18	10	10-10	16	9	1.8	1.7		
<b>Diehl Fields</b>															
DF-101 Brand	I None	49.0 (9)	1.5	48.7 (19)	1.3	9-18	4	-4	9-25	3	-5	1.5	1.4		
DF-201 Brand	II None	47.4 (8)	0.9	46.4 (5)	2.1	9-28	13	6	10-1	13	6	2.0	2.4		
DF-261 Brand	II None	50.0 (4)	3.2	--	--	10-3	19	10	--	--	1.0	--	--		
<b>Funk Seeds International</b>															
G3185	I None	--	--	56.2 (5)	2.4	--	--	--	9-30	7	-3	--	1.3		
G3197	I None	46.6 (13)	-0.6	46.5 (20)	-0.1	9-19	5	-3	9-27	5	-3	1.3	1.3		
G3232	II None	45.6 (11)	0.8	45.5 (3)	0.1	9-29	13	6	10-11	12	5	2.1	2.1		
<b>Glenn-Garno</b>															
1800 Brand	I None	49.2 (9)	-0.2	51.3 (15)	0.9	9-16	4	-3	9-23	3	-5	1.6	1.4		
2700 Brand	II None	48.3 (4)	1.5	57.8 (5)	4.0	10-1	17	8	10-7	14	4	1.1	1.4		
2750 Brand	II None	48.2 (4)	1.4	51.3 (5)	-2.5	10-5	21	12	10-9	16	6	1.6	2.0		
2800 Brand	II None	52.0 (12)	3.8 *	51.2 (10)	2.2 *	9-26	15	7	10-2	13	5	2.2	1.9		

(cont'd)

\* Statistically significant deviation (P<0.05).  
H Variety exhibits higher than average response to highly productive environments.  
L Variety exhibits lower than average response to highly productive environments.

**TABLE 2. (Continued) Performance Summary for varieties entered in the Michigan trials in 1989. Phytophthora resistance designations denote the following: Type 1a resistant to Races 1, 2, and 10; Type 1b resistant to Races 1 and 3-9; Type 1c resistant to Races 1-3 and 6-10; Type 1k resistant to Races 1-10; Type 3 resistant to Races 1-5, 8, and 9; Type 6 resistant to Races 1-4 and 10.**

Brand / Entry	Phyt. Res.	MG Type	Yield (bu/A) with deviation from mean						Maturity Relative to Checks						Lodging Score		
			Southern			Central			Southern			Central			South	Central	
			Yield (n)	Dev.	Dev.	Yield (n)	Dev.	Dev.	Date	H78	C79	Date	H78	C79			
3500 Brand	III	None	41.2	(4)	-5.7	--	--	--	10-10	26	17	--	--	--	1.8	--	
3500A Brand	III	None	44.4	(4)	-2.4	50.2	(4)	-6.0	*H	10-9	25	16	10-13	20	10	1.2	1.6
<b>Golden Harvest (Sommer Brothers)</b>																	
H-1170 Brand	I	None	46.9	(12)	-1.3	50.2	(15)	-0.1		9-15	4	-4	9-23	4	-4	1.6	1.4
H-1278 Brand (X-278)	II	None	47.8	(8)	1.3	49.1	(9)	0.6		10-1	16	9	10-4	14	6	1.4	1.3
H-1285 Brand	II	None	51.0	(17)	5.0	* 50.2	(20)	3.1	*	10-1	15	7	10-6	14	6	2.2	2.0
H-1289 Brand	II	None	47.5	(4)	0.7	46.9	(5)	-6.9		10-6	22	13	10-10	17	7	1.3	1.9
H-1290 Brand	II	None	48.2	(8)	1.8	49.8	(9)	1.3		10-1	16	9	10-5	15	6	1.9	1.8
X-260 Brand	II	None	48.7	(4)	1.9	55.3	(5)	1.5		9-29	15	6	10-6	13	3	1.5	1.7
<b>Great Lakes Hybrids</b>																	
GL1999 Brand	II	1a	46.7	(4)	-0.8	48.2	(19)	0.8		10-1	7	0	10-1	9	1	2.2	2.0
GL2616 Brand	II	None	45.0	(4)	-1.8	54.6	(5)	0.8		10-4	20	11	10-8	15	5	1.3	1.8
GL2634 Brand	II	None	48.1	(28)	3.7	* 47.6	(22)	2.6	*H	9-28	12	5	10-5	11	4	2.2	2.2
<b>Gries Seed Farm</b>																	
GSF-265	II	1b	43.8	(12)	-4.4	51.8	(10)	-3.0		9-25	14	6	10-2	12	3	1.7	1.8
GSF-365	III	1b	33.4	(4)	-13.5	--	--	--		10-10	26	17	--	--	--	1.3	--
<b>Jacques Seed Company</b>																	
J-181 Blend	I	None	--	--	--	48.5	(10)	2.0		--	--	--	9-24	3	-5	--	1.2
J-231	II	1a	47.3	(17)	2.8	* 48.8	(13)	1.3		9-27	9	2	10-3	11	2	2.0	2.0
J-282	II	None	49.4	(8)	2.9	--	--	--		9-26	12	4	--	--	--	1.7	--
<b>Kaiser/Estech</b>																	
EXP 121023 Brand	II	1k	47.1	(4)	0.3	54.9	(5)	1.0		9-25	11	1	10-3	10	0	1.5	2.1
KE 156 Brand	I	None	50.2	(9)	0.7	51.2	(16)	2.3		9-15	4	-4	9-23	4	-4	1.5	1.3
KE 199 Brand (111009)	I	1c	43.9	(8)	-2.6	* 48.7	(9)	0.2		9-24	9	2	10-2	11	3	1.6	1.4
KE 230E Brand	II	None	51.0	(4)	4.2	* 56.7	(5)	2.8		9-26	12	2	10-5	12	2	1.2	1.5
KE 258 Brand	II	None	48.1	(8)	1.7	50.4	(9)	1.9		29	15	7	10-4	13	5	1.5	1.5
KE 266 Brand	II	None	48.7	(12)	0.5	49.5	(10)	0.5		9-24	13	5	10-2	13	5	2.0	2.0
KE 276 Brand	II	None	--	--	--	53.7	(5)	-0.1		--	--	--	10-8	15	5	--	1.8
KE 298 Brand	II	None	46.4	(8)	-0.1	44.2	(5)	-0.2		10-4	20	13	10-7	18	11	1.5	1.8
KE 310 Brand	III	None	51.9	(12)	3.7	53.1	(3)	1.9		10-1	19	11	10-4	18	10	2.3	2.7
<b>King Grain</b>																	
Kador	II	None	43.0	(5)	-4.7	* 48.9	(6)	-3.7		9-28	11	5	10-6	14	5	2.9	2.5
KG81	I	1c	45.4	(4)	-2.1	46.4	(18)	-0.5		9-30	6	-2	9-28	7	-2	1.4	1.5
KG91	II	None	54.5	(3)	3.3	51.0	(13)	-0.4	L	9-25	9	1	9-29	10	2	2.1	2.2
KG100	II	None	--	--	--	50.4	(9)	1.9		--	--	--	10-4	13	5	--	1.5
KG4615	II	None	49.0	(6)	1.2	51.3	(13)	-0.2		10-6	23	14	10-8	19	11	2.3	2.6
PS90	II	None	45.3	(6)	-1.6	46.7	(24)	0.5	L	10-2	8	-1	10-2	8	1	2.0	2.1
<b>Lakeside States</b>																	
LS125 Brand	II	1a	48.6	(12)	1.5	52.9	(14)	2.6		9-25	11	4	10-1	10	2	2.0	1.9
LS2394	II	1a	49.3	(4)	2.5	--	--	--		10-5	21	12	--	--	--	1.5	--
<b>Maumee Valley Seeds</b>																	
"Commander" Brand	III	None	50.4	(12)	2.2	51.4	(3)	0.1		10-5	24	16	10-9	23	15	2.4	2.0
"Eagle" Brand	II	None	50.1	(3)	-1.1	53.0	(13)	1.5		9-23	7	-1	9-26	7	-1	2.1	1.9
"Enterprise" Brand	II	None	41.0	(10)	-3.2	47.5	(15)	-2.6		10-1	11	3	10-4	13	4	2.1	2.0
"Kodiak" Brand	III	1a	47.1	(19)	1.5	48.7	(5)	1.3		10-2	17	9	10-10	16	8	2.7	3.0
MV-2E1 Brand	II	1a	47.0	(20)	2.2	50.0	(10)	0.4		9-30	13	6	10-8	14	5	2.3	2.0
"Sabre" Brand	II	None	53.0	(12)	4.9	* 56.2	(13)	4.8	*H	9-24	12	5	10-1	12	4	1.7	2.0
"Savage" Brand	III	None	51.1	(8)	4.6	* 55.6	(5)	1.3		10-2	18	10	10-8	16	6	1.7	2.0
"Warrior" Brand	II	None	47.6	(19)	2.0	49.1	(15)	-1.0		9-30	14	7	10-6	15	6	2.2	2.3
"Washington V" Brand	III	1a	46.4	(23)	1.7	44.9	(6)	-2.1		10-2	16	8	10-6	12	4	3.0	3.1
<b>Northrup King</b>																	
S19-90	I	1c	--	--	--	56.9	(5)	3.1	*	--	--	--	10-2	9	-1	--	1.1
S20-26	II	1c	--	--	--	57.8	(5)	4.0		--	--	--	10-4	11	1	--	1.5
S23-12	II	None	50.8	(15)	4.2	* 51.3	(17)	3.3	*	9-22	8	1	9-30	8	0	1.2	1.2
S29-20	II	1a	51.3	(12)	3.1	48.2	(3)	-3.0		9-28	17	9	10-3	16	9	1.8	1.7
<b>Pioneer Hi-Bred International</b>																	
9161	I	None	--	--	--	48.5	(10)	2.0		--	--	--	9-25	4	-4	--	1.4
9202	I	None	54.7	(3)	3.5	50.9	(13)	-0.6		9-22	5	-2	9-25	6	-3	1.3	1.4
9271	II	None	47.2	(23)	2.5	* 50.5	(19)	2.1	*	9-26	10	3	10-3	10	3	1.5	1.7
9272	II	None	45.8	(8)	-0.7	50.4	(9)	1.9		9-23	8	1	9-30	9	1	1.4	1.3
9293	II	None	50.1	(8)	3.6	* 51.8	(9)	3.3	*	9-30	16	8	10-5	14	6	1.8	1.7
9301	III	None	48.5	(8)	2.1	--	--	--		10-1	16	9	--	--	--	2.4	--
9302	III	1?	46.4	(4)	-0.4	58.9	(4)	2.7		9-26	12	2	10-3	11	0	1.0	1.0
9361	III	None	--	--	--	50.5	(4)	-5.7		--	--	--	10-11	19	8	--	2.4
<b>Pro-Seed (Prosoy)</b>																	
PS138	I	None	45.6	(12)	-2.6	50.7	(15)	0.3	H	9-15	3	-5	9-23	4	-4	1.4	1.4
PS215	II	1c	49.0	(8)	2.5	52.7	(9)	4.1	*	9-24	9	2	10-1	11	3	1.5	1.7
PS225	II	None	46.4	(8)	-0.1	50.5	(9)	2.0		9-26	11	4	10-2	11	3	2.0	2.1

(cont'd)

\* Statistically significant deviation (P<0.05).

H Variety exhibits higher than average response to highly productive environments.

L Variety exhibits lower than average response to highly productive environments.

**TABLE 2. (Continued) Performance Summary for varieties entered in the Michigan trials in 1989. Phytophthora resistance designations denote the following: Type 1a resistant to Races 1, 2, and 10; Type 1b resistant to Races 1 and 3-9; Type 1c resistant to Races 1-3 and 6-10; Type 1k resistant to Races 1-10; Type 3 resistant to Races 1-5, 8, and 9; Type 6 resistant to Races 1-4 and 10.**

Brand / Entry	Phyt. Res.	MG Type	Yield (bu/A) with deviation from mean						Maturity Relative to Checks						Lodging Score	
			Southern			Central			Southern			Central				
			Yield (n)	Dev.	Yield (n)	Dev.	Date	H78	C79	Date	H78	C79	South.	Central		
PS246A	II	None	47.6 (12)	-0.6	53.1 (13)	1.6	9-24	12	4	10-2	13	4	2.0	2.3		
PS259	II	None	50.9 (12)	2.7	51.6 (7)	-1.1	9-27	16	8	10-5	15	6	2.2	2.0		
PS330	III	None	50.6 (12)	2.5	47.3 (3)	-4.0	9-30	19	11	10-4	18	10	2.3	2.9		
PS80-87-C14	II	None	31.9 (4)	-15.0	38.1 (5)	-15.7	10-8	24	15	10-12	19	9	2.9	2.7		
PS80-87-22	III	None	33.1 (4)	-13.7	--	--	10-9	25	16	--	--	--	2.9	--		
<b>Rupp Seeds</b>																
EXP 33265	II	1k	49.3 (4)	2.5	57.8 (5)	4.0 *	9-29	15	5	10-6	13	3	1.5	1.7		
EXP 34096	II		47.3 (4)	0.5	--	--	10-3	19	10	--	--	--	1.3	--		
RS2308	II	None	53.2 (9)	3.8	54.8 (13)	3.3 *	9-22	10	3	9-28	9	1	1.7	1.8		
RS2323	II	1c	47.4 (8)	0.9	48.7 (9)	0.2	9-25	11	3	10-1	11	2	1.5	1.5		
RS2544	III	None	46.8 (19)	1.3	42.4 (5)	-5.0	10-5	19	12	10-14	20	12	2.5	2.8		
<b>J.M. Schultz</b>																
EX 2600	II		50.9 (4)	4.1 *	57.1 (5)	3.3 *	10-2	18	9	10-7	14	4	1.3	1.4		
EX 2900	II		52.1 (4)	5.3 *	52.8 (5)	-1.0	10-4	20	11	10-7	14	4	1.8	1.8		
2288	II	None	48.5 (8)	2.0	51.5 (9)	3.0	9-26	12	4	10-3	12	4	1.7	1.7		
<b>Seedex</b>																
180X	I		--	--	57.5 (5)	3.6 L	--	--	--	10-1	8	-2	--	1.1		
190	I	None	--	--	47.2 (10)	0.7	--	--	--	9-26	5	-3	--	1.4		
240	II	None	--	--	52.1 (5)	-1.7	--	--	--	10-7	14	4	--	1.4		
260	II	None	--	--	50.8 (9)	2.2	--	--	--	10-4	13	5	--	1.8		
<b>Stine Seed Farm</b>																
2750 Brand	II	None	49.2 (6)	1.4	52.3 (9)	1.9	9-26	13	4	9-29	12	4	1.4	2.0		
2770 Brand	II	None	58.7 (5)	6.6	54.2 (6)	0.4	9-23	14	5	10-3	13	3	2.2	1.8		
2840 Brand	II	None	--	--	55.3 (5)	1.5	--	--	--	10-5	12	2	--	1.8		
2980 Brand	II	None	48.2 (4)	1.4	--	--	10-7	23	14	--	--	--	1.5	--		
<b>Terra International</b>																
EXP 180 Brand	I	None	--	--	56.7 (5)	2.9 L	--	--	--	9-27	4	-6	--	1.2		
EXP 245 Brand	II	None	49.6 (4)	2.8	57.0 (5)	3.2	9-28	14	5	10-6	13	3	1.4	1.7		
EXP 275 Brand	II	None	53.1 (12)	4.9 *	52.6 (13)	1.1	9-30	19	11	10-5	16	7	2.1	2.3		
"Hurdle" Brand	II	1a	48.4 (7)	-0.6	47.1 (17)	-0.9	9-25	10	1	10-2	10	1	1.7	1.6		
"Javelin" Brand	II	None	48.3 (8)	1.8	50.1 (9)	1.6	9-24	10	3	10-2	11	3	1.7	1.9		
"Medalist" Brand	II	None	49.4 (8)	2.9 *	51.9 (9)	3.3 *	9-26	12	5	10-2	12	4	1.6	1.6		
"Runner III" Brand	I	None	--	--	47.9 (10)	1.4	--	--	--	9-24	4	-4	--	1.3		
"Sprint" Brand	II	None	50.6 (15)	3.9 *	51.5 (14)	1.2	9-29	16	8	10-5	14	6	2.2	2.2		

\* Statistically significant deviation (P<0.05).  
H Variety exhibits higher than average response to highly productive environments.  
L Variety exhibits lower than average response to highly productive environments.

**TABLE 3. Southern Michigan.**

Brand	Entry	Yield (bu/A)										Maturity (days)	Height (in)	Lodging Score
		Entire Southern Region		Southeast (Lenawee Co.)		Southwest (St. Joseph Co.)		Far Southwest (Berrien Co.)		South Central (Ingham Co.)				
		1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)			
Public	Amcor	43.3	43.8 (29)	61.8	50.5 (10)	34.5	35.9 (7)	32.1	41.5 (6)	44.8	44.0 (6)	+4	38	2.1
Public	Beeson 80	41.9	37.4 (29)	59.6	42.4 (10)	29.5	31.1 (7)	27.8	37.8 (6)	50.6	36.1 (6)	+3	33	1.2
Public	BSR 101	44.8	47.6 (23)	58.6	50.8 (9)	34.4	43.7 (5)	27.9	43.4 (4)	58.5*	49.2 (5)	-3	31	1.4
Public	BSR 201	48.8*	48.6 (26)	60.4	50.8 (12)	45.4	44.5 (5)	32.8	44.3 (4)	56.5	50.7 (5)	+8	31	1.7
Public	Burlison	40.6	53.2 (11)	51.7	56.2 (5)	30.4	42.9 (2)	28.2	52.5 (2)	52.2	56.5 (2)	+12	30	1.3
Public	Century	46.9*	46.0 (30)	67.1*	53.1 (11)	36.8	38.6 (7)	32.1	42.5 (6)	51.8	45.2 (6)	+6	37	1.5
Public	Century 84	46.5*	46.0 (21)	63.1	49.7 (7)	35.5	41.5 (5)	31.5	43.1 (4)	55.7	47.5 (5)	+8	35	1.6
Public	Conrad	49.7*	51.5 (16)	64.0*	56.9 (7)	43.4	45.1 (3)	35.3*	45.0 (3)	56.2	52.0 (3)	+5	32	1.1
Public	Corsoy 79 †	43.0	43.3 (36)	54.6	50.8 (13)	35.3	33.5 (9)	29.3	39.8 (7)	52.6	45.4 (7)	9-23	38	2.0
Public	Elgin	48.2*	47.9 (27)	57.5	51.0 (10)	40.0	43.8 (6)	39.3*	44.8 (5)	56.0	49.4 (6)	+3	31	1.2
Public	Elgin 87	49.9*	52.1 (20)	69.5*	54.9 (9)	40.6	48.0 (4)	35.0*	55.1 (3)	54.5	47.7 (4)	+5	30	1.6
Public	Gnome 85	44.8	46.8 (16)	57.5	50.1 (10)	43.5	38.7 (2)	32.9	--	45.3	45.8 (3)	+9	24	1.2
Public	Hack	48.9*	48.5 (22)	62.3	51.3 (8)	41.1	44.9 (5)	33.8	45.7 (4)	58.4*	50.0 (5)	+4	32	1.2
Public	Hardin	45.2	44.0 (29)	57.9	50.7 (10)	32.6	36.7 (7)	32.0	39.7 (6)	58.4*	45.6 (6)	-3	35	1.8
Public	Hobbit	47.2*	44.6 (27)	62.3	51.1 (8)	44.7	36.9 (8)	28.8	42.8 (5)	53.0	47.5 (6)	+12	26	1.1
Public	Hobbit 87	48.6*	--	68.2*	--	44.7	--	29.4	--	52.1	--	+13	26	1.1
Public	Hodgson 78	40.7	41.0 (38)	52.7	47.3 (13)	30.9	33 (10)	28.1	38.0 (8)	51.1	44.2 (7)	-9	32	1.2
Public	Hoyt	49.7*	49.9 (19)	60.4	53.2 (8)	41.3	47.9 (4)	36.3*	51.8 (3)	60.9*	43.8 (4)	+5	24	1.2
Public	Kenwood	52.6*	54.8 (11)	66.0*	56.0 (5)	40.7	45.3 (2)	36.9*	52.2 (2)	66.7*	63.7 (2)	+3	34	1.5
Public	Miami	40.3	40.2 (21)	53.8	44.4 (7)	29.8	34.0 (5)	30.4	40.8 (4)	47.4	40.3 (5)	-3	34	1.4
Public	Pella	45.6	46.1 (25)	62.6	52.8 (7)	36.3	36.8 (7)	34.7*	44.6 (5)	48.6	50.3 (6)	+9	38	1.8
Public	Pella 86	45.1	48.7 (9)	60.8	50.1 (2)	33.5	41.5 (2)	35.6*	42.8 (2)	50.6	56.5 (3)	+8	34	1.4
(cont'd)														
Test Mean		46.5		60.7		39.4		33.1		54.0		+7	32.9	1.44
LSD(.05)		6.6		8.0		7.4		4.9		8.6		3.4	3.2	0.51

† Check variety used to calculate deviation from standard maturity.  
\* Not significantly different from the highest yield within that column.

**TABLE 3. (Continued) Southern Michigan.**

Brand	Entry	Yield (bu/A)												
		Entire Southern Region		Southeast (Lenawee Co.)		Southwest (St. Joseph Co.)		Far Southwest (Berrien Co.)		South Central (Ingham Co.)		Maturity (days)	Height (in)	Lodging Score
		1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)			
Public	Preston	46.2	49.6 (18)	51.2	50.5 (7)	46.1*	46.1 (4)	31.6	48.7 (3)	55.9	52.3 (4)	+9	33	1.2
Public	Resnik	50.9*	48.4 (8)	68.8*	52.0 (2)	46.2*	47.0 (2)	35.0*	43.2 (2)	53.4	51.6 (2)	+13	35	1.5
Public	Sherman	45.4	55.3 (8)	60.7	60.2 (2)	43.3	54.8 (2)	32.9	52.4 (2)	45.0	53.9 (2)	+15	33	1.8
Public	Sibley	44.3	46.5 (20)	59.9	50.6 (9)	31.2	36.8 (4)	27.7	44.0 (3)	58.4*	49.0 (4)	-8	32	1.4
Public	Sturdy	48.7*	47.4 (16)	65.3*	51.2 (8)	34.7	43.5 (3)	35.3*	35.5 (2)	59.5*	49.0 (3)	-1	32	1.3
Public	Vickery	46.8*	43.6 (30)	65.8*	50.9 (11)	39.2	35.7 (7)	32.4	41.3 (6)	49.7	41.9 (6)	+10	25	1.0
Public	Vinton 81	39.7	39.7 (8)	50.5	43.2 (2)	33.2	36.0 (2)	28.9	34.6 (2)	46.4	44.9 (2)	-2	33	1.2
Public	Weber 84	40.3	40.5 (25)	54.0	44.8 (8)	27.5	36.4 (6)	32.3	37.7 (5)	47.5	41.1 (6)	-5	35	2.2
Public	Wells II	43.2	42.3 (32)	57.9	46.3 (11)	31.8	35.8 (8)	31.3	41.3 (7)	51.9	44.7 (6)	-1	35	1.4
Public	Williams 82	40.5	39.6 (18)	58.2	49.6 (5)	35.2	34.6 (5)	30.6	36.3 (4)	38.0	36.5 (4)	+15	40	1.8
Public	Zane	48.5*	47.6 (19)	64.2*	52.7 (5)	40.4	44.7 (5)	35.5*	46.9 (4)	53.8	45.9 (5)	+9	36	1.3
Agripro	AP2324 (EX 2324)	43.6	48.5 (12)	51.4	47.8 (3)	35.0	43.7 (3)	32.0	48.1 (3)	56.1	54.3 (3)	+1	27	1.1
Agripro	AP2740 (EX2740)	44.6	44.6 (8)	62.2	50.6 (2)	34.2	40.9 (2)	32.0	37.7 (2)	50.0	49.2 (2)	+6	34	1.2
Agripro	AP3220	49.6*	--	65.8*	--	45.1	--	33.1	--	54.3	--	+12	34	1.2
Agripro	AP3800 (EX3800)	47.7*	47.8 (8)	69.2*	53.9 (2)	44.2	44.6 (2)	32.8	43.9 (2)	44.7	49.0 (2)	+16	34	1.8
Asgrow	A1929	45.5	--	59.7	--	34.3	--	31.5	--	56.4	--	-6	30	1.0
Asgrow	A2234	46.5*	49.4 (12)	62.1	52.9 (3)	32.4	43.9 (3)	33.5	46.7 (3)	58.1	54.3 (3)	-2	30	1.0
Asgrow	A2543	52.2*	--	65.8*	--	44.4	--	34.6*	--	63.9*	--	+5	28	1.1
Asgrow	A2943	51.2*	49.9 (23)	68.9*	55.3 (6)	49.2*	47.1 (6)	31.0	47.8 (5)	55.9	48.8 (6)	+14	35	1.2
Callahan	1280X Brand	47.8*	--	63.4	--	35.8	--	35.0*	--	57.0	--	+7	32	1.5
Callahan	1290X Brand	51.2*	--	55.4	--	51.7*	--	36.4*	--	61.3*	--	+13	33	1.2
Callahan	7299 Brand	49.2*	52.8 (12)	65.1*	55.6 (3)	45.5	53.1 (3)	33.5	50.4 (3)	52.6	52.3 (3)	+11	35	1.6
Callahan	8252 Brand	49.2*	53.1 (12)	63.0*	53.7 (3)	37.2	47.8 (3)	37.0*	51.7 (3)	59.7*	59.2 (3)	+5	32	1.4
Callahan	9270X Brand	52.2*	50.6 (8)	71.8*	56.1 (2)	44.1	47.4 (2)	32.8	43.3 (2)	60.1*	55.7 (2)	+9	30	1.0
Callahan	9299X Brand Blend	47.4*	47.3 (8)	60.0	46.7 (2)	48.9*	50.1 (2)	31.2	40.9 (2)	53.6	51.8 (2)	+11	33	1.5
Countrymark	FFR 218	43.8	--	56.4	--	34.3	--	31.7	--	48.8	--	+4	30	1.0
Countrymark	Exp. 16076	43.4	--	60.6	--	32.8	--	30.7	--	49.4	--	+4	33	1.5
Dairyland	DSR-252	46.1	49.9 (12)	60.6	51.6 (3)	32.8	44.3 (3)	34.9*	50.4 (3)	56.0	53.5 (3)	0	31	1.2
Dairyland	DSR-262	49.4*	55.1 (12)	64.4*	56.3 (3)	43.9	50.8 (3)	33.3	55.8 (3)	56.1	57.4 (3)	+9	33	1.8
Dairyland	DSR-270	49.6*	53.7 (12)	60.8	55.9 (3)	38.3	47.8 (3)	35.7*	53.3 (3)	63.8*	57.6 (3)	+9	29	1.3
Dairyland	DSR-284	48.1*	47.7 (8)	63.9*	56.4 (2)	41.3	46.3 (2)	33.5	40.0 (2)	53.8	48.1 (2)	+9	35	1.4
Dairyland	DSR-290	52.8*	51.2 (8)	66.6*	55.2 (2)	53.0*	51.2 (2)	32.5	44.9 (2)	58.8*	53.5 (2)	+10	33	1.3
Dairyland	DSR-304	48.0*	54.3 (12)	63.7	54.9 (3)	46.6*	52.7 (3)	32.6	54.2 (3)	49.3	55.4 (3)	+13	34	1.3
DeKalb-Pfizer	CX298	48.3*	47.5 (8)	67.8*	53.9 (2)	44.6	46.0 (2)	32.6	43.3 (2)	48.2	46.7 (2)	+11	32	1.3
DeKalb-Pfizer	CX326	44.1	48.3 (15)	61.2	53.3 (4)	41.1	45.2 (4)	29.1	51.6 (3)	45.0	43.9 (4)	+12	35	1.6
Diehl Fields	DF-201 Brand	46.7*	47.4 (8)	58.8	50.3 (2)	40.1	44.2 (2)	35.2*	43.1 (2)	52.6	52.1 (2)	+5	32	1.4
Diehl Fields	DF-261 Brand	50.0*	--	58.6	--	49.3*	--	34.5	--	57.5	--	+9	32	1.0
Funk	G3197	42.6	46.6 (13)	48.5	47.6 (3)	31.1	41.2 (3)	30.6	47.2 (3)	60.4*	49.6 (4)	-6	25	1.0
Funk	G3232	47.4*	45.6 (11)	63.4	52.9 (3)	33.8	40.2 (3)	37.0*	42.7 (2)	55.4	45.5 (3)	+6	37	1.7
Glenn-Garno	2700 Brand	48.3*	--	62.7	--	41.9	--	34.7*	--	53.8	--	+8	31	1.1
Glenn-Garno	2750 Brand	48.2*	--	64.8*	--	48.0*	--	31.7	--	48.4	--	+12	34	1.6
Glenn-Garno	2800 Brand	48.0*	52.0 (12)	60.3	54.1 (3)	42.4	48.8 (3)	37.7*	52.6 (3)	51.5	52.4 (3)	+5	31	1.4
Glenn-Garno	3500 Brand	41.2	--	59.1	--	43.0	--	28.0	--	34.5	--	+17	39	1.8
Glenn-Garno	3500A Brand	44.4	--	57.4	--	44.4	--	29.5	--	46.3	--	+16	33	1.2
Golden Harvest	H-1170 Brand	42.9	46.9 (12)	49.7	48.6 (3)	31.4	41.4 (3)	29.9	43.8 (3)	60.5*	53.7 (3)	-6	29	1.1
Golden Harvest	H-1278 Brand (X-278)	46.6*	47.8 (8)	53.3	46.6 (2)	42.2	46.1 (2)	35.6*	45.6 (2)	55.5	52.9 (2)	+11	28	1.0
Golden Harvest	H-1285 Brand	51.0*	51.0 (17)	63.9*	53.9 (4)	44.5	48.5 (4)	37.6*	52.3 (4)	58.0	49.6 (5)	+8	33	1.3
Golden Harvest	H-1289 Brand	47.5*	--	66.1*	--	46.1*	--	30.4	--	47.5	--	+12	37	1.3
Golden Harvest	H-1290 Brand	47.7*	48.2 (8)	63.1	53.5 (2)	43.1	45.3 (2)	29.3	41.6 (2)	55.5	52.7 (2)	+9	38	1.6
Golden Harvest	X-260 Brand	48.7*	--	58.1	--	42.0	--	34.5	--	60.3*	--	+6	32	1.5
GLH	GL2616 Brand	45.0	--	62.3	--	35.0	--	31.1	--	51.6	--	+10	35	1.3
GLH	GL2634 Brand	48.7*	48.1 (28)	61.3	53.6 (9)	39.3	40.8 (7)	34.6*	46.7 (6)	59.5*	49.9 (6)	+5	32	1.5
Gries	GSF-265	32.9	43.8 (12)	45.2	46.3 (3)	16.2	38.3 (3)	32.1	46.1 (3)	37.9	44.3 (3)	+7	28	1.1
Gries	GSF-365	33.3	--	44.8	--	16.9	--	32.9	--	38.8	--	+16	30	1.3
Jacques	J-282	47.6*	49.4 (8)	56.0	49.6 (2)	40.3	44.4 (2)	36.1*	47.5 (2)	57.9	56.1 (2)	+5	32	1.4
Kaiser/Estech	KE199 Brand	44.0	43.8 (8)	59.6	48.8 (2)	33.6	40.5 (2)	29.7	37.2 (2)	53.1	48.9 (2)	+3	33	1.3
Kaiser/Estech	KE230E Brand	51.0*	--	64.6*	--	40.9	--	38.4*	--	60.2*	--	+2	33	1.2
Kaiser/Estech	KE258 Brand	49.1*	48.1 (8)	62.8	49.6 (2)	40.7	44.4 (2)	34.2	43.3 (2)	58.6*	55.3 (2)	+7	29	1.3
Kaiser/Estech	KE266 Brand	44.0	48.7 (12)	53.4	47.7 (3)	32.3	43.6 (3)	36.6*	51.4 (3)	53.6	52.1 (3)	+4	33	1.5
Kaiser/Estech	KE298 Brand	48.8*	46.4 (8)	59.4	49.1 (2)	47.7*	47.8 (2)	34.2	42.8 (2)	54.0	45.9 (2)	+14	34	1.1
Kaiser/Estech	KE310	47.2*	51.9 (12)	60.1	52.5 (3)	44.0	52.4 (3)	33.7	49.5 (3)	51.1	53.1 (3)	+11	36	1.6
Kaiser/Estech	Exp. 121023 Brand	47.1*	--	65.1*	--	34.6	--	35.9*	--	52.8	--	+1	33	1.5
King Grain	KG4615	46.5*	49.0 (6)	62.4	--	42.2	--	31.0	--	50.6	--	+14	37	2.0
Lakeside States	LS2394 Brand	49.3*	--	63.7	--	43.6	--	33.2	--	56.8	--	+12	33	1.5
Maumee Valley	Commander Brand	43.9	50.4 (12)	55.1	54.5 (3)	46.9*	50.0 (3)	29.3	45.5 (3)	44.4	51.4 (3)	+17	37	1.4
Maumee Valley	Kodiak Brand	46.3*	47.1 (19)	62.5	53.0 (5)	43.4	42.5 (5)	30.0	43.5 (4)	49.3	48.7 (5)	+12	36	1.7
Maumee Valley	Sabre Brand	49.5*	53.0 (12)	58.0	52.5 (3)	45.7*	50.9 (3)	37.0*	51.9 (3)	57.2	56.9 (3)	+4	32	1.6
Maumee Valley	Savage Brand	50.4*	51.1 (8)	68.3*	56.2 (2)	49.9*	50.9 (2)	32.4	47.1 (2)	50.8	50.1 (2)	+11	30	1.4
Maumee Valley	Warrior Brand	46.1	47.6 (19)	63.8	53.7 (5)	42.2	43.1 (5)	28.4	45.5 (4)	49.8	47.6 (5)	+9	34	1.7
Maumee Valley	Washington V Brand	47.2*	46.4 (23)	63.8	52.3 (6)	45.0	44.3 (6)	32.1	43.9 (5)	48.0	44.9 (6)	+13	39	2.2
Northrup King	S23-12	49.0*	50.8 (15)	56.8	52.3 (4)	39.0	47.4 (4)	35.5*	49.7 (3)	64.8*	53.7 (4)	+1	33	1.1
Northrup King	S29-20	47.0*	51.3 (12)	62.6	54.8 (3)	42.7	51.5 (3)	31.5	50.5 (3)	51.2	48.2 (3)	+10	34	1.4
Pioneer	9271	46.8*	47.2 (23)	57.8	52.3 (6)	42.5	44.2 (6)	34.2	43.0 (5)	52.6	48.8 (6)	+5	30	1.3
Pioneer	9272	44.2	45.8 (8)	53.3	45.5 (2)	35	44.8 (2)	36.0*	43.3 (2)	52.4	49.7 (2)	0	29	1.1
Pioneer	9293	48.4*	50.1 (8)	64.9*	52.9 (2)	40.5	47.1 (2)	36.8*	47.9 (2)	51.4	52.5 (2)	+9	29	1.4
Pioneer	9301	50.7*	48.5 (8)	69.2*	52.6 (2)	42.6	48.2 (2)	37.9*	46.2 (2)	53.0	47.2 (2)	+10	39	2.2
Pioneer	9302	46.4*	--	59.8	--	37.8	--	33.9	--	54.1	--	+2	30	1.0
Pro-Seed	PS138	43.1	45.6 (12)	50.2	47.4 (3)	28.1	38.5 (3)	30.4	43.7 (3)	63.8*	52.9 (3)	-7	28	1.1

(cont'd)

Test Mean	46.5	60.7	39.4	33.1	54.0	+7	32.9	1.44
LSD(.05)	6.6	8.0	7.4	4.9	8.6	3.4	3.2	0.51

† Check variety used to calculate deviation from standard maturity.  
 \* Not significantly different from the highest yield within that column.

**TABLE 3. (Continued) Southern Michigan.**

Brand	Entry	Yield (bu/A)												
		Entire Southern Region		Southeast (Lenawee Co.)		Southwest (St. Joseph Co.)		Far Southwest (Berrien Co.)		South Central (Ingham Co.)		Maturity (days)	Height (in)	Lodging Score
		1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)			
Pro-Seed	PS215	47.2*	49.0 (8)	59.2	51.2 (2)	38.6	46.4 (2)	36.9*	42.5 (2)	54.1	55.9 (2)	+2	31	1.2
Pro-Seed	PS225	46.6*	46.4 (8)	61.8	49.8 (2)	35.7	42.1 (2)	34.5	39.1 (2)	54.5	54.5 (2)	+4	35	1.8
Pro-Seed	PS246A	42.7	47.6 (12)	60.4	51.7 (3)	29.1	38.0 (3)	31.2	49.3 (3)	50.2	51.5 (3)	+2	32	1.5
Pro-Seed	PS259	48.9*	50.9 (12)	68.6*	56.1 (3)	46.9*	50.0 (3)	31.2	46.7 (3)	49.0	50.6 (3)	+11	36	1.4
Pro-Seed	PS330	45.4	50.6 (12)	59.1	55.2 (3)	42.2	49.2 (3)	34.3	50.8 (3)	45.8	47.3 (3)	+11	35	1.9
Pro-Seed	PS80-87-C14	31.9	--	53.4	--	27.3	--	26.6	--	20.1	--	+15	45	2.9
Pro-Seed	PS80-87-22	33.1	--	51.1	--	29.2	--	25.8	--	26.2	--	+15	42	2.8
Rupp	RS2323	48.9*	47.4 (8)	62.3	52.6 (2)	36.9	41.8 (2)	39.5*	45.6 (2)	56.9	49.5 (2)	+4	31	1.4
Rupp	RS2544	41.8	46.8 (19)	61.7	50.7 (5)	40.5	46.2 (5)	28.6	48.5 (4)	36.6	42.4 (5)	+16	40	1.9
Rupp	Exp. 33265	49.3*	--	64.4*	--	39.5	--	33.1	--	60.1*	--	+5	32	1.5
Rupp	Exp. 34096	47.3*	--	64.4*	--	37.6	--	34.8*	--	52.4	--	+10	34	1.3
Schultz	JMS 2288 Brand	47.4*	48.5 (8)	65.4*	54.8 (2)	39.6	44.6 (2)	36.4*	42.7 (2)	48.3	52.1 (2)	+5	32	1.6
Schultz	JMS EX 2600 Brand	50.9*	--	64.7*	--	45.7*	--	37.3*	--	56.0	--	+8	31	1.3
Schultz	JMS EX 2900 Brand	52.1*	--	64.6*	--	46.7*	--	37.4*	--	59.7*	--	+11	36	1.8
Stine	2750 Brand	48.5*	49.2 (6)	58.4	--	40.9	--	36.9*	--	57.6	--	+5	30	1.3
Stine	2980 Brand	48.2*	--	60.4	--	48.9*	--	35.6*	--	48.0	--	+14	35	1.5
Terra	Javelin Brand	46.9*	48.3 (8)	60.6	51.7 (2)	31.3	40.9 (2)	36.1*	45.5 (2)	59.6*	55.1 (2)	+2	33	1.5
Terra	Medalist Brand	47.7*	49.4 (8)	58.6	50.8 (2)	40.4	45.7 (2)	34.7*	45.1 (2)	57.0	56 (2)	+5	32	1.1
Terra	Sprint Brand	51.2*	50.6 (15)	65.7*	54.4 (4)	45.8*	45.4 (4)	35.5*	49.8 (3)	57.8	52.5 (4)	+9	34	1.1
Terra	Exp. 245 Brand	49.6*	--	61.6	--	45.3	--	36.8*	--	54.7	--	+4	32	1.4
Terra	Exp. 275 Brand	49.9*	53.1 (12)	65.7*	57.1 (3)	44.3	51.4 (3)	33.4	51.4 (3)	56.0	52.5 (3)	+12	35	1.5
Test Mean		46.5		60.7		39.4		33.1		54.0		7	32.9	1.44
Minimum		31.9		44.8		16.2		25.8		20.1		-9	23.7	1.00
Maximum		52.8		71.8		53.0		39.5		66.7		17	45.3	2.9
CV		10.2%		8.1%		11.4%		8.9%		8.1%		8.0%	7.0%	25.8%
LSD(.05)		6.6		8.0		7.4		4.9		8.56		3.4	3.2	0.51

\* Not significantly different from the highest yield within that column.

**TABLE 4. Central Michigan.**

Brand	Entry	Yield (bu/A)												
		Entire Central Region		South Central (Ingham Co.)		Central (Saginaw Co.)		East Central (Sanilac Co.)		East Central (St. Clair Co.)		Maturity (days)	Height (in)	Lodging Score
		1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)			
Public	Amcor	52.6	45.7 (30)	44.8	44.0 (6)	41.9	44.0 (11)	58.2	49.8 (11)	65.6*	49.8 (11)	+3	41	2.4
Public	Beeson 80	52.1	39.7 (32)	50.6	36.1 (6)	41.8	42.2 (12)	56.1	38.9 (12)	59.9	38.9 (12)	+2	38	1.8
Public	BSR 101	57.8*	46.9 (28)	58.5*	49.2 (5)	54.5*	47.4 (9)	60.6*	49.4 (8)	57.6	49.4 (8)	0	35	1.6
Public	BSR 201	53.1	47.3 (25)	56.5	50.7 (5)	44.7	46.0 (10)	54.2	49.2 (8)	56.9	49.2 (8)	+3	35	2.4
Public	Burlison	56.0	59.0 (11)	52.2	56.5 (2)	41.5	52.4 (4)	58.9	69.7 (4)	71.5*	69.7 (4)	+6	34	1.6
Public	Century	54.5	45.4 (33)	51.8	45.2 (6)	46.7	45.2 (13)	60.9*	46.9 (12)	58.5	46.9 (12)	+4	39	1.8
Public	Century 84	54.0	48.0 (22)	55.7	47.5 (5)	38.5	46.2 (7)	58.6	51.5 (8)	63.1	51.5 (8)	+5	37	1.8
Public	Conrad	60.9*	53.7 (15)	56.2	52.0 (3)	53.4*	47.8 (6)	66.0*	62.1 (5)	67.9*	62.1 (5)	+2	35	1.1
Public	Corsoy 79 †	49.5	44.4 (45)	52.6	45.4 (7)	49.3	44.7 (17)	52.9	46.0 (14)	43.3	46.0 (14)	10-3	39	2.3
Public	Elgin	58.7*	49.3 (29)	56.0	49.4 (6)	52.9*	50.3 (11)	62.0*	51.5 (9)	63.7	51.5 (9)	-1	33	1.8
Public	Elgin 87	60.3*	50.7 (22)	54.5	47.7 (4)	54.7*	51.8 (8)	66.0*	56.2 (7)	66.0*	56.2 (7)	+1	35	2.0
Public	Hack	59.2*	48.6 (23)	58.4*	50.0 (5)	49.5	46.4 (8)	59.0	51.7 (8)	69.8*	51.7 (8)	+2	34	1.4
Public	Hardin	56.6	46.5 (37)	58.4*	45.6 (6)	50.2	49.2 (12)	56.7	49.1 (12)	61.3	49.1 (12)	-4	36	2.0
Public	Hodgson 78	52.8	43.0 (48)	51.1	44.2 (7)	45.7	42.6 (18)	51.7	45.3 (15)	62.7	45.3 (15)	-11	35	1.8
Public	Hoyt	58.3*	46.4 (21)	60.9*	43.8 (4)	46.3	46.1 (8)	60.7*	50.2 (7)	65.2	50.2 (7)	+3	24	1.2
Public	Kenwood	61.9*	61.7 (11)	66.7*	63.7 (2)	51.3	59.2 (4)	61.8*	66.8 (4)	67.8*	66.8 (4)	+1	37	2.1
Public	Miami	50.6	42.4 (22)	47.4	40.3 (5)	46.1	43.3 (7)	49.5	44.0 (8)	59.2	44.0 (8)	-2	37	1.5
Public	Pella	55.7	49.3 (25)	48.6	50.3 (6)	45.3	45.5 (8)	60.1*	52.7 (10)	68.7*	52.7 (10)	+6	40	2.0
Public	Preston	53.6	47.9 (20)	55.9	52.3 (4)	48.6	46.8 (7)	47.3	48.7 (7)	62.7	48.7 (7)	+4	38	1.9
Public	Sibley	56.7	45.0 (25)	58.4*	49.0 (4)	48.2	44.6 (9)	59.9*	47.8 (7)	60.5	47.8 (7)	-7	35	1.8
Public	Sturdy	60.3*	50.2 (19)	59.5*	49.0 (3)	48.7	52.8 (9)	66.1*	50.1 (5)	66.7*	50.1 (5)	0	37	1.6
Public	Vickery	54.6	44.1 (34)	49.7	41.9 (6)	40.9	43.5 (14)	58.8	47.6 (12)	69.0*	47.6 (12)	+6	24	1.1
Public	Vinton 81	49.7	42.6 (9)	46.4	44.9 (2)	44.9	49.8 (2)	54.0	43.9 (3)	53.6	43.9 (3)	-1	36	1.8
Public	Weber 84	51.1	42.0 (30)	47.5	41.1 (6)	44.2	42.5 (9)	56.1	46.0 (9)	56.5	46.0 (9)	-3	41	2.2
Public	Wells II	52.7	43.1 (35)	51.9	44.7 (6)	43.7	44.1 (14)	54.3	41.7 (13)	60.7	41.7 (13)	-1	39	1.5
Public	Zane	58.1*	49.8 (16)	53.8	45.9 (5)	44.3	44.3 (4)	66.5*	55.8 (7)	67.7*	55.8 (7)	+4	39	2.0
Agripro	AP1776	54.4	49.6 (15)	53.8	50.3 (3)	49.5	56.7 (3)	54.1	51.5 (5)	60.0	51.5 (5)	-9	29	1.1
Agripro	AP1989	59.4*	54.0 (15)	63.3*	52.9 (3)	54.7*	55.7 (3)	53.8	59.8 (5)	65.7*	59.8 (5)	-4	35	1.6
Agripro	AP2324 (EX 2324)	54.9	50.6 (10)	56.1	54.3 (3)	45.1	52.0 (2)	56.5	52.0 (3)	61.9	52.0 (3)	0	32	1.3
Agripro	AP2740 (EX2740)	54.0	51.7 (6)	50.0	49.2 (2)	49.1	--	54.0	58.6 (2)	63.1	58.6 (2)	+3	35	1.6
Agripro	AP2292 (EX2292)	55.7	49.2 (9)	53.5	49.2 (2)	50.6	57.8 (2)	56.6	49.0 (3)	62.0	49.0 (3)	-3	34	1.1
Asgrow	A1929	55.2	51.6 (5)	56.4	--	47.7	--	53.7	58.5 (2)	63.2	58.5 (2)	-4	33	1.3
Asgrow	A2234	57.9*	51.3 (10)	58.1	54.3 (3)	52.6*	60.6 (2)	57.8	49.0 (3)	63.0	49.0 (3)	-1	31	1.3
Atlas	280 Brand	61.0*	56.2 (6)	59.0*	51.6 (2)	51.9*	--	63.5*	66.6 (2)	69.6*	66.6 (2)	+3	33	1.5
Callahan	1150X Brand	54.0	49.6 (5)	52.5	--	48.2	--	57.4	57.8 (2)	58.1	57.8 (2)	-5	27	1.0
Callahan	1170X Brand	58.9*	55.5 (5)	60.4*	--	53.7*	--	60.4*	60.7 (2)	60.9	60.7 (2)	-3	30	1.0
Callahan	1280X Brand	60.3*	58.3 (5)	57.0	--	46.7	--	65.8*	68.9 (2)	71.9*	68.9 (2)	+4	36	2.2
Callahan	1290X Brand	59.5*	57.8 (5)	61.3*	--	43.4	--	63.5*	66.7 (2)	69.8*	66.7 (2)	+9	37	1.6
Test Mean		56.5		54.0		48.9		58.2		63.8		-1.5	35.4	1.66
LSD(.05)		6.1		8.6		6.7		9.3		9.0		2.9	2.5	0.52

† Check variety used to calculate deviation from standard maturity.  
 \* Not significantly different from the highest yield within that column.



TABLE 4. (Continued) Central Michigan.

Brand	Entry	Yield (bu/A)										Matur- ity (days)	Height (in)	Lodging Score	
		Entire Central Region		South Central (Ingham Co.)		Central (Saginaw Co.)		East Central (Sanilac Co.)		East Central (St. Clair Co.)					
		1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)				
Callahan	6180 Brand	59.6*	48.5 (23)	63.6*	49.6 (5)	56.8*	54.0 (5)	55.2	49.5 (8)	62.8	49.5 (8)	-5	32	1.3	
Callahan	7299 Brand	54.9	55.9 (10)	52.6	52.3 (3)	41.7	48.9 (2)	58.0	66.4 (4)	67.1*	66.4 (4)	+6	40	2.2	
Callahan	8252 Brand	59.3*	56.6 (13)	59.7*	59.2 (3)	49.5	57.9 (3)	60.3*	60.7 (5)	67.9*	60.7 (5)	+2	36	1.8	
Callahan	9191X Brand Blend	58.5*	46.6 (10)	61.0*	52.9 (2)	54.0*	56.6 (2)	59.7*	49.7 (3)	59.3	49.7 (3)	-6	35	1.8	
Callahan	9222X Brand Blend	57.7*	49.3 (9)	57.2	52.6 (2)	48.6	55.4 (2)	57.0	52.0 (3)	68.2*	52.0 (3)	0	35	1.9	
Callahan	9270X Brand	63.3*	53.9 (9)	60.1*	55.7 (2)	56.9*	60.9 (2)	63.7*	57.0 (3)	72.4*	57.0 (3)	+3	34	1.2	
Countrymark	FFR 190	54.4	46.1 (10)	52.4	47.9 (2)	51.6	54.7 (2)	52.3	47.0 (3)	61.2	47.0 (3)	0	39	1.7	
Countrymark	FFR 218	51.2	49.0 (5)	48.8	--	--	40.9	--	52.7	57.6 (2)	62.4	57.6 (2)	+2	33	1.0
Countrymark	Exp. 16076	56.7	53.7 (5)	49.4	--	--	47.1	--	62.6*	65.3 (2)	67.9*	65.3 (2)	+1	37	1.9
Dairyland	DSR-122	53.0	50.8 (5)	58.3*	52.2 (3)	51.1	54.7 (3)	48.4	55.0 (5)	54.0	55.0 (5)	-14	30	1.2	
Dairyland	DSR-128	56.6	45.1 (23)	54.7	46.1 (5)	55.2*	47.6 (4)	57.4	51.2 (7)	58.9	51.2 (7)	-11	33	1.4	
Dairyland	DSR-157	51.9	44.9 (10)	51.9	49.6 (4)	47.8	57.0 (4)	46.7	49.7 (7)	61.1	49.7 (7)	-6	34	1.5	
Dairyland	DSR-165	57.9*	54.0 (5)	55.8	--	--	55.6*	--	58.7	51.2 (2)	61.5	51.2 (2)	-7	31	1.1
Dairyland	DSR-170	58.8*	55.3 (5)	59.7*	47.3 (5)	56.7*	47.3 (5)	60.2*	47.0 (8)	58.7	47.0 (8)	-5	36	1.7	
Dairyland	DSR-196 (DST-1303)	59.8*	49.5 (10)	61.7*	49.5 (2)	51.0	52.3 (2)	62.0*	47.0 (3)	64.6	47.0 (3)	-1	34	1.6	
Dairyland	DSR-206 (DST-2106)	56.7	47.8 (9)	63.0*	--	--	45.6	--	60.2*	60.1 (2)	58.1	60.1 (2)	-5	35	1.3
Dairyland	DSR-252	56.4	53.2 (13)	56.0	--	--	48.1	--	56.5	59.5 (2)	64.8	59.5 (2)	0	34	1.6
DeKalb-Pfizer	CX187	60.7*	49.6 (15)	64.8*	52.2 (2)	55.1*	57.9 (2)	57.4	53.8 (3)	65.4	53.8 (3)	-5	33	1.0	
DeKalb-Pfizer	CX265	52.6	47.8 (18)	47.8	53.2 (2)	43.8	52.2 (2)	59.3	50.4 (3)	59.3	50.4 (3)	+3	38	1.6	
Diehl Fields	DF-101 Brand	60.5*	48.7 (19)	61.5*	53.5 (3)	56.0*	55.0 (3)	57.6	58.1 (5)	67.1*	58.1 (5)	-7	34	1.4	
Funk	G3185	58.0*	56.2 (5)	53.7	--	--	57.8*	--	58.2	60.2 (2)	62.2	60.2 (2)	-4	33	1.3
Funk	G3197	56.9	46.5 (20)	60.4*	49.6 (4)	51.8	52.4 (4)	48.9	47.2 (7)	66.6*	47.2 (7)	-4	28	1.0	
Glenn-Garno	1800 Brand	58.5*	51.3 (15)	60.3*	53.2 (3)	51.8	56.8 (3)	57.5	55.6 (5)	64.5	55.6 (5)	-7	32	1.2	
Glenn-Garno	2700 Brand	60.0*	57.8 (5)	53.8	--	--	50.2	--	63.9*	68.1 (2)	72.2*	68.1 (2)	+3	34	1.4
Glenn-Garno	2750 Brand	52.1	51.3 (5)	48.4	53.0 (3)	41.2	--	52.3	59.5 (2)	66.7*	59.5 (2)	+6	37	2.1	
Glenn-Garno	2800 Brand	59.7*	51.2 (10)	51.5	52.4 (3)	53.5*	56.6 (2)	62.6*	54.7 (3)	71.2*	54.7 (3)	+3	36	2.0	
Glenn-Garno	3500A Brand	50.2	--	46.3	--	--	39.3	--	53.0	57.7 (2)	62.3	57.7 (2)	+10	37	1.6
Golden Harvest	H-1170 Brand	60.8*	50.2 (15)	60.5*	53.7 (3)	52.3*	55.8 (3)	61.6*	55.9 (5)	68.8*	55.9 (5)	-5	34	1.3	
Golden Harvest	H-1278 Brand (X-278)	55.1	49.1 (9)	55.5	49.2 (2)	44.7	53.9 (2)	52.9	50.9 (3)	67.4*	50.9 (3)	+5	30	1.1	
Golden Harvest	H-1285 Brand	57.9*	50.2 (20)	58.0	49.6 (5)	47.0	47.8 (5)	51.9	54.9 (8)	74.5*	54.9 (8)	+4	36	1.8	
Golden Harvest	H-1289 Brand	48.4	46.9 (5)	47.5	--	--	29.8	--	50.9	58.2 (2)	65.4*	58.2 (2)	+8	39	1.9
Golden Harvest	H-1290 Brand	56.5	49.8 (9)	55.5	52.7 (2)	49.5	53.6 (2)	59.1	51.2 (3)	62.0	51.2 (3)	+4	43	1.8	
Golden Harvest	X-260 Brand	57.6*	55.3 (5)	60.3*	--	--	49.7	--	58.1	60.1 (2)	62.1	60.1 (2)	+3	34	1.7
GLH	GL1999 Brand	56.7	48.2 (19)	55.5	46.7 (4)	45.7	48.8 (4)	60.2*	51.6 (7)	65.3	51.6 (7)	-1	35	1.7	
GLH	GL2616 Brand	57.0	54.6 (5)	51.6	--	--	43.7	--	61.9*	66.2 (2)	70.5*	66.2 (2)	+5	39	1.9
Gries	GSF-265	52.1	51.8 (10)	37.9	44.3 (3)	55.4*	55.2 (2)	62.5*	57.8 (4)	52.4	57.8 (4)	+2	34	1.6	
Jacques	J-181 Blend	58.7*	48.5 (10)	55.7	51.4 (2)	56.8*	61.9 (2)	57.9	51.1 (3)	64.2	51.1 (3)	-7	34	1.2	
Jacques	J-231	56.2	48.8 (13)	56.0	49.1 (6)	43.6	49.6 (2)	61.5*	52.2 (3)	63.6	52.2 (3)	+1	36	2.0	
Kaiser/Estech	KE156 Brand	59.2*	51.2 (16)	64.8*	55.8 (3)	55.9*	58.8 (3)	53.3	57.4 (5)	62.7	57.4 (5)	-5	33	1.4	
Kaiser/Estech	KE199 Brand	55.9	48.7 (9)	53.1	48.9 (2)	46.9	52.4 (2)	58.8	52.1 (3)	65.0	52.1 (3)	+1	36	1.4	
Kaiser/Estech	KE230E Brand	60.8*	56.7 (5)	60.2*	--	--	56.1*	--	61.2*	63.4 (2)	65.5*	63.4 (2)	+1	35	1.5
Kaiser/Estech	KE258 Brand	56.9	50.4 (9)	58.6*	55.3 (2)	48.6	55.5 (2)	57.6	50.7 (3)	62.8	50.7 (3)	+3	33	1.6	
Kaiser/Estech	KE266 Brand	55.8	49.5 (10)	53.6	52.1 (3)	47.0	48.8 (2)	59.2	51.8 (3)	63.5	51.8 (3)	+2	38	2.2	
Kaiser/Estech	KE276 Brand	56.2	53.7 (5)	59.6*	45.9 (2)	40.3	--	58.8	62.5 (2)	66.1*	62.5 (2)	+5	38	2.0	
Kaiser/Estech	Exp. 121023 Brand	58.5*	54.9 (5)	52.8	--	--	55.4*	--	63.0*	62.9 (2)	62.7	62.9 (2)	-1	38	2.3
King Grain	Kador	53.3	48.9 (6)	46.4	42.6 (2)	45.6	--	68.7*	60.6 (2)	52.4	60.6 (2)	+4	43	2.9	
King Grain	KG81	55.8	46.4 (18)	55.1	45.4 (4)	52.1*	50.5 (4)	55.3	50.7 (7)	60.6	50.7 (7)	0	37	1.2	
King Grain	PS90	56.3	46.7 (24)	52.4	45.3 (6)	51.1	46.0 (7)	59.8*	49.2 (9)	61.9	49.2 (9)	-1	37	1.7	
King Grain	KG91	52.2	51.0 (13)	59.1*	54.5 (3)	45.6	52.9 (3)	46.8	51.9 (5)	57.5	51.9 (5)	0	34	1.7	
King Grain	KG100	57.3*	50.4 (9)	60.5*	53.0 (2)	44.1	51.3 (2)	62.8*	52.7 (3)	61.9	52.7 (3)	+2	38	1.7	
King Grain	KG4615	52.6	51.3 (13)	50.6	52.8 (3)	39.2	45.5 (3)	58.1	56.2 (5)	62.5	56.2 (5)	+9	42	2.6	
Lakeside States	LS125 Brand	59.6*	52.9 (14)	61.2*	50.1 (4)	53.5*	54.9 (3)	62.3*	60.7 (5)	61.3	60.7 (5)	0	41	1.7	
Maumee Valley	Eagle Brand	59.4*	53.0 (13)	56.8	50.1 (3)	57.0*	59.8 (3)	60.2*	56.1 (5)	63.5	56.1 (5)	-2	36	1.7	
Maumee Valley	Enterprise Brand	50.7	47.5 (15)	43.9	41.0 (5)	38.7	46.5 (3)	59.6*	56.0 (5)	60.5	56.0 (5)	+3	37	2.5	
Maumee Valley	MV-2E1 Brand	55.7	50.0 (10)	52.4	47.0 (6)	47.3	--	58.4	61.5 (2)	64.6	61.5 (2)	+4	38	1.9	
Maumee Valley	Sabre Brand	59.4*	56.2 (13)	57.2	56.9 (3)	51.6	59.6 (3)	60.0*	60.3 (5)	68.9*	60.3 (5)	+1	36	2.2	
Maumee Valley	Savage Brand	57.1	55.6 (5)	50.8	50.1 (2)	44.0	--	63.5*	66.8 (2)	70.1*	66.8 (2)	+5	36	2.1	
Maumee Valley	Warrior Brand	51.1	49.1 (15)	49.8	47.6 (5)	44.3	53.8 (3)	50.5	54.6 (5)	59.8	54.6 (5)	+5	37	2.1	
Northrup King	S19-90	59.4*	56.9 (5)	60.6*	--	--	50.6	--	62.4*	63.3 (2)	64.1	63.3 (2)	-1	32	1.0
Northrup King	S20-26	60.7*	57.8 (5)	63.0*	--	--	51.4	--	57.9	64.2 (2)	70.5*	64.2 (2)	+1	36	1.6
Northrup King	S23-12	61.7*	51.3 (17)	64.8*	53.7 (4)	54.2*	55.0 (4)	61.6*	52.1 (7)	66.1*	52.1 (7)	0	37	1.2	
Pioneer	9161	58.8*	48.5 (10)	55.8	53.5 (2)	58.3*	61.3 (2)	58.5	50.7 (3)	62.6	50.7 (3)	-6	33	1.5	
Pioneer	9202	59.2*	50.9 (13)	63.1*	54.7 (3)	51.3	53.6 (3)	59.3	55.1 (5)	63.2	55.1 (5)	-3	34	1.5	
Pioneer	9271	56.3	50.5 (19)	52.6	48.8 (6)	49.1	54.2 (5)	60.0*	53.0 (6)	63.7	53.0 (6)	+2	33	1.6	
Pioneer	9272	57.1	50.4 (9)	52.4	49.7 (2)	52.4*	61.9 (2)	56.4	51.4 (3)	67.1*	51.4 (3)	-1	31	1.1	
Pioneer	9293	59.0*	51.8 (9)	51.4	52.5 (2)	49.4	56.7 (2)	62.3*	56.0 (3)	72.9*	56.0 (3)	+4	33	1.9	
Pioneer	9302	58.9*	--	--	54.1	--	53.6*	--	61.6*	64.0 (2)	60.0*	64.0 (2)	0	32	1.0
Pioneer	9361	50.5	--	--	42.4	--	40.2	--	55.9	59.8 (2)	63.6	59.8 (2)	+8	41	2.4
Pro-Seed	PS138	58.9*	50.7 (15)	63.8*	52.9 (3)	47.8	54.2 (3)	56.8	55.8 (5)	67.3*	55.8 (5)	-5	32	1.2	
Pro-Seed	PS215	58.9*	52.7 (9)	54.1	55.9 (2)	52.5*	58.9 (2)	62.9*	53.6 (3)	65.9*	53.6 (3)	+1	37	1.8	
Pro-Seed	PS225	57.9*	50.5 (9)	54.5	54.5 (2)	52.2*	55.5 (2)	59.5*	52.3 (3)	65.4*	52.3 (3)	+2	40	2.2	
Pro-Seed	PS246A	53.5	53.1 (13)	50.2	51.5 (3)	47.4	53.4 (3)	60.3*	58.1 (5)	55.9	58.1 (5)	+2	37	2.1	
Pro-Seed	PS259	53.3	51.6 (7)	49.0	50.6 (3)	39.2	--	56.9	62.5 (2)	68.0*	62.5 (2)	+6	40	2.1	
Pro-Seed	PS80-87-C14	35.7	38.1 (5)	20.1	--	--	25.6	--	45.4	48.5 (2)	51.6	48.5 (2)	+10	46	3.0
Rupp	RS2308	58.8*	54.8 (13)	58.6*	54.5 (3)	53.2*	58.0 (3)	57.3	57.8 (5)	66.2*	57.8 (5)	0	35	1.5	
Rupp	RS2323	57.4*	48.7 (9)	56.9	49.5 (2)	48.7	54.6 (2)	58.5	50.2 (3)	65.6*	50.2 (3)	+1	33	1.6	
Rupp	Exp. 33265	60.4*	57.8 (5)	60.1*	--	--	53.1*	--	59.7*	64.2 (2)	68.6*	64.2 (2)	+3	33	1.8
Schultz	JMS 2288 Brand	56.2	51.5 (9)	48.3	52.1 (2)	50.4	56.6 (2)	59.4*	55.2 (3)	66.5*	55.2 (3)	+2	35	1.7	
Schultz	JMS EX 2600 Brand	58.6*	57.1 (5)	56.0	--	--	51.3	--	62.8*	63.5 (2)	64.2	63.5 (2)	+4	35	1.5

(cont'd)

Test Mean	56.5	54.0	48.9	58.2	63.8	-1.5	35.4	1.66
LSD(.05)	6.1	8.6	6.7	9.3	9.0	2.9	2.5	0.52

† Check variety used to calculate deviation from standard maturity.  
\* Not significantly different from the highest yield within that column.

**TABLE 4. (Continued) Central Michigan.**

Brand	Entry	Yield (bu/A)										Matur- ity (days)	Height (in)	Lodging Score
		Entire Central Region		South Central (Ingham Co.)		Central (Saginaw Co.)		East Central (Sanilac Co.)		East Central (St. Clair Co.)				
		1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)	1989	Avg. (n)			
Schultz	JMS EX 2900 Brand	56.5	52.8 (5)	59.7*	--	51.3	--	53.0	57.6 (2)	62.1	57.6 (2)	+4	38	1.7
Seedex	180X	58.4*	57.5 (5)	60.6*	--	52.2*	--	59.0	60.4 (2)	61.7	60.4 (2)	-2	31	1.1
Seedex	190	58.1*	47.2 (10)	62.6*	50.9 (2)	53.1*	57.7 (2)	53.5	49.0 (3)	63.2	49.0 (3)	-4	33	1.4
Seedex	240	55.2	52.1 (5)	51.7	--	47.0	--	59.4*	61.0 (2)	62.6	61.0 (2)	+4	35	1.4
Seedex	260	54.9	50.8 (9)	55.3	56.3 (2)	46.8	56.7 (2)	59.1	49.9 (3)	58.5	49.9 (3)	+3	36	1.8
Stine	2770 Brand	59.2*	54.2 (6)	56.5	54.3 (2)	50.4	--	62.0*	64.9 (2)	67.8*	64.9 (2)	+3	39	1.9
Stine	2840 Brand	57.8*	55.3 (5)	53.2	--	53.2*	--	61.0*	62.4 (2)	63.8	62.4 (2)	+2	37	1.9
Terra	Hurdle Brand	59.0*	47.1 (17)	58.4*	46.5 (4)	58.6*	49.7 (4)	57.6	48.2 (7)	61.5	48.2 (7)	0	34	1.5
Terra	Javelin Brand	58.8*	50.1 (9)	59.6*	55.1 (2)	50.3	53.3 (2)	57.6	52.5 (3)	67.7*	52.5 (3)	+1	36	2.2
Terra	Medalist Brand	59.8*	51.9 (9)	57.0	56.0 (2)	56.8*	56.6 (2)	58.8	52.8 (3)	66.5*	52.8 (3)	+3	37	1.7
Terra	Runner III Brand	60.4*	47.9 (10)	65.1*	55.8 (2)	53.3*	57.4 (2)	58.7	49.8 (3)	64.6	49.8 (3)	-6	32	1.2
Terra	Sprint Brand	56.1	51.5 (14)	57.8	52.5 (4)	46.9	50.4 (3)	55.9	57.8 (5)	63.9	57.8 (5)	+4	38	1.7
Terra	Exp. 180 Brand	57.9*	56.7 (5)	57.9	--	57.6*	--	55.8	58.1 (2)	60.4	58.1 (2)	-7	34	1.2
Terra	Exp. 245 Brand	57.8*	57.0 (5)	54.7	--	52.2*	--	57.3	62.3 (2)	67.2*	62.3 (2)	+2	36	1.8
Terra	Exp. 275 Brand	54.6	52.6 (13)	56.0	52.5 (3)	35.2	50.4 (3)	61.2*	59.7 (5)	66.1*	59.7 (5)	+6	39	2.1
Test Mean		56.5		54.0		48.9		58.2		63.8		-1.5	35.4	1.66
Minimum		35.7		20.1		25.6		45.4		43.3		-14	24	1.0
Maximum		63.3		66.7		58.6		68.7		74.5		+10	46	3.0
CV		7.8%		8.1%		8.4%		9.8%		8.8%		6.1%	5.0%	22.5%
LSD(.05)		6.1		8.6		6.7		9.3		9.0		2.9	2.5	0.52

\* Not significantly different from the highest yield within that column.

**TABLE 5. Saginaw Bay Area (Huron Co.)**

Brand	Entry	Yield (bu/A) Maturity Height Lodging					
		1989	Avg. (n)	(days)	(in)	Score	
Public	Amcor	42.8*	--	--	+4	36	2.1
Public	Beeson 80	45.8*	--	--	+4	35	1.5
Public	BSR 101	47.7*	42.2 (5)		+2	31	1.2
Public	BSR 201	42.7*	--	--	+4	35	2.5
Public	Burlison	47.4*	--	--	+5	30	1.3
Public	Century	41.4*	--	--	+4	33	1.9
Public	Century 84	44.2*	--	--	+4	35	1.3
Public	Conrad	52.8*	--	--	+3	29	1.2
Public	Corsoy 79 †	42.8*	41.5 (6)	10-3		33	1.7
Public	Dassel	39.4	38.8 (6)	-9		22	1.2
Public	Dawson	31.2	37.9 (8)	-14		24	0.8
Public	Elgin	51.0*	42.1 (2)	0		29	1.1
Public	Elgin 87	49.0*	39.6 (2)	+1		28	1.3
Public	Glenwood	22.2	36.7 (6)	-15		14	1.1
Public	Hack	39.4	--	--	+3	29	1.3
Public	Hardin	41.3*	39.7 (6)	-1		30	1.2
Public	Hodgson 78	41.4*	39.9 (7)	-8		31	1.0
Public	Hoyt	48.1*	--	--	+2	22	1.5
Public	Kenwood	47.9*	--	--	+2	37	1.9
Public	Miami	44.5*	--	--	+1	30	1.5
Public	Ozzie	23.2	33.4 (7)	-18		18	1.0
Public	Preston	43.7*	--	--	+3	32	2.1
Public	Sibley	41.9*	40.2 (4)	-5		29	1.1
Public	Simpson	28.0	37.4 (7)	-13		20	1.1
Public	Sturdy	47.4*	--	--	+1	28	1.2
Public	Vickery	42.1*	--	--	+5	21	1.1
Public	Vinton 81	35.3	--	--	+1	30	1.4
Public	Weber 84	36.5	38.9 (5)	+1		22	1.8
Public	Wells II	45.8*	--	--	+2	34	1.3
Agripro	AP1776	47.9*	46.2 (3)	-4		25	0.7
Agripro	AP1989	52.7*	53.2 (3)	+2		27	1.1
Agripro	AP2324 (EX 2324)	49.3*	--	--	+2	29	1.1
Agripro	AP2740 (EX2740)	45.7*	--	--	+5	29	1.6
Agripro	AP2292 (EX2292)	47.6*	--	--	+2	27	0.9
Asgrow	A1929	36.8	--	--	-3	25	1.1
Asgrow	A2234	48.9*	--	--	+1	27	1.4
Atlas	280 Brand	48.8*	--	--	+4	27	1.2
Callahan	1150X Brand	31.7	--	--	-6	18	1.1
Callahan	1170X Brand	42.1*	--	--	-3	23	1.2
Callahan	1280X Brand	50.2*	--	--	+4	30	1.5
Callahan	1290X Brand	50.8*	--	--	+6	31	1.1
Callahan	6180 Brand	48.4*	43.6 (4)	-3		27	1.4
Callahan	7299 Brand	38.8	--	--	+4	31	1.5
Callahan	8252 Brand	46.6*	--	--	+3	29	1.4
Callahan	9191X Brand Blend	37.1	34.5 (2)	-3		25	1.4
Callahan	9222X Brand Blend	43.0*	--	--	+1	27	1.6
Callahan	9270X Brand	45.8*	--	--	+4	29	1.1
Countrymark	FFR 190	43.7*	37.6 (2)	+2		30	1.0
Countrymark	FFR 218	40.4	--	--	+3	24	0.9
Countrymark	Exp. 16076	41.5*	--	--	+3	29	1.5
(cont'd)							
Mean		44.2		+1		29	1.3
LSD(.05)		13.3		3.6		6.5	0.8

† Check variety used to calculate deviation from standard maturity.  
\* Not significantly different from the highest yield in that column.

TABLE 5. (Continued) Saginaw Bay Area (Huron Co.)

Brand	Entry	Yield (bu/A)		Maturity (days)	Height (in)	Lodging Score	
		1989	Avg. (n)				
Dairyland	DSR-122	42.0*	--	--	-9	23	0.9
Dairyland	DSR-128	41.6*	40.9	(4)	-7	27	0.9
Dairyland	DSR-157	42.2*	36.1	(2)	-1	29	1.0
Dairyland	DSR-165	38.4	--	--	-1	26	1.0
Dairyland	DSR-170	41.2*	--	--	-3	23	0.7
Dairyland	DSR-196 (DST-1303)	47.0*	41.2	(2)	+1	28	1.0
Dairyland	DSR-206 (DST-2106)	47.4*	--	--	-1	28	1.1
Dairyland	DSR-252	45.4*	--	--	+2	31	0.9
DeKalb-Pfizer	CX187	38.4	41.6	(3)	-1	23	1.1
DeKalb-Pfizer	CX265	46.1*	--	--	+5	37	1.0
Diehl Fields	DF-101 Brand	41.2*	41.4	(3)	-6	24	1.3
Funk	G3185	49.0*	--	--	0	26	1.2
Funk	G3197	48.9*	41.5	(4)	0	24	0.8
Glenn-Garno	1800 Brand	46.4*	44.8	(3)	-5	24	1.2
Glenn-Garno	2700 Brand	49.0*	--	--	+5	34	1.4
Glenn-Garno	2750 Brand	48.0*	--	--	+6	37	1.7
Glenn-Garno	2800 Brand	45.7*	--	--	+3	28	1.1
Golden Harvest	H-1170 Brand	41.1*	39.7	(3)	-4	24	1.1
Golden Harvest	H-1278 Brand (X-278)	44.5*	--	--	+4	28	1.4
Golden Harvest	H-1285 Brand	47.1*	--	--	+3	30	1.6
Golden Harvest	H-1289 Brand	40.8*	--	--	+5	38	1.7
Golden Harvest	H-1290 Brand	48.4*	--	--	+4	36	1.4
Golden Harvest	X-260 Brand	46.5*	--	--	+4	29	1.4
GLH	GL1999 Brand	41.8*	46.4	(3)	-2	26	1.2
GLH	GL2616 Brand	45.3*	--	--	+3	34	1.2
Gries	GSF-265	43.2*	--	--	+2	29	1.9
Jacques	J-181 Blend	52.7*	38.9	(2)	-3	28	0.7
Jacques	J-231	48.8*	--	--	+2	32	1.0
Kaiser/Estech	KE156 Brand	47.2*	40.5	(4)	-2	28	1.2
Kaiser/Estech	KE199 Brand (111009)	45.3*	--	--	+2	29	1.1
Kaiser/Estech	KE230E Brand	40.3	--	--	+3	26	1.1
Kaiser/Estech	KE258 Brand	46.7*	--	--	+3	30	1.0
Kaiser/Estech	KE266 Brand	42.4*	--	--	+3	30	1.4
Kaiser/Estech	KE276 Brand	43.6*	--	--	+5	33	1.2
Kaiser/Estech	Exp. 121023 Brand	40.4	--	--	+4	30	1.3
King Grain	Kador	41.6*	--	--	+4	34	1.8
King Grain	KG81	35.7	33.7	(2)	-1	27	1.2
King Grain	PS90	47.1*	--	--	0	31	2.2
King Grain	KG91	44.7*	--	--	-1	29	1.5
King Grain	KG100	52.0*	--	--	+2	36	1.1
King Grain	KG4615	47.6*	--	--	+7	39	1.5
Lakeside States	LS125 Brand	41.9*	--	--	-2	31	1.5
Maumee Valley	Eagle Brand	44.2*	--	--	+1	24	1.2
Maumee Valley	Enterprise Brand	48.9*	--	--	+3	31	1.1
Maumee Valley	MV-2E1 Brand	48.1*	--	--	+4	32	1.5
Maumee Valley	Sabre Brand	48.2*	--	--	+4	30	1.6
Maumee Valley	Warrior Brand	28.9	--	--	+4	29	1.6
Northrup King	S19-90	46.7*	--	--	-2	25	1.2
Northrup King	S20-26	46.4*	--	--	0	29	1.2
Northrup King	S23-12	40.3	--	--	-3	25	1.2
Pioneer	9161	47.6*	37.7	(2)	-2	28	1.3
Pioneer	9202	32.4	--	--	+2	22	1.1
Pioneer	9271	43.3*	--	--	+3	28	1.2
Pioneer	9272	42.2*	--	--	-2	24	1.1
Pioneer	9293	47.7*	--	--	+4	24	1.3
Pro-Seed	PS138	45.2*	43.9	(3)	-1	29	1.9
Pro-Seed	PS215	50.6*	--	--	+3	28	1.2
Pro-Seed	PS225	41.6*	--	--	+2	30	1.8
Pro-Seed	PS246A	48.1*	--	--	+4	32	1.7
Pro-Seed	PS259	45.0*	--	--	+5	33	1.8
Pro-Seed	PS80-87-C14	47.8*	--	--	+5	43	1.5
Rupp	RS2308	51.0*	--	--	0	30	1.2
Rupp	RS2323	45.7*	--	--	+3	30	1.2
Rupp	Exp. 33265	47.4*	--	--	+4	30	1.4
Schultz	JMS 2288 Brand	45.9*	--	--	+3	29	1.1
Schultz	JMS EX 2600 Brand	51.4*	--	--	+5	33	1.1
Schultz	JMS EX 2900 Brand	38.0	--	--	+4	32	2.0
Seedex	180X	53.8*	--	--	-1	26	0.9
Seedex	190	53.6*	41.7	(2)	0	27	1.5
Seedex	240	39.8	--	--	+4	30	1.4
Seedex	260	44.2*	--	--	+4	33	2.0
Stine	2770 Brand	36.5	--	--	+2	30	1.1
Stine	2840 Brand	45.4*	--	--	+3	32	1.7
Terra	Hurdle Brand	47.5*	--	--	+2	30	1.2
Terra	Javelin Brand	43.4*	--	--	+3	25	1.2
Terra	Medalist Brand	48.6*	--	--	+3	29	1.5
Terra	Runner III Brand	46.1*	38.2	(2)	-2	27	1.1
Terra	Sprint Brand	42.9*	--	--	+4	31	1.6
Terra	Exp. 180 Brand	51.9*	--	--	-3	28	1.3
Terra	Exp. 245 Brand	53.8*	--	--	+4	29	1.7
Terra	Exp. 275 Brand	37.5	--	--	+5	33	1.8
Mean		44.2			+1	29	1.3
Minimum		22.2			-18	14	0.7
Maximum		53.8			+7	43	2.5
CV		18.4%			14.1%	13.7%	37.0%
LSD(.05)		13.3			3.6	6.5	0.8

\* Not significantly different from the highest yield in that column.



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