1985 Michigan Soybean Performance Report
Michigan State University Extension Service
O.B. Hesterman, T. G. Isleib, R. Leep, J.L. Lockwood, D. E. Wolfe, L.Rood-Kao, Crop and Soil Sciences
Issued January 1986
8 pages

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1985
MICHIGAN
SOYBEAN PERFORMANCE REPORT

Extension Bulletin E-1206, January 1986

By O.B. Hesterman, T.G. Isleib, R. Leep, J. L. Lockwood, D.E. Wolfe and L. Rood-Kao

Dept. of Crop and Soil Sciences

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 (Berrien County), South Central Michigan (Ingham County), Central Michigan (Saginaw County), and East Central Michigan (Sanilac County). Smaller trials were conducted in Huron and Alger Counties.

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 tables 2 and 5. Seed of entries was planted in plots 20 feet long with a 20-inch row spacing. Seeds were planted 1½ inches deep at 4.5 seeds per foot of row. Each plot was randomized in the field and replicated 3 times. Fourteen feet of the center two rows were harvested for yield.

Evaluation of Characteristics

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

MATURITY DATE — Entries were considered mature when 95% of the pods had lost all green 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.

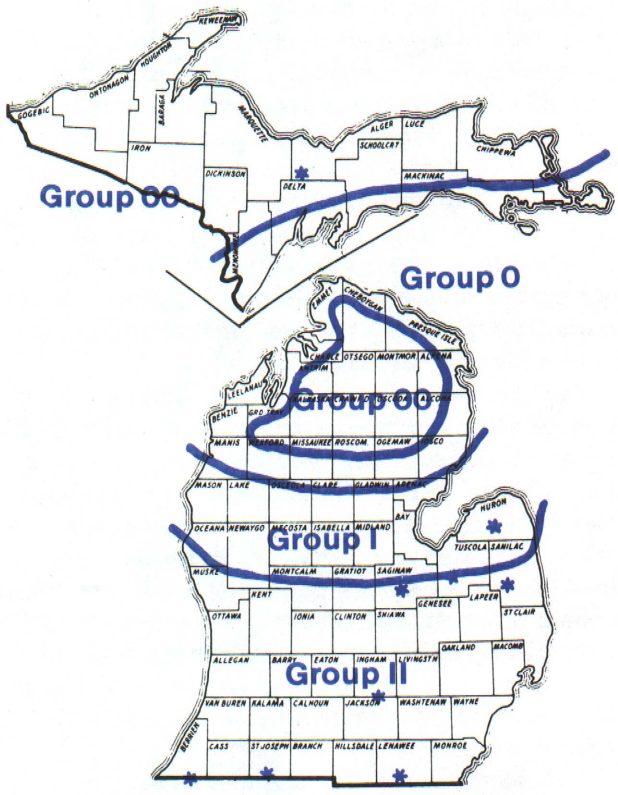
HEIGHT — Plant height, in inches, was measured at maturity from the soil surface to the tip of the main stem.

LODGING — Lodging rates 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 through 5 show results of 1985 soybean variety trials. Values given are the averages of all replications harvested at each location.



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

Moderate drought stress was evident in Berrien and Sanilac Counties.

The test site at St. Joseph County was irrigated with 7 inches of water delivered with a traveling gun.

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.

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 rot. 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 visible 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.

New varieties with resistance to one or more diseases are being developed, particularly varieties resistant to *Phytophthora* root rot. Disease resistance characteristics to Phytophthora root rot are noted in Table 2.

It is often beneficial for 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" (free).

Use of 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 1985 yields and multiple-year average yields from all tests since 1975 are given. Maturity, height (in inches), and lodging scores are the 1985 regional averages. Maturity for U.P. trials is expressed as the date of maturity, all others are + or – days as compared with the check variety. For 1985 yield data, all starred entries designate yields not significantly different from the highest yield 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. Variety Trial Information

County	Lenawee	St. Joseph	Berrien	Ingham	Saginaw	Sanilac	Huron	Alger
CES Director/ Agent	N.H. Bless G.A. Wuethrich	F.J. Henningsen D. Bowen	J.E. Neibauer L.F. Bass	M.M. Preston R.A. Morrison	H.R. Ferris S.S. Poindexter	A.R. Sieting M.W. Stephenson	R.A. Johnson J.L. LeCureux	J.M. Middleton
Farmer Cooperator	D. Woods	B. Marantette J. Sheppard	R. Lamberton		C. Gosen	Mezo Farms	D. Ackerman	
Address	10992 Holloway Britton, MI	25660 Simpson Mendon, MI	2902 Creek Niles, MI	MSU Campus E. Lansing, MI	8735 Swan Creek Saginaw, MI	1640 W. Walker Sandusky, MI	1231 S. Elkton Elkton, MI	MSU Exp Stn., U.P. Chatham, MI
Soil Type	Lenawee silty clay loam	Elston sandy loam	Ostemo-Ockley complex	Capac loam	Colwood silt loam	Capac loam Parkhill loam	Shebeon-Bad-axe sandy loam	Trenary loam
Soil Management Group	1.5 c	4 a	3 a-2.5 a	2.5 b	2.5 c-s	2.5 b 2.5 c	2.5 b-d 3/2 b-d	3 a
Previous Crop	Corn	Corn	Soybeans	Oats	Sugarbeets	Corn	Corn	Barley
Fertilizer	300# 4-17-40	100# 21-0-100 + Mn and B	None	None	200# 6-28-28	300# 9-23-30	None	300# 0-14-41 50# 46-0-0
Planting Date	5/8/85	5/21/85	5/21/85	5/13/85	5/23/85	5/22/85	5/30/85	6/1/85
Harvest Date	10/25/85	10/17/85	10/16/85	10/16/85	10/28/85	10/29/85	10/30/85	11/11/85

TABLE 2. PERFORMANCE SUMMARY FOR VARIETIES ENTERED IN THE MICHIGAN TRIALS IN 1985. 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.

				YIELD (BU/A) WITH DEVIATION FROM MEAN						MATURITY RELATIVE TO CHECKS						LODGING	
				SOUTHERN			CENTRAL			SOUTHERN			CENTRAL				
BRAND	ENTRY	MG	PHYT. RES. TYPE	YIELD	(N)	DEV.	YIELD	(N)	DEV.	DATE	H78	C79	DATE	H78	C79	SOUTH.	CENTRAL
PUBLIC																	
	DAWSON	O	1A	37.0	(4)	-2.8	40.1	(11)	-2.6	9-19	2	-5	9-20	-6	-13	1.3	1.4
	EVANS	O	1A	36.6	(20)	-3.5 *	37.7	(27)	-2.2 *	9-13	-4	-9	9-20	-5	-12	1.4	1.5
	OZZIE	O	1A	33.6	(4)	-6.2 *	37.1	(11)	-5.6 *	9-18	0	-6	9-19	-7	-14	1.1	1.1
	SIMPSON	O	1A	--	--	--	36.5	(10)	-5.7 *	--	-	-	9-22	-4	-10	-	1.3
	BSR 101	I	1B	47.6	(8)	1.7	44.1	(8)	2.1	9-21	2	-5	10-3	7	-2	1.6	1.7
	HARDIN	I	1A	42.9	(14)	1.1	47.8	(17)	4.7 *	9-22	4	-3	10-1	5	-3	2.1	2.4
	HODGSON 78	I	1A	40.8	(23)	-0.6	43.6	(28)	1.3	9-18	0	-6	9-27	0	-6	2.0	1.9
	WEBER 84	I	1A	41.0	(10)	-1.5	40.4	(10)	-0.7	9-23	4	-3	10-1	5	-3	2.6	2.5
	AMCOR	II	1A	42.4	(14)	-0.5	43.6	(13)	-0.5	9-28	10	3	10-10	10	4	2.8	2.9
	BSR 201	II	1B	49.1	(11)	1.4	45.6	(8)	1.2	9-24	7	1	10-6	11	1	2.7	3.1
	BEESON 80	II	1C	40.7	(14)	-2.2 *	42.0	(15)	-1.3	9-26	7	1	10-7	10	3	2.0	2.3
	CENTURY	II	1A	45.0	(15)	1.7 *	43.9	(16)	1.2	9-28	9	3	10-8	10	3	1.8	2.1
	CENTURY 84	II	1K	43.0	(6)	-0.8	43.4	(5)	0.7	9-28	10	2	10-8	12	3	1.6	1.7
	CORSOY	II	NONE	41.7	(23)	0.9	39.9	(25)	0.5	9-23	5	-1	10-1	6	0	2.2	2.1
	CORSOY 79	II	1C	43.3	(21)	1.4	45.1	(25)	2.7 *	9-24	6	0	10-4	7	0	2.4	2.5
	ELGIN	II	NONE	45.3	(12)	1.5	47.2	(11)	3.4 *L	9-24	5	-2	10-3	6	-1	2.3	2.0
	HACK	II	1A	46.4	(7)	1.1	43.4	(6)	1.0	9-26	8	1	10-6	11	2	1.6	1.6
	KELLER	II	1C,3	40.1	(5)	-2.2	45.4	(4)	1.3	9-29	9	1	10-8	11	2	2.5	2.6
	MIAMI	II	1C,3	39.6	(6)	-4.1	42.6	(5)	-0.1	9-22	4	-4	10-3	7	-3	1.9	2.1
	NEBSOY	II	1A	42.4	(15)	-0.9	41.6	(16)	-1.2	9-24	5	-1	10-5	7	0	1.6	1.7
	VICKERY	II	1C	43.2	(15)	-0.1	43.5	(17)	1.2	9-23	5	-2	10-3	5	-1	2.8	2.7
	WELLS II	II	1C	41.3	(17)	-2.0 *	41.6	(18)	-0.3	9-23	4	-3	10-3	5	-2	1.6	1.4
	CUMBERLAND	III	NONE	37.7	(10)	-2.0	--	--	--	10-2	14	7	--	-	-	2.6	-
	HOBBIT	III	NONE	40.3	(12)	1.4	--	--	--	9-29	12	5	--	-	-	1.3	-
	PELLA	III	1A	40.7	(10)	0.9	46.1	(9)	2.9	9-30	11	4	10-7	10	4	1.8	1.8
	SPRITE	III	NONE	39.9	(13)	-0.1	--	--	--	10-1	13	7	--	-	-	1.7	-
	WILLIAMS 82	III	1K	40.6	(7)	-0.1	--	--	--	10-5	15	8	--	-	-	3.0	-
	WINCHESTER	III	1B,3	42.0	(4)	0.3	--	--	--	10-6	14	6	--	-	-	3.2	-
	ZANE	III	NONE	42.7	(4)	1.0	42.7	(3)	0.8	10-2	10	2	10-8	12	2	2.4	2.1

(CONT'D)

* STATISTICALLY SIGNIFICANT DEVIATION (P<.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. PERFORMANCE SUMMARY FOR VARIETIES ENTERED IN THE MICHIGAN TRIALS IN 1985 (CONT'D). 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.

				YIELD (BU/A) WITH DEVIATION FROM MEAN						MATURITY RELATIVE TO CHECKS						LODGING	
				SOUTHERN			CENTRAL			SOUTHERN			CENTRAL				
BRAND	ENTRY	MG	PHYT. RES. TYPE	YIELD	(N)	DEV.	YIELD	(N)	DEV.	DATE	H78	C79	DATE	H78	C79	SOUTH.	CENTRAL
AGRIPRO																	
	AP200	II	1A	43.1	(15)	-0.3	46.0	(14)	2.2	9-21	2	-4	10-1	3	-3	2.3	2.2
	AP240	II	NONE	41.3	(12)	0.4	42.8	(7)	-1.5	9-26	7	1	10-3	6	0	1.8	2.1
	AP2190	II	1A	41.7	(4)	0.0 H	45.8	(3)	3.9	9-30	8	0	10-6	11	1	2.4	1.4
	HP20-20	II	1A	44.6	(8)	-1.4	41.3	(7)	-3.3	9-22	2	-4	10-2	5	-3	2.2	1.9
	HP2530	II	1A	44.6	(11)	1.4	44.9	(8)	1.2	9-27	7	1	10-6	8	2	2.2	2.5
ASGROW																	
	A1525	I	1A	--	--	--	39.0	(4)	-2.0	--	--	--	9-28	1	-8	-	1.1
	A1937	I	1A	43.3	(13)	2.1 *	47.8	(14)	4.4 *	9-20	2	-4	9-30	3	-4	2.0	2.0
	A2187	II	1A	40.9	(4)	-0.8	43.2	(3)	1.4	9-26	4	-5	10-2	6	-4	1.8	1.2
	A2522	II	NONE	41.7	(8)	0.5	45.3	(5)	2.4	9-28	8	0	10-5	7	2	2.6	2.7
	A2943	II	NONE	44.8	(8)	3.6 *L	--	--	--	10-3	12	5	--	--	--	1.7	-
CALLAHAN																	
	5150X BRAND	I	1A	--	--	--	41.4	(8)	0.4	--	--	--	9-28	2	-6	-	1.4
	5200X BLEND	I	1A,NONE	--	--	--	41.9	(8)	1.0	--	--	--	10-3	7	0	-	2.1
	6180X	I	NONE	--	--	--	42.9	(4)	2.0	--	--	--	9-29	2	-7	-	1.2
	1250	II	NONE	41.0	(10)	1.2	45.6	(7)	1.9	9-29	11	4	10-10	13	5	2.0	1.9
	3210 BLEND	II	1A,NONE	41.1	(10)	1.3	43.3	(7)	1.4	9-26	7	0	10-5	7	1	2.0	1.9
	4260 BLEND	II	1A,NONE	41.6	(4)	-0.1	--	--	--	10-3	11	2	--	--	--	2.5	-
	6220X	II	1A	--	--	--	44.4	(3)	2.5	--	--	--	10-10	14	4	-	1.7
	6262X	II	1A	43.4	(4)	1.8	46.1	(3)	4.3 *	9-30	8	0	10-7	11	1	1.8	1.6
	3310 BRAND, BLEND	III	NONE	43.8	(12)	2.9 *	--	--	--	9-30	11	5	--	--	--	2.2	-
	5300X BRAND	III	NONE	44.4	(4)	2.7	--	--	--	10-6	14	6	--	--	--	2.8	-
	5350 BRAND	III	NONE	44.1	(8)	2.9 *	--	--	--	10-3	12	5	--	--	--	2.8	-
DAIRYLAND																	
	DST-0801	O	NONE	--	--	-- *	36.2	(4)	-4.8 *	--	--	--	9-21	-7	-16	-	1.1
	DSR-120	I	NONE	--	--	--	43.9	(15)	0.1 L	--	--	--	9-25	-2	-9	-	1.6
	DSR-151	I	1A	36.7	(7)	-2.9	42.3	(11)	-0.4	9-18	1	-6	9-27	1	-6	1.7	1.7
	DSR-171	I	NONE	43.8	(15)	1.5	45.9	(16)	2.1	9-23	4	-2	10-1	4	-3	2.1	2.2
	DST-1101	I	1C	--	--	--	41.4	(4)	0.4	--	--	--	9-26	-1	-10	-	1.0
	DST-1102	I	1A,NONE	--	--	--	43.0	(4)	2.0	--	--	--	9-27	0	-9	-	1.5
	DST-1206	I	1C	--	--	--	39.4	(4)	-1.5 *	--	--	--	9-30	2	-6	-	1.2
	DSR-205	II	NONE	38.3	(5)	-3.6	39.7	(7)	-2.1	9-26	6	-3	10-3	5	-1	1.2	2.
	DSR-212	II	NONE	39.4	(12)	-1.4	43.6	(11)	0.1	9-25	6	-1	10-6	7	1	1.6	1.5
	DSR-255	II		36.8	(4)	-4.8	39.2	(3)	-2.6	9-29	7	-1	10-5	10	0	2.1	1.7
	DSR-287	II	NONE	44.2	(4)	2.6	--	--	--	10-4	12	3	--	--	--	2.3	-
	DSR-297	II		40.8	(4)	-0.8	--	--	--	10-6	14	6	--	--	--	2.4	-
	DST-2202	II	NONE	40.9	(4)	-0.8	43.9	(3)	2.0	10-1	9	1	10-9	13	3	3.0	2.7
	DSR-317	III	NONE	43.2	(4)	1.5	--	--	--	10-6	14	6	--	--	--	3.0	-
	DSR-320	III	NONE	39.8	(12)	-1.1	--	--	--	10-2	13	6	--	--	--	2.2	-
DEKALB-PFIZER																	
	CX134	I	NONE	34.9	(4)	-4.9	41.0	(11)	-1.6	9-18	1	-6	9-29	3	-5	1.6	1.5
	CX155	I	NONE	40.3	(12)	-0.2	43.5	(19)	0.5	9-23	6	-1	10-3	6	-1	2.1	2.6
	CX174	I		41.5	(8)	0.4	41.8	(8)	0.9	9-26	6	-1	10-4	7	0	1.8	1.7
	CX265	II	1A	42.1	(4)	0.4	--	--	--	10-1	9	1	--	--	--	2.2	-
	CX283	II	NONE	42.1	(8)	0.9	--	--	--	10-2	10	3	--	--	--	2.3	-
	CX324	III		40.6	(10)	0.8	--	--	--	10-1	12	5	--	--	--	2.5	-
FUNK																	
	G3115	I		--	--	--	42.1	(11)	-0.5	--	--	--	10-2	6	-2	-	1.5
	G3145 BLEND	I	1A	--	--	--	42.9	(8)	2.0	--	--	--	10-2	6	-2	-	1.9
	12231	I	NONE	--	--	--	42.0	(3)	0.1	--	--	--	9-29	3	-7	-	2.1
	G3213 BLEND	II		41.5	(8)	0.3 L	--	--	--	9-28	7	0	--	--	--	2.7	-
	G3236	II		38.8	(8)	-2.2	48.6	(5)	2.3 *	9-27	9	3	10-8	11	3	2.2	2.7
	G3239 BLEND	II	NONE	42.6	(5)	0.3	43.3	(5)	0.4	10-5	12	4	10-6	8	3	2.4	2.2
GOLDEN HARVEST																	
	H-1233 BRAND	II	NONE	42.8	(4)	1.2	44.3	(3)	2.5	9-29	7	-1	10-5	9	-1	2.3	1.6
	H-1285 BRAND	II	NONE	43.4	(4)	1.8	45.8	(3)	3.9	10-4	12	3	10-10	15	5	2.4	1.8
GREAT LAKES HYBRIDS (GLH)																	
	GL1434 BRAND	I	1A	--	--	--	35.1	(4)	-5.8 *	--	--	--	9-30	2	-7	-	1.4
	GL1900 BRAND	I	1A	--	--	--	41.7	(4)	0.7 H	--	--	--	10-6	8	0	-	1.4
	GL1937 BRAND	I	1A	--	--	--	44.1	(11)	1.4	--	--	--	10-1	5	-2	-	2.0
	GL2250	II	NONE	43.7	(8)	-1.5	44.6	(13)	0.3	9-24	7	0	10-6	9	2	1.8	1.9
	GL2634 BRAND	II	NONE	45.7	(13)	3.9 *	47.2	(9)	4.0 *	9-28	10	4	10-5	8	2	2.1	2.1
	XP2586 BRAND	II	NONE	41.9	(8)	0.8	42.3	(7)	0.4	9-30	10	2	10-7	9	3	1.9	1.8
	XP2749 BRAND	II	1B	39.3	(4)	-2.4	--	--	--	10-8	16	8	--	--	--	2.8	-
	XP2908 BRAND	II	NONE	43.6	(8)	2.4	--	--	--	10-4	13	5	--	--	--	2.4	-
ILLINOIS FOUNDATION SEEDS (IFS)																	
	BIRCH	II	1A	42.7	(4)	1.0 L	--	--	--	10-4	12	4	--	--	--	3.6	-
	OAK	II	NONE	--	--	--	42.2	(3)	0.3	--	--	--	10-8	13	3	-	1.8
JACQUES																	
	E8380	O	NONE	--	--	--	37.6	(4)	-3.3	--	--	--	9-23	-4	-13	-	1.3
	J-231	II	1A	43.8	(8)	2.6 *	--	--	--	9-29	8	0	--	--	--	2.1	-
	J-2786	II	1A	42.8	(4)	1.2 H	--	--	--	10-3	11	3	--	--	--	2.2	-
KING GRAIN																	
	KG60	I	1A	--	--	--	36.7	(8)	-4.2 *	--	--	--	9-21	-5	-13	-	1.7
	KG70	I	1A	43.2	(4)	-2.0 *	40.6	(13)	-2.2	9-22	-1	-7	9-28	1	-6	1.6	1.5
	KG3224	I		--	--	--	38.2	(4)	-2.7	--	--	--	9-28	0	-8	-	1.5
	KG80	II	1A	--	--	--	39.4	(3)	-2.5	--	--	--	10-10	14	4	-	2.3
	KG3028	II		--	--	--	44.5	(7)	2.6	--	--	--	10-5	7	1	-	2.4
LAKESIDE STATES																	
	EXP 87	I	1A	38.7	(4)	-3.0 *	40.0	(4)	-1.4	9-26	4	-4	10-2	4	-4	1.8	1.2
	EXP 36 BRAND	II	1C,NONE	42.0	(4)	0.4	43.5	(3)	1.7	9-30	8	0	10-9	13	3	2.5	2.6
	EXP 95	II	1A	39.7	(4)	-1.9	42.1	(3)	1.0	10-1	8	0	10-10	14	4	2.2	1.9
	EXP 67 BRAND	III	1A	42.6	(4)	1.0	41.3	(3)	-0.6	10-8	15	7	10-13	17	7	2.8	2.4
LAND O' LAKES																	
	LL0019	I	1A	--	--	--	33.5	(4)	-7.5 *H	--	--	--	10-4	7	-2	-	2.1
	LL0022	II	NONE	43.5	(4)	1.8	--	--	--	9-29	7	-1	--	--	--	2.1	-
	L2456	II		43.4	(4)	1.7	--	--	--	10-1	9	0	--	--	--	2.9	-
MFI																	
	BLLACKSMITH BRAND	II	NONE	42.4	(4)	0.8	--	--	--	10-3	10	2	--	--	--	2.5	-
	MILLLER BRAND	III	NONE	46.6	(4)	5.0	--	--	--	10-6	14	6	--	--	--	2.6	-
MAUMEE VALLEY																	
	CALIBER	II	1A	41.5	(8)	0.5	--	--	--	9-27	5	-2	--	--	--	2.5	-
	ENTERPRISE	II	NONE	38.8	(4)	-2.9	--	--	--	10-2	10	2	--	--	--	2.5	-
	MV-2E1	II	NONE	42.7	(8)	1.5 L	--	--	--	10-2	11	4	--	--	--	2.0	-
	WARRIOR	II	1A	42.9	(4)	1.3	--	--	--	10-3	10	2	--	--	--	2.4	-
	KODIAK	III	NONE	43.5	(4)	1.8	--	--	--	10-6	14	5	--	--	--	3.1	-
	WASHINGTON V	III	1A	43.4	(8)	2.2	--	--	--	10-1	10	2	--	--	--	3.1	-

(CONT'D)

* STATISTICALLY SIGNIFICANT DEVIATION (P<.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. PERFORMANCE SUMMARY FOR VARIETIES ENTERED IN THE MICHIGAN TRIALS IN 1985 (CONT'D). 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; TYPF 1K RESISTANT TO RACES 1-10; TYPE 3 RESISTANT TO RACES 1-5, 8, AND 9.

				YIELD (BU/A) WITH DEVIATION FROM MEAN						MATURITY RELATIVE TO CHECKS						LODGING	
			PHYT.	SOUTHERN			CENTRAL			SOUTHERN			CENTRAL				
BRAND	ENTRY	MG	RES. TYPE	YIELD	(N)	DEV.	YIELD	(N)	DEV.	DATE	H78	C79	DATE	H78	C79	SOUTH.	CENTRAL
NORTHRUP KING (NK)																	
	S1346	I	NONE	41.4	(10)	0.3	43.5	(19)	0.6	9-19	1	-5	9-26	1	-6	1.4	1.4
	S14-60	I	NONE	--	--	--	41.7	(11)	-0.9 L	--	--	--	9-26	0	-7	-	1.4
	S15-50	I	1C	--	--	--	38.5	(4)	-2.4	--	--	--	9-30	2	-7	-	1.5
	S18-84	I	1B,3	43.2	(9)	2.3	47.1	(13)	4.3 *	9-21	3	-3	10-1	4	-3	1.6	1.8
	S23-03	II	NONE	41.5	(8)	0.3	43.2	(4)	0.6 L	9-27	6	-2	10-4	9	-1	2.3	2.1
	S2596	II	1A	46.6	(13)	1.9 *	46.4	(7)	1.2	9-27	7	0	10-7	10	2	1.9	1.7
	S27-10	II	1C	39.9	(4)	-1.8	40.6	(3)	-1.3	10-1	9	1	10-7	11	1	2.2	1.6
	S30-31	III		38.0	(6)	-1.1	--	--	--	9-28	10	3	--	--	--	2.4	-
PIONEER																	
	1981	I	1A	--	--	--	43.7	(4)	2.7	--	--	--	10-3	5	-4	-	1.6
	2480	II	1A	41.7	(8)	0.7	44.9	(10)	2.2 *	9-27	9	1	10-6	9	2	2.1	2.0
	9271	II	NONE	42.8	(8)	1.6	44.7	(5)	1.8	9-28	8	0	10-4	6	1	1.6	1.8
	9292	II	NONE	43.5	(8)	2.3 *	45.2	(5)	2.4	9-26	5	-3	10-3	5	-1	1.3	1.6
PROSOY																	
	PS104	I	1A	41.7	(13)	0.1	44.9	(17)	1.3	9-19	2	-4	9-29	3	-4	1.8	1.9
	PS210	II	1A	41.7	(12)	-0.5	46.4	(11)	2.2 *L	9-24	6	-1	10-4	8	1	1.8	2.0
RUPP																	
	RS2100	II	NONE	40.8	(10)	1.1	45.0	(10)	2.0	9-22	3	-4	9-29	4	-4	2.2	2.2
	RS2300	II		44.2	(15)	0.9	45.7	(13)	2.0	9-23	4	-3	10-3	5	-1	1.6	1.6
	RS2320	II	NONE	41.9	(4)	0.3	42.8	(3)	0.9	10-2	9	1	10-10	14	4	1.7	1.3
	RS2334	II	1C	40.8	(4)	-0.8	41.3	(3)	-0.6	10-3	11	2	10-10	14	4	1.9	1.4
	RS2460P	II		45.4	(8)	4.3 *	43.1	(7)	1.2	10-1	10	3	10-8	10	4	2.0	2.0
	RS2544	III	NONE	44.4	(4)	2.7	--	--	--	10-6	14	6	--	--	--	2.6	-
	RS2546	III	NONE	42.6	(4)	1.0	--	--	--	10-6	14	6	--	--	--	2.1	-
STINE																	
	1350 BRAND	I	1A	--	--	--	41.0	(8)	0.1	--	--	--	9-28	2	-5	-	1.4
	1570 BRAND	I	1A	--	--	--	40.0	(4)	-0.9	--	--	--	10-6	9	0	-	2.4
	2050+ BRAND	II	NONE	--	--	--	43.5	(3)	1.6	--	--	--	10-10	14	4	-	2.1
	2050T BLEND	II	1A,NONE	43.3	(4)	1.7	--	--	--	10-4	12	3	--	--	--	2.4	-
	2220 BLEND	II	1A,NONE	--	--	--	45.5	(3)	3.7	--	--	--	10-6	10	0	-	1.9
	2510 BRAND	II	1A	43.1	(8)	1.9	--	--	--	9-29	8	0	--	--	--	2.3	-
	2510E BRAND	II	1A	--	--	--	43.2	(3)	1.3	--	--	--	10-9	13	3	-	2.4
	2530 BRAND	II	1A	44.2	(4)	2.6	--	--	--	10-4	12	4	--	--	--	2.5	-
	3010+ BRAND	III	NONE	43.9	(4)	2.2 *	--	--	--	10-6	13	5	--	--	--	3.0	-
	3500 BRAND	III	NONE	41.3	(4)	-0.3	--	--	--	10-6	14	6	--	--	--	2.7	-
VORIS																	
	V207	II	1A	45.1	(12)	0.8	46.2	(15)	2.5 *	9-22	3	-4	10-3	5	-2	2.0	2.1
	V311	III	NONE	43.5	(8)	2.3	46.1	(4)	3.5	10-2	12	4	10-10	15	5	2.9	2.6

* STATISTICALLY SIGNIFICANT DEVIATION (P<.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.

		YIELD (BU/A)																
		ENTIRE SOUTHERN REGION			SOUTHEAST (LENAWEE CO.)			SOUTHWEST (ST. JOSEPH CO.)			FAR SOUTHWEST (BERRIEN CO.)			SOUTH CENTRAL (INGHAM CO.)			MATURITY	HEIGHT	LODGING
BRAND	ENTRY	1985	AVG.	(N)	1985	AVG.	(N)	1985	AVG.	(N)	1985	AVG.	(N)	1985	AVG.	(N)			
PUBLIC	BSR 101 (I)	42.7*	47.6	(8)	47.0	51.4	(5)	44.2*	--	--	31.0	--	--	48.4	--	--	-5	32	1.7
PUBLIC	HARDIN	39.1	42.9	(14)	43.6	52.1	(6)	37.1	34.7	(3)	26.3	32.2	(3)	49.6*	44.0	(2)	-3	36	2.9
PUBLIC	HODGSON 78	35.4	40.8	(23)	36.9	48.4	(9)	34.1	31.8	(6)	24.5	35.2	(5)	46.2	45.7	(3)	-8	33	2.1
PUBLIC	WEBER 84	37.4	41.0	(10)	39.0	49.4	(4)	33.2	34.9	(2)	29.3	26.8	(2)	48.1	44.4	(2)	-3	35	2.7
PUBLIC	AMCOR (II)	40.9	42.4	(14)	48.4*	51.5	(6)	35.8	30.1	(3)	37.8*	36.5	(3)	41.5	42.1	(2)	3	40	3.2
PUBLIC	BEESON 80	39.3	40.7	(14)	42.2	47.4	(6)	32.8	26.9	(3)	35.0*	38.3	(3)	47.0	44.7	(2)	1	35	2.3
PUBLIC	BSR 201	43.3*	49.1	(11)	46.8	51.6	(8)	40.6	--	--	32.0	--	--	53.8*	--	--	1	36	2.9
PUBLIC	CENTURY	45.6*	45.0	(15)	51.3*	52.0	(7)	42.9*	34.4	(3)	36.9*	38.3	(3)	51.2*	46.3	(2)	2	37	2.1
PUBLIC	CENTURY 84	41.5	43.0	(6)	52.1*	48.0	(3)	37.6	--	--	31.9	--	--	44.3	--	--	2	36	1.9
PUBLIC	CORSOY	38.1	41.7	(23)	44.7	47.6	(10)	30.9	32.7	(5)	32.3	37.4	(4)	44.6	42.2	(4)	-2	39	3.1
PUBLIC	+ CORSOY 79	40.6	43.3	(21)	48.4*	52.7	(9)	34.2	30.1	(5)	32.6	37.0	(4)	47.2	45.6	(3)	0	40	3.0
PUBLIC	ELGIN	42.1*	45.3	(12)	49.4*	50.9	(6)	43.5*	41.0	(2)	31.8	33.0	(2)	43.8	44.8	(2)	-5	31	2.3
PUBLIC	HACK	42.0*	46.4	(7)	46.0	50.8	(4)	44.9*	--	--	30.1	--	--	47.0	--	--	1	32	1.8
PUBLIC	KELLER	39.1	40.1	(5)	42.7	43.4	(2)	32.3	--	--	32.5	--	--	49.0	--	--	0	35	2.7
PUBLIC	MIAMI	37.0	39.6	(6)	44.4	44.7	(3)	26.9	--	--	30.3	--	--	46.5	--	--	-4	36	2.3
PUBLIC	NEBSOY	42.3*	42.4	(15)	43.3	47.5	(7)	39.1	32.1	(3)	30.1	35.0	(3)	56.6*	50.9	(2)	-2	33	1.6
PUBLIC	VICKERY	37.4	43.2	(15)	41.5	51.9	(7)	34.1	30.3	(3)	30.2	35.8	(3)	43.9	43.3	(2)	-3	37	3.1
PUBLIC	WELLS II	38.5	41.3	(17)	44.9	46.9	(7)	35.1	33.0	(4)	31.2	39.1	(4)	42.8	42.9	(2)	-5	35	1.8
PUBLIC	CUMBERLAND (III)	38.2	37.7	(10)	49.2*	49.2	(3)	31.8	27.1	(3)	37.1*	33.7	(2)	34.6	40.4	(2)	7	36	3.1
PUBLIC	HOBBIT	44.6*	40.3	(12)	48.6*	50.1	(4)	39.5	29.7	(4)	38.0*	32.9	(2)	52.2*	49.4	(2)	5	27	1.9
PUBLIC	PELLA	44.8*	40.7	(10)	51.4*	49.3	(3)	38.3	30.4	(3)	34.0	33.2	(2)	55.5*	50.8	(2)	4	36	2.1
PUBLIC	SPRITE	42.2*	39.9	(13)	50.4*	51.0	(5)	41.0	28.4	(4)	33.5	31.0	(2)	43.9	43.6	(2)	5	27	2.5
PUBLIC	WILLIAMS 82	41.5	40.6	(7)	46.3	50.2	(2)	38.6	36.2	(2)	34.5	32.4	(2)	46.7	--	--	8	39	3.2
PUBLIC	WINCHESTER	42.0*	--	--	49.5*	--	--	32.4	--	--	34.3	--	--	51.7*	--	--	6	39	3.2
PUBLIC	ZANE	42.7*	--	--	48.6*	--	--	41.4	--	--	38.3*	--	--	42.5	--	--	2	37	2.4

\+ CHECK VARIETY USED TO CALCULATE DEVIATION FROM STANDARD MATURITY.
* NOT SIGNIFICANTLY DIFFERENT FROM HIGHEST YIELD WITHIN THAT COLUMN.

TABLE 3. SOUTHERN MICHIGAN (CONT'D).

BRAND	ENTRY	YIELD (BU/A) ENTIRE SOUTHERN REGION 1985	AVG.	(N)	SOUTHEAST (LENAWEE CO.) 1985	AVG.	(N)	SOUTHWEST (ST. JOSEPH CO.) 1985	AVG.	(N)	FAR SOUTHWEST (BERRIEN CO.) 1985	AVG.	(N)	SOUTH CENTRAL (INGHAM CO.) 1985	AVG.	(N)	MATURITY	HEIGHT	LODGING
AGRIPRO	AP200	39.8	43.1	(15)	50.4*	49.1	(7)	33.7	33.7	(3)	29.2	36.5	(3)	45.8	46.0	(2)	-4	37	3.0
AGRIPRO	AP2190	41.7*	--	--	51.9*	--	--	37.9	--	--	24.9	--	--	52.1*	--	--	-0	33	2.4
AGRIPRO	AP240	42.0*	41.3	(12)	49.4*	48.8	(4)	40.6	35.8	(3)	29.2	34.0	(3)	48.9	45.5	(2)	-1	32	2.7
AGRIPRO	HP20-20	37.9	44.6	(8)	45.2	51.3	(4)	35.8	--	--	29.2	37.4	(2)	41.3	--	--	-5	36	2.5
AGRIPRO	HP2530	42.2*	44.6	(11)	50.0*	50.9	(4)	38.7	36.8	(2)	29.3	37.0	(3)	50.7*	51.2	(2)	1	32	2.6
ASGROW	A1937	40.5	43.3	(13)	48.8*	51.5	(5)	35.4	34.9	(3)	28.1	34.9	(3)	49.7*	48.0	(2)	-6	34	2.5
ASGROW	A2187	40.9	--	--	44.5	--	--	38.3	--	--	33.7	--	--	47.0	--	--	-5	35	1.8
ASGROW	A2522	42.8*	41.7	(8)	47.6	51.9	(2)	43.5*	36.5	(2)	31.7	29.5	(2)	48.3	48.8	(2)	0	37	2.7
ASGROW	A2943	45.5*	44.8	(8)	48.0	51.4	(2)	44.4*	42.2	(2)	40.6*	38.6	(2)	49.1	46.8	(2)	5	37	2.1
CALLAHAN	1250	43.8*	41.0	(10)	51.1*	47.6	(3)	35.8	33.6	(3)	34.3	33.4	(2)	54.0*	49.6	(2)	4	34	2.4
CALLAHAN	3210 BLEND	40.1	41.1	(10)	50.5*	53.0	(3)	34.5	32.5	(3)	26.1	28.8	(2)	49.3*	48.6	(2)	-0	34	2.5
CALLAHAN	3310 BRAND BLEND	43.8*	43.8	(12)	48.8*	51.8	(4)	45.4*	34.3	(3)	35.0*	41.5	(3)	45.8	45.6	(2)	5	36	2.7
CALLAHAN	4260 BLEND	41.6	--	--	47.0	--	--	34.8	--	--	32.7	--	--	51.8*	--	--	2	34	2.5
CALLAHAN	5300X BRAND	44.4*	--	--	53.5*	--	--	40.6	--	--	34.7*	--	--	48.7	--	--	6	36	2.8
CALLAHAN	5350 BRAND	44.9*	44.1	(8)	50.8*	54.6	(2)	41.2	39.4	(2)	36.0*	34.6	(2)	51.6*	47.7	(2)	6	37	3.2
CALLAHAN	6262X	43.5*	--	--	52.7*	--	--	36.9	--	--	32.3	--	--	51.9*	--	--	-1	35	1.8
DAIRYLAND	DSR-171	40.4	43.8	(15)	48.2*	50.8	(7)	41.6*	36.6	(3)	28.4	34.5	(3)	43.3	43.7	(2)	-5	35	2.7
DAIRYLAND	DSR-212	39.8	39.4	(12)	43.6	45.2	(4)	40.9	34.0	(3)	26.2	33.3	(3)	48.3	45.4	(2)	-1	33	2.0
DAIRYLAND	DSR-255	36.8	--	--	37.9	--	--	34.2	--	--	30.9	--	--	44.4	--	--	-1	35	2.1
DAIRYLAND	DSR-287	44.3*	--	--	47.2	--	--	45.8*	--	--	34.2	--	--	49.8*	--	--	3	36	2.3
DAIRYLAND	DSR-297	40.9	--	--	47.5	--	--	35.7	--	--	33.8	--	--	46.4	--	--	6	38	2.3
DAIRYLAND	DSR-317	43.1*	--	--	53.5*	--	--	42.9*	--	--	38.3*	--	--	37.9	--	--	6	41	2.9
DAIRYLAND	DSR-320	40.0	39.8	(12)	42.9	45.8	(4)	37.5	30.8	(3)	37.8*	39.4	(3)	41.7	41.9	(2)	5	37	2.5
DAIRYLAND	DST-2202	40.9	--	--	47.1	--	--	37.7	--	--	33.4	--	--	45.3	--	--	1	38	3.0
DEKALB-PFIZER	CX174	42.1*	41.5	(8)	49.8*	51.2	(2)	40.9	36.6	(2)	30.4	32.0	(2)	47.4	46.2	(2)	-2	32	2.0
DEKALB-PFIZER	CX265	42.1*	--	--	47.7	--	--	43.6*	--	--	32.7	--	--	44.4	--	--	1	34	2.2
DEKALB-PFIZER	CX283	43.2*	42.1	(8)	49.4*	50.6	(2)	34.4	35.2	(2)	40.5*	34.8	(2)	48.6	47.8	(2)	4	36	2.5
DEKALB-PFIZER	CX324	44.1*	40.6	(10)	54.7*	50.4	(3)	40.7	30.1	(3)	32.9	33.4	(2)	48.1	48.6	(2)	5	37	3.0
FUNK	G3213	40.7	41.5	(8)	45.7	49.0	(2)	41.1	40.0	(2)	33.1	33.8	(2)	42.9	43.6	(2)	-1	37	3.0
FUNK	G3236	38.2	38.8	(8)	44.2	44.5	(3)	35.2	28.0	(2)	29.5	38.4	(2)	43.7	--	--	2	34	3.1
FUNK	G3239	42.4*	42.6	(5)	44.2	--	--	42.4*	--	--	33.8	--	--	49.2	46.2	(2)	4	35	2.5
GOLDEN HARVEST	H-1233 BRAND	42.9*	--	--	50.7*	--	--	40.5	--	--	33.4	--	--	46.8	--	--	-1	32	2.3
GOLDEN HARVEST	H-1285 BRAND	43.5*	--	--	51.1*	--	--	36.9	--	--	38.7*	--	--	47.1	--	--	3	34	2.3
GLH	GL2634 BRAND	43.4*	45.7	(13)	49.3*	53.0	(5)	40.5	35.1	(3)	34.8*	42.6	(3)	48.9	48.2	(2)	3	34	2.4
GLH	XP2586	43.8*	41.9	(8)	47.2	48.6	(2)	42.2*	40.0	(2)	37.3*	34.4	(2)	48.6	44.8	(2)	2	34	2.1
GLH	XP2749 BRAND	39.3	--	--	44.0	--	--	40.1	--	--	35.4*	--	--	37.6	--	--	8	35	2.8
GLH	XP2908	44.8*	43.6	(8)	52.8*	55.9	(2)	42.9*	38.6	(2)	36.5*	34.8	(2)	47.2	45.0	(2)	6	37	2.6
IFS	BIRCH	42.7*	--	--	46.8	--	--	41.6*	--	--	36.3*	--	--	46.0	--	--	4	40	3.6
JACQUES	J-231	45.2*	43.8	(8)	52.7*	53.7	(2)	41.3	37.9	(2)	33.3	33.4	(2)	53.3*	50.2	(2)	1	35	2.4
JACQUES	J-2786	42.8*	--	--	50.7*	--	--	40.0	--	--	30.0	--	--	50.6*	--	--	3	37	2.2
LAND O' LAKES	LL0022	43.5*	--	--	47.9	--	--	40.0	--	--	36.6*	--	--	49.4*	--	--	-1	33	2.1
LAND O' LAKES	L2456	43.4*	--	--	47.6	--	--	37.3	--	--	33.3	--	--	55.2*	--	--	1	36	2.9
LAKESIDE	EXP 36 BRAND	42.0*	--	--	44.9	--	--	40.7	--	--	32.8	--	--	49.6*	--	--	-1	37	2.5
LAKESIDE	EXP 67 BRAND	42.6*	--	--	52.6*	--	--	35.3	--	--	37.0*	--	--	45.6	--	--	7	40	2.8
LAKESIDE	EXP 87	38.7	--	--	45.3	--	--	36.0	--	--	28.0	--	--	45.5	--	--	-5	36	1.8
LAKESIDE	EXP 95	39.7	--	--	44.9	--	--	33.8	--	--	31.5	--	--	48.7	--	--	0	36	2.2
MFI	BLLACKSMITH	42.4*	--	--	46.8	--	--	39.6	--	--	35.4*	--	--	47.8	--	--	2	34	2.5
MFI	MILLLER	46.6*	--	--	52.9*	--	--	49.2*	--	--	37.5*	--	--	46.9	--	--	6	37	2.5
MAUMEE VALLEY	CALIBER	40.1	41.5	(8)	45.2	48.6	(2)	36.5	39.1	(2)	30.9	30.8	(2)	47.9	47.6	(2)	-2	37	2.9
MAUMEE VALLEY	ENTERPRISE	38.8	--	--	44.4	--	--	35.7	--	--	35.7*	--	--	39.2	--	--	2	35	2.5
MAUMEE VALLEY	KODIAK	43.5*	--	--	49.8*	--	--	39.3	--	--	35.8*	--	--	49.1	--	--	5	38	3.1
MAUMEE VALLEY	MV-2E1	43.6*	42.7	(8)	49.3*	50.2	(2)	40.8	39.0	(2)	35.3*	35.0	(2)	49.0	46.6	(2)	4	36	2.4
MAUMEE VALLEY	WARRIOR	42.9*	--	--	50.3*	--	--	37.3	--	--	36.5*	--	--	47.6	--	--	2	35	2.5
MAUMEE VALLEY	WASHINGTON V	44.8*	43.4	(8)	49.8*	55.0	(2)	43.3*	40.8	(2)	40.0*	33.8	(2)	46.1	43.9	(2)	6	42	3.6
NK	S23-03	39.7	41.5	(8)	45.2	48.4	(2)	42.1*	41.2	(2)	28.4	33.0	(2)	42.9	43.2	(2)	-3	35	2.5
NK	S2596	44.6*	46.6	(13)	51.7*	53.5	(6)	43.5*	39.6	(2)	34.1	38.6	(3)	49.2	45.2	(2)	-1	32	2.1
NK	S27-10	39.9	--	--	46.4	--	--	38.9	--	--	26.7	--	--	47.6	--	--	1	33	2.2
NK	S30-31	38.8	38.0	(6)	46.4	47.2	(2)	40.5	32.7	(2)	31.3	--	--	37.1	--	--	6	37	3.1
PIONEER	9271	43.7*	42.8	(8)	50.2*	52.6	(2)	44.0*	40.2	(2)	31.8	29.1	(2)	48.9	49.1	(2)	-0	30	2.0
PIONEER	9292	43.6*	43.5	(8)	49.0*	52.4	(2)	42.3*	41.4	(2)	30.3	30.4	(2)	52.8*	49.8	(2)	-4	30	1.5
PROSOY	PS210	40.4	41.7	(12)	48.7*	51.9	(5)	40.0	33.0	(3)	24.5	23.8	(2)	48.4	47.2	(2)	-1	36	2.1
RUPP	RS2100	41.4	40.8	(10)	45.1	48.6	(3)	38.3	34.9	(3)	24.6	28.0	(2)	57.7*	50.9	(2)	-5	35	2.7
RUPP	RS2300	41.4	44.2	(15)	48.2*	52.1	(7)	39.8	33.0	(3)	26.5	34.0	(3)	51.0*	48.4	(2)	-3	35	1.8
RUPP	RS2320	41.9*	--	--	48.3*	--	--	40.7	--	--	30.0	--	--	48.7	--	--	1	32	1.7
RUPP	RS2334	40.8	--	--	45.0	--	--	34.8	--	--	32.7	--	--	50.8*	--	--	2	35	1.9
RUPP	RS2460P	44.1*	45.4	(8)	51.6*	56.5	(2)	40.7	42.7	(2)	35.5*	33.6	(2)	48.5	49.0	(2)	3	35	2.2
RUPP	RS2544	44.4*	--	--	44.7	--	--	48.3*	--	--	41.1*	--	--	43.4	--	--	6	39	2.6
RUPP	RS2546	42.6*	--	--	46.0	--	--	40.2	--	--	34.5	--	--	49.8*	--	--	6	38	2.1
STINE	2050T BLEND	43.3*	--	--	49.7*	--	--	44.4*	--	--	30.7	--	--	48.5	--	--	3	35	2.4
STINE	2510 BRAND	45.0*	43.1	(8)	54.7*	54.2	(2)	42.2*	40.2	(2)	31.0	31.2	(2)	52.1*	46.8	(2)	1	31	2.4
STINE	2530 BRAND	44.2*	--	--	53.4*	--	--	38.7	--	--	36.1*	--	--	48.6	--	--	4	37	2.5
STINE	3010+ BRAND	43.9*	--	--	48.7*	--	--	41.2	--	--	35.2*	--	--	50.4*	--	--	5	38	3.0
STINE	3500 BRAND	41.3	--	--	45.3	--	--	42.4*	--	--	34.7*	--	--	42.9	--	--	6	38	2.7
VORIS	V207	42.1*	45.1	(12)	47.5	50.1	(6)	38.1	32.2	(2)	28.4	37.4	(2)	54.3*	50.4	(2)	-3	36	2.4
VORIS	V311	42.3*	43.5	(8)	44.7	49.6	(2)	40.5	39.2	(2)	31.1	36.4	(2)	52.8*	48.6	(2)	4	37	3.0
	LSD(.05)	4.95			6.50			7.79			6.36			8.35			2.4	2.6	0.60
	TEST MEAN	41.83			47.78			39.07			32.80			46.89			1.2	35.3	2.48

\+ CHECK VARIETY USED TO CALCULATE DEVIATION FROM STANDARD MATURITY.
* NOT SIGNIFICANTLY DIFFERENT FROM HIGHEST YIELD WITHIN THAT COLUMN.

TABLE 4. CENTRAL MICHIGAN.

BRAND	ENTRY	YIELD (BU/A) ENTIRE CENTRAL REGION 1985	AVG.	(N)	SOUTH CENTRAL (INGHAM CO.) 1985	AVG.	(N)	CENTRAL (SAGINAW CO.) 1985	AVG.	(N)	EAST CENTRAL (SANILAC CO.) 1985	AVG.	(N)	SAGINAW BAY + (HURON CO.) 1985	AVG.	(N)	MATURITY	HEIGHT	LODGING SCORE
PUBLIC	DAWSON (O)	36.5	40.1	(11)	40.6	42.8	(2)	39.4	35.5	(4)	29.5	43.1	(3)	38.9	42.0	(2)	-17	28	1.3
PUBLIC	EVANS	35.1	37.7	(27)	44.5	37.8	(4)	36.7	38.2	(13)	24.0	37.2	(7)	36.2	36.9	(3)	-19	30	1.1
PUBLIC	OZZIE	30.7	37.0	(11)	37.5	39.2	(2)	28.4	36.0	(4)	26.1	38.9	(3)	34.3	34.2	(2)	-20	27	1.1
PUBLIC	SIMPSON	33.5	36.5	(10)	--	--	--	34.9	32.3	(4)	27.3	39.7	(3)	34.8	39.8	(2)	-22	16	0.6
PUBLIC	BSR 101 (I)	42.0	44.1	(8)	48.4	--	--	42.6	45.3	(5)	34.9	--	--	42.9*	--	--	-4	30	1.3
PUBLIC	HARDIN	45.9*	47.8	(17)	49.6*	44.0	(2)	48.0*	50.0	(8)	40.2*	48.1	(5)	37.7	42.7	(2)	-2	36	2.7
PUBLIC	HODGSON 78	39.3	43.6	(28)	46.2	45.7	(3)	37.1	42.3	(14)	34.7	45.0	(8)	38.3	44.4	(3)	-10	32	1.9
PUBLIC	WEBER 84	40.7	40.4	(10)	48.1	44.4	(2)	38.7	42.4	(5)	35.2	33.4	(2)	36.5	--	--	-3	33	2.3
PUBLIC	AMCOR (II)	40.8	43.6	(13)	41.5	42.1	(2)	42.5	44.0	(7)	38.5*	43.6	(4)	--	--	--	5	38	2.8
PUBLIC	BEESON 80	40.8	42.0	(15)	47.0	44.7	(2)	38.8	44.7	(8)	36.6	36.5	(5)	--	--	--	4	34	2.0
PUBLIC	BSR 201	44.6*	45.6	(8)	53.8*	--	--	41.5	45.5	(6)	38.5*	--	--	--	--	--	1	34	2.5
PUBLIC	CENTURY	44.8*	43.9	(16)	51.2*	46.3	(2)	40.2	44.8	(9)	42.9*	41.2	(5)	--	--	--	5	37	2.1
PUBLIC	CENTURY 84	41.8	43.4	(5)	44.3	--	--	40.3	44.0	(3)	40.7*	--	--	--	--	--	3	33	1.7
PUBLIC	CORSOY	43.3*	39.9	(25)	44.6	42.2	(4)	49.1*	41.3	(13)	36.1	35.6	(6)	--	--	--	-2	36	2.3
PUBLIC	++ CORSOY 79	42.1	45.1	(25)	47.2	45.6	(3)	38.7	45.0	(13)	40.5*	46.2	(7)	42.0	40.6	(2)	10-6	38	2.5
PUBLIC	ELGIN	46.0*	47.2	(11)	43.8	44.8	(2)	48.9*	48.8	(7)	45.3*	43.9	(2)	--	--	--	-4	31	2.2
PUBLIC	HACK	44.1*	43.4	(6)	47.0	--	--	45.0*	43.3	(4)	40.3*	--	--	--	--	--	1	31	1.5
PUBLIC	KELLER	42.8*	--	--	49.0	--	--	37.7	--	--	41.7*	--	--	--	--	--	3	34	2.2
PUBLIC	MIAMI	41.2	42.6	(5)	46.5	--	--	41.8	43.8	(3)	35.4	--	--	--	--	--	-3	36	2.1
PUBLIC	NEBSOY	44.9*	41.6	(16)	56.6*	50.9	(2)	44.0*	43.0	(9)	34.1	35.3	(5)	--	--	--	-1	33	1.5
PUBLIC	VICKERY	43.6*	43.5	(17)	43.9	43.3	(2)	45.8*	43.8	(10)	41.1*	42.9	(5)	--	--	--	-2	37	2.5
PUBLIC	WELLS II	40.6	41.6	(18)	42.8	42.9	(2)	38.4	43.8	(10)	40.7*	37.4	(6)	--	--	--	-5	34	1.1
PUBLIC	PELLA (III)	47.1*	46.1	(9)	55.5*	50.8	(2)	41.5	41.7	(4)	44.2*	49.0	(3)	--	--	--	6	36	2.0
PUBLIC	ZANE	42.7*	--	--	42.5	--	--	46.3*	--	--	39.3*	--	--	--	--	--	2	36	2.1
AGRIPRO	AP200	43.5*	46.0	(14)	45.8	46.0	(2)	45.2*	47.8	(8)	39.4*	42.6	(4)	--	--	--	-4	35	2.6
AGRIPRO	AP2190	45.8*	--	--	52.1*	--	--	42.7	--	--	42.5*	--	--	--	--	--	1	32	1.4
AGRIPRO	HP20-20	35.6	41.3	(7)	41.3	--	--	35.9	46.2	(4)	29.7	31.6	(2)	--	--	--	-6	33	1.9
ASGROW	A1525	38.9	39.0	(4)	44.4	--	--	42.9	--	--	29.5	--	--	39.3	--	--	-9	31	1.1
ASGROW	A1937	45.0*	47.8	(14)	49.7*	48.0	(2)	43.8*	48.0	(6)	41.5*	46.8	(4)	47.8*	49.4	(2)	-7	34	2.2
ASGROW	A2187	43.2*	--	--	47.0	--	--	45.4*	--	--	37.3	--	--	--	--	--	-4	34	1.2
CALLAHAN	1250	46.3*	45.6	(7)	54.0*	49.6	(2)	43.2	46.4	(3)	41.6*	40.5	(2)	--	--	--	6	35	1.9
CALLAHAN	3210 BLEND	45.1*	43.3	(7)	49.3*	48.6	(2)	44.5	45.8	(3)	41.4*	34.2	(2)	--	--	--	1	34	2.0
CALLAHAN	5150X BRAND	43.6*	41.4	(8)	47.6	45.9	(2)	45.7*	43.7	(3)	37.4	34.1	(2)	39.8	--	--	-8	28	1.4
CALLAHAN	5200X BLEND	42.0	41.9	(8)	46.2	44.5	(2)	41.6	43.5	(3)	38.1	36.6	(2)	42.3	--	--	0	36	2.2
CALLAHAN	6180X	44.2*	42.9	(4)	43.0	--	--	51.1*	--	--	38.4	--	--	39.2	--	--	-8	31	1.2
CALLAHAN	6220X	44.4*	--	--	49.5*	--	--	45.1*	--	--	38.6*	--	--	--	--	--	4	34	1.7
CALLAHAN	6262X	46.1*	--	--	51.9*	--	--	45.0*	--	--	41.5*	--	--	--	--	--	1	35	1.6
DAIRYLAND	DSR-120	40.7	43.9	(15)	43.3	46.8	(2)	42.1	44.5	(7)	36.6	42.4	(4)	35.9	42.1	(2)	-9	35	1.6
DAIRYLAND	DSR-151	38.3	42.3	(11)	37.1	41.3	(2)	43.5	41.9	(4)	34.4	44.6	(3)	40.6	40.6	(2)	-9	31	1.7
DAIRYLAND	DSR-171	43.8*	45.9	(16)	43.3	43.7	(2)	47.0*	46.9	(8)	41.0*	46.4	(4)	37.8	43.2	(2)	-4	36	2.4
DAIRYLAND	DSR-205	35.8	39.7	(7)	40.2	44.8	(2)	32.9	41.7	(3)	34.3	31.7	(2)	--	--	--	-1	32	2.2
DAIRYLAND	DSR-212	40.4	43.6	(11)	48.3	45.4	(2)	38.1	43.2	(5)	34.9	43.2	(4)	--	--	--	2	33	1.5
DAIRYLAND	DSR-255	39.2	--	--	44.4	--	--	36.3	--	--	37.0	--	--	--	--	--	-0	36	1.7
DAIRYLAND	DST-0801	36.2	36.2	(4)	39.1	--	--	34.7	--	--	34.9	--	--	36.2	--	--	-18	27	1.1
DAIRYLAND	DST-1101	41.3	41.4	(4)	47.9	--	--	39.4	--	--	36.6	--	--	41.8	--	--	-11	31	1.0
DAIRYLAND	DST-1102	43.1*	43.0	(4)	51.8*	--	--	40.0	--	--	37.5	--	--	42.7*	--	--	-9	31	1.6
DAIRYLAND	DST-1206	40.6	39.4	(4)	45.5	--	--	41.2	--	--	35.1	--	--	36.0	--	--	-8	32	1.3
DAIRYLAND	DST-2202	43.9*	--	--	45.3	--	--	44.2*	--	--	42.2*	--	--	--	--	--	3	38	2.7
DEKALB-PFIZER	CX134	40.4	41.0	(11)	44.8	35.9	(4)	38.3	40.7	(4)	38.2	42.7	(3)	36.8	44.3	(2)	-8	32	1.5
DEKALB-PFIZER	CX155	41.6	43.5	(19)	43.6	38.9	(3)	40.1	44.4	(9)	41.1*	45.4	(5)	38.6	41.7	(2)	-1	38	2.8
DEKALB-PFIZER	CX174	42.2	41.8	(8)	47.4	46.2	(2)	38.6	42.2	(3)	40.6*	36.8	(2)	42.0	--	--	-1	31	1.4
FUNK	G3115	39.7	42.1	(11)	46.2	44.3	(2)	40.3	40.8	(4)	32.7	41.7	(3)	38.9	43.0	(2)	-3	29	1.5
FUNK	G3145 BLEND	43.1*	42.9	(8)	48.3	44.8	(2)	44.7*	45.0	(3)	36.2	38.0	(2)	42.9*	--	--	-3	34	2.1
FUNK	EXP 12231	42.0	--	--	47.6	--	--	43.0	--	--	35.4	--	--	41.8	--	--	-7	30	2.1
GOLDEN HARVEST	H-1233 BRAND	44.3*	--	--	46.8	--	--	43.3	--	--	42.9*	--	--	--	--	--	-1	33	1.6
GOLDEN HARVEST	H-1285 BRAND	45.8*	--	--	47.1	--	--	45.2*	--	--	45.0*	--	--	--	--	--	5	34	1.8
GLH	GL1434 BRAND	35.8	35.1	(4)	43.1	--	--	33.5	--	--	30.8	--	--	33.1	--	--	-9	33	1.6
GLH	GL1900 BRAND	43.0*	41.7	(4)	51.0*	--	--	43.2	--	--	34.9	--	--	37.6	--	--	-1	29	1.5
GLH	GL1937 BRAND	40.1	44.1	(11)	41.0	44.1	(2)	41.1	44.4	(4)	38.2	45.1	(3)	38.8	41.8	(2)	-4	35	2.0
GLH	GL2250	40.6	44.6	(13)	42.4	44.1	(2)	44.8*	46.6	(7)	34.5	41.2	(4)	--	--	--	1	37	2.1
GLH	GL2634 BRAND	47.7*	47.2	(9)	48.9	48.2	(2)	50.8*	45.8	(4)	43.5*	48.4	(3)	--	--	--	4	35	1.8
GLH	XP2586	42.9*	42.3	(7)	48.6	44.8	(2)	41.1	43.6	(3)	38.9*	37.7	(2)	--	--	--	4	34	1.7
IFS	OAK	42.2	--	--	49.0	--	--	40.7	--	--	36.8	--	--	--	--	--	3	33	1.8
JACQUES	E8380	38.8	37.6	(4)	41.3	--	--	38.4	--	--	36.7	--	--	34.2	--	--	-15	32	1.5
KING GRAIN	KG60	35.0	36.7	(8)	38.2	38.1	(2)	40.4	41.1	(3)	26.4	30.7	(2)	32.7	--	--	-17	25	1.1
KING GRAIN	KG70	33.9	40.6	(13)	44.2	43.0	(2)	33.5	39.7	(5)	23.9	40.7	(4)	34.7	40.4	(2)	-6	34	1.6
KING GRAIN	KG80	39.4	--	--	43.8	--	--	35.6	--	--	38.8*	--	--	--	--	--	4	40	2.3
KING GRAIN	KG3028	43.7*	44.5	(7)	47.4	48.6	(2)	45.8*	45.5	(3)	37.8	38.7	(2)	--	--	--	-0	35	2.1
KING GRAIN	KG3224	38.4	38.2	(4)	44.9	--	--	37.3	--	--	33.0	--	--	37.8	--	--	-9	32	1.7
LAKESIDE	EXP 36 BRAND	43.5*	--	--	49.6*	--	--	40.8	--	--	40.2*	--	--	--	--	--	3	37	2.6
LAKESIDE	EXP 67 BRAND	41.3	--	--	45.6	--	--	39.5	--	--	38.8*	--	--	--	--	--	7	38	2.4
LAKESIDE	EXP 87	39.9	39.5	(4)	45.5	--	--	41.3	--	--	32.8	--	--	38.5	--	--	-6	32	1.4
LAKESIDE	EXP 95	42.0	--	--	48.7	--	--	38.7	--	--	38.7*	--	--	--	--	--	4	37	1.9
LAND O' LAKES	LL0019	34.7	33.5	(4)	43.7	--	--	34.2	--	--	26.3	--	--	29.8	--	--	-3	31	2.3
NK	S1346	42.2	43.5	(19)	44.8	43.1	(4)	46.3*	45.3	(9)	35.6	41.7	(4)	38.2	39.4	(2)	-10	28	1.3

(CONT'D)

\+ VALUES FROM THE 1985 HURON CO. PLOTS WERE NOT INCLUDED IN THE 1985 REGIONAL MEANS.
++ CHECK VARIETY USED TO CALCULATE DEVIATION FROM STANDARD MATURITY.
* NOT SIGNIFICANTLY DIFFERENT FROM HIGHEST YIELD WITHIN THAT COLUMN.

TABLE 4. CENTRAL MICHIGAN (CONT'D).

BRAND	ENTRY	YIELD (BU/A) ENTIRE CENTRAL REGION 1985	AVG.	(N)	SOUTH CENTRAL (INGHAM CO.) 1985	AVG.	(N)	CENTRAL (SAGINAW CO.) 1985	AVG.	(N)	EAST CENTRAL (SANILAC CO.) 1985	AVG.	(N)	SAGINAW BAY + (HURON CO.) 1985	AVG.	(N)	MATURITY	HEIGHT	LODGING SCORE
NK	S1460	39.2	41.7	(11)	41.9	45.2	(2)	40.1	39.9	(4)	35.5	42.2	(3)	41.3	41.0	(2)	-11	30	1.3
NK	S15-50	39.3	38.5	(4)	45.8	--	--	35.7	--	--	36.3	--	--	36.3	--	--	-8	35	1.5
NK	S1884	41.9	47.1	(13)	45.4	43.6	(2)	42.6	47.5	(5)	37.7	49.1	(4)	40.1	45.8	(2)	-6	31	1.7
NK	S23-03	43.0*	43.2	(4)	42.9	43.2	(2)	43.4	--	--	42.8*	--	--	--	--	--	-1	34	2.3
NK	S27-10	40.6	--	--	47.6	--	--	38.1	--	--	36.1	--	--	--	--	--	1	32	1.6
PIONEER	1981	44.5*	43.7	(4)	49.9*	--	--	41.8	--	--	41.7*	--	--	41.3	--	--	-5	33	1.7
PIONEER	2480	43.9*	44.9	(10)	49.5*	46.3	(2)	44.6*	44.0	(5)	37.6	45.6	(3)	--	--	--	4	37	2.1
PROSOY	PS104	43.1*	44.9	(17)	49.6*	43.4	(2)	43.3	47.1	(9)	36.3	41.2	(4)	40.9	44.0	(2)	-6	35	1.9
PROSOY	PS210	44.6*	46.4	(11)	48.4	47.2	(2)	47.2*	47.1	(6)	38.1	44.4	(3)	--	--	--	1	35	1.8
RUPP	RS2100	46.8*	45.0	(10)	57.7*	50.9	(2)	44.0*	43.0	(4)	38.7*	45.3	(3)	--	--	--	-4	37	2.6
RUPP	RS2300	43.9*	45.7	(13)	51.0*	48.4	(2)	42.5	46.0	(7)	38.3	43.7	(4)	--	--	--	-2	34	1.4
RUPP	RS2320	42.8*	--	--	48.7	--	--	43.2	--	--	36.4	--	--	--	--	--	4	32	1.3
RUPP	RS2334	41.3	--	--	50.8*	--	--	35.8	--	--	37.2	--	--	--	--	--	4	34	1.4
RUPP	RS2460P	44.6*	43.1	(7)	48.5	49.0	(2)	45.3*	46.1	(3)	39.9*	32.6	(2)	--	--	--	5	36	2.0
STINE	1350 BRAND	40.7	41.0	(8)	46.6	47.8	(2)	39.5	43.5	(3)	36.0	32.2	(2)	37.7	--	--	-7	27	1.0
STINE	1570 BRAND	41.4	40.0	(4)	44.9	--	--	39.5	--	--	39.7*	--	--	36.1	--	--	0	37	2.4
STINE	2050+ BRAND	43.5*	--	--	48.6	--	--	40.5	--	--	41.3*	--	--	--	--	--	4	35	2.1
STINE	2220 BLEND	45.5*	--	--	52.9*	--	--	44.8*	--	--	38.9*	--	--	--	--	--	0	34	1.9
STINE	2510E BRAND	43.2*	--	--	46.7	--	--	40.7	--	--	42.2*	--	--	--	--	--	3	35	2.4
VORIS	V207	44.8*	46.2	(15)	54.3*	50.4	(2)	42.6	46.8	(8)	37.6	43.5	(5)	--	--	--	-2	37	1.8
VORIS	V311	46.7	46.1	(4)	52.8*	48.6	(2)	47.7*	--	--	39.5*	--	--	--	--	--	6	38	2.9
	LSD(.05)	5.13			8.35			7.54			6.82			5.39			3.0	2.6	0.57
	TEST MEAN	41.78			46.89			41.50			37.22			38.31			-2.7	33.5	1.84

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TABLE 5. UPPER PENINSULA (ALGER COUNTY).

BRAND	ENTRY	YIELD (BU/A) 1985	AVG.	(N)	MATURITY	HEIGHT	LODGING SCORE
PUBLIC	BICENTENNIAL (OO)	27.3*	28.7	(2)	9-20	18	1.5
PUBLIC	CHICO (O)	11.5	--	--	10-10	19	1.6
PUBLIC	CLAY (O)	15.8	17.0	(3)	9-27	15	1.8
PUBLIC	MAPLE AMBER (OO)	26.0*	31.0	(3)	9-14	17	1.0
PUBLIC	MAPLE RIDGE (OO)	22.3	22.9	(2)	9-12	15	1.0
PUBLIC	MCCALL (OO)	26.0*	27.0	(3)	9-15	16	1.1
	LSD(.05)	3.3					
	TEST MEAN	21.5					

* NOT SIGNIFICANTLY DIFFERENT FROM HIGHEST YIELD IN THAT COLUMN.

Issued in furtherance of Cooperative Extension work in agriculture and home economics, acts of May 8, and June 30, 1914, in cooperation with the U.S. Department of Agriculture. W.J. Moline, Director, Cooperative Extension Service, Michigan State University, E. Lansing, MI 48824.

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