



Michigan Corn Production

HYBRIDS COMPARED 1968

COOPERATIVE EXTENSION
MICHIGAN STATE UNIVERSITY

BY: E. C. ROSSMAN, BARRY M. DARLING, AND JERRY TAYLOR

Authors are respectively Professor of Crop Science and Crop Science Aides.

HYBRID CORN TRIALS are conducted each year by the Michigan Experiment Station in cooperation with the Cooperative Extension Service, Michigan Crop Improvement Association, seed corn companies, and farmers.

Many different hybrids are offered for sale in Michigan. They differ in yield ability, maturity, lodging resistance, and other characteristics. Choosing the best corn hybrids is an important part of profitable corn production. Higher yields and other improvements from planting the best hybrids are obtained with little or no increase in production costs. Seed of the best hybrids generally costs no more than seed of hybrids with lower performance.

ENTRIES

Two groups of entries are included in the trials:
(1) Voluntary entries. — All seed companies are invited each year to enter their hybrids in the trials. A fee is charged to cover some of the direct expenses.

(2) Extension entries. — Some seed companies do not participate with voluntary fee-assessed entries and others do not include some of their hybrids that are planted in Michigan. Extension entries are included to provide performance data on some of the hybrids not entered as voluntary entries. They are hybrids suggested by County Extension personnel on the basis of extent of use in the various areas of the state.

No distinction between, or identification of, voluntary and extension entries is made in reporting the results. All hybrids were randomized and compared in the same field using the same procedure. Table 22, presents an index of all hybrids entered in the 1967 trials.

Single cross hybrids are indicated with (2X), three-way hybrids with (3X), and special cross hybrids with

(Sp) following the hybrid name and number in the tables. All others are double-cross hybrids.

Michigan experimental hybrids and some experimental hybrids from seed companies are not listed since seed is not yet available for farm use.

METHODS

Scientific procedures are followed in conducting these trials to give all hybrids equal opportunity to



Corn Maturity Zones and Locations (★) of Trials

demonstrate their capabilities. The best way to compare a group of corn hybrids is to grow them in the same field with the same fertilizer, population, date of planting, etc., for all hybrids.

Seed for voluntary and Extension entries was submitted by the seed companies. Equal numbers of seeds were counted for each plot of all hybrids. Each hybrid was replicated several times in the field. Plots were planted with a standard two-row or four-row corn planter adapted for small plots.

From seed packaging through harvest and data processing, each hybrid was identified only by a code number to reduce chance for any personal bias by anyone working in the field or with the data. The code was deciphered after the data had been processed.

Stands and lodging were counted before harvest. Plots for grain yields were harvested with a one-row picker-sheller. Field data were processed with high speed electronic computers.

Silage yields were taken on all hybrids in the Huron, Grand Traverse, Alpena, and Alger county trials. (Tables 15, 18, 20, 21).

All hybrids in the Monroe, Ingham, and Saginaw County trials were compared at 2 plant populations (Tables 1, 9, and 12).

Two irrigated trials were conducted in 1967 in Cass and Saginaw (Prairie Farm) counties, Tables 6 and 11.

Planting of all trials was completed between May 2-26. Rains in April and June reduced drought conditions of the last two years in central Michigan. The east central section, "thumb", received excess moisture during June. Semi-dry conditions were prevalent during much of July and August. Total rainfall for the growing season at most of the 18 locations was normal or above in 1967. Rainfall distribution during the season was better than in 1966 and 1965, and yields were higher at most locations. Temperature averages were below normal from June to September.

Most hybrids matured ahead of killing frost at all locations except the Clinton County Muck Soil and Alpena County trials. Frost occurred in the Upper Peninsula and northern Lower Peninsula September 11. Light to heavy frosts occurred on September 23 and 25 in northern and central Lower Peninsula areas. Heavy Killing frosts occurred during the week of October 23 in most areas.

Prolonged rainy periods in October and November were not favorable for harvest. Corn was very slow to dry in the field and moisture contents of grain were unusually high.

The Michigan Crop Reporting Service estimates the 1967 average yield at 65.0 bushels per acre on about 1,491,000 acres harvested for grain compared with 1966 averages of 67.0 bushels per acre on 1,470,000 acres. About 400,000 acres of corn are harvested for silage.

HOW TO USE THIS BULLETIN

One, two, and three-year averages are presented for all hybrids tested during 1967, 1966, and 1965. One-year data are less reliable than two or three-year averages and should be interpreted with more caution. Confidence in corn performance data increases with more years and locations of testing. Two or more years' results are more desirable than one year of testing.

The tables tell you three things about the hybrids tested:

- (1) average moisture content at harvest,
- (2) average yield in bushels of shelled corn at 15.5 moisture or silage yields, and
- (3) average percentage of stalk lodging (plants broken below the ear at harvest).

Hybrids are recorded in the tables in order of their approximate maturity (early to late) based on moisture content at harvest. Moisture contents were determined from shelled grain samples at all locations harvested for grain and from ear corn samples in the silage trials.

Stalk breakage is caused by corn borers and/or stalk rot diseases.

Two or more plots of the same hybrid in the same field may produce somewhat different results due to uncontrolled variability in the soil and other environmental factors. Replication and randomization of the entries are two methods used to reduce these errors. Since these methods do not eliminate all of these effects, differences necessary for statistical significance have been calculated for yield and moisture content.

When comparing any two hybrids, the difference between them should not be considered significant unless it exceeds the value listed at "least significant differences" at the bottom of the tables.

Agronomic information for each trial is given at the bottom of the table. Fertilizer amounts are total pounds per acre of nitrogen, P₂O₅ and K₂O applied during the season.

HOW TO CHOOSE A CORN HYBRID

Adaptation. — The map on the cover shows location of the trial and divides Michigan into four maturity zones. A map can show maturity zones only in a general way. Local variations in weather, soil type and fertility, time of planting, and other conditions all affect adaptation. Corn hybrids are often adapted to more than one zone.

Find the zone in which you plan to grow the corn, and refer to the table which gives results for the trial conducted nearest your farm. Also, refer to the other tables listed in your zone. A hybrid which has done well at two or more locations is more likely to be a good hybrid for your farm, too.

Rate of plantings. — A population of 12,000 plants per acre is best for corn soils producing 50 bushels or

less per acre. Populations of 16 to 18,000 are best for soils producing more than 50 bushels per acre. Higher populations (20,000 or more) should be considered only for soils consistently producing more than 100 bushels per acre. Rainfall deficiencies with high plant population usually result in no increase and frequently a decrease in yield compared to 16 to 18,000. Lodging and harvest losses are often greater at high populations.

Maturity. — Hybrids are listed in the tables in order of maturity — early to late. One percent more moisture at harvest means a delay in maturity of about two days. Corn is mature when moisture is down to 35 percent in the grain or 40 percent in the ear. Ear corn is safe to crib when moisture content is below 25 percent.

For grain. — It is better to choose an early corn (below average moisture content) than a late corn for grain. The tables show that a good yield does not depend on later maturity. Advantages of early maturing hybrids are:

- (1) They usually mature before killing frosts.
- (2) Good yielding early hybrids generally yield as much or more corn than late hybrids in most areas in Michigan.
- (3) Lower moisture content at harvest permits safer storage. You will take more clean, sound, high-quality corn out of the crib.
- (4) Mature, dry corn makes better livestock feed.
- (5) You can harvest earlier in the fall when weather conditions are most favorable. Early harvest may reduce corn losses resulting from broken stalks and dropped ears in the field.

- (6) Early hybrids with lower moisture content at harvest reduces cost for drying and market discount for moisture is less.
- (7) Fall plowing of corn stubble may be possible with early hybrids on land not subject to erosion.

For silage. — The best silage contains a high percentage of grain. Hybrids that produce high yields of grain should be used for silage. High dry weight production per acre is a better basis for choosing hybrids for silage than tons of green weight.

Corn for silage should reach the early dent stage well before frost in an average year. The early dent stage, when most of the kernels have dented, is the best time to begin harvest for silage. Dry matter production continues to increase until maturity.

Other considerations. — Choose early hybrids for late plantings, low soil fertility, sandy soils, muck soils, and for corn which is to be followed by a winter grain or cover crop.

You can get some degree of "crop insurance" by choosing two or three hybrids which differ slightly in their maturity. If one hybrid runs into unfavorable weather at a critical stage of growth, another may be affected less and come through with a good crop.

Even though you have been growing a hybrid which has given good results, you may be able to improve your corn crop by trying one or more of the hybrids with better records in these trials. Well tested new hybrids are worth trying. You may want to try a new hybrid in a strip in the same field with your present hybrid.

Table 1

Zone 1

SOUTHERN MICHIGAN
MONROE COUNTY TRIAL
One, Two, and Three Year Averages — 1967, 1966, 1965

Hybrid	% Moisture			Bushels Per Acre						% Stalk Lodging			% Root Lodging			
	1967	2 Yrs.	3 Yrs.	1967			2 yrs.			1967			2 yrs.	3 yrs.		
				17700	23600	16900	22600	16300	21100	17700	23600	16900	22600	16300	21100	23600
Michigan 270	23.9	22	22	52.7	40.9	66	64	71	69	32.0	24.5	20	17	16	14	0.0
Michigan 280	24.4	—	—	77.6	53.4	—	—	—	—	23.1	17.4	—	—	—	—	0.0
Michigan 300	24.4	23	25	71.7	49.8	78	64	79	71	28.9	23.8	16	15	15	12	0.0
Michigan 250	24.6	22	23	64.1	44.0	75	66	78	72	34.4	21.5	19	14	14	9	0.0
Michigan 370	25.1	—	—	60.7	53.6	—	—	—	—	32.1	15.9	—	—	—	—	0.0
Northrup King PX 527 (3X)	25.2	—	—	86.0	60.7	—	—	—	—	17.6	10.1	—	—	—	—	0.0
DeKalb XL 306 (3X)	25.5	24	24	81.2	56.5	85	77	—	—	22.4	14.0	12	8	—	—	0.0
Michigan 400	25.5	24	25	76.1	55.0	86	76	86	81	18.2	13.5	9	7	7	5	0.0
Northrup King X 138 (3X) ²	25.7	—	—	85.8	68.1	—	—	—	—	28.4	6.1	—	—	—	—	0.0
Michigan 402-2X (2X)	25.7	24	26	84.9	64.5	98	90	98	94	15.7	13.3	9	7	7	5	0.0
Michigan 425	25.8	24	26	69.8	60.8	87	84	94	91	9.2	13.4	7	9	6	7	0.0
Pioneer 3775 (2X) ²	26.0	25	25	83.1	66.6	98	101	—	—	22.4	13.8	13	10	—	—	0.0
Todd M 40 (2X)	26.1	—	—	59.6	39.5	—	—	—	—	31.9	25.9	—	—	—	—	0.0
Northrup King PX 525 (Sp)	26.4	—	—	80.0	61.6	—	—	—	—	25.0	23.7	—	—	—	—	0.0
Funk Bros. G 4350 (2X)	26.4	26	—	68.3	62.0	85	74	—	—	11.3	9.9	6	6	—	—	0.0
Todd 130 A (3X)	26.5	—	—	51.5	40.5	—	—	—	—	16.4	10.0	—	—	—	—	0.0
Simons M 310 S	26.8	—	—	48.7	40.9	—	—	—	—	40.1	18.7	—	—	—	—	0.0
Simons M 3112 A	26.8	—	—	59.6	39.6	—	—	—	—	36.9	27.9	—	—	—	—	0.0
Todd M 60 (2X)	27.0	—	—	89.6	57.0	—	—	—	—	21.3	16.8	—	—	—	—	0.0
Michigan 463-3X (3X) ²	27.0	26	—	88.9	70.7	102	93	—	—	19.5	20.4	12	12	—	—	0.0
Blaney B 800 E (2X)	27.0	26	27	82.8	56.8	97	85	99	94	8.5	14.9	5	9	3	7	0.0
Blaney 6606 A (2X) ^{1 2}	27.1	27	—	91.4	76.7	98	101	—	—	5.4	13.7	3	8	—	—	0.0
Supercrost S 268 (2X)	27.1	—	—	69.8	47.1	—	—	—	—	17.2	11.4	—	—	—	—	0.5
Michigan 550	27.1	25	27	82.2	64.3	95	87	96	96	19.9	10.1	11	5	8	5	1.3
DeKalb XL 45 (2X) ^{1 2}	27.1	26	29	91.0	66.3	103	102	98	96	15.7	11.8	8	6	6	7	0.0
Pioneer 3773 (2X) ^{1 2}	27.2	—	—	94.2	71.7	—	—	—	—	6.1	5.4	—	—	—	—	0.0
DeKalb XL 325 (3X)	27.2	26	27	73.1	59.3	89	86	93	88	22.1	22.9	12	13	10	11	0.0
Migro M 12 SX (2X) ²	27.3	—	—	81.2	68.1	—	—	—	—	25.3	16.1	—	—	—	—	1.3
Funk Bros. G 4390 (3X) ^{1 2}	27.4	—	—	94.6	67.6	—	—	—	—	33.9	17.8	—	—	—	—	0.0
Michigan 500-2X (2X) ^{1 2}	27.4	26	—	100.5	75.5	110	109	—	—	9.3	10.3	5	6	—	—	0.6
Haapala SX 621 (2X) ^{1 2}	27.4	26	—	96.7	66.5	100	91	—	—	16.1	10.1	9	5	—	—	0.0
Blaney B 601 (2X) ^{1 2}	27.5	—	—	94.2	65.7	—	—	—	—	14.0	10.0	—	—	—	—	0.0
Michigan 430	27.5	25	27	78.6	57.3	90	80	90	86	19.0	23.8	10	14	7	13	3.0
Northrup King PX 44 (2X) ^{1 2}	27.5	27	27	90.5	69.5	103	96	96	95	24.5	15.1	13	9	7	7	0.0
Pioneer 371	27.5	26	28	78.3	58.2	92	87	91	92	18.4	12.3	10	8	8	6	0.6
Garno S 95 (2X)	27.7	27	—	66.5	60.8	82	84	—	—	22.1	13.4	13	8	—	—	0.0
Todd M 55 (2X)	27.7	—	—	76.7	63.8	—	—	—	—	11.5	7.2	—	—	—	—	0.9
Crib Filler 22	27.7	—	—	82.7	70.7	—	—	—	—	11.6	14.7	—	—	—	—	0.0
Northrup King PX 610 (3X) ^{1 2}	27.8	27	—	102.1	70.4	103	95	—	—	20.4	12.7	10	11	—	—	1.2
Simons W 601 (2X)	27.9	27	—	70.9	46.2	94	79	—	—	39.6	19.7	21	12	—	—	0.6
Funk Bros. G 34	27.9	27	29	66.6	46.5	82	72	81	75	19.6	13.2	12	7	10	5	0.0
Weather Master EPX-6 (2X) ^{1 2}	27.9	—	—	91.8	69.6	—	—	—	—	13.0	16.1	—	—	—	—	1.2
Pioneer 354 A	28.0	—	—	65.4	44.4	—	—	—	—	38.4	18.4	—	—	—	—	0.0
Haapala H 277	28.1	—	—	87.4	55.9	—	—	—	—	23.9	22.3	—	—	—	—	1.2
Migro M 140	28.1	—	—	84.6	49.0	—	—	—	—	11.4	16.0	—	—	—	—	0.0
Pride R 728 (3X) ¹	28.2	—	—	93.6	56.0	—	—	—	—	18.1	11.1	—	—	—	—	0.6
DeKalb 409	28.3	26	28	57.5	50.6	84	81	84	86	30.1	21.8	21	17	14	15	1.4
Northrup King PX 50 (2X) ^{1 2}	28.6	28	—	100.5	80.6	106	97	—	—	8.8	9.3	5	5	—	—	0.0
Northrup King PX 52 (2X)	28.6	27	30	80.8	49.1	96	84	94	84	16.9	17.4	9	9	7	7	0.0
Pioneer 3567 ²	28.6	—	—	83.0	66.4	—	—	—	—	14.7	18.1	—	—	—	—	0.0
Migro M 540 ¹	28.9	—	—	98.3	53.4	—	—	—	—	10.3	13.6	—	—	—	—	0.0
Northrup King PX 560 (Sp)	28.9	—	—	78.4	53.8	—	—	—	—	22.4	20.0	—	—	—	—	0.0
Supercrost S 30 A (2X)	28.9	27	—	82.8	61.9	98	89	—	—	18.1	16.0	10	9	—	—	0.5
OYO 225 (2X)	29.0	—	—	88.4	60.1	—	—	—	—	13.5	11.4	—	—	—	—	0.6
Blaney B 772 (3X)	29.0	—	—	75.4	53.9	—	—	—	—	21.2	13.7	—	—	—	—	1.4
Migro M 22 SX (2X) ¹	29.0	—	—	96.7	54.4	—	—	—	—	21.3	18.2	—	—	—	—	0.6
Simons M 1115 A	29.1	—	—	62.0	42.8	—	—	—	—	35.3	28.0	—	—	—	—	0.0
Northrup King KM 567	29.2	28	30	80.6	49.2	88	78	97	92	21.4	13.5	12	7	8	5	0.0
Taylor-Evans Bonusmaker (3X)	29.3	28	30	87.4	46.4	87	71	90	80	28.5	19.1	15	12	12	9	0.0
P.A.G. 272 (3X)	29.4	—	—	73.4	51.8	—	—	—	—	23.2	16.8	—	—	—	—	2.5

Table 1 — MONROE COUNTY TRIAL (Continued)

Hybrid	% Moisture			Bushels Per Acre						% Stalk Lodging			% Root Lodging					
	1967	2 Yrs.	3 Yrs.	1967	17700	23600	16900	22600	16300	21100	17700	23600	16900	22600	16300	21100	17700	23600
OYO E 6633 (2X)	29.4	—	—	88.4	63.1	—	—	—	—	—	11.0	10.7	—	—	—	—	0.7	0.5
Gries 475 (2X)	29.7	—	—	88.7	49.4	—	—	—	—	—	29.8	17.2	—	—	—	—	0.0	0.0
Pioneer SX 310 (2X)	29.8	—	—	76.5	55.2	—	—	—	—	—	14.4	6.9	—	—	—	—	0.7	2.2
P.A.G. SX 9 (2X)	30.0	28	30	89.4	54.1	100	84	101	86	21.3	11.6	12	7	9	6	0.0	0.0	
Michigan 570	30.0	28	29	80.2	58.7	89	82	92	87	24.2	10.6	13	9	11	8	2.3	0.0	
Migro M 43 SX (2X)	30.0	—	—	76.2	42.8	—	—	—	—	—	15.5	11.8	—	—	—	—	0.0	0.0
Michigan 490	30.1	28	29	80.9	62.2	89	84	95	92	23.2	14.4	14	10	12	8	0.7	3.1	
Migro M 453 X (3X)	30.2	—	—	89.2	59.4	—	—	—	—	—	16.8	10.1	—	—	—	—	1.3	2.3
Landmark C 700 X ¹	30.4	—	—	94.8	52.9	—	—	—	—	—	15.5	12.6	—	—	—	—	5.4	0.5
OYO 435 A ¹	30.7	—	—	96.8	60.3	—	—	—	—	—	21.9	17.3	—	—	—	—	0.0	1.8
Simons M 4115	30.6	—	—	67.0	40.7	—	—	—	—	—	20.6	13.1	—	—	—	—	0.0	0.0
DeKalb XL 341 (3X)	31.1	30	31	83.8	58.2	99	78	99	89	16.5	14.0	9	8	8	7	4.4	1.9	
Pride 724	31.9	—	—	68.6	53.0	—	—	—	—	—	15.9	11.7	—	—	—	—	1.9	0.0
Michigan 620	32.5	30	32	82.0	58.0	93	77	95	85	18.8	15.1	12	10	9	7	2.7	0.0	
Crib Filler 40 (2X) ²	32.6	30	—	86.4	68.4	100	97	—	—	20.0	13.3	11	7	—	—	3.8	4.4	
Gries 640	32.7	—	—	81.5	51.6	—	—	—	—	21.8	17.8	—	—	—	—	0.0	0.0	
Average	27.9	26	28	80.7	57.2	93	85	92	87	20.7	15.3	11	9	9	8	0.5	0.3	
Range	23.9	22	22	48.7	39.5	66	64	71	69	5.4	5.4	3	5	3	5	0.0	0.0	
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	
	32.7	30	32	102.1	80.6	110	109	101	96	40.1	28.0	21	17	16	15	5.4	4.4	
Least significant differences	1.7	1	1	9.5	7.7	5	5	4	4									

¹ — Significantly better than average yield at 17,700 population in 1967.² — Significantly better than average yield at 23,600 population in 1967.

	1967	1966	1965
Planted	May 17	May 9-10	May 11
Harvested	November 13	November 10	October 22
Soil type	Brookston clay loam	Brookston loam	Brookston loam
Previous crop	Corn	Corn	Wheat
Rows	36"	36"	36"
Population	17,700 and 23,600	16,000 and 20,400	15,100 and 19,200
Fertilizer	160-144-120	130-120-120	131-122-86
Soil test: pH	6.5	7.2	7.0
P	59 (high)	39 (high)	20 (medium)
K	120 (medium high)	240 (high)	167 (medium)

Farm Cooperator: Earl Creech, Dundee
County Agricultural Agent: R. J. Laser, Monroe

Table 2

**SOUTHERN MICHIGAN
WASHTENAW COUNTY TRIAL
One Year — 1967**

Zone 1

Hybrid	% Moisture	Bushels Per Acre	% Stalk Lodging	% Root Lodging
Michigan 270	24.8	102.9	14.9	0.0
Michigan 250	25.3	113.9	14.9	0.0
Michigan 300	26.8	113.2	6.9	0.0
Michigan 280	27.1	119.8	6.3	1.3
DeKalb XL 306 (3X)	28.1	114.9	6.6	1.8
Northrup King X 138 (3X)	30.4	128.7	6.3	0.0
Michigan 370	30.5	107.2	11.1	1.1
Michigan 400	30.6	104.6	6.6	0.0
Michigan 402-2X (2X)	31.2	119.8	10.5	0.0
Northrup King PX 527 (3X)	32.2	127.2	3.4	0.0
Michigan 430	32.2	108.0	6.4	0.0
Simons M 1115 A	32.2	130.2	8.1	0.0
Todd 130 A (3X)	32.3	111.4	3.6	0.0
Michigan 425	32.3	115.6	11.8	0.0
Garno S 95 (2X)	32.4	119.1	5.6	0.0
OYO 225 (2X) *	32.5	140.2	5.2	0.0
Michigan 500-2X (2X) *	32.7	132.7	5.8	0.6
Pioneer 3775 (2X)	32.7	102.7	10.4	0.0
Michigan 463-3X (3X)	33.0	118.0	7.4	0.0
Funk Bros. G 4350 (2X)	33.1	101.8	10.7	0.0
Michigan 550	33.1	115.7	6.3	0.0
DeKalb XL 325 (3X)	33.2	121.3	3.4	0.6
Todd M 40 (2X)	33.3	95.3	10.3	0.0
Migro M 12 SX (2X) *	33.3	140.6	4.0	0.0
Northrup King PX 525 (Sp) *	33.4	139.0	8.7	0.0
Supercrost S 268 (2X)	33.4	91.2	2.9	0.0
Migro M 140	33.4	116.9	4.0	0.0
Simons M 3112 A	33.5	101.5	11.6	0.0
Pioneer 3773 (2X)	33.5	127.3	4.8	0.0
DeKalb XL 45 (2X)	33.6	125.1	4.3	0.0
Todd M 55 (2X)	33.9	123.5	0.0	0.0
Blaney 6606 A (2X) *	33.9	153.2	2.9	1.8
Taylor-Evans Bonusmaker (2X) *	34.0	143.3	2.8	0.0
Northrup King PX 610 (3X) *	34.1	134.3	2.9	0.0
P.A.G. 272 (3X)	34.2	111.9	8.0	0.0
DeKalb 409	34.2	116.9	13.9	0.0
Funk Bros. G 4390 (3X)	34.2	113.6	7.1	1.9
Blaney B 800 E (2X)	34.3	110.3	2.9	0.0
Northrup King PX 44 (2X)	34.5	118.9	8.1	0.0
Simons M 3105	34.5	90.4	6.9	0.0
Michigan 570	34.5	114.2	8.2	0.0
Todd M 60 (2X)	34.7	107.0	11.2	0.0
Pioneer 371	34.8	111.0	8.6	0.0
Pioneer 354 A	34.9	115.2	6.3	0.0
Funk Bros. G 34	34.9	117.4	4.5	0.0
P.A.G. SX 9 (2X)	35.0	107.9	8.0	0.0
Blaney B 772 (3X)	35.2	108.9	4.0	0.0
Michigan 490	35.3	109.2	10.9	0.0
Northrup King PX 52 (2X)	35.3	118.7	9.2	0.0
Simons W 601 (2X)	35.4	111.9	14.2	0.0
OYO E 6633 (2X)	35.4	127.0	0.6	0.0
Supercrost S 30 A (2X)	35.6	115.1	5.7	0.0
Gries 475 (2X)	35.7	115.2	11.9	0.0
Northrup King PX 50 (2X) *	35.9	138.7	5.1	0.0
Pioneer SX 310 (2X)	36.1	116.9	4.5	0.6
Pride R 728 (3X)	36.1	119.1	3.4	0.0
Blaney B 601 (2X)	36.2	125.4	11.0	0.0
Simons M 4115	36.2	115.3	8.0	0.0
Northrup King PX 560 (Sp)	36.5	113.9	13.3	0.0
Haapala SX 621 (2X)	36.7	130.2	6.4	0.0
Crib Filler 22	36.8	115.1	2.4	0.0
Haapala H 277	36.8	118.2	7.5	0.0
Pride 724	36.8	125.9	6.8	0.0
Michigan 620	37.1	113.6	9.4	0.0
Landmark C 700 X	37.2	106.2	8.3	4.1

Table 2 — WASHTENAW COUNTY (Continued)

Hybrid	% Moisture	Bushels Per Acre	% Stalk Lodging	% Root Lodging
OYO 435 A	37.2	121.7	5.1	0.0
DeKalb XL 341 (3X)	37.3	130.4	4.7	0.6
Migro M 43 SX (2X)	37.3	129.7	2.9	0.0
Migro M 22 SX (2X)	37.8	110.1	5.7	1.7
Northrup King KM 567	38.2	120.0	6.9	0.0
Migro M 453 X (3X)	38.3	98.5	6.0	0.0
Gries 640	38.4	119.2	7.6	1.2
Weather Master EPX-6 (2X)	38.4	123.9	9.1	0.0
Migro M 540	39.1	129.7	4.6	0.0
Crib Filler 40 (2X)	39.2	129.4	8.5	0.6
Pioneer 3567	39.5	107.8	5.2	0.6
Average	34.5	118.6	7.1	0.2
Range	24.8 to 39.5	90.4 to 153.2	0.0 to 14.9	0.0 to 4.1
Least significant difference	1.8	13.0		

* Significantly better than average yield in 1967.

Planted — May 27

Harvested — November 14

Previous crop — Corn

Rows — 36"

Population — 18,400

Fertilizer — 20 tons manure, 195-140-155

Farm Cooperator: Robert Bevier, Milan

County Agricultural Agent: Robert W. McCrory, Ann Arbor

Table 3

Zone 1

**SOUTHERN MICHIGAN
HILLSDALE COUNTY TRIAL
One, Two, and Three-Year Averages —
1967, 1966, 1965**

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging	
	2 1967	3 yrs.yrs.	2 1967	3 yrs.	2 1967	3 yrs.yrs.	1967	1967
Michigan 270	19.6	22 —	23	100.1	103	94	5.1	11 —
DeKalb XL306 (3X)	22.9	—	—	103.1	—	—	4.8	—
Michigan 250	22.9	23 —	25	95.5	108	98	5.2	4 —
DeKalb XL304 (3X)	24.4	—	—	102.0	—	—	5.4	—
Michigan 300	24.8	26 —	27	102.0	99	91	3.1	6 —
Michigan 280	24.9	—	—	108.1	—	—	3.5	—
Funk Bros. G4289 (3X)	24.9	—	—	97.8	—	—	8.5	—
Todd M40 (2X)	25.0	—	—	84.3	—	—	0.6	—
Michigan 370	25.5	26 —	27	98.4	103	96	4.2	8 —
Michigan 400	25.6	26 —	27	100.8	106	99	3.7	3 —
Wyckoff W5X	26.3	28 —	30	110.8	109	100	2.9	4 —
Todd 130A (3X)	26.4	28 —	30	94.6	106	100	2.5	2 —
Northrup King PX527 (3X)	26.5	—	—	115.6	—	—	0.6	—
Michigan 402-2X (2X)	26.7	27 —	29	123.4	122	112	8.3	5 —
Northrup King PX525 (Sp)	27.2	—	—	127.2	—	—	0.6	—
Pioneer 3658	27.3	—	—	115.8	—	—	3.6	—
Michigan 430	27.5	29 —	31	108.2	111	106	3.6	5 —
Andersons A105	27.8	—	—	116.1	—	—	3.6	—
Northrup King X138 (3X)	27.8	—	—	122.7	—	—	1.2	—
Pioneer 3773 (2X)*	27.9	—	—	127.0	—	—	6.9	—
Michigan 463-3X (3X)*	28.2	30 —	—	134.7	133	—	4.3	3 —
Wyckoff W9X	28.2	29 —	31	106.2	115	104	0.6	1 —
Michigan 425	28.3	29 —	32	115.5	118	110	3.1	3 —
Funk Bros. G4390 (3X)*	28.3	—	—	133.4	—	—	8.3	—
Pioneer 3775 (2X)	28.4	—	—	107.2	—	—	2.9	—
Funk Bros. G34	28.5	31 —	33	100.4	107	99	3.0	2 —

Table 3 — HILLSDALE COUNTY (Continued)

Hybrid	% Moisture			Bushels Per Acre		% Stalk Lodging		% Root Lodging		
	2 1967		3 yrs.	2 1967		3 yrs.	2 1967		1967	
	2 1967	3 yrs.	2 1967	3 yrs.	2 1967	3 yrs.	2 1967	3 yrs.	1967	
DeKalb XL325 (3X)	28.5	30	32	107.5	111	108	1.2	1	1	0.0
Michigan 570	28.6	32	34	115.0	115	108	3.2	6	7	2.6
Cowbell SX107 (2X)	28.7	31	—	115.6	127	—	2.4	3	—	0.0
Migro M12SX (2X)	28.7	—	—	116.6	—	—	2.3	—	—	0.0
Funk Bros. G4384 (2X)*	28.9	—	—	133.6	—	—	6.5	—	—	0.6
Michigan 500-2X (2X)*	28.9	30	—	138.7	145	—	0.6	2	—	0.0
Pioneer 368	29.0	—	—	116.3	—	—	2.9	—	—	1.1
Andersons AX3 (2X)	29.1	—	—	124.2	—	—	3.5	—	—	1.7
Northrup King PX44 (2X)	29.1	30	33	112.4	116	106	1.2	2	2	1.2
Michigan 550	29.6	30	32	122.6	125	116	1.8	2	2	0.6
OYO E6633 (2X)	29.7	—	—	125.0	—	—	2.9	—	—	0.6
Haapala SX626 (2X)*	29.7	31	—	131.4	139	—	0.6	1	—	0.0
DeKalb XL45 (2X)	29.8	31	34	114.0	119	111	2.3	2	2	0.6
Todd M60 (2X)	29.8	—	—	121.3	—	—	1.2	—	—	0.0
Crib Filler 22	29.9	—	—	122.0	—	—	1.2	—	—	0.6
Northrup King PX52 (2X)	30.0	33	36	115.4	118	105	2.5	2	1	0.0
Northrup King KM67*	30.0	31	34	132.7	136	123	3.4	3	3	0.0
Todd M55 (2X)	30.1	31	35	102.9	112	99	1.2	1	1	0.0
Northrup King PX560 (Sp)	30.1	—	—	118.8	—	—	5.9	—	—	0.6
Migro M140	30.2	—	—	99.0	—	—	2.5	—	—	0.0
Bayless SX415 (2X)*	30.3	31	—	144.3	130	—	2.9	3	—	0.0
Northrup King PX50 (2X)	30.4	—	—	116.8	—	—	1.7	—	—	0.0
Migro M22SX (2X)	30.6	—	—	116.8	—	—	1.1	—	—	0.0
Northrup King PX610 (3X)	30.9	33	—	113.2	125	—	0.0	1	—	0.0
Taylor-Evans Bonus-maker (2X)	30.9	33	36	122.5	118	109	2.4	4	3	0.0
Crib Filler 29	31.1	32	—	107.1	110	—	4.7	4	—	1.2
Wyckoff W10A	31.1	32	34	112.3	119	111	2.4	2	2	0.0
P.A.G. SX36 (2X)	31.2	—	—	110.4	—	—	1.2	—	—	0.6
OYO 225 (2X)*	31.3	—	—	137.3	—	—	3.7	—	—	1.0
P.A.G. SX9 (2X)*	31.4	—	—	127.8	—	—	2.9	—	—	0.0
Haapala SX525 (3X)	31.5	—	—	88.4	—	—	3.3	—	—	1.3
Landmark C700X	31.6	—	—	106.4	—	—	3.5	—	—	5.8
Michigan 490	31.6	33	35	105.3	112	107	7.6	8	7	0.0
Migro M453X (3X)	31.8	—	—	125.5	—	—	0.0	—	—	0.0
Pride R450 (2X)	31.8	—	—	120.9	—	—	1.2	—	—	0.0
DeKalb XL341 (3X)*	31.8	34	35	128.4	118	111	1.8	2	3	0.6
Pride XR750 (3X)*	32.0	—	—	131.1	—	—	1.1	—	—	0.6
Mich. Exp. 66-3004 (3X)	32.0	—	—	93.1	—	—	1.2	—	—	0.0
OYO 435A	32.5	—	—	102.3	—	—	2.9	—	—	0.0
P.A.G. 272 (3X)	33.2	—	—	94.8	—	—	3.6	—	—	0.6
Michigan 620	33.5	35	37	108.0	113	106	8.1	7	7	0.0
Pioneer 3567	33.6	—	—	118.4	—	—	4.7	—	—	0.0
Anderson AX5 (2X)	34.5	32	—	107.8	109	—	0.6	2	—	0.0
Crib Filler 40 (2X)	34.6	37	—	106.6	113	—	2.3	4	—	3.4
Weather Master EP60	36.8	—	—	86.7	—	—	1.2	—	—	1.8
Average	29.2	30	32	114.3	117	105	3.0	3	4	0.4
Range	19.6	22	23	84.3	99	91	0.0	1	1	0.0
	to	to	to	to	to	to	to	to	to	to
	36.8	37	37	144.3	145	123	8.5	11	11	5.8
Least significant difference	1.3	1	1	12.6	5	4				

* Significantly better than average yield in 1967.

	1967	1966	1965
Planted	May 24	May 28	May 8
Harvested	Oct. 28	Oct. 26	Oct. 20
Soil type	Fox sandy loam	Fox sandy loam	Fox sandy loam
Previous crop	Corn	Corn	Corn
Population	18,200	17,300	16,300
Rows	36"	36"	36"
Fertilizer	152-69-120	Manure, 137-69-120	Manure, 125-60-60
Soil test: pH	6.5	6.7	6.5
P	47 (high)	120 (very high)	53 (high)
K	175 (med.)	125 (med.)	87 (low)

Farm Cooperator: Keith Brown, Jonesville
County Agricultural Agent: A. T. Hall, Hillsdale

Table 4

**SOUTHERN MICHIGAN
BRANCH COUNTY TRIAL**
One and Two Year Averages — 1967 and 1966

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging	
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.
Michigan 280	23.9	—	120.2	—	1.8	—	1.2	
Michigan 270	25.7	23	93.5	97	5.7	7	0.0	
Michigan 250	26.3	24	93.0	100	4.5	8	1.9	
Gutwein 10 (2X)	26.8	—	83.1	—	4.3	—	2.2	
Michigan 300	27.6	25	98.9	97	4.3	6	4.9	
Michigan 370	27.7	25	100.0	100	2.5	4	0.0	
Northrup King KE 497	27.9	—	113.8	—	2.4	—	0.0	
Tomco 2600 (2X)	28.3	—	119.3	—	4.5	—	0.0	
Gutwein 17 (3X)	28.9	—	111.6	—	0.0	—	0.0	
Northrup King PX (3X)	28.9	—	129.3	—	0.0	—	0.6	
Funk Bros. G 4390 (3X)	29.0	—	129.6	—	1.2	—	1.8	
DeKalb XL 306 (3X)	29.2	—	125.0	—	1.2	—	0.0	
DeKalb XL 315 (3X)	29.4	—	92.8	—	1.8	—	1.2	
Pioneer 3773 (2X)*	29.4	—	144.4	—	1.3	—	0.0	
Northrup King X 138 (3X)	29.6	—	130.4	—	2.5	—	0.0	
Funk Bros. G 17 A	29.6	27	135.1	128	2.5	6	0.0	
Michigan 400	29.6	26	117.5	109	0.6	1	0.0	
Michigan 402-2X (2X)	29.6	27	137.7	128	1.3	4	0.0	
Funk Bros. G 4289 (3X)	29.7	—	87.0	—	6.5	—	0.7	
Northrup King PX 525 (Sp)	29.7	—	125.1	—	2.9	—	3.5	
Michigan 425	29.7	27	120.9	123	4.1	5	0.0	
Michigan 430	29.9	27	118.7	120	1.6	2	0.0	
Cowbell SX 112 (2X)	30.0	28	136.9	136	3.1	5	0.6	
Wyckoff W 5 X	30.3	27	118.2	111	1.8	6	0.0	
P.A.G. SX 36 (2X)	30.6	—	118.1	—	1.2	—	0.0	
Bayless 3 X 435 (3X)	30.6	—	115.9	—	0.0	—	0.0	
Northrup King PX 44 (2X)	30.9	29	120.9	116	1.3	2	0.0	
Michigan 550*	30.9	28	139.7	133	0.6	4	2.6	
Michigan 463-3X (3X)	31.0	29	135.7	131	5.4	7	0.6	
Migro M 12 SX (2X)	31.0	—	129.4	—	0.6	—	1.2	
Funk Bros. G 4384 (2X)*	31.0	—	140.9	—	3.8	—	0.6	
DeKalb XL 325 (3X)	31.1	29	113.9	113	0.6	1	1.2	
Michigan 570	31.2	29	125.1	124	4.1	6	6.2	
Gutwein 222	31.4	—	125.1	—	3.0	—	0.6	
Northrup King PX 610 (3X)	31.4	29	123.5	131	3.0	2	0.0	
Gutwein 20 (2X)	31.4	—	119.4	—	0.0	—	0.6	
Landmark C 700 X	31.5	—	125.8	—	1.2	—	2.3	
Funk Bros. G 4401 (2X)	31.5	—	136.9	—	2.5	—	0.0	
Hulting X 214	31.6	—	117.7	—	0.0	—	0.6	
Northrup King PX 560 (Sp)	31.6	—	125.2	—	2.5	—	0.0	
Hulting 928 (2X)*	31.7	—	140.5	—	0.6	—	0.0	
Michigan 500-2X (2X)*	31.7	28	147.3	145	0.0	1	0.0	
Northrup King PX 50 (2X)	31.9	29	130.4	131	1.3	3	2.0	
Pioneer 3466	31.9	29	130.9	131	1.2	4	5.3	
Pioneer 3715 (2X)	32.0	—	122.2	—	1.8	—	0.0	
P.A.G. SX 52 (2X)	32.1	30	114.5	126	0.6	1	0.0	
Pioneer 371	32.1	29	109.5	114	1.8	2	0.0	
Wyckoff W 10A*	32.2	29	139.1	136	1.8	2	0.0	
DeKalb XL 45 (2X)	32.4	29	121.7	125	0.0	1	1.8	
Pioneer 3414	32.4	—	124.0	—	3.1	—	0.0	
Hulting X 536	32.6	—	136.4	—	0.6	—	0.0	
Hulting X 537	32.6	—	105.3	—	2.5	—	1.3	
Michigan 490	32.6	30	117.8	120	5.2	6	2.0	
Migro M 140	32.7	—	107.2	—	0.7	—	0.0	
Bayless 3 X 485 (3X)	32.9	—	131.1	—	2.6	—	0.0	
Hulting 218*	33.0	—	140.4	—	3.1	—	0.0	
Taylor-Evans Bonusmaker (2X)	33.0	31	144.1	130	0.6	2	2.4	

Zone 1

Table 4 — BRANCH COUNTY (Continued)

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	
Bayless SX 615-S (2X)*	33.0	—	145.4	—	4.1	—	0.7
Bayless SX 601 (2X)*	33.0	31	148.8	145	1.2	5	0.0
Pioneer 3567	33.0	—	124.5	—	1.8	—	0.0
Northrup King KM 567	33.0	30	130.8	131	1.8	4	0.0
Migro M 22 SX (2X)	33.1	—	128.1	—	2.5	—	4.4
Tomco 440	33.2	—	121.0	—	0.6	—	0.0
Northrup King PX 52 (2X)	33.2	—	124.0	—	1.2	—	0.0
Migro M 540	33.2	—	123.2	—	1.2	—	1.9
Weather Master EPX-6 (2X)	33.4	—	136.3	—	0.0	—	1.2
P.A.G. 272 (3X)*	34.2	—	139.9	—	2.6	—	1.9
Bayless SX 415 (2X)*	34.4	30	144.1	139	3.0	4	0.0
Bayless SX 433-7 (2X)	34.7	—	122.9	—	0.0	—	0.0
Migro M 453 X (3X)	35.4	—	105.7	—	2.4	—	0.0
Michigan 620	35.7	33	120.8	124	1.3	3	0.0
Average	31.2	28	125.7	123	2.0	4	0.8
Range	23.9	23	83.1	97	0.0	1	0.0
	to	to	to	to	to	to	to
	35.7	33	148.8	145	6.5	7	6.2
Least significant difference	1.4	1	12.3	5			

* Significantly better than average yield in 1967.

	1967	1966
Planted	May 19	May 27
Harvested	Nov. 1	Oct. 29
Soil type	Gilford sandy loam	Gilford sandy loam
Previous crop	Corn	Corn
Rows 36"	36"	36"
Population	19,200	17,100
Fertilizer	36-92-0	116-92-90
Soil test: pH	6.4; P-112 (high); K-199 (high)	

Soil test: pH 6.4; P-112 (high), K-199 (high)
Farm Cooperator: George Matthews, Union City
County Agricultural Agent: Paul Thompson, Coldwater

Table 5

**SOUTHERN MICHIGAN
KALAMAZOO COUNTY TRIAL
One, Two, and Three Year Averages —
1967, 1966, 1965**

Hybrid	% Moisture		Bushels Per Acre			% Stalk Lodging			% Root Lodging	
	2	3	2	3	2	3	2	3	2	3
	1967	Yrs.	1967	Yrs.	1967	Yrs.	1967	Yrs.	1967	Yrs.
Michigan 270	25.4	24 —	25	101.2	78	70	5.9	6	7	1.2
Michigan 280	26.0	—	—	107.5	—	—	3.6	—	—	3.0
Michigan 250	26.1	26	26	97.0	76	67	4.7	5	5	0.0
Michigan 300	26.1	25	27	102.3	82	71	6.3	8	5	3.8
Funk Bros. G 4289 (3X)	29.0	—	—	103.0	—	—	5.7	—	—	0.0
Funk Bros. G 17 A	29.2	28	30	113.3	91	77	4.9	3	3	0.0
Northrup King X 138 (2X)	29.2	—	—	111.4	—	—	0.6	—	—	0.0
Northrup King PX 527 (3X)	29.5	—	—	101.2	—	—	3.0	—	—	0.0
Michigan 370	29.5	28	29	116.0	86	78	3.6	4	3	1.2
Michigan 400	29.9	28	29	104.1	83	76	1.8	3	3	0.0
Michigan 402-2X (2X)*	30.4	29	30	126.9	99	89	4.9	4	3	0.6
Michigan 430	30.5	29	31	107.6	85	76	3.0	4	6	0.0
Weather Master EP 30	30.5	—	—	114.6	—	—	1.8	—	—	0.6
Michigan 425	30.6	30	31	109.8	89	80	2.4	4	2	0.0

Table 5 — KALAMAZOO COUNTY (Continued)

Hybrid	% Moisture			Bushels Per Acre			% Stalk Lodging		% Root Lodging	
	2 1967	3 yrs.	2 1967	3 yrs.	2 1967	3 yrs.	2 1967	3 yrs.	2 1967	3 yrs.
Northrup King PX 525 (Sp)*	30.6	—	—	119.6	—	—	0.6	—	—	0.0
Michigan 550*	30.7	30	32	118.8	92	85	0.6	1	1	0.0
Cowbell 55	30.8	29	—	88.3	80	—	5.3	4	—	1.3
Pioneer 3773 (2X)*	31.1	—	—	134.7	—	—	0.6	—	—	0.0
Funk Bros. G 4390 (3X)	31.1	—	—	99.1	—	—	0.0	—	—	0.0
Michigan 463-3X (3X)*	31.3	30	—	127.4	101	—	3.0	4	—	0.0
Pioneer 368	31.4	30	33	113.7	88	82	2.4	2	4	1.2
Crib Filler 22	31.6	—	—	113.3	—	—	0.6	—	—	0.0
Cowbell SX 107 (2X)	31.8	—	—	91.6	—	—	0.0	—	—	0.0
Cowbell HK 271 (2X)	31.9	—	—	99.5	—	—	1.2	—	—	1.2
Pioneer 3775 (2X)*	32.3	31	—	122.3	87	—	0.6	1	—	1.8
Northrup King PX 610 (3X)	32.4	31	—	97.8	80	—	2.4	2	—	0.0
Crib Filler 17	32.5	31	—	81.5	67	—	1.8	1	—	0.0
DeKalb 409	32.5	31	32	96.5	79	72	5.6	8	6	0.0
Haapala SX 475 (2X)	32.7	—	—	91.6	—	—	5.0	—	—	0.0
Pride 568	32.8	—	—	80.5	—	—	1.9	—	—	0.0
Northrup King PX 52 (2X)*	32.9	32	34	136.6	97	82	1.2	1	1	0.6
Michigan 500-2X (2X)*	32.9	31	—	134.0	106	—	1.2	1	—	0.0
Taylor-Evans Bonusmaker (2X)	33.2	31	33	105.1	87	77	5.0	4	3	0.0
DeKalb 414	33.5	32	34	105.4	83	74	1.8	3	2	0.0
Migro M 140	33.5	—	—	105.3	—	—	1.8	—	—	0.0
Weather Master EP 50	33.6	—	—	114.5	—	—	2.4	—	—	0.0
Northrup King PX 560 (Sp)	33.7	—	—	116.3	—	—	2.5	—	—	0.0
Michigan 570	33.8	33	34	103.7	81	76	5.7	5	6	0.0
Northrup King PX 44 (2X)	34.2	33	33	116.1	84	74	1.8	2	2	0.6
Michigan 490	34.3	33	34	113.0	86	81	4.0	4	4	1.3
Migro M 12 SX (2X)	34.3	—	—	94.6	—	—	2.0	—	—	0.0
DeKalb XL 45 (2X)	34.7	32	34	115.7	93	86	1.3	1	1	0.0
Northrup King PX 50 (2X)	34.8	33	—	92.9	75	—	2.4	1	—	0.0
Migro M 22 SX (2X)	34.9	—	—	94.7	—	—	2.5	—	—	0.0
Northrup King KM 567	35.2	34	35	100.5	81	73	1.2	3	3	0.0
Tomco Genetic Giant 440	35.3	—	—	108.9	—	—	1.9	—	—	0.0
DeKalb 415 A	35.6	—	—	103.7	—	—	1.2	—	—	0.0
Migro M 453 X (3X)	35.7	—	—	107.8	—	—	1.2	—	—	0.0
Pioneer 371	35.8	33	34	91.5	72	68	0.6	1	2	0.0
Michigan 620	36.0	34	35	108.6	82	76	3.1	4	3	2.5
Pride R 450 (2X)	36.0	33	34	99.5	84	74	2.4	3	3	0.0
Pioneer 3567	36.1	—	—	103.9	—	—	3.7	—	—	0.0
Crib Filler 40 (2X)	37.1	35	—	106.3	83	—	1.2	2	—	0.6
Haapala SX 525 (3X)	37.2	—	—	81.6	—	—	1.9	—	—	0.6
Landmark C 700 X	38.2	—	—	78.1	—	—	2.9	—	—	1.2
Average	32.5	31	32	106.3	85	77	2.5	3	3	0.4
Range	25.4	24	25	78.1	67	67	0.0	1	1	0.0
	to	to	to	to	to	to	to	to	to	to
	38.2	35	35	136.6	106	87	6.3	8	7	3.8
Least significant difference	1.5	1	1	11.6	5	4				

* Significantly better than average yield in 1967.

	1967	1966	1965
Planted	May 26	May 23	May 15
Harvested	Nov. 3	Oct. 31	Oct. 26
Soil type	Warsaw loam	Warsaw loam	Warsaw loam
Previous crop	Corn	Corn	Corn
Rows	36"	36"	36"
Population	17,800	16,800	16,100
Fertilizer	145-80-20	113-53-53	93-72-72
Soil test: pH	7.3	6.8	6.6
P	35 (medium high)	168 (very high)	88 (high)
K	210 (high)	341 (very high)	174 (medium)

Farm Cooperator: Richard VanVrancken, Climax
County Agricultural Agent: Vern Hinz, Kalamazoo

Table 6

SOUTHERN MICHIGAN
CASS COUNTY TRIAL
Irrigated versus Not Irrigated
One Year — 1967

Hybrid	Moisture	Bu. per Acre		% Stalk Lodg.		% Root Lodg.	
		Not Irrig.	Irrig.	Not Irrig.	Irrig.	Not Irrig.	Irrig.
Michigan 402-2X (2X)	26.9	116.7	90.4	5.0	2.8	3.1	1.2
Northrup King X 138 (3X)	27.3	114.4	91.7	7.9	5.9	0.6	0.0
Wyckoff W 5 X	27.5	94.6	82.4	3.5	7.1	0.0	0.0
DeKalb XL 306 (3X)	27.6	109.0	83.2	8.6	5.4	1.2	0.0
Michigan 430	27.7	114.5	83.9	9.4	19.4	0.0	1.8
Pioneer 3715 (3X) ²	27.9	113.3	98.7	10.7	17.5	0.0	1.2
Migro M 12 SX (2X)	27.9	110.2	92.2	10.9	2.3	0.0	0.0
Pioneer 371	28.2	110.9	72.2	1.8	2.4	0.0	0.6
Pioneer 3466	28.2	111.2	81.5	3.0	5.1	0.6	0.0
Northrup King PX 525 (Sp)	28.2	113.5	79.4	6.0	10.4	0.0	0.0
Michigan 425	28.4	109.9	81.6	6.5	3.5	1.8	0.7
Funk Bros. G 4390 (3X)	28.4	112.7	74.6	4.6	14.1	0.6	0.0
Funk Bros. G. 17 A	28.4	91.4	78.3	4.2	4.3	2.3	0.0
Michigan 550	28.5	122.6	85.7	2.6	4.3	0.0	0.0
Michigan 463-3X (3X) ¹	28.5	125.7	89.7	4.7	4.9	2.4	1.2
Bayless 3 X 435 (3X)	28.6	109.6	81.9	5.8	4.6	0.6	0.0
Bayless SX 433-7 (2X)	29.1	96.7	86.3	2.9	2.5	0.0	2.5
Cowbell SX 112 (2X)	29.4	122.2	90.0	2.8	3.7	0.6	0.0
Pioneer 3773 (2X) ²	29.1	129.9	90.3	3.4	5.8	1.7	1.2
Northrup King PX 44 (2X)	29.2	102.3	88.5	4.1	14.5	1.2	1.8
Funk Bros. G 4384 (2X)	29.2	98.1	87.7	8.4	3.6	0.0	0.0
P.A.G. 272 (3X)	29.3	107.9	93.3	4.6	6.5	0.0	0.0
P.A.G. SX 52 (2X) ^{1,2}	29.5	135.7	96.9	5.8	10.8	0.0	0.0
Pioneer 3567	29.6	118.8	85.4	3.4	4.2	0.0	0.0
DeKalb 409	29.6	88.6	63.3	9.6	6.8	0.0	0.0
Migro M 22 SX (2X)	29.6	124.4	89.6	2.9	3.6	0.0	0.0
P.A.G. SX 36 (2X)	29.6	117.2	83.6	4.7	1.9	0.0	0.0
Northrup King PX 52 (2X)	30.1	112.3	82.9	4.8	2.4	0.0	0.0
Northrup King PX 610 (3X)	30.1	113.7	93.9	2.4	3.6	0.0	1.2
Northrup King PX 50 (2X)	30.1	104.8	75.3	3.2	8.0	1.3	0.0
Weather Master EPX-6 (2X)	30.2	104.6	93.3	7.5	4.8	0.0	1.2
Michigan 500-2X (2X) ^{1,2}	30.2	129.8	104.3	3.1	6.0	0.0	0.0
Migro M 140	30.5	108.7	76.8	4.1	4.0	0.0	0.0
Migro M 453 C (3X)	30.6	111.5	80.1	6.4	6.0	0.0	1.8
DeKalb XL 45 (2X) ¹	30.2	125.7	90.7	2.4	1.9	0.0	1.3
Migro M 540 ¹	30.6	125.3	82.8	5.8	7.4	0.0	0.0
Wyckoff W 10 A	30.6	118.7	83.7	4.0	4.0	0.6	0.0
DeKalb XL 325 (3X)	31.0	118.0	77.6	2.9	4.2	0.6	2.4
Bayless SX 615-5 (2X) ²	31.1	123.9	107.6	0.0	3.5	0.0	0.0
Bayless 3X 485 (3X) ^{1,2}	31.1	130.5	98.9	4.0	4.8	0.0	0.0
Northrup King KM 567	31.4	114.9	84.2	2.9	3.5	0.0	0.0
Bayless SX 415 (2X)	31.4	124.5	89.4	4.2	6.1	0.0	0.0
Landmark C 700 X	31.6	105.3	94.5	4.1	5.4	1.7	0.0
DeKalb XL 341 (3X)	32.3	123.2	85.5	1.9	4.6	0.0	0.0
Bayless SX 601 (2X)	32.6	101.2	67.9	7.7	3.0	0.0	0.6
Funk Bros. G 4401 (2X)	33.3	108.8	75.5	5.2	2.9	2.9	0.0
Average	29.9	114.3	87.2	4.8	6.3	0.5	0.4
Range	26.9	88.6	63.3	0.0	1.9	0.0	0.0
	to	to	to	to	to	to	to
	33.3	135.7	107.6	10.9	19.4	3.1	2.5
Least significant differences	1.4	10.8	8.1				

1 — Significantly better than average yield, irrigated.

2 — Significantly better than average yield, not irrigated.

Planted — May 6 Harvested — November 8
Soil type — Kalamazoo sandy loam Previous crop — Potatoes

Rows — 40' Population — 17,200

Fertilizer — 148-127-0

Soil test: pH — 6.7, P — 138 (high), K — 389 (very high)

Irrigation: 2 inches in mid-July and 2 inches in early August.

Farm Cooperator: Cliff Moulton, Decatur.

County Agricultural Agent: Fred Sackrider, Cassopolis.

Zone 1

Table 7

SOUTH CENTRAL MICHIGAN
OTTAWA COUNTY TRIAL
One, Two, and Three Year Averages —
1967, 1966, 1965

Hybrid	Moisture	% Bushels		% Stalk		% Root	
		2	3	2	3	2	3
Northrup King PX 446 (3X)	1967 yrs. yrs.	26.6	—	120.0	—	17.1	—
Michigan 250	27.0 25 24	111.6	100	91	12.4	9	9
Michigan 270	27.3 24 23	106.8	94	87	15.9	11	10
Michigan 300	28.0 26 25	110.4	93	92	10.8	8	9
Michigan 280	28.5 — —	113.3	—	—	14.4	—	12.1
Taylor-Evans Hastyemaker	29.2 — —	98.4	—	—	13.8	—	4.1
Michigan 370	29.6 28 26	109.0	93	91	7.1	6	1.8
Funk Bros. G 4287 (3X)	30.2 — —	119.2	—	—	13.6	—	8.6
Funk Bros. G 18 A	30.4 — —	119.2	—	—	19.9	—	9.9
Funk Bros. G 17 A	30.5 29 28	123.5	111	105	20.5	12	6.0
Michigan 402-2X (2X)*	30.8 29 28	132.0	115	107	17.3	11	3.6
Funk Bros. G 10 A	30.8 — —	123.2	—	—	15.3	—	18.4
Weather Master EP 30	30.8 — —	111.3	—	—	3.8	—	4.4
Northrup King PX 480 (Sp)	30.9 29 —	126.0	102	—	12.6	10	—
DeKalb 57	30.9 29 28	107.5	88	86	13.0	7	0.6
Cowbell 55	31.0 29 —	102.6	97	—	11.0	7	0.0
Michigan 400	31.1 28 27	115.8	99	94	8.3	5	0.6
Michigan 425	31.1 30 29	122.4	107	103	6.7	6	3.7
Funk Bros. G 4350 (2X)	31.1 — —	119.6	—	—	4.9	—	4.3
Michigan 550	31.2 30 29	123.9	108	107	7.8	5	0.6
Northrup King PX 525 (Sp)	31.2 — —	127.6	—	—	2.4	—	0.0
DeKalb 224*	31.2 30 —	131.1	107	—	15.2	10	—
Weather Master EP 40	31.7 — —	118.2	—	—	6.9	—	0.0
Wolverine 66 A	31.9 30 29	114.6	103	96	20.6	13	0.0
Northrup King PX 527 (3X)	32.2 29 29	124.9	114	104	4.6	5	0.0
Michigan 463-3X (3X)*	32.3 29 29	131.6	116	113	8.8	7	0.6
Pioneer 3773 (2X)	33.0 31 30	127.5	109	101	19.8	10	11
Michigan 430	33.1 30 29	113.8	101	97	9.0	7	7.7
Taylor-Evans Profit-maker (2X)	33.4 — —	97.0	—	—	7.9	—	0.0
Northrup King KE 497	33.4 31 29	127.1	110	102	9.4	7	2.5
Northrup King PX 560 (Sp)	33.8 — —	113.2	—	—	8.2	—	1.9
Michigan 500-2X (2X)*	33.8 31 —	132.4	120	—	3.5	2	0.6
DeKalb 427	35.0 34 33	128.5	102	99	3.6	3	3.6
Pioneer 371	35.5 34 31	114.7	97	100	12.6	8	0.0
Northrup King KM 567	35.5 33 31	124.0	110	105	14.7	8	7.0
Northrup King PX 44 (2X)	35.6 34 33	121.3	100	97	6.1	4	1.2
Crows 420 (2X)	35.7 34 —	110.9	97	—	12.0	8	—
Northrup King PX 50 (2X)*	35.9 33 —	136.8	122	—	7.6	7	—
Cowbell SX 112 (2X)	36.3 — —	122.5	—	—	6.6	—	0.0
Pride R 450 (2X)*	37.0 — —	130.4	—	—	7.6	—	0.6
Crows 428 (2X)	37.4 34 —	110.9	106	—	5.1	4	—
Taylor-Evans Bonus-maker (2X)	38.3 36 —	120.4	109	—	9.9	6	—
DeKalb 441	38.5 37 35	119.9	101	105	1.8	2	0.0
Average	32.4 31 29	119.9	105	100	10.2	7	2.3
Range	26.6 24 23	97.0	88	86	1.8	2	0.0
	to to to	to to to	to to to	to to to	to to to	to to to	to to to
	38.5 37 35	136.8	122	113	20.6	16	18.4

Table 7 — OTTAWA COUNTY (Continued)

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging	
	2	3	2	3	2	3		
	1967	yrs.	1967	yrs.	1967	yrs.	1967	
Least significant difference	1.6	1	1	10.4	5	4		

* Significantly better than average yield in 1967.

	1967	1966	1965
Planted	May 25	May 26	May 7
Harvested	Nov. 21	Nov. 3	Oct. 30
Previous Crop	Corn	Corn	Corn
Rows	36"	36"	36"
Population	17,800	16,900	15,000
Fertilizer	140-64-32	144-96-48	Manure, 133-115-80
Soil test: pH	6.2	6.9	6.9
P	65 (high)	77 (high)	122 (very high)
K	277 (high)	352 (very high)	342 (very high)

Farm Cooperator: Marvin Patmos, Jamestown
County Agricultural Agent: Richard Machiele, Grand Haven

Table 8 Zone 2
SOUTH CENTRAL MICHIGAN
SHIAWASSEE COUNTY TRIAL
One and Two Year Averages — 1967 and 1966

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging	
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	1967	
Michigan 280	25.5	—	131.0	—	3.7	—	0.0	
Michigan 270	26.0	24	122.2	108	2.5	3	0.0	
Pioneer 3854	26.1	—	120.4	—	5.0	—	0.0	
Northrup King PX 446 (2X)	26.1	—	121.5	—	1.8	—	0.0	
Michigan 250	26.1	24	125.6	106	0.0	2	0.0	
Michigan 300	27.1	26	127.1	117	4.9	6	1.9	
P.A.G. SX 48 (2X)	27.8	—	130.8	—	2.5	—	0.0	
Michigan 402-2X (2X)	28.1	27	139.6	125	1.8	1	0.0	
P.A.G. 41	28.8	—	127.3	—	3.0	—	0.0	
Michigan 370	29.1	27	126.8	115	3.8	4	0.0	
DeKalb XL 307 (3X)	29.1	26	90.5	84	1.9	1	0.9	
Michigan 400	29.3	28	119.5	111	0.6	1	0.0	
Funk Bros. G 10 A	29.5	28	134.7	116	0.0	2	0.0	
Taylor-Evans Hastymaker	29.9	—	97.4	—	0.6	—	0.0	
Northrup King PX 487 (3X)	29.9	—	117.5	—	1.3	—	0.0	
Northrup King KE 497	30.4	28	134.3	122	1.2	3	0.0	
Northrup King PX 480 (Sp)	30.5	28	134.3	116	4.1	7	0.0	
Funk Bros. G 17 A	30.5	28	123.8	117	1.2	2	0.0	
Michigan 463-3X (3X)*	30.5	30	143.4	130	0.0	1	0.0	
Wolverine 66 A	30.5	29	122.5	108	2.9	3	0.0	
DeKalb 59	30.6	28	122.7	101	2.4	2	0.0	

Table 8 — SHIAWASSEE COUNTY (Continued)

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging	
	1967	2 yrs.	1967	2 yrs.	1967	2 yrs.	1967	
P.A.G. 45	30.7	28	129.4	112	5.4	5	5.4	
Pioneer 385	30.7	28	130.8	112	1.9	1	0.0	
Michigan 430	30.9	29	125.7	111	1.2	3	0.0	
DeKalb XL 315 (3X)	31.0	28	118.0	104	3.0	2	0.0	
Michigan 425	31.0	30	122.0	116	0.0	1	0.0	
Michigan 550	31.0	29	139.0	133	1.8	2	1.8	
DeKalb XL 15 (2X)	31.1	28	130.5	115	1.9	2	0.0	
Funk Bros. G 18 A	31.1	28	123.4	115	3.6	2	1.2	
Northrup King PX 525 (Sp)*	31.1	—	156.8	—	2.4	—	0.0	
Tomco 2600 (2X)	31.2	—	130.1	—	0.0	—	0.0	
Wolverine W 135 (2X)	31.2	29	104.2	91	0.0	1	0.0	
Northrup King PX 527 (3X)*	31.3	29	143.6	127	0.6	2	0.0	
Michigan 500-2X (2X)*	31.3	30	157.8	143	1.2	2	0.0	
Haapala H 508	31.6	—	125.3	—	0.6	—	0.0	
Pride R 407 (2X)	31.7	—	136.1	—	1.8	—	0.0	
DeKalb XL 45 (2X)	31.8	31	140.1	125	2.4	2	0.0	
Taylor-Evans Profitmaker (2X)	31.8	—	109.8	—	1.3	—	0.0	
Pioneer 3773 (2X)*	32.0	30	142.7	135	0.0	0	0.0	
Funk Bros. G 4350 (2X)	32.1	30	120.5	112	0.6	1	0.0	
Pioneer 3775 (2X)	32.3	30	134.2	129	0.6	1	0.0	
P.A.G. 70	33.1	—	131.6	—	3.7	—	0.0	
P.A.G. 272 (3X)*	33.2	—	142.8	—	0.6	—	0.6	
Pioneer 368	33.2	31	130.2	116	1.8	3	4.9	
DeKalb 427	33.6	32	139.4	119	3.1	3	0.0	
Northrup King PX 50 (2X)*	34.2	32	149.3	136	0.6	2	0.0	
Haapala SX 621 (2X)	34.6	33	138.6	125	1.2	2	0.6	
Weather Master EP 50	34.6	—	135.0	—	0.6	—	0.0	
Taylor-Evans Bonusmaker (2X)*	35.1	33	148.9	123	1.2	2	0.0	
P.A.G. SX 310 (2X)	36.7	—	119.7	—	0.0	—	0.0	
Weather Master EP 60	38.5	—	133.6	—	0.0	—	0.6)
Average	31.2	29	130.3	117	1.7	2	0.3	
Range	25.5	24	90.5	84	0.0	0	0.0	
	to	to	to	to	to	to	to	
	38.5	33	156.8	143	5.4	7	5.4	
Least significant difference	1.5	1	12.1	5				

* Significantly better than average yield in 1967.

	1967	1966
Planted	May 18	May 23
Harvested	Nov. 10	Oct. 29
Soil type	Brookston	Brookston
Previous crop	Oats	Beans
Rows	36"	36"
Population	18,200	17,600
Fertilizer	130-72-72	174-96-164
Soil test: pH	6.7	6.7
P	79 (high)	57 (high)
K	152 (medium)	255 (high)

Farm Cooperator: Ward Perry, Route 2, Durand.
County Agricultural Agent: Harry Wilt, Corunna.

Table 9

Zone 2

SOUTH CENTRAL MICHIGAN
INGHAM COUNTY TRIAL

One, Two, and Three Year Averages — 1967, 1966, 1965

Hybrid	% Moisture			Bushels Per Acre						% Stalk Lodging			% Root Lodging				
	2 Yrs.		3 Yrs.	1967		2 yrs.		3 yrs.		1967		2 yrs.		3 yrs.		% Root Lodging 1967	
			18900	24600	17800	22800	17000	21700	18900	24600	17800	22800	17000	21700	18900	24600	
Michigan 280	27.5	—	—	117.9	136.0	—	—	—	—	1.1	0.5	—	—	—	—	2.3	1.0
Michigan 250	28.4	28	29	117.8	125.7	106	108	85	88	0.6	0.0	1	3	1	5	0.6	0.0
Michigan 270	29.5	27	29	108.2	116.2	99	102	79	81	1.7	1.4	4	5	3	6	2.9	0.0
Northrup King PX 446 (2X)	30.6	—	—	104.9	119.1	—	—	—	—	1.1	1.1	—	—	—	—	0.6	0.0
Michigan 300	30.7	30	31	106.9	114.6	98	99	77	79	0.6	1.1	2	4	1	2	8.6	0.6
Funk Bros. G 10 A ¹	30.8	—	—	132.6	128.1	—	—	—	—	0.6	4.1	—	—	—	—	5.9	0.0
P.A.G. SX 48 (2X)	31.0	30	—	117.6	128.5	113	117	—	—	0.0	0.6	0	3	—	—	0.6	0.0
DeKalb XL 315 (3X) ¹	31.3	31	—	127.8	125.0	112	109	—	—	0.0	0.0	1	1	—	—	0.6	0.0
Funk Bros. G 17 A	31.3	31	32	125.1	127.2	116	116	93	93	1.2	0.6	1	0	1	2	1.2	0.0
Michigan 370	31.6	30	32	118.3	121.2	108	111	84	89	0.0	1.1	1	2	1	2	5.9	1.1
Michigan 400	31.6	31	33	106.6	110.0	106	105	86	86	0.0	0.7	1	1	0	1	1.3	5.1
Taylor-Evans Hastymaker	32.0	—	—	85.9	93.2	—	—	—	—	2.0	1.1	—	—	—	—	0.0	0.0
Michigan 402-2X (2X) ^{1,2}	32.0	32	33	126.9	153.2	123	139	102	111	0.0	0.5	0	1	0	1	0.0	0.0
Funk Bros. G 18 A	32.4	—	—	121.6	113.3	—	—	—	—	0.0	0.6	—	—	—	—	1.9	0.0
Haapala SX 520 (2X) ¹	32.5	—	—	135.8	133.1	—	—	—	—	0.0	0.0	—	—	—	—	0.0	0.0
Blaney B 401 (2X)	32.7	—	—	123.3	126.1	—	—	—	—	0.6	0.0	—	—	—	—	0.0	0.6
Weather Master EP 30	33.0	—	—	114.7	108.1	—	—	—	—	0.0	0.0	—	—	—	—	2.0	0.0
Northrup King KE 497 ²	33.1	33	34	117.6	137.6	109	126	88	97	0.0	1.1	2	4	1	4	1.2	0.0
Northrup King PX 480 (Sp) ¹	33.1	32	—	131.3	133.2	113	110	—	—	0.6	1.2	2	4	—	—	0.6	0.0
Blaney 6606A (2X) ^{1,2}	33.4	34	—	134.1	157.6	132	144	—	—	0.6	0.5	1	1	—	—	1.7	0.0
Funk Bros. G 4350 (2X)	33.6	—	—	119.6	131.2	—	—	—	—	0.0	1.0	—	—	—	—	0.6	0.0
Pioneer 3715 (3X)	33.6	—	—	98.1	126.3	—	—	—	—	0.6	0.0	—	—	—	—	3.0	1.2
Crib Filler 22 ²	33.6	—	—	110.1	137.4	—	—	—	—	0.0	0.5	—	—	—	—	0.0	0.0
Michigan 463-3X (3X) ¹	33.8	35	—	127.6	134.1	126	125	—	—	0.6	0.6	2	1	—	—	0.0	0.0
Cowbell SX 112 (2X) ¹	34.1	35	—	131.8	134.8	117	119	—	—	0.0	0.0	0	1	—	—	0.0	0.0
Northrup King PX 527 (3X) ¹	34.2	33	35	126.4	134.1	109	116	86	92	0.6	1.2	1	2	1	2	0.0	0.0
Pride 495	34.2	—	—	104.3	125.6	—	—	—	—	0.0	0.6	—	—	—	—	0.6	0.0
Michigan 430	34.4	34	35	116.8	124.0	108	111	86	90	1.9	0.9	2	2	1	1	1.9	2.7
Blaney B 500 (2X)	34.4	33	34	98.1	122.1	99	116	84	92	1.3	0.6	2	1	1	1	0.6	0.0
Wolverine 66 A	34.5	—	—	105.8	105.4	—	—	—	—	0.0	0.6	—	—	—	—	1.4	0.0
Michigan 425	34.5	33	35	103.3	124.3	103	112	82	89	0.7	0.0	0	0	1	2	2.7	0.6
P.A.G. 272 (3X) ²	34.6	—	—	116.1	136.9	—	—	—	—	0.0	0.0	—	—	—	—	2.3	0.6
Northrup King PX 525 (Sp)	34.6	—	—	105.5	121.3	—	—	—	—	0.6	0.5	—	—	—	—	0.0	0.5
DeKalb XL 325 (3X)	34.6	34	36	110.6	110.2	105	105	86	88	0.0	0.6	1	1	1	1	1.2	0.0
Blaney 6616 (3X)	34.8	35	—	117.3	118.7	115	113	—	—	0.0	0.0	0	1	—	—	0.6	0.0
Pioneer 3775 (2X)	34.8	34	37	104.5	113.8	116	116	91	94	0.0	0.0	0	2	0	1	2.6	0.0
Northrup King PX 52 (2X) ^{1,2}	34.8	—	—	128.5	140.6	—	—	—	—	0.0	0.0	—	—	—	—	0.6	0.0
Northrup King PX 50 (2X)	34.9	36	—	109.9	128.9	114	119	—	—	1.1	1.1	1	1	—	—	0.0	0.0
Taylor Evans Profitmaker (2X)	34.9	—	—	107.0	102.8	—	—	—	—	1.9	0.0	—	—	—	—	0.6	0.0
Blaney B 601 (2X) ¹	35.0	—	—	138.3	130.0	—	—	—	—	0.0	1.3	—	—	—	—	0.0	0.0
Michigan 500-2X (2X) ²	35.0	35	—	125.5	155.6	126	147	—	—	0.0	0.0	0	0	—	—	0.0	0.0
DeKalb XL 45 (2X)	35.3	35	37	114.9	124.3	113	113	93	90	0.0	0.0	0	0	0	0	0.0	1.1
Weather Master EP 40	35.3	—	—	118.1	114.8	—	—	—	—	0.0	1.1	—	—	—	—	0.7	0.5
Pioneer 3773 (2X) ¹	35.3	35	36	128.2	121.1	128	118	102	96	0.7	0.0	1	0	1	1	0.0	0.0
Migro M 12 SX (2X)	35.4	—	—	121.6	131.0	—	—	—	—	0.0	0.0	—	—	—	—	0.0	0.0
Michigan 570	35.5	37	38	106.2	122.7	105	109	83	88	1.0	0.0	1	2	1	2	0.0	0.0
Migro M 140	35.6	—	—	109.8	110.6	—	—	—	—	0.0	0.0	—	—	—	—	0.6	0.0
Wolverine W 175 (2X)	35.6	37	—	115.5	136.0	109	116	—	—	0.6	0.5	1	1	—	—	0.0	0.5
Michigan 550	35.7	35	36	112.0	130.0	111	118	93	96	0.6	0.6	0	1	0	1	1.9	0.0
Pioneer 368	36.0	35	36	117.4	116.8	106	100	86	84	0.0	0.0	0	1	1	1	6.9	0.0
Cowbell SX 107 (2X)	36.0	—	—	114.1	115.2	—	—	—	—	0.0	0.0	—	—	—	—	0.0	0.0
Crib Filler 40 (2X)	36.3	—	—	92.4	85.8	—	—	—	—	0.0	0.0	—	—	—	—	0.0	0.0
Haapala SX 626 (2X)	36.5	35	—	115.4	130.2	119	131	—	—	0.0	0.6	1	0	—	—	8.6	0.0
Taylor-Evans Bonusmaker (2X)	36.6	38	—	125.1	135.7	114	112	—	—	0.0	1.1	0	2	—	—	0.6	0.0
Supercrost 2570	36.6	36	38	107.3	119.4	105	109	84	89	1.2	2.4	2	2	1	2	2.5	1.8
P.A.G. 70	36.8	—	—	106.8	115.2	—	—	—	—	0.0	0.0	—	—	—	—	2.4	2.5
Migro M 22 SX (2X) ¹	37.0	—	—	126.3	125.6	—	—	—	—	0.0	0.0	—	—	—	—	1.7	0.0
Pride 568	37.0	—	—	85.3	94.5	—	—	—	—	0.0	0.0	—	—	—	—	0.0	0.0
Pioneer 371	37.0	37	38	109.1	110.1	107	102	82	80	0.0	0.0	0	1	1	1	3.6	1.8
DeKalb XL 344 (3X)	37.1	—	—	92.2	94.0	—	—	—	—	0.0	0.6	—	—	—	—	1.2	2.3
Michigan 490	37.3	39	40	97.5	114.5	104	106	83	85	0.0	0.0	0	1	1	1	0.6	0.0
Michigan 620	38.5	39	40	103.3	108.7	104	100	84	84	0.0	0.0	0	2	0	2	3.5	0.7

Table 9 — INGHAM COUNTY (Continued)

Hybrid	% Moisture			Bushels Per Acre						% Stalk Lodging			% Root Lodging				
	2 Yrs.		3 Yrs.	1967		2 yrs.		3 yrs.		1967		2 yrs.		3 yrs.	1967		
				18900	24600	17800	22800	17000	21700	18900	24600	17800	22800	17000	21700	18900	24600
Supercrost S 30 A (2X)	38.5	37	—	99.5	116.7	112	121	—	—	0.0	0.0	1	1	—	—	0.0	0.0
Pride A 40	39.8	—	—	94.1	85.2	—	—	—	—	0.0	0.0	—	—	—	—	2.6	0.6
Average	34.3	34	35	113.8	123.3	111	115	87	90	0.5	0.6	1	2	1	2	1.3	0.4
Range	27.5	27	29	85.3	85.2	98	99	77	79	0.0	0.0	0	0	0	0	0.0	0.0
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to
	39.8	39	40	138.3	157.6	132	147	102	111	2.0	4.1	4	5	3	6	8.6	5.1
Least significant differences	1.8	1	1	12.6	13.1	6	6	4	4								

1 — Significantly better than average at 18,900 population in 1967.

2 — Significantly better than average at 24,600 population in 1967.

1967

1966

1965

Planted	May 16	May 21	May 5
Harvested	Oct. 14	Oct. 12	Oct. 12
Soil type	Cover clay loam	Cover clay loam	Cover clay loam
Previous crop	Corn	Corn	Corn
Population	18,400 and 24,600	17,200 and 21,000	15,400 and 19,600
Rows	36"	36"	36"
Fertilizer	18,900 — 150-60-60	17,200 — 150-60-210	15,400 — 140-80-190
	24,600 — 252-104-104	21,000 — 245-175-325	19,600 — 410-270-360
Soil test: pH	6.6	6.3	6.7
P	99 (high)	63 (high)	51 (high)
K	275 (high)	293 (high)	205 (high)

Farm Cooperator: Michigan State University, East Lansing

Table 10

Zone 2

SOUTH CENTRAL MICHIGAN
(MUCK SOIL) CLINTON COUNTY TRIAL
One, Two, and Three Year Averages —
1967, 1966, 1965

Hybrid	% Moisture			Bushels Per Acre			% Stalk Lodging		% Root Lodging		1967	1966	1965
	2	3	2	3	2	3	2	3	2	3			
	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967			
Michigan 200*	23.5	—	—	77.3	75	—	7.7	5	—	0.0			
A.E.S. 202	23.8	23	26	62.3	63	53	13.5	7	9	0.6			
Michigan 270*	25.4	25	28	84.7	79	66	14.3	8	9	0.0			
Northrup King PX 446 (3X)*	26.4	—	—	83.0	—	—	5.3	—	—	0.0			
Michigan 280*	26.8	—	—	83.3	—	—	8.8	—	—	0.0			
Pioneer 3854	26.8	—	—	70.3	—	—	9.3	—	—	0.0			
Pioneer 388*	27.5	26	30	78.0	83	66	29.7	15	15	0.7			
Michigan 250	27.6	26	30	73.5	77	65	13.0	7	7	0.0			
Blaney B401 (2X)*	27.7	—	—	80.6	—	—	5.6	—	—	0.0			
Blaney B330 (3X)	28.1	—	—	67.6	—	—	7.2	—	—	0.0			
Northrup King X122 (2X)	29.2	—	—	67.5	—	—	8.8	—	—	0.7			
Blaney B44A (3X)	29.5	—	—	63.1	—	—	13.4	—	—	0.0			
Pride R2 (2X)	29.6	—	—	61.3	—	—	19.7	—	—	0.0			
Michigan 300*	30.2	28	32	79.3	80	68	7.5	8	8	0.7			
Pride 305	30.3	—	—	69.8	—	—	8.7	—	—	0.0			
Funk Bros. G10A	30.6	29	33	69.6	73	58	12.2	7	8	0.0			
Michigan 370	30.7	28	32	60.4	78	66	13.0	7	6	0.0			
Michigan 400*	30.7	29	33	78.4	83	68	1.9	2	1	0.0			
Weather Master EP30*	31.5	—	—	76.0	—	—	4.8	—	—	0.0			
Taylor-Evans Hastyemaker	31.6	—	—	49.3	—	—	7.6	—	—	0.7			
Michigan 402-2X (2X)	31.6	29	34	75.5	89	71	19.9	10	9	0.0			
DeKalb XL 315 (3X)	31.7	30	34	65.3	70	62	25.8	14	10	0.0			
Michigan 430	32.1	31	36	65.9	76	62	5.5	4	5	1.4			
Haapala H 1301	32.2	—	—	75.2	—	—	16.3	—	—	0.0			
Michigan 500-2X (2X)	32.3	31	—	75.8	94	—	8.1	5	—	0.6			
Michigan 550	32.3	31	36	74.7	87	68	4.0	2	3	0.0			
Weather Master EP 40	32.5	—	—	64.1	—	—	13.4	—	—	1.5			
Michigan 425	32.5	32	36	68.3	85	64	3.9	3	5	0.7			

Table 10 — CLINTON COUNTY (Continued)

Hybrid	% Moisture			Bushels Per Acre			% Stalk Lodging		% Root Lodging		1967	1966	1965
	2	3	2	3	2	3	1967	1967	1967	1967			
	1967	1967	1967	1967	1967	1967	1967	1967	1967	1967			
Michigan 463-3X (3X)	32.6	—	—	71.2	—	—	12.5	—	—	0.0			
Funk Bros. G 17A	32.8	31	34	71.8	79	68	15.2	9	8	0.6			
P.A.G. 45	32.9	30	34	75.6	88	67	20.5	11	9	0.0			
Northrup King PX527 (3X)	32.9	31	35	66.7	87	72	15.4	8	6	0.0			
Northrup King PX480 (Sp)	33.1	30	—	75.6	78	—	20.5	11	—	0.0			
Northrup King PX525 (Sp)	33.1	—	—	74.5	—	—	9.6	—	—	1.3			
DeKalb XL 325 (3X)	33.6	32	36	63.6	75	60	9.5	5	6	2.7			
Funk Bros. G4350 (2X)	33.8	—	—	64.1	—	—	11.7	—	—	0.0			
Northrup King KE 497*	34.1	32	36	79.3	84	68	7.4	5	5	0.0			
DeKalb XL 45 (2X)	34.2	32	—	58.3	80	—	10.1	6	—	0.7			
Haapala SX 621 (2X)*	34.7	33	—	78.0	92	—	14.2	7	—	0.0			
Blaney 6606A (2X)*	34.7	32	—	81.4	96	—	4.4	4	—	0.0			
Supercrost 2610	34.9	31	36	70.6	89	72	5.6	4	3	0.0			
Taylor-Evans Profit-maker (2X)	36.3	—	—	67.2	—	—	4.5	—	—	0.0			
Pioneer 3775 (2X)	36.3	—	—	52.4	—	—	7.5	—	—	0.0			
Pioneer 3773 (2X)	36.9	33	37	57.7	86	66	7.4	4	4	0.0			
Taylor-Evans Bonus-maker (2X)	38.3	35	—	44.9	77	—	25.3	13	—	0.7			
Supercrost S 30A (2X)	38.6	36	—	44.4	74	—	17.1	10	—	0.0			
Michigan 490	39.1	36	39	45.1	70	58	14.2	11	10	0.0			
Average	32.2	30	34	67.7	81	65	11.6	7	7	0.4			
	23.5	23	26	44.4	63	53	1.9	2	1	0.0			
Range	to	to	to	to	to	to	to	to	to	to			
	39.1	36	39	88.3	96	72	29.7	15	15	2.7			
Least significant difference	1.6	1	1	8.3	5	4							

* Significantly better than average yield in 1967.

	1967	1966	1965
Planted	May 18	May 17	May 20
Harvested	Nov. 18	Oct. 20	Oct. 13
Previous crop	Corn	Corn	Corn
Population	18,100	16,800	15,700
Rows	36"	36"	36"
Fertilizer	50-100-50	23-90-90	25-100-100

Cooperator: Robert Gillespie, M.S.U. Muck Soil Experimental Farm, Laingsburg

Table 11

**SOUTH CENTRAL MICHIGAN
IRRIGATED TRIAL — SAGINAW COUNTY
Prairie Farm
One Year — 1967**

Zone 2

Hybrid	% Moisture	Bushels Per Acre	% Stalk Lodging	% Root Lodging
Asgrow ATC 35 (3X)	21.9	68.6	3.7	0.0
Michigan 270	22.4	87.3	5.3	0.0
Pioneer 3854	23.1	75.6	2.4	0.0
Michigan 280	23.4	105.0	1.2	0.0
DeKalb XL 304 (3X)	24.1	82.0	5.2	0.0
DeKalb XL 306 (3X)	24.2	98.1	3.0	0.0
Michigan 300	24.7	87.7	4.1	0.0
Northrup King X 122 (2X)	25.0	80.3	3.7	0.0
Michigan 250	25.1	81.2	2.9	0.0
Blaney B 401 (2X)	25.3	99.3	0.6	0.0
Pioneer 3943 (3X)	25.4	83.2	3.5	0.0
Michigan 370	25.8	101.5	2.4	0.0
Blaney B 441 (3X)	26.0	100.9	3.6	0.0
Taylor-Evans Hastymaker	26.1	58.7	6.1	2.4
Northrup King PX 446 (2X)	26.3	87.4	1.2	0.0
Michigan 400	26.4	94.4	0.7	0.0
Funk Bros. G 10 A	26.5	84.4	5.1	0.0
Northrup King PX 480 (Sp)*	26.5	111.4	4.8	0.6
Northrup King KE 449	26.5	88.9	9.9	0.0
Michigan 402-2X (2X)*	26.6	111.2	2.9	0.0
Michigan 463-3X (3X)*	26.6	119.9	3.5	0.0
Funk Bros G 18 A	26.7	86.0	0.6	0.0
Weather Master EP 30	26.8	89.1	3.6	2.2
Funk Bros. G 17 A	26.9	95.5	1.8	0.6
DeKalb XL 15 (2X)	27.0	94.8	3.0	0.0
Pioneer 3675	27.0	102.8	2.4	2.4
Michigan 430	27.2	98.2	0.0	3.6
Michigan 425	27.4	97.4	4.1	1.2
Wolverine 61	27.8	91.5	2.3	0.6
Northrup King PX 525 (Sp)	27.9	104.5	3.6	0.0
Pioneer 3773 (2X)	28.1	92.6	0.6	0.6
Pioneer 3715 (3X)*	28.3	114.2	2.4	0.6
Funk Bros. G 4350 (2X)	28.5	104.8	4.1	0.0
Garno S 95 (2X)	28.6	105.8	0.6	0.0

Table 11 — SAGINAW COUNTY (Continued)

Hybrid	% Moisture	Bushels Per Acre	% Stalk Lodging	% Root Lodging
DeKalb 409	28.9	91.9	4.0	0.6
DeKalb 224	29.0	100.7	4.1	0.0
Pioneer 368	29.1	95.7	2.3	0.0
Northrup King PX 527 (3X)	29.2	103.7	1.2	0.0
Northrup King PE 497	29.2	103.5	6.5	0.0
P.A.G. 70	29.3	107.6	4.7	0.0
Pride R 407 (2X)*	29.4	112.5	0.6	0.0
Michigan 500-2X (2X)*	29.6	129.3	1.2	0.0
Michigan 550	29.6	105.9	4.1	0.6
Taylor-Evans Profitmaker (2X)	30.1	73.1	2.4	0.0
Jacques JX 1052 (2X)	30.2	102.2	1.7	0.0
Michigan 490	30.2	92.5	5.4	0.0
DeKalb XL 325 (3X)*	30.3	109.9	0.6	0.0
Weather Master EPX-6 (2X)*	31.0	118.1	1.7	0.0
Supercrost S 268 (2X)	31.2	85.3	2.3	0.0
Northrup King PX 44 (2X)	31.4	89.8	2.9	1.2
Pioneer 3775 (2X)	31.8	96.9	3.6	0.0
Supercrost S 35 (2X)	31.8	101.1	3.1	0.6
Wolverine W 175 (2X)*	31.8	132.3	2.9	0.0
Michigan 570	31.9	93.3	1.4	0.0
Wolverine 69	31.9	98.7	0.6	0.0
DeKalb XL 45 (2X)	32.0	101.8	0.6	0.0
Pride R 450 (2X)*	32.3	125.7	3.0	0.0
Funk Bros. G 4390 (3X)	32.5	90.9	3.0	0.0
Michigan 620	34.5	80.7	3.5	1.2
Average	28.8	99.0	2.9	0.4
Range	21.9	58.7	0.0	0.0
	to	to	to	to
	34.5	132.3	9.9	3.6

Classification of the data

* Significantly better than average yield.
 Planted — May 2 Harvested — Nov. 7
 Soil type — Brookston Previous Crop — Corn
 Rows — 28" Population — 21,400
 Fertilizer — 196-150-120 + 1% zinc and trace manganese + Trell
 Soil test: pH — 7.7, P — 42 (high), K — 485 (very high)
 Irrigation: 1 inch August 4 and 1 inch August 20
 Farm Cooperator: Ed Brabant,
 County Agricultural Agent, Bay Vasold, Saginaw

Table 12

**NORTH CENTRAL MICHIGAN
SAGINAW COUNTY TRIAL**

Zone 3

Hybrid	% Moisture			Bushels Per Acre						% Stalk Lodging			% Root Lodging	
	1967	2 Yrs.	3 Yrs.	1967	2 yrs.	3 yrs.	1967	2 yrs.	3 yrs.	1967	2 Yrs.	3 Yrs.	1967	22000
	17200	22000	16900	21400	16300	20600	17200	22000	16900	21400	16300	20600	17200	22000
Michigan 270	24.6	22	21	98.4	91.5	78	74	73	72	3.9	2.9	4	4	4
Michigan 250	24.9	24	23	100.5	97.1	79	76	75	73	1.9	1.9	2	5	2
Pioneer 3854	25.5	—	—	91.6	88.0	—	—	—	—	0.0	0.0	—	—	—
Michigan 280	25.6	—	—	111.0	100.6	—	—	—	—	1.2	1.9	—	—	—
Asgrow ATC 35 (3X)	26.0	—	—	92.5	96.8	—	—	—	—	1.2	0.9	—	—	—
Michigan 300	26.0	25	24	97.4	94.9	80	75	74	73	2.5	3.4	4	6	4
Northrup King PX 446 (3X)	26.2	—	—	101.6	104.8	—	—	—	—	3.2	0.5	—	—	—
DeKalb XL 304 (3X)	26.2	25	—	102.4	97.2	83	79	—	—	1.2	0.5	6	2	—
Northrup King X 122 (2X)	26.4	—	—	104.0	98.7	—	—	—	—	0.0	0.0	—	—	—
Pioneer 3943 (3X)	26.8	—	—	90.0	90.2	—	—	—	—	1.3	2.0	—	—	—
Northrup King KE 449	26.8	25	—	98.6	100.1	76	74	—	—	2.0	3.8	7	10	—
Taylor-Evans HastyMaker	26.9	—	—	86.8	91.8	—	—	—	—	1.4	0.5	—	—	—
Blaney B 401 (2X)	27.0	—	—	112.1	102.9	—	—	—	—	0.0	1.4	—	—	—
Funk Bros. G 10 A	27.3	—	—	103.7	94.9	—	—	—	—	0.0	2.3	—	—	—

Table 12 — SAGINAW COUNTY (Continued)

Hybrid	% Moisture			Bushels Per Acre						% Stalk Lodging			% Root Lodging				
	1967	2 Yrs.	3 Yrs.	1967		2 yrs.		3 yrs.		1967		2 yrs.		3 yrs.		1967	
				17200	22000	16900	21400	16300	20600	17200	22000	16900	21400	16300	20600	17200	22000
DeKalb XL 306 (3X) ²	27.5	26	—	109.0	120.8	86	91	—	—	0.6	0.9	2	3	—	—	0.0	0.0
Blaney B 441 (3X)	27.6	26	—	107.5	110.6	90	88	—	—	1.9	1.4	1	2	—	—	0.0	0.5
Pioneer 3675	28.3	28	28	106.3	98.7	87	74	—	—	1.9	1.9	1	2	—	—	0.0	0.9
Michigan 370	28.3	27	26	109.3	100.0	87	83	82	80	1.2	2.4	1	3	1	2	0.6	0.0
Michigan 402-2X (2X) ²	28.4	27	26	120.7	125.8	95	93	90	91	0.0	1.4	0	1	0	1	0.0	0.0
Funk Bros. G 17 A	28.8	—	—	101.9	102.7	—	—	—	—	3.8	1.0	—	—	—	—	0.0	0.0
Michigan 400	28.9	27	26	105.0	108.1	83	85	81	82	2.2	2.1	2	4	1	4	1.4	0.5
DeKalb XL 15 (2X)	29.4	28	26	119.4	109.2	87	80	82	71	1.3	3.7	5	10	4	7	0.0	0.5
Northrup King PX 480 (Sp)	29.4	27	—	115.6	111.3	79	76	—	—	1.9	3.8	2	12	—	—	0.0	0.0
Taylor-Evans Profitmaker (2X)	29.4	—	—	106.2	104.2	—	—	—	—	0.0	0.5	—	—	—	—	0.0	0.0
Michigan 463-3X (3X) ^{1,2}	29.4	30	28	123.7	119.7	95	91	91	90	0.6	0.5	1	3	1	2	0.0	0.0
Weather Master EP 30	29.5	—	—	107.6	108.2	—	—	—	—	0.6	0.5	—	—	—	—	0.0	0.0
Wolverine 61	29.5	28	—	114.0	97.9	88	82	—	—	1.8	2.0	3	4	—	—	0.0	0.5
Pioneer 368	29.8	29	27	113.4	106.7	85	78	84	79	0.0	0.9	1	3	0	2	0.0	0.5
Northrup King PX 525 (Sp) ¹	29.8	—	—	124.8	106.6	—	—	—	—	0.6	0.5	—	—	—	—	0.6	0.0
Northrup King PX 527 (3X) ²	29.8	28	27	121.6	117.0	98	94	91	84	1.8	0.9	2	4	1	3	0.0	0.0
Michigan 430	29.8	28	27	114.6	101.6	92	79	84	76	5.1	2.1	4	4	3	4	1.3	0.0
Michigan 550	29.9	28	27	117.9	110.1	95	84	88	81	0.6	2.8	1	3	1	3	0.0	0.0
Pioneer 3715 (3X) ¹	29.9	—	—	127.5	107.1	—	—	—	—	0.0	1.4	—	—	—	—	0.6	0.0
Funk Bros. G 18 A	29.9	27	26	104.9	100.0	83	77	79	77	0.0	0.9	0	4	0	3	0.6	0.5
Funk Bros. G 4350 (2X)	29.9	28	—	95.0	98.0	85	77	—	—	1.3	2.9	1	2	—	—	0.0	0.0
Michigan 425	30.0	28	27	109.2	102.7	89	87	83	80	1.9	1.1	3	3	3	2	0.0	0.0
DeKalb 224	30.3	29	—	106.7	93.1	90	74	—	—	0.0	0.5	2	3	—	—	0.0	0.0
Northrup King KE 497	30.6	28	27	104.9	102.7	86	79	81	77	1.2	0.5	3	3	2	3	0.0	0.5
Michigan 500-2X (2X) ^{1,2}	30.7	30	—	122.9	121.0	102	102	—	—	1.2	2.3	1	2	—	—	0.0	0.0
Pioneer 3773 (2X) ²	30.7	29	—	108.3	117.3	79	82	—	—	0.6	0.0	0	0	—	—	0.6	0.0
Pioneer 3775 (2X)	30.7	—	—	112.1	115.8	—	—	—	—	0.0	1.0	—	—	—	—	0.0	0.0
DeKalb XL 325 (3X) ^{1,2}	30.8	29	28	127.6	122.0	99	95	91	89	0.0	0.0	1	1	1	1	0.0	0.0
Supercrost S 268 (2X)	30.8	—	—	95.5	90.9	—	—	—	—	0.0	0.0	—	—	—	—	0.0	0.0
DeKalb 409	31.0	30	30	104.6	97.5	90	73	82	69	1.9	1.0	2	8	2	7	0.6	1.5
Supercrost S 35 (2X)	31.7	—	—	113.2	105.3	—	—	—	—	0.0	0.5	—	—	—	—	0.0	0.0
Michigan 570	31.7	30	30	110.4	97.6	86	76	80	75	3.4	4.7	6	4	5	3	0.0	0.8
Garno S 95 (2X) ²	31.8	—	—	117.2	117.1	—	—	—	—	0.6	0.0	—	—	—	—	0.0	0.0
P.A.G. 70	32.2	30	29	99.0	104.7	85	81	77	76	0.6	0.0	1	2	1	2	0.0	0.0
Funk Bros. G 4390 (3X)	32.5	32	30	108.6	106.4	85	82	78	78	0.6	0.5	3	3	2	3	0.0	0.0
Wolverine 69	32.5	31	31	101.2	94.1	88	72	76	68	1.2	0.5	1	3	1	2	0.0	0.0
DeKalb XL 45 (2X)	32.5	31	30	114.5	110.9	96	89	88	82	1.2	0.9	1	1	1	1	0.0	0.0
Northrup King PX 44 (2X)	32.7	32	29	119.3	102.1	100	86	91	83	0.6	2.0	1	1	1	1	0.0	0.5
Pride R 450 (2X)	32.7	—	—	116.0	105.7	—	—	—	—	3.0	0.9	—	—	—	—	0.6	0.0
Jacques JX 1052 (2X)	33.1	—	—	116.7	95.5	—	—	—	—	0.0	0.9	—	—	—	—	0.0	0.0
Weather Master EPX-6 (2X) ^{1,2}	33.1	—	—	122.4	124.2	—	—	—	—	3.0	0.9	—	—	—	—	0.0	0.0
Pride R 407 (2X)	33.2	—	—	121.9	109.6	—	—	—	—	0.0	0.5	—	—	—	—	0.0	0.0
Wolverine W 175 (2X) ¹	33.7	—	—	124.1	114.8	—	—	—	—	0.6	0.9	—	—	—	—	0.0	0.5
Michigan 490	35.2	33	32	98.1	98.3	80	78	76	76	2.1	1.1	1	2	1	1	0.7	1.1
Michigan 620	35.8	33	33	95.5	90.5	79	70	77	70	2.6	0.6	2	0	1	1	2.6	1.1
Average	30.1	28	28	110.1	105.5	88	82	83	79	1.1	1.3	2	4	2	3	0.2	0.2
Range	24.6	22	21	86.8	88.0	76	70	73	68	0.0	0.0	0	0	0	1	0.0	0.0
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to	1.5
	35.8	33	33	127.6	125.8	102	102	91	91	5.1	4.7	7	12	5	7	2.6	1.5
Least significant differences	1.6	1	1	12.1	11.3	5	5	4	4								

¹ — Significantly better than average yield at 17,200 population in 1967.² — Significantly better than average yield at 22,000 population in 1967.

1967		1966		1965	
Planted	May 3	May 5	May 5-6		
Harvested	Nov. 2	Oct. 23	Nov. 1		
Soil type	Brookston clay loam	Brookston clay loam	Brookston clay loam		
Previous crop	Beets	Corn	Corn		
Rows	36"	36"	36"		
Population	17,200 and 22,000	16,500 and 20,800	15,300 and 19,100		
Fertilizer	21-84-42	21-84-42	114-56-28		
Soil test: pH	7.1	7.1	7.0		
P	94 (high)	71 (high)	45 (high)		
K	505 (very high)	259 (high)	160 (medium)		

Table 13

Zone 3

NORTH CENTRAL MICHIGAN**SANILAC COUNTY TRIAL**

One and Two Year Averages — 1967 and 1965
 (1966 trial was not harvested)

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	Lodging
Michigan 270	29.2	31	131.4	103	4.1	4	0.7
P.A.G. SX 48 (2X)*	30.3	—	134.8	—	1.4	—	0.7
Michigan 280*	30.5	—	134.6	—	1.4	—	0.7
Wolverine 46 A	31.3	35	117.0	101	2.1	4	0.0
Northrup King PX 446 (2X)	31.6	—	115.1	—	2.9	—	0.7
Michigan 250	31.7	32	123.1	100	1.4	6	0.0
Northrup King KE 449	32.1	—	105.4	—	2.4	—	0.0
Green Belt 31	32.2	—	131.7	—	0.0	—	0.8
Northrup King X 122 (2X)	32.3	—	117.9	—	0.0	—	0.0
Green Belt 34	32.3	—	114.9	—	1.4	—	0.7
Michigan 300	32.4	33	119.7	101	4.7	4	2.0
Pioneer 388	32.4	33	129.8	103	0.7	6	0.7
DeKalb 58	32.7	35	90.6	82	0.8	8	1.6
Pride R 2 (2X)	32.7	—	106.9	—	1.6	—	0.0
Jacques 900 J	32.9	33	116.8	95	2.0	3	1.0
Green Belt 40*	33.0	35	133.7	107	1.4	1	0.7
Michigan 370	33.1	35	129.6	105	1.6	4	1.6
Green Belt SX 362 (2X)*	33.4	37	132.3	100	0.7	5	0.0
Michigan 400	33.5	37	117.0	101	0.7	2	1.4
Taylor-Evans Hastymaker	33.6	—	89.7	—	3.8	—	0.0
P.A.G. 41	33.6	—	111.1	—	0.7	—	0.0
Michigan 402-2X (2X)*	33.8	37	134.9	112	0.8	3	0.8
Funk Bros. G 17 A	34.5	36	123.6	106	0.7	5	2.2
Supercrost 15563	34.6	—	112.2	—	0.7	—	0.0
Wolverine 39	34.6	35	118.7	102	0.0	—	0.0
Green Belt 41	34.6	—	130.7	—	4.0	—	0.0
Funk Bros. G 4350 (2X)	34.8	—	113.6	—	0.7	—	0.0
P.A.G. 45	34.9	36	115.0	98	1.5	4	3.8
Northrup King PX 487 (3X)	35.0	35	110.3	98	6.6	6	0.0
Green Belt E 16	35.2	—	106.9	—	0.0	—	0.0
Weather Master EP 30	36.0	—	110.2	—	0.0	—	0.7
Northrup King PX 480 (Sp)*	36.5	—	137.1	—	2.9	—	0.0
Michigan 430	36.6	40	115.4	94	0.0	5	0.0
Michigan 425	36.9	41	118.2	101	1.5	2	0.8
Northrup King PX 525 (Sp)	37.6	—	127.2	—	0.7	—	0.0
Michigan 463-3X (3X)	37.7	—	129.8	—	0.7	—	0.0
Northrup King PX 527 (3X)	37.8	42	131.2	91	0.0	3	0.0
Michigan 550	38.2	38	123.6	101	2.8	3	2.1
Northrup King KE 497	38.3	40	119.9	102	2.1	3	0.0
Michigan 570	38.8	—	113.9	—	1.1	—	6.5
Michigan 490	39.7	42	109.5	89	1.7	2	0.8
Pioneer 3775 (2X)	40.0	—	106.9	—	2.1	—	1.4
Michigan 500-2X (2X)*	40.0	—	140.3	—	0.0	—	0.0
Pioneer 3773 (2X)	40.2	—	130.9	—	0.7	—	0.7
Taylor-Evans Profitmaker (2X)	40.2	—	100.3	—	0.0	—	0.0
Supercrost S 268 (2X)	40.3	—	109.9	—	0.7	—	0.0
Green Belt SX 44 (2X)	41.0	43	108.3	96	0.0	2	0.0
Pioneer 368	41.2	41	104.2	89	0.7	0	2.0
Average	35.6	37	118.9	99	1.4	4	0.7

Table 13 — SANILAC COUNTY (Continued)

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	Lodging
Range	29.2 to 41.2	31 to 43	89.7 to 140.3	82 to 112	0.0 to 6.6	0 to 8	0.0 to 6.5
Least significant difference	2.0	1	13.5	5			

* Significantly better than average yield in 1967.

	1967	1965
Planted	May 6	May 18
Harvested	Oct. 26	Nov. 6
Soil type	Brookston clay loam	Brookston clay loam
Previous crop	Corn	Corn
Rows	36"	36"
Population	17,100	17,500
Fertilizer	115-60-30	99-55-55
Soil test: pH	6.8	6.1
P	52 (high)	32 (medium)
K	175 (medium)	156 (medium)

Farm Cooperator: Orville Orchard, Applegate.

County Agricultural Agent: Keith Sowerby, Sandusky.

Table 14

Zone 3

NORTH CENTRAL MICHIGAN
GRAIN — HURON COUNTY TRIAL
One and Two Year Averages

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	Lodging
Michigan 270	29.1	26	115.4	92	5.2	9	0.0
Teweles 232	30.4	27	111.7	85	0.6	6	0.0
Northrup King KE 449	30.5	30	96.3	70	14.1	17	0.6
Michigan 250	30.5	—	112.2	—	3.2	—	0.0
Green Belt 41	30.9	28	120.4	87	5.4	10	0.0
Michigan 280*	31.3	—	137.4	—	1.9	—	0.0
Taylor-Evans Hastymaker	31.3	—	93.8	—	1.4	—	0.0
Jacques 951	31.4	—	118.7	—	7.3	—	0.6
Funk Bros. G 10 A	31.6	29	107.2	81	11.7	10	0.6
Pioneer 3675	31.7	29	106.5	73	2.4	5	0.0
Northrup King KE 477	31.7	29	92.5	84	18.4	17	0.0
Green Belt 40	31.9	30	112.5	83	4.5	6	0.0
Haapala SX 205 (3X)	31.9	—	123.3	—	0.6	—	0.0
Michigan 300	32.0	29	118.8	92	3.8	8	0.0
Haapala H 358	32.3	—	90.7	—	4.6	—	0.0
Northrup King PX 480 (Sp)*	32.7	31	134.3	94	1.8	12	0.0
Wolverine 46 A	32.8	31	122.7	87	0.0	5	0.0
Funk Bros. G 4350 (2X)*	32.8	—	132.2	—	0.0	—	0.0
P.A.G. 41	32.9	28	120.1	104	1.8	8	0.0
Funk Bros. G 18 A	33.1	30	108.3	88	10.3	12	0.0
Northrup King X 122 (2X)	33.2	—	111.7	—	1.4	—	0.0
Green Belt 34	33.3	29	99.9	83	0.6	2	0.0
Wolverine 39	33.4	29	101.2	86	3.6	5	0.0
P.A.G. 45	33.5	30	115.4	86	0.0	5	0.0
Michigan 402-2X (2X)	33.5	30	122.9	99	3.1	4	0.0
Northrup King PX 446 (2X)	33.6	—	123.9	—	0.0	—	0.0

Table 14 — HURON COUNTY (Continued)

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging	
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.
Michigan 400	33.6	30	122.4	95	0.6	2	0.0	
Funk Bros. G 17 A	33.6	30	124.9	98	4.1	7	0.0	
Michigan 370	33.7	30	103.9	88	2.5	6	0.0	
Michigan 430	33.8	31	110.3	91	1.6	8	0.0	
Pioneer 3773 (2X)*	33.9	33	126.8	94	10.8	8	0.0	
DeKalb XL 306 (3X)	34.5	29	104.0	89	0.0	7	0.0	
Green Belt SX 362 (2X)*	34.7	—	145.1	—	0.0	—	0.0	
DeKalb 59	35.2	32	99.5	72	2.4	8	0.0	
Michigan 463-3X (3X)*	35.3	32	132.6	104	0.0	3	0.0	
Pride 495	35.3	—	99.2	—	3.1	—	0.0	
Michigan 425	35.3	31	108.2	94	0.0	3	0.0	
Michigan 500-2X (2X)*	35.4	33	147.3	—	0.6	1	0.0	
Pioneer 3775 (2X)	35.5	—	115.8	—	0.0	—	0.0	
Green Belt 12 A	36.5	—	105.4	—	1.9	—	0.0	
Green Belt 20	36.8	33	118.8	99	1.2	6	0.0	
Michigan 550	37.0	33	122.8	97	3.8	3	0.0	
Michigan 570	37.1	34	106.0	92	1.4	7	0.0	
Taylor-Evans Profitmaker (2X)	37.3	—	116.1	—	3.8	—	0.0	
P.A.G. 70	37.9	34	93.1	73	0.0	5	0.0	
Northrup King PX 44 (2X)	38.6	34	94.6	88	1.9	4	0.0	
Green Belt SX 44 (2X)	39.0	35	104.5	90	0.7	4	0.0	

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging	
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.
Jacques 1052 (2X)*	39.1	—	129.7	—	0.0	—	0.0	
Michigan 490	39.3	37	108.7	89	0.8	4	0.0	
DeKalb XL 45 (2X)	39.5	35	124.5	98	0.6	2	0.0	
Average	34.4	31	116.0	90	2.9	6	0.0	
	29.1	26	90.7	70	0.0	1	0.0	
Range	to	to	to	to	to	to	to	
	39.5	37	147.3	104	18.4	17	0.6	
Least significant difference	1.6	1	10.8	5				

* Significantly better than average yield in 1967.

	1967	1966
Planted	May 2	May 4
Harvested	Oct. 21	Oct. 27
Soil type	Brookston	Brookston
Previous crop	Corn	Corn
Rows	36"	36"
Population	18,300	17,500
Fertilizer	170-126-105	128-112-56
Soil test: pH	7.4	7.4
P	83 (high)	63 (high)
K	289 (high)	186 (high)

Farm Cooperator: William McCrea, Bad Axe.
County Agricultural Agent: Lee Warschefsky, Bad Axe.

Table 15

Zone 3

**NORTH CENTRAL MICHIGAN
SILAGE — HURON COUNTY TRIAL
One and Two Year Averages**

	% Moisture in ears		Tons Per Acre		% Ears in Dry Weight	
	1967	2 yrs.	1967	2 yrs.	1967	2 yrs.
Northrup King KE 449	42.1	39	18.0	14.3	8.3	6.7
Haapala H 358	42.7	—	14.7	—	6.0	—
Jacques 951	43.1	—	20.1	—	7.8	—
Michigan 270	43.7	38	22.9	17.2	8.1	7.1
Teweles 232	44.4	—	18.5	—	7.0	—
Northrup King X 122 (2X)	44.4	—	17.7	—	6.4	—
Michigan 280	44.6	—	24.6	—	8.5	—
Haapala SX 205 (3X)	44.6	—	18.8	—	6.7	—
Northrup King PX 446 (2X)	44.7	—	18.9	—	7.0	—
Michigan 250	44.8	41	22.7	17.4	7.8	6.8
Michigan 370	45.5	43	22.2	17.6	7.4	6.7
Taylor-Evans Hastyemaker	46.1	—	13.8	—	6.6	—
Green Belt SX 362 (2X)	46.4	—	21.8	—	7.9	—
Wolverine 46 A	46.5	43	19.2	15.2	6.7	5.8
Wolverine 39	46.6	41	19.9	15.5	7.3	6.4
P.A.G. 41	46.7	42	22.7	17.9	8.5	7.2
Green Belt 40	46.8	42	20.2	15.2	7.2	6.0
Funk Bros. G 10A	47.4	44	20.4	16.6	7.0	6.2
Funk Bros. G 4350 (2X)	47.5	—	20.7	—	7.1	—
Green Belt 34	47.7	43	20.2	15.4	7.3	6.1
Northrup King KE 477	47.7	43	15.6	13.2	6.2	5.7
Green Belt 41	48.2	42	19.8	15.4	6.8	6.0
Funk Bros. G 18A	49.3	45	22.8	18.6	7.3	6.8
DeKalb XL 306 (3X)	49.5	45	20.2	18.0	6.8	7.1
Michigan 300	49.6	44	21.6	17.2	8.1	7.1
Michigan 402-2X (2X)	49.7	45	23.1	19.0	8.5	7.7
P.A.G. 45	49.7	45	22.8	17.4	7.8	6.5
Michigan 400	49.8	44	20.4	17.6	7.6	7.3
Pride 495	49.9	—	23.9	—	8.2	—
Northrup King PX 480 (Sp)	50.2	45	23.4	18.7	8.0	7.1
Michigan 463-3X (3X)	50.3	47	22.0	19.3	9.1	8.1
Funk Bros. G 17A	50.5	44	22.7	19.2	7.7	7.5
					45.3	46

Table 15 — HURON COUNTY (Continued)

	% Moisture in ears		Tons Per Acre		% Ears in Dry Weight	
	1967	2 yrs.	1967	2 yrs.	1967	2 yrs.
Taylor-Evans Profit-maker (2X)	50.9	—	21.2	—	7.1	—
Pioneer 3675	51.1	46	23.1	18.9	7.7	7.1
Michigan 550	51.2	47	24.2	20.0	8.7	7.7
Michigan 425	51.3	47	24.0	18.1	8.1	7.1
Pioneer 3773 (2X)	51.4	47	21.5	18.3	7.6	7.2
Michigan 500-2X (2X)	51.9	47	23.7	19.8	8.3	7.7
Pioneer 3775 (2X)	52.7	—	23.1	—	8.0	—
Green Belt 12A	52.7	—	23.6	—	8.0	—
DeKalb 59	52.9	46	21.6	16.8	7.7	6.5
Michigan 430	53.6	48	22.6	18.9	7.8	7.2
Green Belt SX 44 (2X)	53.9	48	19.5	17.2	5.9	6.3
P.A.G. 70	54.1	48	24.5	19.7	8.0	7.4
DeKalb XL 45 (2X)	54.5	48	22.6	19.3	7.7	7.3
Green Belt 20	55.0	50	24.3	19.0	7.9	6.8
Michigan 570	55.3	50	26.1	21.4	8.1	7.5
Jacques 1052 (2X)	55.7	—	27.5	—	8.6	—
Northrup King PX 44 (2X)	56.2	51	24.9	21.2	7.7	7.4
Michigan 490	58.2	51	24.6	20.9	8.5	7.8
Average	49.2	45	21.7	17.9	7.8	6.9
	42.1	38	13.8	13.2	5.9	5.7
Range	58.2	51	27.5	21.4	9.1	8.1
Least significant difference	2.8	2.0	1.6	1.0	.5	.3
					2.8	2

	1967	1966
Planted	May 2	May 4
Harvested	Sept. 12	Sept. 19
Soil Type	Brookston	Brookston
Previous crop	Corn	Corn
Rows	36"	36"
Population	18,100	17,500
Fertilizer	170-126-105	128-112-56
Soil test: pH	7.4	7.4
P	83 (high)	63 (high)
K	289 (high)	186 (high)

Farm Cooperator: William McCrea, Bad Axe.
County Agricultural Agent: Lee Warschefsky, Bad Axe.

Table 16

Zone 3

NORTH CENTRAL MICHIGAN
NEWAYGO COUNTY TRIAL
One, Two, and Three Year Averages—
1967, 1966, 1965

	% Moisture			Bushels Per Acre		% Stalk Lodging		% Root Lodging		
	1967 yrs.		1967 yrs.	1967 yrs.		1967 yrs.	1967 yrs.		1967 yrs.	
	2	3	2	3	2	3	2	3	2	
Michigan 270	30.1	27	26	91.7	94	92	0.0	6	11	0.0
Funk Bros. G4170 (2X)	32.1	—	—	68.7	—	—	0.0	—	—	0.0
Pioneer 3862	32.3	28	—	92.1	90	—	0.0	8	—	0.0
Michigan 280*	32.7	—	—	110.1	—	—	0.0	—	—	0.0
Michigan 250	32.9	29	28	98.0	93	88	0.0	2	5	1.4
Northrup King X122 (2X)	33.1	—	—	100.7	—	—	0.0	—	—	2.2
Michigan 370	33.1	29	29	96.9	94	88	0.0	5	6	0.0
DeKalb XL15 (2X)	33.3	31	31	98.4	102	96	0.0	8	9	0.0
Michigan 300	33.5	29	29	106.2	100	92	0.0	3	8	0.0
Northrup King PX446 (2X)	33.8	—	—	102.9	—	—	0.0	—	—	0.0
Pioneer 3854	33.9	30	29	102.6	95	90	0.0	1	5	0.7
Taylor-Evans Hastyemaker	34.7	—	—	90.3	—	—	0.0	—	—	0.7
Northrup King KE 449	34.7	31	31	79.0	79	74	0.0	4	8	0.0
Haapala SX 520 (2X)*	34.7	—	—	112.8	—	—	0.0	—	—	1.5
Funk Bros. G 10A*	34.7	32	32	112.2	109	98	0.0	6	9	0.0
Funk Bros. G 4287 (3X)*	34.7	31	—	111.9	114	—	0.0	2	—	0.6
Pioneer 3911 (2X)	34.8	—	—	100.1	—	—	0.0	—	—	0.7
DeKalb XL 306 (3X)*	35.1	31	—	111.2	104	—	0.0	1	—	0.0
Pioneer 385*	35.3	31	32	112.6	107	101	0.0	3	5	0.0
Pride R2 (2X)	35.4	—	—	107.3	—	—	0.0	—	—	0.0
Michigan 400	35.6	31	31	95.2	97	96	0.0	1	2	0.0
Weather Master EP 30	35.7	—	—	93.8	—	—	0.0	—	—	0.0
Tomco 180	35.8	—	—	100.0	—	—	0.0	—	—	0.0
Northrup King KE 477	36.1	—	—	90.4	—	—	0.0	—	—	0.0
Michigan 402-2X (2X)*	37.0	—	—	120.4	—	—	0.0	—	—	0.7
Funk Bros. G 18A	37.0	—	—	93.1	—	—	0.0	—	—	0.0
Pioneer 3675	37.0	32	31	87.8	101	95	0.0	1	2	0.0
Funk Bros. G 17A	37.2	33	33	96.6	96	93	0.0	4	10	0.0
Michigan 463-3X (3X)*	37.2	—	—	115.4	—	—	0.0	—	—	0.0
Michigan 425	37.3	32	32	93.5	100	95	0.0	2	3	0.0
Michigan 550	38.2	34	33	101.3	115	106	0.0	2	3	1.3
Northrup King PX 527 (3X)*	38.6	33	—	112.0	111	—	0.0	2	—	0.0
DeKalb XL 315 (3X)	38.6	34	33	92.8	95	91	0.0	4	5	0.7
Michigan 430	38.9	33	33	98.9	104	97	0.0	4	10	0.0
Michigan 570	39.0	37	38	90.3	92	85	0.0	2	8	0.0
Northrup King PX 480 (Sp)*	39.7	34	—	116.3	103	—	0.0	9	—	0.0
Haapala SX 406 (3X)	39.8	—	—	87.3	—	—	0.0	—	—	0.0
Pioneer 3773 (2X)	39.9	—	—	92.5	—	—	0.0	—	—	0.0
Michigan 500-2X (2X)	40.0	35	—	105.0	112	—	0.0	0	—	0.0
Funk Bros. G 4350 (2X)	40.0	35	34	102.3	100	92	0.0	0	4	0.7
Taylor-Evans Profit-maker (2X)	40.2	—	—	78.6	—	—	0.0	—	—	0.0
Michigan 490	40.3	38	39	85.9	87	82	0.0	1	0	0.0
Tomco 144	40.3	—	—	90.4	—	—	0.0	—	—	0.0
Average	36.3	32	32	98.6	100	92	0.0	3	6	0.2
Range	30.1	27	26	68.7	79	74	0.0	0	0	0.0
Least significant difference	40.3	35	39	120.4	115	106	0.0	9	11	2.2

Table 16 — NEWAYGO COUNTY (Continued)

* Significantly better than average yield in 1967.

	1967	1966	1965
Planted	May 22	May 21	May 19
Harvested	Oct. 21	Nov. 8	Nov. 4
Soil type	Selkirk loam	Selkirk loam	Selkirk loam
Previous crop	Corn	Corn	Corn
Rows	36"	36"	36"
Population	17,000	17,500	16,700
Fertilizer	20-80-40	100-84-42	121-84-42
Soil test: pH	7.1	7.3	7.2
P	36 (med. high)	62 (high)	23 (medium)
K	226 (high)	187 (high)	108 (low)

Farm Cooperator: Ivan Norris, Hesperia
County Agricultural Agent: Lane Rushmore, Fremont

Table 17

Zone 4

NORTHERN MICHIGAN
GRAIN — GRAND TRAVERSE COUNTY
One and Two Year Averages—1967 and 1965
(1966 Trial not harvested for grain yields)

Hybrid	% Moisture		Bushels Per Acre		% Stalk Lodging		% Root Lodging	
	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.	1967	2 Yrs.
Seneca XX 155	27.7	—	64.7	—	0.0	—	0.0	—
A.E.S. 202	27.8	31	64.3	55	0.0	23	0.0	—
Michigan 200	28.2	32	73.9	65	1.6	7	0.0	—
Weather Master EPX-2 (2X)	28.9	—	72.5	—	0.9	—	0.0	—
Northrup King KE 435	29.1	36	55.7	48	6.5	19	0.0	—
Michigan 270	29.4	36	66.4	58	0.0	16	0.0	—
Michigan 250	29.4	—	68.1	—	2.3	—	0.0	—
Northrup King PX 446 (2X)	29.4	—	64.3	—	0.0	—	0.0	—
Pride 137	29.4	—	67.7	—	0.8	—	0.0	—
Pioneer 3956*	29.5	—	76.7	—	0.0	—	0.0	—
Michigan 280	29.6	—	72.8	—	0.8	—	0.0	—
Funk Bros. G 4170 (3X)	30.1	—	58.9	—	0.8	—	0.0	—
Seneca SR 155	30.6	—	52.8	—	0.0	—	0.0	—
DeKalb 45	30.8	37	65.2	57	0.0	5	0.0	—
Pride 132	30.8	—	68.3	—	4.2	—	0.0	—
Haapala SX 205 (3X)	31.3	—	64.5	—	0.0	—	0.0	—
Haapala H 358*	31.6	—	76.1	—	3.3	—	0.0	—
Michigan 300*	32.3	38	76.4	63	1.8	16	0.0	—
Michigan 402-2X (2X)	32.8	39	69.3	62	0.0	15	0.0	—
Michigan 370	33.0	39	58.6	53	2.4	16	0.0	—
Michigan 400	34.2	39	56.5	52	0.0	13	0.0	—
Northrup King PX 480 (Sp)	35.2	—	60.5	—	0.8	—	0.0	—
Pride 232	35.3	—	65.0	—	0.0	—	0.0	—
Northrup King PX 527 (3X)	35.4	—	63.1	—	0.0	—	0.0	—
Northrup King KE 497	35.8	41	55.2	52	0.8	14	0.0	—
Haapala SX 420 (3X)	41.9	—	49.7	—	0.8	—	0.0	—
Average	32.0	37	66.5	57	0.9	14	0.0	—
Range	27.7	31	49.7	48	0.0	5	0.0	—
to	to	to	to	to	to	to	to	to
41.9	41	76.7	65	6.5	23	0.0	—	0.0
Least significant difference	1.7	1	7.8	4	—	—	—	—

* Significantly better than average yield in 1967.

	1967	1965
Planted	May 23	May 14
Harvested	Oct. 25	Nov. 16
Soil type	Emett sandy loam	Emmett sandy loam
Previous crop	Corn	Corn
Rows	38"	38"
Population	18,000	17,000
Fertilizer	81-81-81	120-120-120
Soil test: pH	5.9	6.8
P	62 (high)	49 (high)
K	171 (medium)	113 (low)

Farm Cooperator: Karl Wagner, Grawn.

County Agricultural Agent: George McManus, Traverse City.

Table 18

Zone 4

NORTHERN MICHIGAN
SILAGE — GRAND TRAVERSE COUNTY TRIAL
One, Two, and Three Year Averages —
1967, 1966, 1965

Hybrid	% Moisture in Ears		Tons Per Acre			% Ears in Dry Weight		
	2	3	2	3	2	3	2	3
	1967 yrs.	1967 yrs.	1967 yrs.	1967 yrs.	1967 yrs.	1967 yrs.	1967 yrs.	1967 yrs.
A.E.S. 202	44.0	40 44	10.4	8.3	9.4	4.1	3.4	3.4
Seneca XX 155	46.9	— —	14.4	— —	—	4.8	— —	42.6
Michigan 200	47.9	— —	12.5	— —	—	5.0	— —	45.4
Northrup King KE 435	48.1	46 49	11.2	8.2	9.3	4.3	3.2	3.3
Haapala H358	48.2	— —	12.8	— —	—	4.9	— —	47.5
Weather Master EPX-2 (2X)	49.9	— —	12.3	— —	—	4.3	— —	47.4
Seneca SR 155	50.0	— —	13.4	— —	—	4.6	— —	42.8
Michigan 270	50.3	45 48	13.9	10.8	11.6	4.7	3.9	3.9
Michigan 250	50.8	46 50	14.5	12.2	13.1	5.1	4.3	4.4
Michigan 280	50.9	— —	15.3	— —	—	5.6	— —	47.0
Haapala SX 205 (3X)	52.1	— —	14.2	— —	—	4.7	— —	45.1
Pioneer 3956	52.3	— —	14.4	— —	—	5.1	— —	46.6
Pride 137	52.5	— —	13.2	— —	—	5.0	— —	44.6
Pride 132	52.6	— —	13.1	— —	—	4.4	— —	44.5
Michigan 370	52.7	50 53	13.4	11.1	12.9	4.6	4.0	4.2
DeKalb 45	53.5	— —	11.6	— —	—	4.0	— —	45.3
Funk Bros. G 4170 (3X)	53.5	47 —	11.0	8.9	—	3.8	3.4	42.9
Michigan 300	54.7	50 53	16.2	13.3	14.4	5.4	4.5	4.6
Northrup King PX 446 (2X)	55.0	— —	10.6	— —	—	3.6	— —	42.0
Northrup King KE 497	55.4	52 57	15.0	12.3	13.4	5.0	4.2	4.3
Northrup King PX 480 (Sp)	55.7	49 —	13.6	11.0	—	4.8	3.9	39.6
Pride 232	57.4	— —	14.1	— —	—	4.8	— —	44.0
Northrup King PX 527 (3X)	58.7	— —	14.6	— —	—	4.9	— —	35.6
Michigan 402-2X (2X)	60.2	55 56	15.5	13.0	14.3	5.2	4.5	4.6
Michigan 400	60.7	54 57	13.3	12.0	13.2	4.9	4.5	4.4
Haapala SX 420 (3X)	63.0	— —	15.8	— —	—	4.8	— —	34.0
Average	53.3	49 52	13.6	11.0	12.4	4.7	4.0	4.1
Range	44.0	40 44	10.4	8.2	9.3	3.6	3.2	3.3
	to	to	to	to	to	to	to	to
Least significant difference	63.0	55 57	16.2	13.3	14.4	5.6	4.5	4.6
							48.9	49 49
								2
								2

	1967	1966	1965
Planted	May 23	May 13	May 14
Harvested	Sept. 15	Sept. 14	Sept. 16
Soil type	Emmett sandy loam	Emmett sandy loam	Emmett sandy loam
Previous crop	Corn	Alfalfa	Corn
Rows	38"	38"	38"
Population	17,800	15,900	17,000
Fertilizer	81-81-81	36-36-36	120-120-120
Soil test: pH	5.9	6.8	6.8
K	62 (high) 171 (medium)	40 (high) 49 (very low)	49 (high) 113 (low)

Farm Cooperator: Karl Wagner, Grawn
 County Agricultural Agent: George McManus, Traverse City

Table 19

NORTHERN MICHIGAN
GRAIN — ALPENA COUNTY TRIAL
One Year Averages — 1967

Zone 4

Hybrid	% Moisture	Bushels Per Acre	% Stalk Lodging	% Root Lodging
Jacques 750	31.3	59.8	5.4	1.1
Michigan 200*	34.7	80.1	3.7	0.0
Seneca XX 155	35.4	70.0	0.0	0.0
A.E.S. 202*	36.0	77.8	1.1	1.1
Seneca SR 155	36.3	67.5	0.0	0.0
Funk Bros. G 43	37.4	74.9	2.3	0.0
Funk Bros. G 4170 (3X)	38.2	54.0	2.2	0.0
Weather Master EP 10*	38.3	77.4	1.1	0.0
Pioneer 3956*	38.6	77.8	1.1	0.0
DeKalb 45	39.4	64.7	7.2	1.2
Northrup King PX 446 (3X)	40.2	73.1	3.5	0.0
Jacques 851 J	40.3	81.1	3.5	1.2
Michigan 270	41.3	73.1	1.2	2.4
DeKalb XL 307 (3X)	41.4	56.9	2.2	0.0
Pride 137	41.5	74.7	4.3	1.1
Michigan 300	43.1	72.4	1.1	0.0
Funk Bros. G 10 A	43.2	75.8	2.7	1.3
Michigan 250	43.2	71.5	0.0	0.0
Jacques 951	43.7	65.3	4.2	1.4
DeKalb XT 138	44.7	55.6	3.2	0.0
Northrup King PX 527 (3X)	45.9	64.0	3.0	1.0
Michigan 280	45.9	73.4	0.0	0.0
Northrup King PX 480 (Sp)	48.0	64.7	0.0	1.1
Funk Bros. G 17 A	48.5	65.9	6.8	1.4
Northrup King KE 497	48.6	69.4	2.5	1.2
DeKalb XL 325 (3X)	48.7	72.8	0.0	0.0
Funk Bros. G 44	59.7	51.9	1.3	1.3
Average	42.1	69.1	2.5	0.8
Range	31.3	51.9	0.0	0.0
	to	to	to	to
	59.7	81.1	7.2	2.4
Least significant differences	2.0	8.0		

* Significantly better than average yield in 1967.

Planted — May 17 Harvested — November 7
 Previous crop — Beans Soil type — Onaway sandy loam
 Rows — 28" Population — 17,200
 Fertilizer — 250 pounds 12-12-12
 Farm Cooperator — A. H. Nickels, Alpena.
 County Agricultural Agent — A. H. Nickels, Alpena.

Table 20

NORTHERN MICHIGAN
SILAGE — ALPENA COUNTY TRIAL
One and Two Year Averages — 1967 and 1966
(No trials conducted 1965)

	% Moisture in ears		Tons Per Acre			% Ears in Dry Weight
	1967	2 yrs.	1967	2 yrs.	1967	2 yrs.
Jacques 750	47.8	—	10.2	—	4.1	—
A.E.S. 202	48.0	45	10.8	8.3	4.0	3.3
Michigan 200	49.7	44	11.4	9.2	4.5	3.9
Funk Bros. G 43	51.4	47	10.2	8.6	3.5	3.3
Jacques 851 J	52.2	47	13.4	9.7	4.3	3.5
Seneca XX 155	52.6	—	13.5	—	4.6	—
Funk Bros. G 4170 (3X)	53.1	—	7.8	—	2.7	—
DeKalb XT 138	53.5	49	9.5	8.8	3.4	3.3
Seneca SR 155	53.8	—	10.3	—	3.6	—
Michigan 270	54.5	48	13.0	10.0	4.5	3.7
Michigan 280	56.6	—	13.9	—	4.8	—
DeKalb 45	57.1	50	11.3	9.4	3.8	3.7
Pride 137	57.8	—	12.3	—	4.2	—
Michigan 250	58.5	51	11.6	10.9	3.8	4.0
Weather Master EP 10	59.6	—	11.3	—	3.6	—
DeKalb XL 307 (3X)	60.2	53	7.9	6.9	2.8	2.7
Jacques 951	60.5	—	11.9	—	3.6	—
Michigan 300	60.8	53	12.9	11.8	4.8	4.5
Northrup King PX 446 (2X)	61.0	—	11.9	—	4.1	—
Pioneer 3956	61.6	—	11.7	—	3.4	—
Funk Bros. G 10A	62.3	54	13.1	11.4	4.0	4.0
Northrup King KE 497	64.9	56	11.8	11.0	3.8	4.0
DeKalb XL 325 (3X)	65.5	—	12.0	—	3.6	—
Northrup King PX 527 (3X)	65.7	—	14.2	—	4.8	—
Northrup King PX 480 (Sp)	66.1	57	9.7	10.3	2.9	3.5
Funk Bros. G 17A	67.8	56	11.1	10.7	3.1	3.2
Funk Bros. G 44	79.0	69	14.2	11.8	3.5	3.7
Average	58.4	52	11.4	9.9	3.8	3.6
Range	47.8	44	7.8	6.9	2.8	2.7
	to	to	to	to	to	to
	79.0	69	14.2	11.8	4.8	4.5
Least significant difference	2.4	2	1.2	.7	.3	.2
	1967		1966			
Planted	May 17		May 11			
Harvested	Sept. 13		Sept. 21			
Soil Type	Onaway sandy loam		Onaway loam			
Rows	28'		38"			
Population	17,200		14,000			
Fertilizer	250 pounds 12-12-12		30-60-30			

Farm Cooperators: (1967) A. H. Nickel, Alpena; (1966) Esley Van Wagoner, Rt. 2, Alpena.

County Agricultural Agent: A. H. Nickel, Alpena.

Zone 4

Table 21

NORTHERN MICHIGAN
SILAGE — ALGER COUNTY TRIAL
One, Two, and Three Year Averages —
1967, 1966, 1965

	% Moisture in Ears		Tons Per Acre			% Ears in Dry Weight
	2 1967 yrs.	3 1967 yrs.	2 1967 yrs.	3 1967 yrs.	2 1967 yrs.	3 1967 yrs.
Pioneer PXE-1	54.8	—	8.4	—	3.0	—
Trojan D31 (6-10)	59.5	—	6.8	—	2.5	—
Trojan 331 (6-8)	61.8	—	8.8	—	2.8	—
Trojan D31 (6-8)	64.3	—	8.3	—	2.4	—
DeKalb 29	70.8	55	59	8.5	9.0	8.8
Michigan 200	71.5	57	62	10.5	10.0	9.1
Seneca SR 155	74.2	58	—	10.6	10.7	—
Wisconsin 263	74.4	60	—	8.3	10.0	—
Northrup King KC3	75.0	65	66	10.8	10.4	9.2
Pride 11	75.7	59	64	12.1	11.2	10.3
Wisconsin 243	75.7	58	—	9.6	10.1	—
Wisconsin 273	76.0	59	—	11.0	10.7	—
Wisconsin 335A	76.4	61	—	10.7	9.6	—
Wisconsin 1709	77.0	61	—	7.0	8.1	—
Wisconsin 346	77.4	61	—	11.6	11.5	—
Wolverine 29	77.4	—	—	11.4	—	—
A.E.S. 202	77.5	59	62	10.0	10.3	9.7
Northrup King PX 446 (2X)	78.4	—	—	10.9	—	—
(2X)	78.8	—	—	11.3	—	—
Michigan 270	80.4	62	66	10.8	11.0	10.0
Pioneer 3956	80.6	—	—	10.2	—	—
Michigan 250	81.3	63	66	9.8	10.9	10.4
Michigan 280	82.8	64	—	11.5	11.9	—
Northrup King KE 497	84.3	—	—	10.1	—	—
Northrup King PX 480 (Sp)	84.8	—	—	10.5	—	—
Michigan 300	85.1	68	72	10.0	11.5	11.0
DeKalb XL 15 (2X)	86.5	67	73	10.1	11.1	10.1
Northrup King PX 527 (3X)	86.7	—	—	10.9	—	—
Average	76.3	61	65	10.0	10.5	9.8
Range	54.8	55	59	6.8	8.1	8.8
	to	to	to	to	to	to
	86.7	68	73	12.1	11.9	11.0
Least significant difference	3.6	2	1	1.2	0.7	0.4

	1967		1966		1965	
	Planted	May 29	Harvested	Sept. 21-22	Soil type	Chatham stoney loam
Population	16,600					15,900
Fertilizer	75-100-100					74-96-48

Cooperator: Dr. Don Reid, Michigan State University, Chatham.

Zone 4

Table 22 Index for 238 hybrids entered as 1,130 entries in the 1967 Michigan Corn Performance Trials. Numbers within parentheses refer to table numbers in which the hybrid appears. (2X) indicates a single cross hybrid, (3X) indicates a three-way hybrid, and all others are double-cross hybrids.

Anderson Elevator Co., Maumee, Ohio	Supercrost 2610 (10)	Michigan Hybrid Seed Co., 974 Rosewood, East Lansing, Michigan	Pioneer 368 (3, 5, 8, 9, 11, 12, 13)
Anderson AX3 (2X) (3)	Supercrost 15563 (13)	Wolverine 39 (13, 14, 15)	Pioneer 371 (1, 2, 4, 5, 6, 7, 9)
Anderson AX5 (3)		Wolverine 46A (13, 14, 15)	Pioneer 385 (8, 16)
Anderson A 105 (3)		Wolverine 61 (11, 12)	Pioneer 388 (10, 13)
Asgrow Seed Co., Mechanicsburg, Penn.	Garno Seed Co., Deerfield, Michigan	Wolverine 66 A (7, 8, 9)	Pioneer 3414 (4)
Asgrow ATC 35 (3X) (11, 12)	Garno S 95 (2X) (1, 2, 11, 12)	Wolverine 69 (11, 12)	Pioneer 3466 (4, 6)
Bayless & Sons, Route 1, Bluffton, Indiana	Green Belt Fertilizer Co., Applegate, Mich.	Wolverine W 135 (2X) (8)	Pioneer 3567 (1, 2, 3, 4, 5, 6)
Bayless SX 415 (2X) (3, 4, 6)	Green Belt 12 A (14, 15)	Wolverine W 175 (9, 11, 12)	Pioneer 3658 (3)
Bayless SX 433-7 (2X) (4, 6)	Green Belt E 16 (13)	Midwest Research Associates, Box J, Dassel, Minnesota	Pioneer 3675 (11, 12, 14, 15, 16)
Bayless 3X 435 (3X) (4, 6)	Green Belt 20 (14, 15)	Weathermaster EPX-2 (2X) (17, 18)	Pioneer 3715 (3X) (4, 6, 9, 11, 12)
Bayless 3X 485 (3X) (4, 6)	Green Belt 31 (13)	Weathermaster EPX-6 (2X) (1, 2, 4, 6, 11, 12)	Pioneer 3773 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15)
Bayless SX 601 (2X) (4, 6)	Green Belt 34 (13)	Weathermaster EP 10 (19, 20, 21)	Pioneer 3775 (2X) (1, 2, 3, 5, 8, 9, 10, 11, 12, 13, 14, 15)
Bayless SX 615-5 (2X) (4, 6)	Green Belt 40 (13, 14, 15)	Weathermaster EP 30 (5, 7, 9, 10, 11, 12, 13, 16)	Pioneer 3854 (8, 10, 11, 12, 16)
Blaney Farms, Inc., Route 3, Madison, Wis.	Green Belt 41 (13, 14, 15)	Weathermaster EP 40 (7, 9, 10)	Pioneer 3862 (16)
Blaney B44A (3X) (10)	Green Belt 44 (2X) (13, 14, 15)	Weathermaster EP 50 (5, 8)	Pioneer 3911 (2X) (16)
Blaney B330 (3X) (10)	Green Belt SX 362 (2X) (13, 14, 15)	Weathermaster EP 60 (3, 8)	Pioneer 3943 (3X) (11, 12)
Blaney B401 (2X) (9, 10, 11, 12)	Gries Seed Co., Rt. 4, Fremont, Ohio		Pioneer 3956 (17, 18, 19, 20, 21)
Blaney B441 (3X) (11, 12)	Gries 475 (2X) (1)		
Blaney B500 (2X) (9)	Gries 640 (1)		
Blaney B 601 (2X) (1, 2, 9)	Fred Gutwein & Sons, Francesville, Indiana		
Blaney B 772 (3X) (1, 2)	Gutwein 10 (2X) (4)		
Blaney B 800E (2X) (1, 2)	Gutwein 17 (3X) (4)		
Blaney 6606A (2X) (1, 2, 9, 10)	Gutwein 20 (2X) (4)		
Blaney 6616 (3X) (9)	Gutwein 222 (4)		
Cowbell Seeds, Inc., Wayland, Michigan	Levi Haapala & Sons Inc., Dassel, Minn.		
Cowbell 55 (5, 7)	Haapala SX 205 (3X) (14, 15, 17, 18)		
Cowbell SX 107 (2X) (3, 5, 9)	Haapala H 277 (1, 2)		
Cowbell SX 112 (2X) (4, 6, 7, 9)	Haapala SX 333 (9, 16)		
Cowbell HK 271 (2X) (5)	Haapala SX 358 (14, 15, 17, 18)		
Crow's Hybrid Corn Co., Milford, Illinois	Haapala SX 406 (3X) (16)		
Crow 420 (2X) (7)	Haapala SX 420 (3X) (17, 18)		
Crow 428 (2X) (7)	Haapala SX 475 (2X) (5)		
DeKalb Agricultural Assoc., Inc., DeKalb, Ill.	Haapala H 508 (8)		
DeKalb 59 (8, 14, 15)	Haapala SX 525 (3X) (3, 5)		
DeKalb XT 138 (19, 20)	Haapala SX 621 (2X) (1, 2, 8, 10)		
DeKalb 224 (7, 11, 12)	Haapala SX 626 (2X) (3, 9)		
DeKalb XL 304 (3X) (3, 11, 12)	Haapala H 1301 (10)		
DeKalb XL 306 (3X) (1, 2, 3, 4, 6, 11, 12, 14, 15, 16)	G. E. Hulting & Sons, Geneseo, Illinois		
DeKalb XL 341 (3X) (1, 2, 3, 6)	Hulting X 214 (4)		
DeKalb XL 344 (3X) (9)	Hulting 218 (4)		
DeKalb 409 (1, 2, 5, 6, 11, 12)	Hulting X 536 (4)		
DeKalb 414 (5)	Hulting X 537 (4)		
DeKalb 415 A (5)	Hulting 928 (2X) (4)		
DeKalb 427 (7, 8)	Jacques Seed Co., Prescott, Wisconsin		
DeKalb 441 A (7)	Jacques 750 (19, 20)		
DeKalb XL 15 (2X) (8, 11, 12, 21)	Jacques 851 J (19, 20)		
DeKalb 29 (21)	Jacques 900 J (13)		
DeKalb XL 45 (2X) (1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16)	Jacques 951 (14, 15, 19, 20)		
DeKalb 45 (17, 18, 19, 20)	Jacques JX 1052 (2X) (11, 12, 14, 15)		
DeKalb 57 (7)	Landmark Seed Plant, South Charleston, Ohio		
DeKalb 58 (13)	Landmark C 700 X (1, 2, 3, 4, 5, 6)		
Funk Bros. Seed Co., Bloomington, Illinois	Michigan Crop Improvement Association, East Lansing, Michigan		
Funk Bros. G 10 A (7, 8, 9, 10, 11, 12, 14, 15, 16, 19, 20)	Michigan 200 (10, 17, 18, 19, 20, 21)		
Funk Bros. G 17 A (4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20)	Michigan A.E.S. 202 (10, 17, 18, 19, 20, 21)		
Funk Bros. G 287 (3X) (7, 16)	Michigan 250 (1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)		
Funk Bros. G 4289 (3, 4, 5)	Michigan 270 (1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)		
Funk Bros. G 4350 (2X) (1, 2, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)	Michigan 280 (1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)		
Funk Bros. G 4384 (2X) (3, 4, 6)	Michigan 300 (1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)		
Funk Bros. G 4390 (3X) (1, 2, 3, 4, 5, 6, 11, 12)	Michigan 370 (1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18)		
Funk Bros. G 4401 (2X) (4, 6)	Michigan 400 (1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18)		
Edward J. Funk & Sons, Kentland, Indiana	Michigan 463-2x (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)		
Supercrost S 30 A (2X) (1, 2, 9, 10)	Michigan 490 (1, 2, 3, 4, 5, 9, 10, 11, 12, 13, 14, 15, 16)		
Supercrost S 35 (2X) (11, 12)	Michigan 500-2x (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)		
Supercrost S 268 (2X) (1, 2, 11, 12, 13)	Michigan 550 (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)		
Supercrost 2570 (9)	Michigan 570 (1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16)		
	Michigan 620 (1, 2, 3, 4, 5, 9, 12)		
	OYO Seed Associates, Inc., Marysville, Ohio		
	OYO 225 (2X) (1, 2, 3)		
	OYO 435 A (1, 2, 3)		
	OYO E 3633 (2X) (1, 2, 3)		
	Pfister Associated Growers, Inc., Box 470, Aurora, Illinois		
	P.A.G. SX 9 (2X) (1, 2, 3)		
	P.A.G. SX 36 (2X) (3, 4, 6)		
	P.A.G. 41 (8, 13, 14, 15)		
	P.A.G. 45 (8, 10, 13, 14, 15)		
	P.A.G. SX 48 (2X) (8, 9, 13)		
	P.A.G. SX 52 (2X) (4, 6)		
	P.A.G. 70 (8, 9, 11, 12, 14, 15, 16)		
	P.A.G. 272 (3X) (1, 2, 3, 4, 6, 8, 9)		
	P.A.G. SX 310 (2X) (1, 2, 8)		
	Pioneer Corn Co., Inc., Tipton, Indiana		
	Pioneer P.XE-1 (21)		
	Pioneer 354 A (1, 2)		
	Wyckoff Hybrids, Inc., Route 3, Valparaiso, Indiana		
	Wyckoff W 5 X (3, 4, 6)		
	Wyckoff W 9 X (3)		
	Wyckoff W 10 A (3, 4, 6)		

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. George S. McIntyre, Director, Cooperative Extension Service, Michigan State University, E. Lansing, Mich.