

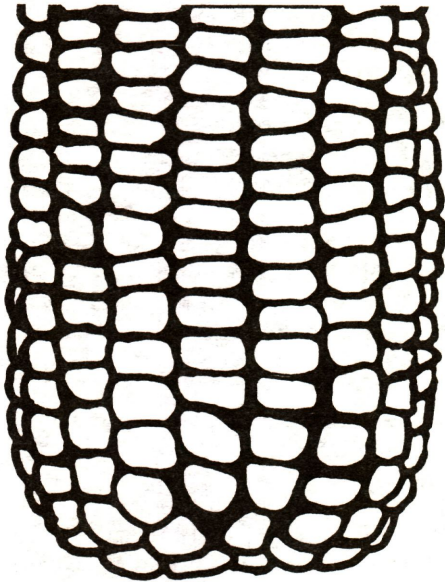
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Michigan Corn Production Hybrids Compared
Michigan State University Extension Service
E.C. Rossman, Bary M. Darling, Keith Dysinger, Crop Science
Issued January 1976
24 pages

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Michigan Corn Production

HYBRIDS COMPARED 1976

COOPERATIVE EXTENSION SERVICE
MICHIGAN STATE UNIVERSITY

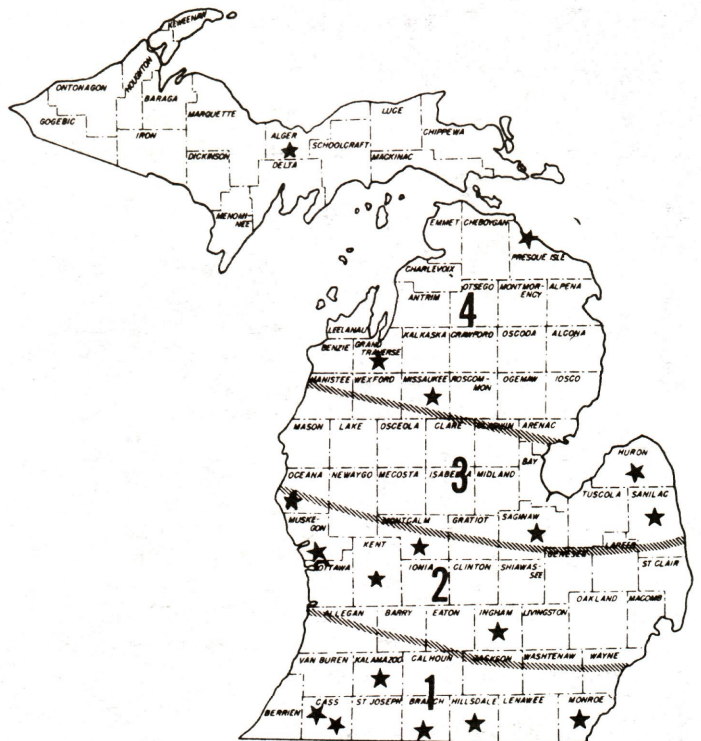
BY: E. C. ROSSMAN, BARY M. DARLING AND KEITH DYSINGER

Authors are respectively Professor of Crop and Soil Sciences, Crop Science Aide, and Technician

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 cost no more than seed of hybrids with lower performance.

Highest yielding corn hybrids in the 1975 trials produced 30 bushels more corn per acre than the average of 330 hybrids tested and 66 bushels more than the lowest yield hybrids tested (Table A, page 4). The respective yield yields were 160, 130 and 94 for the highest, average and lowest yielding hybrids at the 17 testing locations. The driest hybrids at harvest contained 6% less moisture than the average and 12% less moisture than the wettest hybrids tested. Stalk breakage averaged 12%, 3% and 0% for hybrids with highest, average and lowest amounts of stalk lodging.



Corn Maturity Zones and Locations (★) of Trials

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ENTRIES

Two groups of entries are included in the trials:

1. **Voluntary entries**—all seed companies are invited each year to enter hybrids in the trials. A fee is charged to cover some of the direct expenses.
2. **Extension entries**—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 procedures for all.

Table 23 presents an index of all hybrids entered in the 1975 trials. 330 hybrids were tested as 1,665 entries at 17 testing locations. Company names used in association with hybrid numbers refer to the brand, and the number is the hybrid designation.

Single-cross hybrids are indicated with (2X), three-way hybrids with (3X), double-cross hybrids with (4X) and special cross hybrids with (Sp) following the hybrid name and number in the tables.

Michigan experimental hybrids 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 demonstrate their capabilities. The best way to compare a group of corn hybrids is to grow them all 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 seed companies. An equal number 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 the chance of 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 Ingham, Sanilac, Huron, Missaukee, Presque Isle and Alger County trials (Tables 10, 12, 15, 19, 21 and 22). The Sanilac County silage trial was on a different farm from the grain trial.

Irrigated and non-irrigated comparisons were made in the Montcalm County trial (Table 16). There were two locations in Cass County—upland soil with irrigation (Table 5) and muck soil (Table 6).

Five adapted hybrids at four plant populations (15,000 to 27,000) were tested at 16 locations (Table B). Hybrid x population interactions were not significant, so only the averages were reported. The 19,200 average population produced the highest yield at 13 of the 16 locations. The average population of 23,200 gave the highest yield at Cass County-Irrigated, Montcalm County-Irrigated and Sanilac County. When averaged for all locations, 19,200 average population produced 18.2, 2.6 and 13.8 bushels more than population of 15,400, 23,200 and 27,500 respectively. Moisture content of grain averaged 0.1 to 0.9% higher for the higher populations. There was slightly more stalk lodging at the higher populations.

Planting of all trials in the Lower Peninsula was completed between April 30 and May 20. Cold, wet weather in April delayed the start of planting in some areas. Warm, sunny weather in May permitted more rapid planting than normal, and generally good stands were obtained. About 90% of the state's corn acreage was planted by May 31, well ahead of the 68% in 1974 and 80% average. Abundant moisture and hot weather during the last half of June stimulated rapid growth. Average plant height was 19 inches on June 28, almost double the 10-inch average in 1974. Some fields started to tassel by July 4.

Hot, dry weather during July and the first three weeks of August created plant stress and cut yields at some locations. Heavy rains in late August resulted in record rainfall for the month. Corn developed and matured ahead of normal. By September 1, 50% of the fields were dented compared with 13% in 1974 and 28% average. Most corn matured without any frost damage.

Dry, warm weather in October was favorable for field dry-down and early harvest. By November 1, 65% of the grain corn was harvested compared with 31% in 1974 and 40% average.

The Michigan Crop Reporting Service estimates the 1975 average corn yield at 81 bushels per acre compared to 63 in 1974, 79 in 1973, 83 (a record high) in 1972, 65 in 1971, and 79 in 1970. 1,820,000 acres were indicated for grain harvest and about 480,000 acres for silage in 1975. A record total crop of 147.4 million bushels is forecast, 34% more than 1974. The previous record was 142.9 million bushels in 1972.

HOW TO USE THIS BULLETIN

One-, two-, and three-year averages are presented for all hybrids tested during 1975, 1974, and 1973. 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 the number of 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 content was 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 as "least significant difference", 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, P_2O_5 and K_2O applied during the season.

HOW TO CHOOSE A HYBRID

Adaptation—The map on the cover shows the location of the trials 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.

Planting Rate—High plant populations (20,000 or more per acre) should be considered only for soils consistently producing more than 100 bushels per acre. Rainfall deficiencies with high plant populations usually result in no increase and frequently a decrease in yield compared to 18,000 to 19,000 plants per acre. Lodging and harvest losses are often greater at higher populations.

Maturity—Hybrids are listed in the tables in order of maturity—early to late—based on moisture content of the grain at harvest. This is usually a reasonably accurate measure of relative maturity in most years in Michigan. Early-maturing hybrids will be generally lower in moisture content than later-maturing hybrids. Difference among hybrids in rate of drying in the field also affects moisture content at harvest but usually does not greatly disturb the relative maturity ratings as determined by moisture content. One percent more moisture at harvest means a delay in maturity of about two days. Corn

is mature when moisture is down to about 32% in the grain or 38% in the ear.

For Grain—It is better to choose an early corn (below average moisture content) than a late corn for grain. The tables show that good yields do 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 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 reduce drying costs and market discounts for moisture.
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.

TO REDUCE STALK LODGING

Several stalk rotting fungi may cause broken stalks at harvest and create a major problem in corn production. Stalk rot is a disease of old age in that these fungi increase rapidly after the plant has matured or when the plant has died prematurely. Highest incidence of stalk rot occurs in years when corn matures early and when harvest is delayed. Infection and disease development are favored by warm

humid weather with abundant rainfall during the latter part of the growing season.

Hybrid resistance to stalk rot is only one of several factors that determine the extent of stalk breakage. There are no clear-cut cases of specific hybrids that can be depended upon consistently to resist stalk rot under *all* conditions of soil fertility, plant population, plant stress and maturity. A major part of the difference in resistance to lodging appears to be mechanical in that stiffer stalks do not break as soon when disease attacks.

The most effective practice to reduce losses from stalk rot is to harvest as soon as possible after maturity. Stalk breakage continues to increase rapidly in warm damp weather when harvest is delayed. Early-maturing hybrids that mature in September will have more stalk breakage than later-maturing hybrids harvested in November and December. There may be little or no advantage to planting early-maturing hybrids if harvest is delayed.

To avoid problems, the best combination is to choose high yielding early maturing hybrids, plant early and harvest early.

TO AVOID MOLDY CORN IN 1976

The following recommendations will help avoid moldy corn in 1976:

1. Plant early.

2. Plant early to medium-early maturing hybrids.
3. Harvest early—during October. Weather problems and harvest losses increase with later harvests.
4. Plan for adequate artificial drying. Drying in the field and in the crib is slow and undependable in Michigan. Ready access to drying facilities will permit more timely harvest with less harvest loss and more corn profits.

SEED SUPPLIES FOR 1976

A large supply of high-quality hybrid seed corn is available for 1976 planting. Increased seed acreage, a favorable growing season in most areas, no early killing frost and excellent harvest conditions all contributed to a large seed crop with good quality.

The current seed situation is in direct contrast to that of a year ago when seed supplies were tight and some of it was low or marginal in quality. Delayed planting, drought, and killing frosts reduced both supply and quality of seed corn for 1975 planting. Fortunately, weather conditions were generally favorable during 1975 planting so that satisfactory stands were obtained in most fields.

Seed reserves were almost exhausted in planting the 1975 crops so that a larger than usual seed acreage was planted to assure an adequate supply for 1976 and to replace reserves.

Table A. Average, highest and lowest moisture content, grain yield and stalk lodging at 17 locations in 1975.

Location	No. of hybrids	% Moisture			Bushels per acre			% Stalk lodging		
		Ave.	Highest	Lowest	Ave.	Highest	Lowest	Ave.	Highest	Lowest
Monroe	98	22.2	29.2	17.7	137.9	169.7	90.4	3.0	11.9	0.0
Hillsdale	112	25.9	30.3	20.0	119.2	148.8	92.7	1.8	9.4	0.0
Branch	119	27.7	33.9	19.6	150.7	183.0	98.6	0.4	2.4	0.0
Kalamazoo	69	30.2	34.1	24.1	120.2	143.1	93.7	0.6	3.9	0.0
Cass-Upland Irrigated	77	24.9	30.9	19.7	155.7	186.7	95.4	5.8	22.1	0.0
Cass-Muck Soil	75	24.4	28.3	19.7	125.2	159.7	85.7	8.6	38.7	0.0
Kent	79	26.0	30.9	20.7	121.6	148.4	100.2	1.1	5.9	0.0
Muskegon	55	26.5	33.1	20.1	115.9	145.0	94.1	0.5	2.3	0.0
Ingham	109	30.3	36.9	23.0	140.8	174.5	101.3	0.3	8.9	0.0
Sanilac	82	26.5	33.1	20.1	145.7	174.9	109.8	0.2	2.5	0.0
Saginaw	87	25.0	30.2	18.2	113.0	142.3	84.2	0.7	5.6	0.0
Huron	96	23.0	30.5	17.1	125.4	151.8	87.3	1.0	8.4	0.0
Montcalm-Irrigated	75	26.1	32.0	21.8	153.9	206.5	106.3	4.5	16.8	0.0
Montcalm-Not Irrigated	75	26.1	32.0	21.8	124.6	157.2	80.4	4.6	18.7	0.0
Oceana	64	23.2	28.9	18.7	130.0	149.9	101.7	2.1	11.0	0.0
Grand Traverse	40	22.5	28.1	18.6	100.4	124.5	72.3	2.5	9.4	0.0
Presque Isle	48	33.0	39.3	25.6	127.3	155.2	99.6	5.7	33.6	0.0
Average		26.1	31.9	20.3	129.9	160.1	93.9	2.6	12.4	0.0

Table B. Average yield, % moisture and % stalk lodging at four plant populations for 16 locations in 1975.

Location	Bushels per Acre				% Moisture in Grain				% Stalk Lodging			
	15,400	19,200	23,200	27,500	15,400	19,200	23,200	27,500	15,400	19,200	23,200	27,500
Monroe	137.2	155.3	143.4	126.7	21.0	21.6	21.6	21.9	3.6	4.5	6.5	9.5
Hillsdale	119.1	135.7	126.4	108.2	24.5	24.8	24.9	25.5	2.3	5.0	5.4	5.4
Branch	141.5	165.5	157.4	150.0	25.4	25.2	25.8	25.9	1.4	3.6	3.4	6.8
Kalamazoo	126.2	141.9	138.1	120.9	25.9	26.2	26.2	26.8	1.5	2.9	2.6	5.9
Cass-Upland Irrigated	165.4	181.1	201.6	178.3	24.6	24.6	24.8	24.8	5.3	9.8	11.7	12.0
Cass-Muck Soil	118.4	138.1	137.1	126.8	24.6	24.9	24.8	25.6	4.1	5.3	6.4	9.9
Kent	141.8	153.8	147.1	142.8	25.8	25.8	26.0	26.6	3.1	3.8	5.4	7.1
Muskegon	119.0	135.4	125.9	122.3	25.3	25.2	25.6	26.6	0.3	2.4	2.3	4.8
Ingham	137.9	155.3	151.8	140.8	27.5	27.4	27.9	28.5	0.2	1.3	1.4	3.7
Sanilac	147.7	170.4	195.3	173.1	27.3	27.6	27.8	28.4	0.0	0.0	1.1	2.1
Saginaw	110.1	127.2	119.4	117.5	25.8	26.1	26.4	27.2	0.2	1.6	1.8	2.1
Huron	141.4	155.2	152.0	145.1	26.8	26.7	27.2	27.2	0.9	2.9	3.4	5.3
Montcalm-Irrigated	158.2	182.7	195.5	171.8	26.2	26.2	26.3	26.9	1.7	5.0	5.4	9.7
Montcalm-Not Irrigated	136.0	163.9	150.6	145.5	26.6	26.5	26.9	26.8	2.4	6.2	7.0	10.2
Oceana	139.9	158.9	148.8	143.8	26.0	26.4	26.4	26.5	2.4	4.7	6.8	9.9
Grand Traverse	105.6	115.6	104.8	101.9	25.0	25.2	26.5	26.7	0.5	1.8	1.8	2.9
Average	134.1	152.3	149.7	138.5	25.5	25.6	25.9	26.4	1.9	3.8	4.5	6.7

Table 1 SOUTHERN MICHIGAN Zone 1
MONROE COUNTY TRIAL
One, Two, Three Year Averages—
1975, 1974, 1973

Hybrid (Brand-Variety)	% Moisture			Bushels per acre			% Stalk lodging		
	1975	2	3	1975	2	3	1975	2	3
Michigan 280 (4X)	17.7	20	20	100.3	88	89	10.4	5	6
Michigan 333 (3X)	18.5	21	20	119.7	101	103	8.7	4	4
DeKalb XL 12 (2X)	19.1	22	—	127.9	108	—	8.2	4	—
Michigan 396-3X (3X)	19.3	23	22	131.6	112	118	5.2	3	2
Pioneer 3784 (2X)	19.5	23	22	134.2	108	107	1.5	1	1
Blaney 7305 (2X)	19.5	23	—	128.8	116	—	0.0	1	—
Hulting X 310 (2X)	19.5	—	—	94.1	—	—	4.8	—	—
Golden Harvest H 2355 (2X)	19.6	23	—	127.4	110	—	2.3	1	—
Wolverine W 170 (2X)	20.1	—	—	119.1	—	—	0.0	—	—
Pioneer 3780 (2X)	20.1	24	23	130.6	125	132	3.0	2	2
Golden Harvest H-2290 (3X)	20.1	—	—	90.4	—	—	5.3	—	—
Funk G-4288 (3X)	20.3	24	—	138.8	115	—	11.9	7	—
Michigan 572-3X (3X)	20.3	25	24	136.6	125	133	8.0	4	4
Adler 23X (2X)	20.3	24	23	128.7	106	115	3.0	2	1
*Michigan 407-2X (2X)	20.4	24	23	152.4	133	140	2.2	1	2
Pride 5525 (2X)	20.4	—	—	137.5	—	—	0.0	—	—
Hulting Exp. 74149 (3X)	20.4	—	—	108.6	—	—	2.2	—	—
O's Gold SX 1101 (2X)	20.5	—	—	135.6	—	—	0.7	—	—
Michigan 410-2X (2X)	20.5	24	23	138.6	120	129	1.5	1	1
Funk G 4343 (2X)	20.6	24	23	142.5	118	119	5.9	7	5
Michigan 4122 (2X)	20.6	—	—	140.2	—	—	0.0	—	—
Acco DC 394 (3X)	20.7	25	24	98.9	92	96	6.4	3	4
*Northrup King PX 46 (2X)	20.8	—	—	146.1	—	—	0.7	—	—
*Wil-Star RV 55 (2X)	20.9	—	—	144.9	—	—	7.8	—	—
*Northrup King PX 32 (2X)	21.0	—	—	147.6	—	—	2.1	—	—

Hybrid (Brand-Variety)	% Moisture			Bushels per acre			% Stalk lodging		
	1975	2	3	1975	2	3	1975	2	3
Golden Harvest H-2420 (2X)	21.0	24	—	124.2	106	—	0.0	1	—
Funk GL 2384 (Sp.)	21.1	—	—	138.6	—	—	3.9	—	—
*Michigan 5443 (3X)	21.1	—	—	151.4	—	—	3.6	—	—
Super Crost 4242 (2X)	21.1	27	26	133.3	104	112	2.2	2	2
Wolverine W 177 (2X)	21.2	26	—	140.1	121	—	6.0	3	—
*Security SS 108 (2X)	21.2	—	—	147.3	—	—	0.8	—	—
*DeKalb XL 42 (2X)	21.2	26	—	155.3	133	—	2.3	1	—
*Funk G-4321 (2X)	21.3	25	—	163.6	138	—	3.1	2	—
*Golden Harvest H-2450 (2X)	21.3	29	—	169.7	133	—	1.5	2	—
Golden Harvest H-2400 (3X)	21.4	—	—	121.0	—	—	2.9	—	—
Wil-Star RV 43 (2X)	21.5	—	—	129.8	—	—	2.2	—	—
Super Crost S 25 (2X)	21.5	24	23	134.7	113	125	0.0	0	1
Jacques JX 122A (2X)	21.5	—	—	136.0	—	—	1.6	—	—
Migro M-1212 (2X)	21.5	26	24	117.2	96	107	3.1	2	2
*Garno S 110 (2X)	21.5	28	27	147.5	126	130	0.7	1	1
*Wolverine W 174 (2X)	21.6	26	—	153.0	129	—	3.1	2	—
*Blaney B 606 (2X)	21.6	25	—	157.3	130	—	0.7	0	—
*Michigan 575-2X (2X)	21.6	27	25	154.0	126	135	3.3	3	3
*Funk G-4408 (3X)	21.6	—	—	150.4	—	—	3.1	—	—
*Northrup King PX 48 (2X)	21.7	27	—	154.2	128	—	5.1	4	—
*Super Crost 2890 (2X)	21.7	26	—	154.1	120	—	4.5	2	—
*Funk G-4444 (2X)	21.8	27	25	144.7	122	129	1.5	2	3
Super Crost S 29 (2X)	21.9	—	—	138.4	—	—	4.3	—	—
Hulting X 770 (2X)	22.0	—	—	139.6	—	—	1.5	—	—
*Super Crost S 27 (2X)	22.1	27	26	149.8	117	130	0.0	0	0
Super Crost 2772 (2X)	22.1	28	26	126.2	111	122	6.1	3	3
O's Gold SX 1100 (2X)	22.1	26	—	141.4	118	—	3.9	2	—
*Wil-Star RV 50 (2X)	22.2	—	—	147.5	—	—	0.0	—	—
Acco U 348 (3X)	22.3	—	—	117.6	—	—	1.5	—	—
Security SS 105 (2X)	22.3	—	—	142.2	—	—	5.1	—	—

(Continued)

TABLE 11. (Continued)

	1975	1974	1973
Planted	May 15	May 22	May 22
Harvested	Oct. 22	Oct. 25	Oct. 31
Soil Type	Brookston clay loam	Brookston clay loam	Brookston clay loam
Previous Crop	Corn	Corn	Corn
Population	20,400	21,400	20,100
Rows	30"	30"	30"
Fertilizer	120-30-30	122-88-88	118-72-72
Soil Test:	pH 7.0	6.6	6.6
	P 83 (very high)	51 (very high)	47 (very high)
	K 195 (high)	241 (high)	229 (high)

Farm Cooperator: Orville Orchard, Applegate
 County Extension Director: Rex Sieting, Sandusky

Table 12 **NORTH CENTRAL MICHIGAN** Zone 3
SANILAC COUNTY TRIAL—SILAGE
 One Year Averages—1975
 No Previous Trials

Hybrid (Brand-Variety)	Tons per Acre		
	% Dry Matter	Green Weight	Dry Weight
Michigan 275-2X (2X)	42.0	14.7	6.2
Pioneer 3958 (2X)	41.7	15.6	6.5
Pioneer 3956A (2X)	39.9	17.0	6.8
Michigan 280 (4X)	39.7	16.9	6.7
Michigan 2833 (3X)	39.6	16.7	6.6
Asgrow RX35A (2X)	36.7	17.0	6.3
Michigan 2853 (3X)	36.5	17.8	6.5
Super Crost 1692 (2X)	36.2	18.5	6.7
Trojan TXS94 (2X)	35.7	20.2	7.2
Migro M-0101 (2X)	35.6	18.6	6.6
Security SS97 (2X)	35.5	20.3	7.2
Northrup King PX20 (2X)	35.4	19.8	7.0
DeKalb XL10 (2X)	35.1	21.0	7.2
Michigan 333-3X (3X)	35.0	20.0	7.0
Gutwein 08 (2X)	34.7	18.3	6.3
Michigan 396-3X (3X)	34.4	22.5	7.7
Wolverine W128 (2X)	34.1	17.7	6.0
Pioneer 3965 (3X)	34.1	22.1	7.7
Funk G-4195 (3X)	34.1	22.3	7.6
Garno S-85X (2X)	34.1	22.9	7.8
Cargill 830 (2X)	33.8	23.7	8.0
Stewart 2914 (2X)	33.7	15.7	5.3
Stewart 2-3001 (2X)	33.6	16.4	5.5
Asgrow RX32 (2X)	33.5	20.6	6.9
P.A.G. SX177 (2X)	33.5	21.8	7.3
DeKalb XL12 (2X)	33.2	20.0	6.6
Michigan 3102 (2X)	33.1	23.3	7.7
Stewart 2-3102 (2X)	33.0	20.6	6.8
Asgrow RX42 (2X)	33.0	22.0	7.3
Blaney B302 (2X)	32.9	18.9	6.2
Pioneer 3955 (3X)	32.8	19.2	6.2
Blaney B401 (2X)	32.7	23.9	7.8
Funk G-4141 (2X)	32.5	23.0	7.5
DeKalb XL16 (2X)	32.0	23.1	7.4
Michigan 3093 (3X)	31.9	24.3	7.5
Gutwein 10A (2X)	31.7	24.9	7.9
Funk G-4288 (3X)	31.3	23.8	7.4
Pioneer 3784 (2X)	31.2	21.0	6.5
Migro M-1020 (3X)	31.1	19.1	6.0
Northrup King PX529 (3X)	31.0	21.7	6.7
Michigan 407-2X (2X)	31.0	23.2	7.2
Northrup King PX32 (2X)	30.7	26.1	8.0
Blaney 7305 (2X)	30.7	24.4	7.5
Northrup King PX46 (2X)	30.7	23.9	7.3
Michigan 410-2X (2X)	30.7	23.9	7.3
Wolverine W166 (2X)	30.6	24.2	7.4
Michigan 4122 (2X)	30.6	25.8	7.9
Funk G-4252 (3X)	30.6	25.5	7.8
Funk G-4343 (2X)	30.5	26.2	8.0
Super Crost S27 (2X)	30.5	24.6	7.5
Michigan 5443 (3X)	30.5	25.6	7.8
Gutwein 23 (2X)	30.3	24.0	7.3
DeKalb XL21 (2X)	30.3	27.2	8.2
Funk 26516 (3X)	30.3	27.6	8.4
Michigan 572-3X (3X)	30.2	25.8	7.8
Pioneer 3780 (2X)	30.2	25.5	7.7
Pride 3315 (2X)	29.9	21.7	6.5
Acco UC 1151 (2X)	29.6	22.2	6.6
Gutwein 40 (2X)	29.5	23.5	6.8
Pride 4404 (2X)	29.5	21.0	6.2
Cargill 863 (2X)	29.3	24.0	7.0
Security SS105 (2X)	29.2	28.1	8.2

Hybrid (Brand-Variety)	% Dry Matter	Tons per Acre	
		Green Weight	Dry Weight
Funk G-4444 (2X)	29.2	27.4	8.0
P.A.G. SX69 (2X)	29.2	27.7	8.1
Garno S-92 (2X)	28.9	26.4	7.6
Super Crost S25 (2X)	28.9	27.1	7.8
Michigan 575-2X (2X)	28.9	27.1	7.8
Northrup King PX50A (2X)	28.4	24.6	7.0
Garno WX91 (2X)	28.4	26.1	7.3
Migro M-1130 (2X)	28.2	26.8	7.6
Trojan TXS102 (2X)	28.2	25.9	7.3
Cardinal SX105 (2X)	28.0	26.3	7.4
Funk G-4321 (2X)	28.0	30.2	8.5
Michigan 5802 (2X)	27.9	29.4	8.2
P.A.G. SX67 (2X)	27.9	25.8	7.2
Jacques JX122A (2X)	27.9	27.7	7.7
P.A.G. SX210 (2X)	27.6	24.8	6.8
Super Crost 2890 (2X)	27.5	26.8	7.3
Acco UC 2901 (2X)	26.5	27.0	7.2
Super Crost 1901 (2X)	26.2	25.3	6.6
Migro M-1212 (2X)	25.0	26.8	6.7
Acco UC 3301 (2X)	24.9	28.9	7.2
Average	31.7	23.0	7.2
Range	24.9 to 42.0	14.7 to 30.2	5.3 to 8.5
Least significant difference	1.3	1.5	0.5

1975	
Planted	April 30
Harvested	Sept. 2
Soil Type	Parkhill loam
Previous Crop	Corn
Population	21,100
Rows	30"
Fertilizer	116-64-112
Soil Test:	pH 7.3
	P 84 (very high)
	K 178 (medium)

Farm Cooperator: Charles Cork, Peck
 County Extension Director: Rex Sieting, Sandusky

Table 13 **NORTH CENTRAL MICHIGAN** Zone 3
SAGINAW COUNTY TRIAL
 One, Two, Three Year Averages—
 1975, 1974, 1973

Hybrid (Brand-Variety)	% Moisture		Bushels per acre			% Stalk lodging		
	2	3	2	3	2	3	2	3
	1975	Yrs.	1975	Yrs.	1975	Yrs.	1975	Yrs.
Michigan 280 (4X)	18.2	20	86.9	103	102	2.7	4	4
Payco SX 465 (2X)	18.8	—	88.3	—	—	3.1	—	—
Michigan 2833 (3X)	19.4	20	86.2	103	—	0.0	2	—
Michigan 2853 (3X)	19.5	20	94.1	107	—	0.0	1	—
Michigan 275-2X (2X)	20.1	21	101.5	109	106	0.8	3	5
Migro M-0101 (2X)	20.1	21	98.7	106	—	0.8	3	—
Cargill 830 (2X)	20.7	23	113.7	130	—	0.8	3	—
*Funk G-4195 (3X)	20.8	22	126.2	131	119	0.0	2	2
Pioneer 3958 (2X)	21.2	—	84.6	—	—	5.6	—	—
Michigan 3102 (2X)	21.7	23	124.9	134	—	0.0	1	—
Migro M-1020 (3X)	21.7	23	90.8	105	—	2.3	3	—
Blaney B 302 (2X)	22.3	23	86.7	107	108	3.1	2	1
Stewart 2914 (2X)	22.4	—	89.9	—	—	1.6	—	—
Pioneer 3965 (3X)	22.4	22	95.3	107	—	0.8	3	—
Gutwein 08 (2X)	22.4	24	96.4	108	—	1.6	1	—
Michigan 3093 (3X)	22.5	—	114.7	—	—	1.1	—	—
Michigan 333-3X (3X)	22.6	23	109.5	122	117	0.0	2	2
Stewart 2-3102 (2X)	22.8	23	113.8	128	—	0.0	0	—
Blaney B 401 (2X)	22.9	24	98.6	119	—	0.0	1	—
Super Crost 1692 (2X)	23.4	24	84.2	111	107	1.6	1	1
Blaney B 7305 (2X)	23.4	25	109.3	131	—	0.0	0	—
Funk G-4141 (2X)	23.5	—	99.9	—	—	0.0	—	—
Funk 26516 (3X)	23.8	—	111.1	—	—	0.0	—	—
Pioneer 3955 (3X)	23.9	—	86.4	—	—	0.8	—	—
Golden Harvest H-2290 (3X)	24.0	—	84.6	—	—	1.8	—	—

(Continued)

TABLE 15. (Continued)

Hybrid (Brand-Variety)	% Dry Matter			Tons per Acre					
	1975	2 Yrs.		3 Yrs.		Green Weight		Dry Weight	
		Yrs.	Yrs.	Yrs.	Yrs.	Yrs.	Yrs.	Yrs.	Yrs.
Funk G-4444 (2X)	35.8	37.1	40.7	17.3	17.5	17.2	6.2	6.5	7.0
Garno S-92 (2X)	35.7	37.2	39.3	18.5	19.1	18.3	6.6	7.1	7.2
Michigan 575-2X (2X)	35.5	37.0	—	18.3	18.1	—	6.5	6.7	—
Blaney 6616 (3X)	35.0	37.4	—	18.5	18.2	—	6.5	6.8	—
P.A.G. SX69 (2X)	34.9	37.4	39.2	17.2	17.1	15.8	6.0	6.4	6.2
Pioneer 3518 (Sp.)	34.8	36.2	—	19.3	18.5	—	6.7	6.7	—
Super Crost 1901 (2X)	34.4	37.4	—	16.7	18.2	—	5.8	6.8	—
DeKalb XL42 (2X)	34.4	—	—	18.3	—	—	6.3	—	—
P.A.G. SX67 (2X)	34.4	38.0	41.1	15.9	16.3	15.8	5.5	6.2	6.5
Wolverine W174 (2X)	34.3	41.1	—	20.0	18.6	—	6.9	6.6	—
Michigan 5802 (2X)	34.3	—	—	20.4	—	—	7.0	—	—
Acco UC 3301 (2X)	34.0	36.5	—	20.9	19.2	—	7.1	7.0	—
P.A.G. SX177 (2X)	33.8	—	—	16.3	—	—	5.5	—	—
Blaney B606 (2X)	33.8	35.3	—	17.4	17.3	—	5.9	6.1	—
P.A.G. SX210 (2X)	33.7	—	—	15.3	—	—	5.2	—	—
Migro M-1212 (2X)	32.6	35.2	38.4	16.8	17.9	17.7	5.5	6.3	6.7
Wil-Star RV55 (2X)	32.3	—	—	18.8	—	—	6.1	—	—
Pioneer 3535 (2X)	32.1	—	—	19.1	—	—	6.1	—	—
Golden Harvest H-2450 (2X)	30.3	36.5	—	17.0	17.0	—	5.1	6.2	—
Golden Harvest H-2500 (2X)	28.8	31.3	—	21.2	21.1	—	6.1	6.6	—
Migro M-1130	28.4	34.6	37.2	18.1	18.2	17.2	5.1	6.3	6.4
Average	39.5	39.6	42.5	15.6	15.9	15.3	6.1	6.3	6.5
Range	28.4	31.3	37.2	9.5	10.4	11.1	4.7	5.3	5.8
	to	to	to	to	to	to	to	to	to
	52.9	52.9	52.3	21.2	21.1	18.3	7.1	7.2	7.2
Least significant difference	1.6	1.0	0.8	1.5	0.9	0.6	0.5	0.4	0.3

	1975	1974	1973
Planted	April 30	April 25	May 16
Harvested	Sept. 2	Sept. 17	Sept. 11
Soil Type	Brookston clay loam	Brookston clay loam	Brookston clay loam
Previous Crop	Corn	Corn	Corn
Population	20,000	19,700	19,900
Rows	30"	30"	30"
Fertilizer	157-82-132	157-82-192	198-115-120
Soil Test: pH	7.0	7.3	7.0
P	45 (very high)	37 (high)	74 (very high)
K	194 (high)	215 (high)	472 (very high)
Farm Cooperator:	William McCrea, Bad Axe		
Extension Livestock Agent:	Lee Warschefsky, Bad Axe		

Table 16 NORTH CENTRAL MICHIGAN Zone 3
MONTCALM COUNTY TRIAL—IRRIGATED VS. NOT IRRIGATED
One, Two, Three Year Averages—1975, 1974, 1973

Hybrid (Brand-Variety)	% Moisture			Bushels per Acre						% Stalk lodging					
	1975	2 Yrs.		1975		2 years		3 years		1975		2 years		3 years	
		Yrs.	Yrs.	Irrig	Not Irrig	Irrig	Not Irrig	Irrig	Not Irrig	Irrig	Not Irrig	Irrig	Not Irrig	Irrig	Not Irrig
Michigan 275-2X (2X)	21.8	25	24	133.8	101.0	122	104	116	101	10.4	10.6	6	5	6	6
DeKalb XL311 (3X)	21.8	26	24	106.3	80.4	104	83	104	85	5.2	2.3	3	1	3	2
Michigan 280 (4X)	21.8	25	24	122.8	91.5	119	97	113	97	10.2	9.8	6	7	5	6
Michigan 2853 (3X)	21.9	25	—	129.0	100.4	126	104	—	—	5.8	6.8	4	4	—	—
Funk G-4195 (3X)	22.0	28	26	133.2	109.1	122	108	115	101	7.2	3.8	4	2	3	4
Michigan 2833 (3X)	22.1	25	24	123.4	100.7	118	102	116	102	8.8	5.7	5	3	5	4
DeKalb XL12 (2X)	22.3	29	28	124.2	102.8	120	104	115	101	16.8	18.7	8	9	7	7
Migro M-1020 (2X)	22.5	28	—	139.8	113.5	128	108	—	—	2.3	3.9	1	3	—	—
Wolverine W128 (2X)	22.7	25	25	122.2	100.6	114	100	111	95	4.7	0.0	5	2	3	2
Migro M-010 (2X)	22.7	26	—	140.7	109.6	126	104	—	—	4.6	3.5	2	3	—	—
Super Crost 1692 (2X)	22.8	27	26	130.7	104.2	125	108	119	102	2.4	4.7	1	3	2	3
Michigan 333-3X (3X)	22.9	26	25	144.5	114.8	134	115	128	112	2.3	8.1	2	4	3	3
Super Crost 1610 (2X)	23.1	25	—	136.0	107.6	122	106	—	—	2.9	0.8	1	1	—	—
Asgrow 2222 (2X)	23.2	—	—	129.4	106.9	—	—	—	—	0.8	1.6	—	—	—	—
Northrup King PX20 (2X)	23.2	26	—	135.3	111.4	122	106	—	—	7.6	4.4	4	2	—	—
Blaney B302 (2X)	23.2	27	—	142.1	114.7	131	113	—	—	0.7	3.1	0	3	—	—
Pioneer 3955 (3X)	23.3	—	—	147.1	124.6	—	—	—	—	4.7	0.8	—	—	—	—
Michigan 3093 (3X)	23.5	—	—	158.0	125.7	—	—	—	—	3.1	1.5	—	—	—	—
Blaney B401 (2X)	23.5	—	—	157.1	130.3	—	—	—	—	5.8	2.2	—	—	—	—
Pioneer 3965 (3X)	23.5	25	—	137.0	115.3	121	108	—	—	1.5	0.8	1	0	—	—
Funk G-4141 (2X)	23.6	—	—	156.0	114.5	—	—	—	—	1.6	0.0	—	—	—	—
Funk G-4252 (3X)	23.7	29	28	143.5	113.1	132	108	117	100	5.6	2.1	3	1	3	2
Pioneer 3958 (2X)	23.9	28	27	160.0	127.5	136	113	123	106	0.7	3.1	0	2	1	2
Asgrow RX42 (2X)	24.0	28	26	142.9	130.5	131	118	127	114	0.0	0.0	0	0	1	1
DeKalb XL15A (2X)	24.1	30	28	130.3	105.2	117	103	112	100	12.0	13.7	6	7	5	5
Michigan 3102 (2X)	24.3	29	—	157.3	131.1	141	124	—	—	3.5	2.4	2	1	—	—
Acco UC 2301 (2X)	24.6	29	28	158.7	132.7	138	119	133	115	7.4	17.1	4	9	5	6
Blaney B442 (3X)	24.7	—	—	128.4	113.3	—	—	—	—	6.9	5.8	—	—	—	—
Michigan 396-3X (3X)	25.2	30	28	160.6	128.3	144	122	139	118	0.0	0.8	0	0	1	1
Funk G-4343 (2X)	25.3	31	29	164.2	135.1	133	109	126	107	6.9	7.1	3	4	3	3
Blaney 7305 (2X)	25.3	30	—	156.5	133.2	132	119	—	—	2.1	5.1	1	3	—	—
Cowbell 7300 (2X)	25.6	31	30	144.8	122.3	123	106	120	104	7.9	6.1	4	3	5	3
Michigan 410-2X (2X)	25.9	31	29	157.6	132.9	145	123	141	119	5.5	4.9	3	3	3	4
Northrup King PX32 (2X) ^{1 2}	26.1	30	—	168.2	135.6	143	121	—	—	4.4	5.3	2	3	—	—
Pioneer 3785 (2X)	26.2	32	—	146.0	123.7	129	113	—	—	0.0	0.8	0	0	—	—

(Continued)

TABLE 16. (Continued)

Hybrid (Brand-Variety)	% Moisture			Bushels per Acre						% Stalk lodging					
	1975	2 Yrs.	3 Yrs.	1975		2 years		3 years		1975		2 years		3 years	
				Irrig	Not Irrig	Irrig	Not Irrig	Irrig	Not Irrig	Irrig	Not Irrig	Irrig	Not Irrig	Irrig	Not Irrig
Blaney B443 (3X)	26.3	—	—	155.1	121.4	—	—	—	—	4.7	0.8	—	—	—	—
Michigan 4122 (2X) ^{1 2}	26.3	—	—	179.3	140.4	—	—	—	—	0.8	0.0	—	—	—	—
Acco DC231 (4X)	26.3	32	30	139.7	113.7	116	101	107	96	11.0	7.6	6	5	7	4
Cowbell 102 (2X)	26.3	—	—	129.0	107.2	—	—	—	—	4.9	10.2	—	—	—	—
Pride R290 (2X)	26.5	32	30	157.4	133.7	145	124	133	114	7.9	6.8	4	4	4	4
Funk G-L2384 (Sp.)	26.5	—	—	140.9	112.4	—	—	—	—	14.1	14.7	—	—	—	—
Michigan 407-2X (2X) ^{1 2}	26.6	31	29	168.6	137.5	151	130	145	126	3.5	0.0	2	1	3	2
Migro M-1212 (2X)	26.7	33	31	153.7	127.7	132	116	130	117	1.5	3.6	2	2	2	1
Funk G-4288 (3X)	26.7	32	30	155.4	132.5	136	121	134	118	10.3	11.3	5	6	5	4
Funk 26516 (3X) ^{1 2}	26.8	—	—	168.5	136.3	—	—	—	—	1.4	1.5	—	—	—	—
Michigan 572-3X (3X)	26.8	33	31	156.4	128.1	139	122	137	120	7.1	5.7	4	3	3	3
Blaney B606 (2X) ^{1 2}	26.8	33	—	176.8	143.5	143	123	—	—	3.6	3.6	2	2	—	—
Acco U 334 (3X)	27.0	—	—	167.0	123.7	—	—	—	—	12.1	5.1	—	—	—	—
Michigan 5443 (3X)	27.1	—	—	167.7	131.7	—	—	—	—	3.6	5.4	—	—	—	—
Pride 4404 (2X)	27.1	—	—	169.7	129.7	—	—	—	—	0.8	1.5	—	—	—	—
Asgrow RX53 (2X) ^{1 2}	27.2	30	28	169.3	138.3	146	126	141	124	0.0	0.8	0	0	0	1
Northrup King PX529 (3X) ²	27.3	33	—	165.6	138.7	136	124	—	—	5.6	7.5	3	4	—	—
Wolverine W166 (2X) ^{1 2}	27.3	—	—	179.3	137.8	—	—	—	—	5.6	8.6	—	—	—	—
Cowbell 4100 (2X)	27.6	33	—	140.4	111.4	126	106	—	—	7.2	3.8	4	2	—	—
Funk G-4321 (2X) ^{1 2}	27.7	33	31	181.1	148.7	157	132	146	126	2.3	0.7	1	0	3	1
Super Crost 1901 (2X)	28.1	33	—	155.5	118.8	145	119	—	—	1.7	1.6	1	1	—	—
Cardinal SX105 (2X)	28.2	32	—	166.1	134.7	144	121	—	—	3.1	3.6	3	2	—	—
Super Crost S25 (2X)	28.2	33	30	145.8	114.6	130	110	126	108	0.7	1.6	0	1	1	1
Funk G-4444 (2X)	28.7	33	32	166.4	135.0	148	128	143	124	3.8	2.8	2	2	3	2
Asgrow RX64 (2X)	28.7	33	—	153.8	133.1	136	123	—	—	3.0	6.2	2	3	—	—
Pioneer 3780 (2X)	28.8	33	31	166.5	132.6	142	121	137	118	3.8	3.7	2	2	3	2
Northrup King PX46 (2X)	28.8	—	—	154.0	131.7	—	—	—	—	2.2	0.8	—	—	—	—
Super Crost S27 (2X) ²	28.8	33	31	160.1	140.5	133	113	133	115	2.2	6.5	1	3	2	3
Funk G-4366 (3X)	28.9	34	32	170.2	131.8	138	115	137	117	1.5	6.0	1	3	2	3
Michigan 575-2X (2X)	28.9	34	—	167.4	135.2	148	126	—	—	4.6	4.5	2	2	—	—
Funk G-WX302 (Sp.)	29.4	35	—	158.8	122.3	136	115	—	—	8.8	15.5	5	8	—	—
Cowbell 7440 (2X)	29.7	34	—	167.4	125.9	148	122	—	—	0.7	0.0	1	1	—	—
Security SS105 (2X) ^{1 2}	29.8	—	—	173.1	145.7	—	—	—	—	0.7	5.9	—	—	—	—
Michigan 5802 (2X) ^{1 2}	29.8	—	—	187.6	151.3	—	—	—	—	0.0	1.4	—	—	—	—
Migro M-1130 (2X) ^{1 2}	30.2	35	33	170.3	138.8	149	123	142	120	4.9	4.9	2	2	2	3
Pioneer 3716 (3X) ^{1 2}	30.3	—	—	172.7	137.4	—	—	—	—	4.5	2.1	—	—	—	—
P.A.G. SX69 (2X) ^{1 2}	31.5	35	33	169.9	141.6	138	122	138	120	3.5	2.8	2	2	2	3
Acco UC 3301 (2X) ^{1 2}	31.5	35	33	206.5	157.0	163	131	155	127	1.4	1.4	1	1	3	4
Pioneer 3535 (2X) ^{1 2}	31.6	—	—	200.8	157.2	—	—	—	—	2.3	0.8	—	—	—	—
Cowbell 7480 (2X)	32.0	36	—	147.4	124.1	132	119	—	—	7.0	7.8	4	4	—	—
Average	26.1	30	29	153.9	124.6	134	115	128	111	4.5	4.6	3	3	3	3
Range	21.8	25	24	106.3	80.4	104	83	104	85	0.0	0.0	0	0	0	1
	to	to	to	to	to	to	to	to	to	to	to	to	to	to	to
	32.0	36	33	206.5	157.2	163	132	155	127	16.8	18.7	8	9	7	7
Least significant difference	1.2	0.9	0.7	14.2	10.9	8	7	5	5						

¹ Significantly better than average yield, irrigated 1975.
² Significantly better than average yield, not irrigated 1975.

	1975	1974	1973
Planted	May 7	May 4	May 8
Harvested	Oct. 15	Oct. 26	Oct. 17
Soil Type	Montcalm sandy loam	Montcalm sandy loam	Montcalm sandy loam
Previous Crop	Clover	Sorghum—sudan seeded to rye in fall	Sorghum—sudan seeded to rye in fall
Population	20,700	20,500	18,700
Rows	30"	30"	30"
Fertilizer	255-110-110	150-120-170	277-130-130
Irrigation	9 inches	8 inches	5 inches
Soil Test: pH	6.5	6.1	5.6
P	268 (very high)	340 (very high)	297 (very high)
K	257 (high)	198 (high)	175 (medium)

Farm Cooperator: Theron Comden, Lakeview
 County Extension Director: James Crosby, Stanton

TABLE 21. (Continued)

Hybrid (Brand-Variety)	% Dry Matter			Tons per Acre					
				Green Weight			Dry Weight		
	2	3		2	3		2	3	
	1975	Yrs.	Yrs.	1975	Yrs.	Yrs.	1975	Yrs.	Yrs.
Warwick SL207 (2X)	26.2	—	—	25.9	—	—	6.7	—	—
Stewart 2501 (2X)	25.5	—	—	25.8	—	—	6.6	—	—
Warwick SL209 (2X)	25.3	24.5	26.1	25.2	24.5	21.8	6.3	6.0	5.7
Funk G-4082 (3X)	25.3	25.6	26.6	26.9	25.4	22.9	6.8	6.5	6.1
Michigan 275-2X (2X)	25.1	24.8	26.3	26.7	25.8	23.2	6.7	6.4	6.1
Golden Harvest H-2220 (3X)	24.8	—	—	21.9	—	—	5.4	—	—
P.A.G. SX121 (2X)	24.5	24.3	—	26.6	26.3	—	6.6	6.4	—
Pride R103 (3X)	24.4	—	—	23.8	—	—	5.8	—	—
Jacques 844 (4X)	23.9	24.5	—	23.0	23.7	—	5.5	5.8	—
Stewart 255 (2X)	23.9	—	—	26.0	—	—	6.2	—	—
Pride 137 (4X)	23.9	23.0	24.5	26.4	25.7	22.9	6.3	5.9	5.6
Funk G-4141 (2X)	23.8	—	—	29.0	—	—	6.8	—	—
Pride R144 (3X)	23.5	23.2	—	27.6	27.2	—	6.5	6.3	—
P.A.G. 7120	23.3	23.7	—	25.9	26.2	—	6.0	6.2	—
Funk G-5048 (4X)	23.2	23.6	24.8	29.0	26.7	23.4	6.7	6.3	5.8
Funk G-4040 (2X)	23.2	—	—	31.0	—	—	7.2	—	—
Warwick TX20 (3X)	22.9	—	—	30.5	—	—	7.0	—	—
Michigan 280 (4X)	22.9	22.8	25.0	31.0	29.8	26.0	7.1	6.8	6.5
DeKalb XL10 (2X)	22.7	—	—	28.0	—	—	6.3	—	—
Pioneer 3965 (3X)	22.6	23.7	24.9	29.0	28.3	25.3	6.5	6.7	6.3
Michigan 2853 (3X)	22.5	22.6	—	30.2	28.3	—	6.8	6.4	—
Michigan 3102 (2X)	22.5	—	—	32.4	—	—	7.3	—	—
DeKalb XL311 (3X)	22.4	23.0	—	32.1	24.4	—	5.2	5.6	—
Garno S-85X (2X)	22.4	22.4	—	32.1	29.9	—	7.2	6.7	—
Michigan 2833 (3X)	22.4	22.7	24.9	29.0	28.2	25.3	6.5	6.4	6.3
Pioneer 3663 (4X)	22.3	—	—	30.6	—	—	6.8	—	—
Northrup King PX442 (3X)	22.2	22.1	23.6	26.8	26.2	23.3	5.9	5.8	5.5
DeKalb XL310 (3X)	21.7	—	—	26.7	—	—	5.8	—	—
Northrup King PX 446 (3X)	21.5	22.1	23.5	31.9	28.1	24.7	6.8	6.2	5.8
Michigan 3093 (3X)	21.5	—	—	32.1	—	—	6.9	—	—
Northrup King PX20 (2X)	21.3	—	—	30.0	—	—	6.4	—	—
Northrup King PX25 (2X)	21.3	21.8	—	32.0	29.4	—	6.8	6.4	—
Michigan 333-3X (3X)	21.3	21.3	24.2	31.5	30.0	26.5	6.7	6.4	6.4
Golden Harvest H-2290 (3X)	21.1	—	—	28.4	—	—	6.0	—	—
Michigan 396-3X (3X)	21.0	19.7	22.4	31.4	30.4	27.2	6.6	6.0	6.1
Jacques 951 (4X)	20.8	21.7	23.6	28.8	28.1	24.6	6.0	6.1	5.8
Golden Harvest H-2340 (2X)	20.7	—	—	31.4	—	—	6.5	—	—
Golden Harvest H-2355 (2X)	20.5	—	—	31.2	—	—	6.4	—	—
Average	24.3	23.6	24.9	27.1	26.3	23.7	6.4	6.2	5.9
Range	20.5	19.7	22.4	17.4	21.7	19.4	5.2	5.6	5.5
Least significant difference	1.3	10.	0.7	1.5	0.8	0.6	0.4	0.3	0.3

	1975	1974	1973
Planted	May 15	May 22	May 17
Harvested	Sept. 3	Sept. 18	Sept. 12
Soil Type	Onaway loam	Onaway loam	Mackinaw and Onaway loam
Previous Crop	Corn	Corn	Corn
Population	20,900	21,000	20,500
Rows	28"	28"	28"
Fertilizer	20-80-80, manure	202-64-64, manure	24-96-96
Soil Test:	pH		7.3
	P		90 (very high)
	K		289 (high)

Farm Cooperators: Louis and Leroy Woloszyk, Posen
 County Extension Director: Jay Poffenberger, Rogers City
 Cooperator: L. V. Nelson, Crop and Soil Science Department, Michigan State University.

Table 22 NORTHERN MICHIGAN Zone 4
 Alger County Trial—SILAGE
 One, Two Three Year Averages—1975, 1973, 1972
 (No results from 1974)

Hybrid (Brand-Variety)	% Dry Matter			Tons per Acre					
				Green Weight			Dry Weight		
	2	3		2	3		2	3	
	1975	Yrs.	Yrs.	1975	Yrs.	Yrs.	1975	Yrs.	Yrs.
DeKalb DK22 (4X)	28.9	29.7	29.8	13.3	11.1	11.4	3.8	3.3	3.4
Michigan 2013 (3X)	28.6	—	—	13.7	—	—	3.9	—	—
Cargill 185 (4X)	26.4	29.7	—	13.1	11.1	—	3.5	3.3	—
Northrup King KE408 (4X)	26.4	28.0	27.9	14.9	11.4	12.2	3.9	3.2	3.4
Michigan 200 (4X)	26.4	29.9	28.6	14.4	12.7	13.3	3.8	3.8	3.8
Michigan 2833 (3X)	25.7	—	—	15.2	—	—	3.9	—	—
Funk G-4082 (3X)	25.1	28.8	27.9	14.9	12.5	12.9	3.7	3.6	3.6
Michigan 275-2X (2X)	24.8	26.8	26.5	14.1	12.7	13.2	3.5	3.4	3.5
Pioneer 3965 (3X)	24.3	27.3	—	17.1	15.0	—	4.2	4.1	—
Northrup King PX420 (3X)	24.3	28.7	28.6	15.0	12.9	12.6	3.6	3.7	3.6
DeKalb LX310 (3X)	24.1	—	—	14.1	—	—	3.4	—	—
Pride R102 (3X)	23.8	27.5	27.6	13.3	10.2	10.5	3.2	2.8	2.9
DeKalb 007 (4X)	23.7	28.3	27.5	13.0	11.3	12.0	3.1	3.2	3.3
Funk G-5048 (4X)	23.7	27.5	—	16.3	13.1	—	3.9	3.6	—
Michigan 280 (4X)	23.5	26.3	26.2	16.2	13.7	14.1	3.8	3.6	3.7
Funk G-4040 (2X)	22.6	—	—	15.0	—	—	3.4	—	—
Michigan 2853 (3X)	22.5	—	—	16.9	—	—	3.8	—	—
Stewart 38 (3X)	21.8	—	—	16.7	—	—	3.7	—	—
Northrup King KC3 (4X)	21.7	27.2	27.3	14.2	12.5	12.8	3.1	3.4	3.5
Stewart 3701 (3X)	21.7	—	—	15.6	—	—	3.4	—	—
Pioneer 3663 (4X)	21.5	—	—	16.3	—	—	3.5	—	—
DeKalb XL311 (3X)	21.0	—	—	13.1	—	—	2.8	—	—
Average	24.2	28.1	27.8	14.8	12.3	12.5	3.6	3.5	3.5
Range	21.0	26.3	26.2	13.0	10.2	10.5	2.8	2.8	2.9
Least significant difference	1.2	0.9	0.7	1.4	0.8	0.6	0.4	0.3	0.2

	1975	1973	1972
Planted	June 4	May 3	May 26
Harvested	Oct. 1	Sept. 16	Oct. 10-20
Soil Type	Chatham stoney loam	Chatham stoney loam	Chatham stoney loam
Previous Crop	Fallow	Corn	Corn
Population	17,400	16,700	18,300
Rows	36"	36"	36"
Fertilizer	51-51-51	57-57-57	48-48-48
Soil Test:	pH		7.4
	P		108 (very high)
	K		354 (very high)

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

Table 23. Index for 330 hybrids entered as 1,665 entries in the 1975 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, (4X) indicates a double-cross hybrid, and (Sp.) a special-cross hybrid. Company names used in association with hybrid numbers refer to the brand and the numbers are the variety (hybrid) designation.

ACCO Seed, Belmond, Iowa
Acco DC231 (4X) (16)
Acco U334 (3X) (13, 16, 17)
Acco U348 (3X) (1)
Acco U356 (3X) (3, 5)
Acco U370 (3X) (3)
Acco DC394 (4X) (1)
Acco DC441 (4X) (1)
Acco UC1151 (2X) (11, 12)
Acco UC2301 (2X) (6, 8, 9, 10, 14, 15, 16, 17)
Acco UC2901 (2X) (6, 7, 9, 10, 11, 12, 17)
Acco UC3201 (2X) (1, 4, 8, 14, 15)
Acco UC3301 (2X) (2, 3, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16)
Acco UC4201 (2X) (2, 4)
Acco UC4561 (2X) (1, 3, 5)

Adler's Seeds, Inc., Sharpville, Indiana
Adler 23X (2X) (1, 2, 3, 4, 5, 6)
Adler 415 (3X) (1, 2, 3, 4)

Asgrow Seed Co., Des Moines, Iowa
Asgrow RX32 (2X) (11, 12)
Asgrow RX35A (2X) (11, 12)
Asgrow RX42 (2X) (4, 9, 10, 11, 12, 16)
Asgrow RX53 (2X) (4, 9, 10, 16)
Asgrow RX58 (2X) (4, 9, 10)
Asgrow RX64 (2X) (16)
Asgrow 2222 (2X) (4, 9, 10, 16)

Bayless Hybrids, Inc., Bluffton, Indiana
Bayless SX434 (2X) (2, 3)
Bayless SX434-3 (2X) (3, 5)
Bayless SX434M (2X) (2, 3, 5)
Bayless SX447 (2X) (3)
Bayless SX637 (2X) (3)
Bayless SX1795 (2X) (3)

Blaney Farms, Inc., Madison, Wisconsin
Blaney B-AA (2X) (2, 7, 17)
Blaney BX-AA (2X) (2, 5)
Blaney B33A (3X) (6)
Blaney B44A (3X) (6)
Blaney B100 (2X) (17)
Blaney B302 (2X) (2, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Blaney B330 (2X) (17)
Blaney B401 (2X) (5, 6, 8, 11, 12, 13, 14, 15, 16, 17)
Blaney B442 (3X) (16)
Blaney B443 (3X) (16)
Blaney B501A (2X) (2, 4, 17)
Blaney B606 (2X) (1, 2, 3, 4, 5, 6, 8, 9, 10, 13, 14, 15, 16)
Blaney B705 (2X) (3)
Blaney B805 (2X) (3)
Blaney 6616 (3X) (14, 15)
Blaney 7305 (2X) (1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)

Cardinal Seed Co., Quincy, Michigan
Cardinal SX105 (2X) (11, 12, 13, 14, 15, 16)
Cardinal SX112 (2X) (1, 4, 9, 10, 13)

Cargill Seeds, Minneapolis, Minnesota
Cargill 185 (4X) (22)
Cargill 434 (3X) (9, 10)
Cargill 449 (2X) (3)
Cargill 830 (2X) (11, 12, 13, 14, 15)
Cargill 863 (2X) (9, 10, 11, 12, 14, 15)
Cargill 890 (2X) (1, 2, 3, 9, 10)
Cargill 920 (2X) (1, 2, 3, 9, 10)

Cowbell Seeds, Inc., Wayland, Michigan
Cowbell 102 (2X) (4, 6, 7, 8, 16, 17)
Cowbell 4100 (2X) (4, 6, 7, 8, 9, 10, 16, 17)
Cowbell 7300 (2X) (2, 3, 4, 5, 6, 7, 8, 9, 10, 16, 17)
Cowbell 7440 (2X) (3, 4, 5, 7, 8, 9, 10, 16, 17)
Cowbell 7480 (2X) (1, 2, 3, 4, 5, 7, 8, 9, 10, 16)

DeKalb Ag. Research, Inc., DeKalb, Illinois
DeKalb 007 (4X) (18, 20, 21, 22)
DeKalb DK22 (4X) (18, 20, 21, 22)
DeKalb XL10 (2X) (11, 12, 18, 20, 21)
DeKalb XL12 (2X) (1, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17)
DeKalb XL15A (2X) (16)
DeKalb XL16 (2X) (7, 9, 10, 11, 12)
DeKalb XL19 (2X) (2, 9, 10)
DeKalb XL21 (2X) (2, 11, 12)
DeKalb XL21A (2X) (3)
DeKalb XL22 (2X) (3, 4)
DeKalb XL22B (Sp) (7, 14, 15)
DeKalb XL42 (2X) (1, 7, 13, 14, 15)
DeKalb XL43A (2X) (1, 9, 10, 13)
DeKalb XL44 (2X) (2, 3, 4, 13)
DeKalb XL45A (2X) (3, 13)
DeKalb XL310 (3X) (20, 21, 22)
DeKalb XL311 (3X) (16, 20, 21, 22)

E. J. Funk & Sons, Inc., Kentland, Indiana
Super Crost S14A (2X) (18, 19)
Super Crost S25 (2X) (1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16)
Super Crost S27 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)
Super Crost S29 (2X) (1, 2, 3, 9, 10)
Super Crost 1103 (3X) (18, 19)
Super Crost 1610 (2X) (9, 10, 16)
Super Crost 1692 (2X) (6, 7, 9, 10, 11, 12, 13, 14, 15, 16)
Super Crost 1901 (2X) (2, 5, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Super Crost 2572 (2X) (1, 6)
Super Crost 2772 (2X) (1, 2, 7, 8, 9, 10, 13)
Super Crost 2890 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13)
Super Crost 3433 (3X) (1, 2, 3, 6)
Super Crost 4242 (2X) (1, 2, 3, 4, 5)
Super Crost 5440 (2X) (1, 3)

Funk Seeds International, Bloomington, Illinois
Funk G-WX302 (Sp) (2, 3, 4, 7, 9, 10, 16)
Funk G-WX520 (2X) (1, 2, 3)
Funk G-L2384 (Sp) (1, 2, 3, 4, 7, 9, 10, 16)
Funk G-4040 (2X) (14, 15, 17, 18, 19, 20, 21, 22)
Funk G-4082 (3X) (17, 18, 19, 20, 21, 22)
Funk G-4141 (2X) (7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)
Funk G-4195 (3X) (6, 7, 8, 11, 12, 13, 14, 15, 16, 17, 18)
Funk G-4252 (3X) (7, 8, 11, 12, 13, 14, 15, 16, 17)
Funk G-4288 (3X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17)
Funk G-4321 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)
Funk G-4343 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Funk G-4366 (3X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 16)
Funk G-4384A (Sp) (2, 7)
Funk G-4404 (2X) (2, 4, 6)
Funk G-4408 (2X) (1, 2, 3, 4, 5, 6)
Funk G-4444 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Funk G-5048 (4X) (17, 18, 19, 20, 21, 22)
Funk G-5150 (4X) (17, 18, 19)
Funk 26516 (3X) (7, 11, 12, 13, 14, 15, 16, 17)

Garno Seed Co., Deerfield, Michigan
Garno S75X (2X) (14, 15)
Garno S80X (2X) (18)
Garno S85X (2X) (9, 10, 11, 12, 14, 15, 18)
Garno WX91 (2X) (11, 12, 13)
Garno S92 (2X) (11, 12, 14, 15)
Garno S96 (2X) (3)
Garno S110 (2X) (1, 2, 3, 4, 5)

Fred Gutwein & Sons, Inc., Francesville, Indiana
Gutwein 08 (2X) (11, 12, 13, 14, 15)
Gutwein 10A (2X) (11, 12, 13, 14, 15)
Gutwein 23 (2X) (5, 7, 9, 10, 11, 12, 13)
Gutwein 40 (2X) (2, 5, 7, 9, 10, 11, 12, 13, 14, 15)
Gutwein 46 (2X) (2, 5, 7, 9, 10)
Gutwein 48 (2X) (5)
Gutwein 58 (2X) (2)
Gutwein 62 (2X) (2, 5)
Gutwein 69A (2X) (2, 5)
Gutwein 128 (Sp.) (2, 5)

Helena Chemical Co., Charlotte, Michigan
Wil-Star RV32 (2X) (14, 15)
Wil-Star RV38 (2X) (14, 15)
Wil-Star RV43 (2X) (1, 14, 15)
Wil-Star RV50 (2X) (1)
Wil-Star RV55 (2X) (1, 14, 15)

Hulting Hybrids, Geneseo, Illinois
Hulting X310 (2X) (1, 2, 3)
Hulting X322 (2X) (1, 2, 3)
Hulting X537 (2X) (1, 2, 3)
Hulting X770 (2X) (1, 2, 3)
Hulting X6861 (3X) (1, 2, 3)
Hulting X9761 (3X) (2, 3)
Hulting X9770 (3X) (2, 3)
Hulting Exp. 74149 (3X) (1, 2, 3)

Jacques Seed Co., Prescott, Wisconsin
Jacques JX30 (2X) (18)
Jacques JX62 (2X) (4, 7, 17, 18, 19)
Jacques JX67 (2X) (17)
Jacques JX92 (2X) (4, 14, 15)
Jacques JX122A (2X) (1, 2, 4, 11, 12, 14, 15)
Jacques JX177 (2X) (4)
Jacques JX733 (3X) (18)
Jacques JX863 (3X) (19)
Jacques 951 (4X) (19, 20, 21)

Lowe Seed Co., Kankakee, Illinois
Lowe LMS201 (Sp.) (14, 15)
Lowe LSX2TP (2X) (2, 3)
Lowe LTX-2 (3X) (3)

Michigan Crop Improvement Assoc., East Lansing, Michigan
Michigan 200 (4X) (17, 18, 19, 20, 21, 22)
Michigan 2013 (3X) (18, 19, 20, 21, 22)
Michigan 275-2X (2X) (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22)
Michigan 280 (4X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22)
Michigan 2833 (3X) (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22)
Michigan 2853 (3X) (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22)
Michigan 3093 (3X) (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)
Michigan 3102 (2X) (6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)
Michigan 333-3X (3X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)
Michigan 396-3X (3X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21)
Michigan 407-2X (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Michigan 410-2X (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Michigan 4122 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Michigan 5443 (3X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Michigan 572-3X (3X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Michigan 575-3X (3X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)
Michigan 5802 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16)

Michigan Hybrid Seed Co., East Lansing, Michigan
Wolverine 24 (4X) (17, 18)
Wolverine W120 (2X) (17, 18)
Wolverine W128 (2X) (7, 11, 12, 14, 15, 16)
Wolverine W166 (2X) (11, 12, 13, 14, 15, 16)
Wolverine W170 (2X) (1, 2, 7, 9, 10, 13)
Wolverine W174 (2X) (1, 2, 9, 10, 13, 14, 15)
Wolverine W176 (2X) (2, 9, 10)
Wolverine W177 (2X) (1, 2, 9, 10)

Migro Hybrids, Mitchell, Indiana
Migro M-0101 (2X) (4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Migro M-0501 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
Migro M-0601 (2X) (1, 2)
Migro M-1020 (2X) (7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Migro M-1101 (2X) (7)
Migro M-1130 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Migro M-1212 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Migro M-3020 (4X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10)
Migro M-4501 (2X) (1, 2, 3, 4, 5, 6)
Migro M-5040 (4X) (1, 2, 3, 4, 5, 6)
Migro M-6666 (2X) (2, 3)

Muncy Chief Hybrids, Muncy, Pennsylvania
Muncy Chief H-304 (4X) (13)
Muncy Chief H-401 (4X) (13)
Muncy Chief SX442 (2X) (2, 9, 10, 13)
Muncy Chief SX550 (2X) (2, 9, 10, 13)
Muncy Chief SX662 (2X) (2, 9, 10)
Muncy Chief H764 (4X) (9, 10)
Muncy Chief SX878 (2X) (9, 10)

Northrup King & Co., Minneapolis, Minnesota
Northrup King PX20 (2X) (3, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 20, 21)
Northrup King PX25 (2X) (20, 21)
Northrup King PX32 (2X) (1, 2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Northrup King PX46 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
Northrup King PX48 (2X) (1, 3, 4, 6, 9, 10, 13, 14, 15, 17)
Northrup King PX50A (2X) (1, 2, 3, 4, 6, 11, 12, 13)
Northrup King PX65 (2X) (1, 2, 3, 4, 5, 6)
Northrup King PX74 (2X) (3, 4, 4, 5)
Northrup King 105 (3)
Northrup King KE408 (4X) (22)
Northrup King PX418 (3X) (14, 15)
Northrup King PX420 (3X) (20, 21, 22)
Northrup King PX442 (3X) (19, 20, 21)
Northrup King PX446 (3X) (17, 20, 21)
Northrup King PX476 (3X) (17)
Northrup King PX529 (3X) (7, 11, 12, 13, 14, 15, 16)
Northrup King PX545 (3X) (2)
Northrup King PX606 (3X) (3, 6)
Northrup King PX610A (3X) (2, 3, 5)
Northrup King PX614 (3X) (1, 5)
Northrup King KC3 (4X) (22)

O's Gold Seed Co., Parkersburg, Iowa
O's Gold SX1100 (2X) (1, 5, 13, 14, 15)
O's Gold SX1101 (2X) (1, 13)
O's Gold SX2102 (2X) (5)
O's Gold SX2145 (2X) (1, 13)
O's Gold 3104 (3X) (1)

OYO Seed Associates, Inc., Marysville, Ohio
OYO 220 (2X) (1, 2)
OYO333 (2X) (1, 2)

P.A.G. Seeds, Minneapolis, Minnesota
P.A.G. SX67 (2X) (5, 8, 11, 12, 14, 15)
P.A.G. SX69 (2X) (3, 5, 9, 10, 11, 12, 14, 15, 16)
P.A.G. SX121 (2X) (20, 21)
P.A.G. SX177 (2X) (9, 10, 11, 12, 14, 15)
P.A.G. SX210 (2X) (8, 9, 10, 11, 12, 14, 15)

(Continued)

TABLE 23. (Continued)

P.A.G. SX397 (2X) (1, 3, 9, 10)
 P.A.G. SX424 (2X) (1, 3, 5, 9, 10)
 P.A.G. 7120 (20, 21)
 P.A.G. 7317 (3X) (8)

Roy Parker & Sons, Inc., Kimmell, Indiana
 Parker 36A (2X) (6)
 Parker 50 (2X) (3)
 Parker 260 (3X) (3)

Payco Hybrids, Dassel, Minnesota
 Payco SX465 (2X) (13)
 Payco SX775N (2X) (13)

Pioneer Hi-Bred, Inc., Tipton, Indiana
 Pioneer 3516 (2X) (2)
 Pioneer 3518 (Sp.) (1, 2, 3, 4, 5, 13, 14, 15)
 Pioneer 3529 (Sp.) (1, 2, 3, 4, 5)
 Pioneer 3535 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 15, 16)
 Pioneer 3663 (4X) (20, 21, 22)
 Pioneer 3716 (3X) (1, 2, 3, 4, 5, 6, 7, 16)
 Pioneer 3773 (2X) (2, 3, 13)
 Pioneer 3780 (2X) (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
 Pioneer 3784 (2X) (1, 7, 11, 12, 14, 15)
 Pioneer 3785 (2X) (16)
 Pioneer 3797 (3X) (19)
 Pioneer 3853 (4X) (17)
 Pioneer 3955 (3X) (11, 12, 13, 16, 17, 18)
 Pioneer 3965A (2X) (11, 12, 17, 19)
 Pioneer 3958 (2X) (11, 12, 13, 16, 17, 19)
 Pioneer 3965 (3X) (11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22)
 Pioneer 3977 (3X) (17, 18, 19, 20, 21)

Prairie Stream Farms, Inc., Frankfort, Indiana
 Prairie Stream SX3 (2X) (5)
 Prairie Stream SX3A (2X) (5)

Pride Seed, Inc., Coldwater, Michigan
 Pride R102 (3X) (22)
 Pride R103 (3X) (18, 20, 21)
 Pride 137 (4X) (20, 21)
 Pride R144 (3X) (18, 20, 21)
 Pride R173 (3X) (18)
 Pride R290 (2X) (16)
 Pride R407 (2X) (3)
 Pride 2264 (2X) (8, 14, 15)
 Pride 3315 (2X) (8, 11, 12, 14, 15)
 Pride 4404 (2X) (11, 12, 13, 14, 15, 16)
 Pride 5525 (2X) (1, 2, 3, 4, 5, 6, 9, 10, 13)
 Pride 5574 (2X) (3, 5, 6)
 Pride 6694 (2X) (1, 3)
 Pride 7715 (2X) (1, 2, 3)

Renk Seed Co., Sun Prairie, Wisconsin
 Renk RK2 (2X) (9, 10)
 Renk RK6 (2X) (3, 9, 10)
 Renk RK11AA (2X) (3, 7, 9, 10)
 Renk RK16 (2X) (3, 9, 10)
 Renk RK44 (2X) (3, 9, 10)
 Renk RK66 (2X) (3)

Security Seed Co., Williamsburg, Iowa
 Security SS97 (2X) (11, 12, 13, 14, 15)
 Security SS105 (2X) (1, 2, 3, 5, 9, 10, 11, 12, 13, 14, 15, 16, 17)
 Security SS105-WX (2X) (9, 10)
 Security SS108 (2X) (1, 2, 3, 9, 10)

Sommer Bros. Seed Co., Pekin, Illinois
 Golden Harvest H-2220 (3X) (20, 21)
 Golden Harvest H-2290 (3X) (1, 3, 5, 6, 7, 9, 10, 13, 14, 15, 20, 21)
 Golden Harvest H-2355 (2X) (1, 3, 5, 6, 7, 9, 10, 13, 14, 15, 20, 21)
 Golden Harvest H-2340 (2X) (20, 21)
 Golden Harvest H-2400 (3X) (1, 6, 14)
 Golden Harvest H-2420 (2X) (1, 3, 5, 6, 7, 9, 10, 13, 14, 15)
 Golden Harvest H-2450 (2X) (1, 3, 5, 6, 7, 9, 10, 13, 14, 15)
 Golden Harvest H-2500 (2X) (3, 5, 6, 7, 9, 10, 14, 15)

Stewart Seed Ltd., Ailsa Craig, Ontario, Canada
 Stewart 38 (3X) (19, 22)
 Stewart 255 (2X) (18, 20, 21)
 Stewart 2300 (2X) (20, 21)
 Stewart 2501 (2X) (18, 20, 21)
 Stewart 2914 (2X) (11, 12, 13, 14, 15, 17)
 Stewart 2-3001 (2X) (11, 12, 14, 15)
 Stewart 2-3102 (2X) (7, 8, 9, 10, 11, 12, 13, 14, 15)
 Stewart 3-3301 (3X) (4, 9, 10)
 Stewart 3505 (3X) (18, 20, 21)
 Stewart 3701 (3X) (19, 22)

Todd Hybrid Com. Co., Burlington, Indiana
 Todd MX33 (3X) (2, 3)
 Todd M50 (2X) (2, 3)
 Todd M30 (2X) (2, 3)
 Todd M58 (2X) (2, 3)

Trojan Seed Co., Madison, Wisconsin
 Trojan TX70 (3X) (18, 20, 21)
 Trojan TX85 (3X) (6, 18)
 Trojan TXS85 (2X) (14, 15, 18)
 Trojan TXS94 (2X) (6, 11, 12, 14, 15)
 Trojan TXS99 (2X) (7, 9, 10, 14, 15, 17)
 Trojan TX100 (3X) (14, 15)
 Trojan TXS102 (2X) (1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13, 14, 15)
 Trojan TXS102A (2X) (6)
 Trojan TXS105A (2X) (7, 9, 10, 13)
 Trojan TXS108A (2X) (2)
 Trojan TXS113 (2X) (1, 2, 3, 5)

Voris Seeds Inc., Windfall, Indiana
 Voris V2402 (2X) (1, 3, 7)
 Voris V2422 (2X) (6)
 Voris V2442 (2X) (5, 9, 10)
 Voris V2452 (2X) (6, 7)
 Voris V2482 (2X) (1)
 Voris V2532 (2X) (1, 3, 5, 9, 10)

Warwick Seed Co., Ltd., Blenheim, Ontario, Canada
 Warwick TX17 (3X) (20, 21)
 Warwick TX20 (3X) (20, 21)
 Warwick TX27 (3X) (9, 10)
 Warwick TX32 (3X) (2, 9, 10)
 Warwick SL207 (2X) (20, 21)
 Warwick SL209 (2X) (20, 21)
 Warwick SL314 (2X) (9, 10)
 Warwick SL501 (Sp) (2, 9, 10)
 Warwick SL601 (2X) (2)

Wyckoff Hybrids, Inc., Valparaiso, Indiana
 Wyckoff 1266SX (2X) (2, 6)
 Wyckoff 2414SX (2X) (2, 3, 6)
 Wyckoff 3537SX (2X) (2, 3)

