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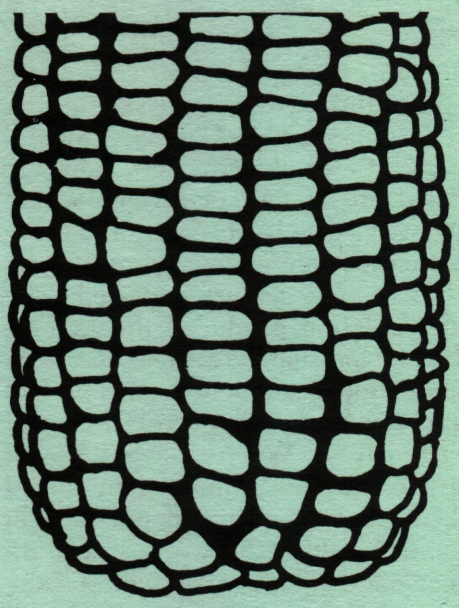

Michigan Corn Production

HYBRIDS COMPARED 1979

Cooperative Extension Service
Michigan State University

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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.

Highest yielding corn hybrids in the 1978 trials produced 28 bushels more corn per acre than the average of 410 hybrids tested and 59 bushels more than the lowest yield hybrids tested (Table A). The respective yields were 140, 112, and 81 for the highest, average and lowest yielding hybrids at the 19 testing locations. The driest hybrids at harvest contained 5% less moisture than the average and 11% less moisture than the wettest hybrids tested. Stalk breakage averaged 10%, 2% and 0% for hybrids with highest, average and lowest amounts of stalk lodging.

Corn Maturity Zones and Locations (★) of Trials

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 26 presents an idex of all hybrids entered in the 1978 trials. 410 hybrids were tested as 2,061 entries at 19 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), modified single-cross hybrids with (MSX) and special cross hybrids with (Sp) following the hybrid name and number in the tables.

Michigan experimental hybrids are not listed unless seed is 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 corn planter adapted for small plots.

From seed packaging through harvest and data processing, each hybrid was indentified 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, Alpena, Alger and Menominee Counties trials (Tables 10, 12, 15, 20, 22, 23 and 25). The Sanilac County silage trial was on a different farm than the grain trial. Hail destroyed the Alger County trial in mid-summer and it was not harvested. Data in Table 23 are 1977, 1976, 1975 results.

Irrigated and non-irrigated comparisons were made in the Montcalm County Trial (Table 17). 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 (15,500 to 27,600) were tested at 17 locations (Table B). Hybrid x population interactions were not significant, so only the averages are reported. The 19,100 average population produced the highest yield at 13 of the 17 locations. The four locations where 23,300 population gave the highest yield had high yield levels (170+ bushels per acre) and two of these were irrigated trials. When averaged for all locations, 19,300 average plant population produced 16.0, 2.8 and 10.7 bushels more than populations of 15,500, 23,300 and 27,600 respectively. Moisture content of grain averaged .3% to 1.1% more for the higher populations. There was a noticeable trend toward increased stalk lodging as plant population was increased.

Planting of all trials was completed between April 26 and May 20. About 75% of the state acreage was planted by the end of May. This was about normal but compares with 95% planted in 1977. Plant height averaged 14 inches by June 24 compared to 13 inches for the 5-year average and 10 inches in 1977. On July 24, plant height averaged 56 inches, 17 inches taller than normal. Half of the crop had silked by July 31 compared to 80% in 1977.

Moisture stress developed by late July and continued through August at most locations. The state crop was 75% dented by September 11 compared with 85% in 1977 and 70% normally. Rains during the last half of September were too late to help corn yields. Harvest conditions during most of October were excellent, and corn dried rapidly in the field. Moisture content of grain at harvest was lower than usual for Michigan. Practically all corn was mature before killing frosts occurred. 85% of the crop was harvested by mid November compared to 60% in 1977 and 75% normally.

The Michigan Crop Reporting Service estimates that a total of 2.6 million acres were planted to corn, 2,150,000 for grain harvest and 450,000 for silage production. The average yield was 82 bushels per acre compared to the record high of 85 in 1977, 69 in 1976, 80 in 1975, 63 in 1974, 79 in 1973 and 83 in 1972. The total crop is estimated at 176 million bushels, down 8% from the 1977 record crop.

HOW TO USE THIS BULLETIN

One-, two- and three-year averages are presented for all hybrids tested during 1978, 1977 and 1976.

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 of silage yields.
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 chopped silage (fodder plus grain) 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. Differences among hybrids in rate of drying in the field also affect moisture content at harvest but usually do 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 chosing hybirds 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 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 1979

The following recommendations will help avoid moldy corn in 1979:

1. Plant early.
2. Plant early to medium-early maturing hybrids.
3. Harvest early — during October. Weather problems and harvest losses increase with later harvest.
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 1979

A good supply of high-quality hybrid seed corn is available for 1979 planting. Most of the seed-producing areas had a fair to good growing season with no early killing frost and good harvest conditions.

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Table A. Average, highest and lowest moisture content, grain yield and stalk lodging at 19 locations in 1978.

Location	No. of Hybrids	% Moisture			Bushels Per Acre			% Stalk Lodging		
		Ave.	Highest	Lowest	Ave.	Highest	Lowest	Ave.	Highest	Lowest
Monroe	106	19.5	22.7	16.7	106.0	127.6	83.3	0.7	19.8	0.7
Hillsdale	95	23.6	30.9	19.1	100.5	128.6	73.6	1.1	6.6	0.0
Branch	108	20.6	23.9	17.3	143.7	173.9	89.7	0.8	14.0	0.0
Kalamazoo	62	20.8	26.7	17.1	124.3	146.9	96.7	0.5	4.8	0.0
Cass-upland irrigated	112	19.5	22.6	17.1	160.5	192.6	104.2	3.9	13.0	0.0
Cass-muck soil	82	22.6	27.3	17.8	121.3	154.3	97.0	2.0	7.5	0.0
Kent	74	22.6	25.9	18.4	148.9	180.0	110.7	0.6	4.4	0.0
Ottawa	61	25.4	30.9	20.1	134.4	163.3	106.9	0.7	4.1	0.0
Ingham	124	26.7	32.6	19.1	114.1	147.2	82.2	0.2	2.1	0.0
Sanilac	118	27.0	34.3	20.6	99.6	124.8	77.4	0.0	0.8	0.0
Saginaw	118	21.6	29.3	18.3	111.8	134.7	83.4	3.8	13.7	0.0
Huron	113	21.8	30.3	17.4	112.1	133.8	76.1	1.4	6.5	0.0
Isabella	71	22.3	26.5	18.7	104.9	135.1	73.1	1.2	5.4	0.0
Montcalm-irrigated	73	22.2	29.1	18.5	143.6	186.0	91.5	5.1	13.5	0.0
Montcalm-not irrigated	73	22.2	29.1	18.5	88.2	112.3	61.1	2.5	9.0	0.0
Mason	57	25.7	31.2	20.4	83.8	108.7	58.1	0.2	2.6	0.0
Grand Traverse	61	26.4	32.6	21.0	74.7	96.4	60.2	1.7	5.4	0.0
Alpena	54	39.9	47.1	29.5	91.8	113.9	67.3	1.6	7.3	0.0
Menominee	47	34.6	50.4	22.7	66.5	92.4	44.8	8.8	42.3	0.7
Average		24.6	30.8	19.4	112.1	139.6	80.9	1.9	9.6	0.1

Table B. Average grain yield, % moisture and stalk lodging at four plant populations for 17 locations in 1978.

Location	Bushels Per Acre				% Moisture in Grain				% Stalk Lodging			
	15,500	19,100	23,300	27,600	15,500	19,100	23,300	27,600	15,500	19,100	23,300	27,600
Monroe	110.0	117.2	113.1	102.5	18.8	19.0	19.0	19.4	0.5	0.4	2.4	5.9
Hillsdale	104.7	121.6	118.3	111.8	23.5	23.4	23.9	24.2	1.1	1.6	3.0	6.6
Branch	149.5	163.6	169.1	152.3	20.8	20.9	21.3	21.4	0.7	3.9	6.2	8.1
Kalamazoo	117.4	137.2	130.5	121.8	21.1	21.4	21.9	22.0	0.0	0.8	2.1	5.2
Cass-upland irrigated	151.9	177.6	188.7	178.9	19.8	19.7	20.4	20.8	2.2	4.1	5.7	8.4
Cass-muck soil	116.3	137.2	130.6	119.3	23.1	23.4	23.9	24.5	1.5	2.7	4.8	5.5
Kent	145.5	166.6	170.3	159.7	22.9	23.3	23.7	24.2	0.0	1.5	3.9	7.1
Ottawa	140.1	157.5	153.6	145.9	25.1	25.0	25.7	26.0	0.0	2.0	3.4	6.3
Ingham	120.3	138.9	132.1	128.5	25.8	26.2	26.3	26.9	0.0	0.0	2.5	4.8
Sanilac	110.2	126.7	117.3	111.5	26.6	27.0	27.3	28.0	0.0	0.8	1.9	4.1
Saginaw	120.4	135.1	130.4	126.8	21.9	22.2	22.4	22.5	0.7	3.4	4.2	7.3
Huron	119.6	130.3	125.4	118.3	22.1	22.2	22.8	23.1	1.5	3.9	4.1	6.8
Isabella	116.3	129.7	120.2	114.3	22.0	22.4	22.4	22.9	1.4	1.5	3.6	4.8
Montcalm-irrigated	146.3	163.7	174.6	165.1	22.7	23.0	23.7	24.2	4.7	7.1	9.0	10.4
Montcalm-not irrigated	91.8	109.5	100.4	94.3	23.0	23.3	24.0	24.5	2.0	3.7	5.9	7.5
Mason	90.3	102.6	97.5	91.4	25.4	26.0	26.3	26.8	0.0	0.8	1.5	3.3
Grand Traverse	85.3	94.2	89.5	84.1	25.3	25.6	26.0	26.3	1.3	2.2	3.2	7.0
Average	119.8	135.8	133.0	125.1	22.9	23.2	23.6	24.0	1.0	2.4	4.0	6.4

Table 1 SOUTHERN MICHIGAN Zone 1

Monroe County Trial

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 3093(3X)	16.7	19	20	100.5	116	112	9.4	6	5
Michigan 333-3X(3X)	16.7	18	19	108.3	109	110	4.0	4	4
*Pioneer 3901(2X)	17.0	19	--	119.3	127	---	3.9	2	-
*Amcorn 7480(2X)	17.0	21	22	117.2	126	121	3.8	2	2
Migro M-0101(2X)	17.1	19	--	113.0	115	---	8.6	4	-
*Michigan 3102 (2X)	17.2	19	20	116.2	124	118	5.8	4	4
Dennis DS90(2X)	17.2	19	--	96.8	102	---	4.9	4	-
Jacques JX92(2X)	17.3	--	--	90.9	---	---	10.9	-	-
OYO 110(2X)	17.3	--	--	99.8	---	---	5.8	-	-
Migro M-0105(2X)	17.6	19	--	98.1	113	---	5.8	4	-
Pioneer 3780(2X)	17.8	20	22	105.0	128	128	8.2	6	5
Andersons SSE(2X)	17.8	20	--	101.1	135	---	6.7	4	-
Michigan 407-2X(2X)	17.8	20	21	109.6	124	123	8.2	5	5
Garno S-82(2X)	17.9	20	--	101.6	110	---	5.4	3	-
Michigan 3953(3X)	17.9	20	--	99.3	119	---	9.0	6	-
Andersons SSM(2X)	17.9	21	--	84.9	123	---	8.0	4	-
Andersons AX-4(Sp.)	18.0	20	--	100.9	126	---	4.4	7	-
Cargill 838 (2X)	18.0	--	--	96.4	---	---	5.5	-	-
Northrup King PX37(2X)	18.0	--	--	109.8	---	---	5.5	-	-
Jacques JX52(2X)	18.1	--	--	100.0	---	---	3.8	-	-
Farmers FCC277(2X)	18.1	--	--	105.7	---	---	4.8	-	-
Michigan 5443(3X)	18.1	20	22	103.4	125	121	8.9	7	6
Blaney B606E(2X)	18.3	21	--	107.9	127	---	2.5	1	-
*Payco 775(2X)	18.3	20	--	126.9	132	---	2.2	2	-
Funk G-4430(2X)	18.3	20	--	104.6	128	---	4.6	2	-
*O's Gold SX1107(2X)	18.3	--	--	126.2	---	---	4.9	-	-
*Pioneer X5711(2X)	18.4	--	--	127.6	---	---	2.9	-	-
Super Coost 2470(2X)	18.4	20	22	107.4	122	118	5.6	3	3
Michigan 4122(2X)	18.4	20	22	105.4	126	124	5.8	3	4
O's Gold SX1100(2X)	18.4	--	--	110.7	---	---	6.2	-	-
Dairyland DX 1007(2X)	18.4	--	--	110.5	---	---	13.2	-	-
Payco 737(2X)	18.4	--	--	102.3	---	---	5.3	-	-
Garno S-95X (2X)	18.4	--	--	101.7	---	---	3.1	-	-
Michigan 5802(2X)	18.5	21	22	111.3	130	131	6.0	5	5
P-A-G SX 189(2X)	18.6	--	--	84.0	---	---	8.5	-	-
Northrup King PX46(2X)	18.6	21	--	106.6	134	---	5.0	3	-
Cardinal SX 112 (2X)	18.7	--	--	92.2	---	---	6.7	-	-
USS 0011 (2X)	18.8	21	--	86.0	111	---	9.4	5	-
Golden Harvest H-2445 (MSX)	18.8	--	--	106.6	---	---	4.6	-	-
Renk RK66(2X)	18.8	21	--	97.7	109	---	7.7	4	-
Stanton 10100 (2X)	18.8	--	--	112.3	---	---	10.1	-	-
Pioneer 3541 (2X)	18.8	--	--	111.2	---	---	0.7	-	-
Cargill 863 (2X)	18.8	--	--	104.8	---	---	6.2	-	-
Northrup King PX 45 (2X)	18.9	--	--	98.2	---	---	7.7	-	-
*Amcorn 7300 (2X)	18.9	21	23	119.1	127	126	6.8	5	5
Northrup King PX585 (3X)	18.9	21	--	100.3	128	---	4.4	2	-
Payco 844 (2X)	18.9	--	--	107.3	---	---	7.6	-	-
Blaney 3606 (2X)	19.0	21	22	108.9	128	117	1.6	1	2
OYO 275 (2X)	19.0	--	--	96.2	---	---	8.5	-	-
Trojan T1108 (MSX)	19.1	--	--	88.2	---	---	3.6	-	-
Northrup King PX49(2X)	19.1	--	--	115.0	---	---	9.4	-	-
*Jacques JX 177 (2X)	19.1	--	--	121.2	---	---	4.2	-	-
Dairyland DX1008(2X)	19.1	21	--	83.3	109	---	14.3	7	-
Michigan 5912 (2X)	19.1	21	--	115.8	140	---	5.8	4	-
Pioneer 3591 (Sp.)	19.2	21	--	96.0	119	---	0.8	1	-
Gold Tag X-770 (2X)	19.2	21	23	110.4	126	120	3.0	3	5
Voris V2472 (2X)	19.3	--	--	89.2	---	---	4.1	-	-
Acco UC 3002 (2X)	19.3	21	--	98.5	121	---	7.5	7	-
Dennis DS6 (2X)	19.3	21	--	114.3	129	---	3.1	3	-
Blaney B703 (2X)	19.3	22	--	110.2	121	---	1.5	1	-
Acco UC 2851 (2X)	19.3	--	--	106.1	---	---	15.7	-	-
Stanton 1095 (2X)	19.4	--	--	104.1	---	---	14.9	-	-
Migro M-2018X (2X)	19.4	21	--	94.4	122	---	3.0	2	-
Blaney AA-WX (2X)	19.4	--	--	99.0	---	---	7.0	-	-
DeKalb XL54 (2X)	19.4	--	--	93.8	---	---	2.5	-	-
*Super Crost 3585(Sp.)	19.5	--	--	116.9	---	---	7.1	-	-
Andersons AX-5 (Sp.)	19.5	21	--	87.8	122	---	10.7	6	-
Super Crost 2350(2X)	19.5	21	22	104.1	109	115	6.1	4	3
*Golden Harvest H-2450 (2X)	19.6	21	22	119.6	123	125	6.4	3	3
Migro M-2022X (2X)	19.8	21	--	100.5	127	---	2.2	4	-
Farmers FCC 224 (2X)	19.8	--	--	94.1	---	---	2.2	-	-

(Continued)

Table 1 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
*Michigan 5922 (2X)	19.8	--	--	122.2	---	---	1.6	-	-
Dennis DS47A (2X)	20.0	22	--	107.4	127	---	10.7	5	-
Gold Tag 2060 (2X)	20.0	--	--	97.1	---	---	5.3	-	-
USS 0010 (2X)	20.1	22	--	104.5	117	---	7.4	4	-
OYO 125 (3X)	20.1	--	--	83.7	---	---	3.9	-	-
Wolverine W174 (2X)	20.2	22	23	94.3	124	116	2.4	1	2
Pioneer 3535 (2X)	20.2	22	23	95.1	127	125	1.5	1	2
Super Crost 2880(2X)	20.4	--	--	107.7	---	---	6.5	-	-
Funk G-4444 (2X)	20.4	21	23	106.7	122	118	3.7	4	5
Garno S-100 (2X)	20.4	23	23	107.7	126	123	6.7	3	4
*Golden Harvest H-2600 (2X)	20.4	24	--	119.0	137	---	1.4	1	-
P-A-G SX 249 (2X)	20.4	--	--	109.8	---	---	15.6	-	-
*Voris V2422 (2X)	20.5	--	--	117.4	---	---	7.4	-	-
Super Crost 4350(2X)	20.6	23	24	109.4	123	123	6.8	3	2
Dennis DS36 (2X)	20.6	--	--	109.8	---	---	5.5	-	-
Pride 5578 (2X)	20.6	--	--	100.8	---	---	5.8	-	-
Dairyland DX1010X(2X)	20.7	--	--	111.3	---	---	4.2	-	-
Jacques JX 174 (2X)	20.8	--	--	113.1	---	---	16.0	-	-
Northrup King PX 65 (2X)	20.8	23	--	100.3	133	---	1.5	2	-
Blaney B601-WX (2X)	20.9	22	--	95.0	118	---	19.8	14	-
Migro M-0301 (2X)	21.0	23	26	100.4	126	125	11.1	7	5
Acco UC3301A (2X)	21.0	23	--	109.6	132	---	7.2	7	-
Cargill 942 (2X)	21.3	--	--	100.9	---	---	6.4	-	-
Pride 7715 (2X)	21.4	24	25	112.4	137	126	4.0	3	2
Northrup King PX69 (2X)	21.4	--	--	98.5	---	---	4.3	-	-
Migro M-0505 (2X)	21.5	24	26	109.7	140	140	2.5	2	2
Dennis DS37E (2X)	21.5	24	25	108.9	127	128	6.2	4	3
Blaney B805 (2X)	21.6	24	25	100.5	133	136	6.0	3	4
Voris V2532 (2X)	21.9	24	26	100.3	137	133	1.5	1	1
Funk G-4507 (2X)	22.1	24	--	113.2	140	---	2.3	1	-
Northrup King PX74 (2X)	22.1	--	--	104.9	---	---	1.4	-	-
Super Crost 5440(2X)	22.2	24	26	108.1	137	129	3.9	2	1
Golden Harvest H-2500 (2X)	22.2	25	26	109.1	141	131	0.7	0	1
Trojan TXS115A (2X)	22.4	25	--	106.3	133	---	5.7	3	-
Renk RK77 (2X)	22.6	25	--	107.7	138	---	9.1	6	-
*Payco 990 (2X)	22.7	23	--	125.2	139	---	3.1	3	-
Average	19.5	21	23	106.0	125	124	6.1	4	3
Range	16.7 to 22.7	18 to 25	19 to 26	83.3 to 127.6	102 to 141	110 to 140	0.7 to 19.8	0 to 14	1 to 6
Least significant difference	0.9	0.7	0.7	10.1	7	5			

Significantly better than average yield in 1978.

	1978	1977	1976
Planted	*May 2*	*April 21*	*May 14*
Harvested	*October 24*	*October 18*	*October 26*
Soil type	*Pewamo loam*	*Pewamo loam*	*Pewamo loam*
Previous Crop	*Soybeans*	*Corn*	*Wheat*
Population	*19,300*	*18,200*	*18,900*
Rows	*30"*	*30"*	*30"*
Fertilizer	*213-147-147*	*235-180-180*	*233-158-158*
Soil test: pH	*6.7*	*6.7*	*6.5*
P	*111 (very high)*	*207 (very high)*	*214 (very high)*
K	*260 (high)*	*174 (medium)*	*217 (high)*

Farm Cooperator: Orville Montri, LaSalle

County Extension Director: Paul Nevel, Monroe

Table 2 SOUTHERN MICHIGAN Zone 2

Hillsdale County Trial

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 3093 (3X)	19.1	19	20	73.6	79	88	1.7	1	3
Michigan 333-3X (3X)	19.4	20	20	95.8	92	98	0.0	0	1
Migro M-0101 (2X)	19.7	21	--	74.1	87	--	0.0	0	-
Michigan 3102 (2X)	20.3	21	22	102.7	98	102	0.8	0	2
Andersons SSE (2X)	20.5	--	--	106.2	--	--	0.0	-	-
Stanton 1095 (2X)	20.6	--	--	84.0	--	--	6.6	-	-
*Michigan 3953 (3X)	21.0	22	--	115.7	106	--	0.0	0	-
Warwick SL501 (Sp.)	21.2	22	23	98.8	99	99	0.0	0	1
P-A-G SX189 (2X)	21.3	--	--	99.5	--	--	0.0	-	-
*Gutwein 112 (3X)	21.4	--	--	114.8	--	--	0.0	-	-
Trojan TXS94 (2X)	21.6	--	--	111.6	--	--	2.5	-	-
Acco UC2951 (2X)	21.6	--	--	81.0	--	--	0.0	-	-
*Dairyland DX 1005(2X)	21.7	--	--	116.9	--	--	0.0	-	-
Pioneer 3901 (2X)	21.7	--	--	109.9	--	--	0.0	-	-
*Blaney B506 (2X)	21.8	23	--	123.0	120	--	0.0	0	-
Northrup King PX45 (2X)	21.9	--	--	109.2	--	--	1.5	-	-
Jacques JX 124A (2X)	22.1	23	--	95.6	95	--	0.7	0	-
Michigan 407-2X (2X)	22.1	22	23	102.1	101	108	0.0	0	2
Migro M-2022X (2X)	22.3	24	--	95.3	101	--	2.2	1	-
Warwick W966 (Sp.)	22.4	--	--	84.6	--	--	0.0	-	-
Northrup King PX49(2X)	22.4	--	--	104.9	--	--	2.2	-	-
*Super Crost 2350 (2X)	22.6	23	--	113.3	115	--	0.7	1	-
Jacques JX 122A (2X)	22.7	--	--	103.5	--	--	0.0	-	-
Farmers FCC 224 (2X)	22.8	--	--	91.3	--	--	2.3	-	-
Michigan 4122 (2X)	22.8	23	24	99.3	106	114	0.8	0	1
Northrup King PX585 (3X)	22.9	23	--	110.4	111	--	0.7	0	-
Andersons AX-4 (Sp.)	22.9	--	--	105.3	--	--	2.2	-	-
Stanton 10100 (2X)	22.9	--	--	90.5	--	--	3.5	-	-
Pioneer 3780 (2X)	22.9	23	24	105.6	102	108	0.0	0	3
Funk G-4323 (MSX)	22.9	--	--	95.2	--	--	1.5	-	-
*OYO 275 (2X)	22.9	--	--	116.7	--	--	0.0	-	-
Dairyland DX1008 (2X)	22.9	--	--	94.5	--	--	0.0	-	-
Andersons AX-5 (Sp.)	23.0	--	--	86.2	--	--	0.7	-	-
Pride 5578 (2X)	23.0	--	--	91.6	--	--	2.9	-	-
OYO 125 (3X)	23.0	--	--	83.7	--	--	0.0	-	-
O's Gold SX1100 (2X)	23.0	--	--	85.4	--	--	2.9	-	-
Amcorn 7480 (2X)	23.0	25	26	101.3	97	109	0.0	0	2
Andersons SSM (2X)	23.1	--	--	104.4	--	--	0.7	-	-
*Gold Tag X-770 (2X)	23.1	25	26	123.6	122	122	1.5	1	2
Michigan 5443 (3X)	23.1	24	25	109.4	110	115	1.8	1	2
*Amcorn 7300 (2X)	23.1	24	24	122.1	114	114	2.2	1	4
*Super Crost 2470 (2X)	23.1	24	26	117.4	117	113	0.0	0	1
*Blaney B501A (2X)	23.2	--	--	116.0	--	--	0.0	-	-
Michigan 5802 (2X)	23.2	24	25	111.6	109	116	2.4	1	1
Gutwein 2250 (2X)	23.3	--	--	91.1	--	--	3.0	-	-
*DeKalb XL42 (2X)	23.3	24	25	124.9	118	123	5.7	3	4
Gold Tag 2060 (2X)	23.3	--	--	94.2	--	--	0.0	-	-
Bayless SX434M (2X)	23.4	24	25	101.2	105	112	0.8	0	1
OYO 110 (2X)	23.4	--	--	96.0	--	--	1.5	-	-
Funk G-4321A (2X)	23.4	24	26	90.4	101	110	1.6	2	2
P-A-G SX249 (2X)	23.5	--	--	109.4	--	--	0.0	-	-
Cargill 838 (2X)	23.5	--	--	95.5	--	--	0.7	-	-
Migro M-0105 (2X)	23.6	24	--	86.2	91	--	0.0	0	-
DeKalb XL 54 (2X)	23.7	--	--	91.8	--	--	0.0	-	-
Blaney B-AA-WX (2X)	23.7	--	--	93.8	--	--	1.6	-	-
Blaney B601-WX (2X)	23.7	25	--	86.5	94	--	2.4	1	-
Migro M-2018X (2X)	23.8	25	--	104.2	112	--	0.0	0	-
*Northrup King PX48 (2X)	23.8	25	26	115.6	115	111	2.4	1	2
Gutwein 22 (2X)	23.9	25	--	94.9	93	--	2.9	1	-
Blaney B606 (2X)	23.9	24	26	96.9	103	112	0.0	0	1
*Michigan 5912 (2X)	23.9	25	--	121.2	118	--	2.0	1	-
Super Crost 3585 (Sp.)	23.9	--	--	94.4	--	--	5.0	-	-
Warwick W1101 (2X)	23.9	24	--	84.6	89	--	0.0	0	-
Super Crost 2880 (2X)	24.1	--	--	94.9	--	--	0.8	-	-
Dairyland DX 1007(2X)	24.1	--	--	110.2	--	--	0.0	-	-
Migro M-0301 (2X)	24.3	25	26	111.1	108	104	0.0	0	1
*Michigan 5922 (2X)	24.3	--	--	125.7	--	--	0.0	-	-
*Northrup King PX37 (2X)	24.3	--	--	128.6	--	--	2.9	-	-
Jacques JX 177 (2X)	24.4	--	--	90.7	--	--	0.0	-	-
Farmers FCC 277 (2X)	24.5	--	--	89.3	--	--	0.0	-	-

(Continued)

Table 2 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Pioneer 3709 (Sp.)	24.6	25	26	102.0	103	113	0.0	0	1
*Funk G-4430 (2X)	24.6	25	--	116.5	122	--	1.5	1	-
Pioneer 3535 (2X)	24.7	25	26	112.0	103	112	0.0	0	0
*Gutwein 46 (2X)	24.7	25	27	115.9	111	117	0.0	0	1
Northrup King PX69 (2X)	24.9	--	--	86.4	--	--	2.4	-	-
Acco UC4201 (2X)	25.0	--	--	92.3	--	--	0.7	-	-
Migro M-4501 (2X)	25.0	26	27	108.5	114	122	1.4	0	4
Northrup King PX65 (2X)	25.1	27	--	86.2	97	--	1.5	1	-
Pioneer 3541 (2X)	25.1	--	--	84.7	--	--	2.9	-	-
Blaney B703 (2X)	25.3	26	--	83.3	97	--	0.0	0	-
Gutwein 2340 (2X)	25.4	--	--	108.0	--	--	0.0	-	-
USS 1010 (2X)	25.4	--	--	111.6	--	--	0.8	-	-
Cargill 924 (2X)	25.6	--	--	86.9	--	--	4.4	-	-
Pride 5525 (2X)	25.9	25	--	100.0	107	--	0.0	0	-
O's Gold 104B	26.0	--	--	94.8	--	--	0.0	-	-
*Super Crost 4350 (2X)	26.2	27	28	118.9	112	111	1.5	1	2
Bayless SX447 (2X)	26.3	27	27	91.3	103	105	0.7	0	2
*Trojan TXS115A (2X)	26.3	--	--	127.1	--	--	0.0	-	-
Wolverine W174 (2X)	26.5	27	27	95.3	100	106	0.8	0	1
Gutwein 62 (2X)	27.0	29	30	91.5	103	113	2.3	1	1
Bayless SX637 (2X)	27.5	29	30	111.5	114	117	1.5	1	2
*Migro M-0505 (2X)	27.6	29	30	118.2	111	107	0.7	0	1
Pride 7715 (2X)	27.7	29	31	94.3	93	104	0.0	0	1
Super Crost 5440 (2X)	28.1	29	--	95.9	98	--	0.0	0	-
*Northrup King PX74(2X)	30.9	--	--	123.7	--	--	0.0	-	-
Average	23.6	25	26	100.5	104	110	1.1	0.5	2
Range	19.1 to 30.9	19 to 29	20 to 31	73.6 to 128.6	79 to 122	88 to 123	0.0 to 6.6	0 to 3	0 to 4
Least significant differences	1.1	0.7	0.5	11.4	7	5			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*May 18*	*May 14*	*May 11*
Harvested	*October 24*	*October 21*	*October 29*
Soil type	*Blount clay loam*	*Griffin sandy loam*	*Griffin sandy loam*
Previous crop	*Corn*	*Soybeans*	*Corn*
Population	*20,600*	*20,800*	*19,700*
Rows	*30"*	*30"*	*30"*
Fertilizer	*164-70-35*	*136-118-192*	*117-66-186*
Soil test: pH	*6.8*	*6.8*	*6.8*
P	*32 (low*	*32 (low*	*47 (medium)*
K	*228 (high)*	*236 (high)*	*222 (high)*

Farm Cooperator: Don and Ed Marshall, Litchfield (1978)
Dean Shamplo, Pittsford (1977, 1976)
County Extension Director: A. T. Hall, Hillsdale

Table 3 SOUTHERN MICHIGAN Zone 1

Branch County Trial

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 333-3X (3X)	17.3	19	19	118.7	107	104	1.8	7	5
Michigan 3093 (3X)	17.5	19	20	122.4	116	111	2.0	1	1
Pioneer 3901 (2X)	18.1	--	--	123.8	--	--	0.0	-	-
Migro M-D105 (2X)	18.6	--	--	121.2	--	--	0.0	-	-
Cargill 838 (2X)	18.7	--	--	138.7	--	--	0.7	-	-
Migro M-0101 (2X)	18.8	21	--	152.8	141	--	0.0	6	-
Solar 1001 (2X)	18.8	--	--	89.7	--	--	14.0	-	-
Michigan 3102 (2X)	18.9	21	21	156.7	142	129	0.9	1	1
Renk RK40 (2X)	19.1	--	--	140.8	--	--	2.3	-	-
Blaney B401 (2X)	19.1	--	--	154.0	--	--	2.3	-	-

(Continued)

Table 3 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 3953 (3X)	19.1	--	--	143.4	--	--	0.0	-	-
Gold Tag 2060 (2X)	19.2	--	--	157.3	--	--	0.8	-	-
Dennis DS90 (2X)	19.2	20	--	131.3	115	--	0.0	2	-
Michigan 407-2X (2X)	19.2	21	22	145.2	146	132	0.0	0	1
Amcorn 4100 (2X)	19.2	21	--	134.4	128	--	0.0	5	-
Blaney B-AA-WX (2X)	19.2	--	--	118.1	--	--	0.0	-	-
Solar 1501 (2X)	19.3	--	--	138.2	--	--	1.6	-	-
Michigan 4122 (2X)	19.3	21	23	148.1	155	144	2.0	3	3
*Northrup King PX49(2X)	19.3	--	--	163.8	--	--	0.0	-	-
Michigan 5443 (3X)	19.3	22	23	136.7	143	128	2.2	4	4
Super Crost 3585(Sp.)	19.5	--	--	139.3	--	--	0.0	-	-
Dairyland DX1008(2X)	19.5	22	23	150.3	149	133	4.2	7	4
Solar 1201 (2X)	19.5	22	--	140.5	153	--	3.4	3	-
P-A-G SX189 (2X)	19.6	--	--	144.4	--	--	0.0	-	-
Golden Harvest H-2445 (MSX)	19.7	--	--	137.3	--	--	0.0	-	-
Pioneer 3780 (2X)	19.7	22	23	147.4	160	140	0.0	2	3
Northrup King PX45(2X)	19.7	--	--	156.6	--	--	0.0	-	-
Super Crost 2350 (2X)	19.7	22	23	145.5	155	145	0.7	2	1
Voris V2381 (2X)	19.8	--	--	118.0	--	--	0.0	-	-
*Northrup King PX37(2X)	19.9	--	--	160.3	--	--	0.0	-	-
Pride 5578 (2X)	19.9	--	--	125.3	--	--	3.4	-	-
Andersons SSE (2X)	20.0	22	--	139.9	152	--	0.0	2	-
Renk RK15 (2X)	20.0	22	--	116.4	135	--	0.7	1	-
Northrup King PX48(2X)	20.0	22	23	147.6	158	143	1.5	1	1
Cardinal SX112 (2X)	20.0	--	--	156.1	--	--	0.0	-	-
Andersons SSM (2X)	20.0	23	--	120.4	130	--	3.2	2	-
Solar 1602 (2X)	20.1	--	--	137.7	--	--	0.0	-	-
Renk RK66 (2X)	20.1	--	--	155.2	--	--	2.7	-	-
Bayless SX434M (2X)	20.1	23	24	140.8	154	145	0.8	1	1
Super Crost 2470 (2X)	20.1	22	24	152.5	147	133	0.0	1	1
Cardinal SX110 (2X)	20.1	--	--	134.4	--	--	1.6	-	-
Cargill 430 (3X)	20.1	--	--	120.7	--	--	0.0	-	-
*Acco UC 3002 (2X)	20.3	23	--	158.7	161	--	0.0	1	-
Amcorn 7480 (2X)	20.3	23	24	150.9	152	137	0.0	0	0
Michigan 5802 (2X)	20.3	23	23	153.9	160	147	0.7	3	2
Amcorn 7300 (2X)	20.3	23	24	153.6	152	129	0.0	4	3
Wolverine W169 (2X)	20.3	22	--	131.0	140	--	0.0	1	-
Gold Tag 2080 (2X)	20.3	--	--	133.9	--	--	0.0	-	-
Blaney B606 (2X)	20.4	23	24	128.2	150	138	0.0	0	0
Farmers FCC 224 (2X)	20.4	--	--	127.7	--	--	0.0	-	-
*Andersons AX-4 (Sp.)	20.4	23	--	161.4	155	--	0.7	1	-
Farmers FCC 277 (2X)	20.5	--	--	151.8	--	--	0.0	-	-
Northrup King PX46(2X)	20.5	23	--	132.4	148	--	0.0	0	-
Andersons AX-5 (Sp.)	20.5	24	--	144.5	157	--	0.0	0	-
Solar 1401 (2X)	20.5	--	--	138.9	--	--	1.8	-	-
*Solar 1301 (2X)	20.5	24	--	168.8	178	--	0.0	1	-
Voris V2422 (2X)	20.6	23	25	156.4	161	149	5.0	3	3
Migro M-2022X (2X)	20.6	23	--	157.3	159	--	0.0	0	-
Cargill 449 (3X)	20.6	24	24	139.6	157	141	3.8	3	2
Gutwein 69A (2X)	20.7	24	25	156.6	167	148	0.0	1	1
Gutwein 44 (2X)	20.7	23	--	134.3	150	--	0.0	0	-
*Michigan 5912 (2X)	20.7	--	--	170.4	--	--	0.0	-	-
*Golden Harvest H-2450 (2X)	20.7	22	24	172.7	158	142	3.1	3	2
Dairyland DX1007(2X)	20.7	23	--	145.9	151	--	0.0	0	-
Funk G-4321A (2X)	20.8	23	24	137.4	146	134	0.7	2	1
Blaney B601-WX (2X)	20.9	24	--	129.3	154	--	1.5	4	-
*P-A-G SX397 (2X)	21.0	24	26	166.5	173	151	0.0	2	3
Migro M-0301 (2X)	21.0	24	26	151.3	169	153	0.0	0	0
Migro M-2018X (2X)	21.0	23	--	138.3	157	--	0.7	2	-
P-A-G SX249 (2X)	21.2	--	--	143.4	--	--	0.0	-	-
Acco UC 4201 (2X)	21.2	--	--	131.2	--	--	0.0	-	-
Funk G-4430 (2X)	21.2	23	--	143.1	161	--	0.0	3	-
Blaney B703 (2X)	21.2	24	--	145.3	158	--	0.0	1	-
Dennis DS6 (2X)	21.2	24	--	142.5	155	--	0.8	0	-
ADI 323 (2X)	21.4	--	--	150.7	--	--	0.8	-	-
*Michigan 5922 (2X)	21.4	--	--	171.5	--	--	0.0	-	-
*Pioneer 3541 (2X)	21.4	--	--	172.1	--	--	0.0	-	-
Super Crost 2880 (2X)	21.5	--	--	133.2	--	--	0.9	-	-
*Dennis DS47A (2X)	21.5	--	--	173.9	--	--	0.0	-	-
Garno S-100 (2X)	21.5	--	--	142.2	--	--	2.3	-	-
Wolverine W174 (2X)	21.6	25	--	155.4	167	--	0.7	0	-
Northrup King PX65(2X)	21.8	25	27	150.4	176	149	0.7	1	1
Acco UC 3301A (2X)	21.9	26	--	152.4	156	--	0.8	1	-
Super Crost 4350 (2X)	22.0	26	27	133.5	143	140	0.0	1	2

(Continued)

Table 3 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
ADI 315 (2X)	22.1	25	--	147.0	155	--	0.0	0	-
Super Crost 4242 (2X)	22.1	24	25	133.9	158	134	0.0	2	2
Bayless SX447 (2X)	22.2	25	25	138.7	161	143	0.8	4	3
*Dennis DS36 (2X)	22.4	--	--	161.4	--	--	0.0	-	-
Northrup King PX69(2X)	22.5	--	--	140.1	--	--	0.0	-	-
Dairyland DX1016 (2X)	22.5	--	--	151.4	--	--	2.2	-	-
Pioneer 3535 (2X)	22.7	24	25	145.4	162	142	0.8	0	0
*ADI 575 (3X)	22.8	26	--	161.3	172	--	0.0	0	-
Migro M-0505 (2X)	22.8	--	--	138.6	--	--	0.0	-	-
*Funk G-4507 (2X)	22.8	26	--	172.8	172	--	0.0	2	-
Dairyland DX1010X(2X)	22.8	--	--	151.7	--	--	0.0	-	-
Dennis DS37E (2X)	22.9	26	26	133.1	148	134	0.0	0	0
*Pride 7715 (2X)	22.9	26	28	169.9	186	157	0.7	1	0
*Renk RK77 (2X)	23.0	--	--	167.1	--	--	0.0	-	-
*Parker 60 (2X)	23.2	--	--	158.7	--	--	0.7	-	-
Super Crost 5440 (2X)	23.2	25	28	153.5	170	146	0.0	0	0
Blaney B805 (2X)	23.3	26	28	155.8	173	153	0.8	2	2
*Trojan TXS115A (2X)	23.5	27	--	159.4	174	--	0.8	2	-
*Bayless SX637 (2X)	23.5	--	--	168.2	--	--	1.6	-	-
*Golden Harvest H-2500 (2X)	23.5	26	29	173.2	179	160	1.5	2	1
Northrup King PX74(2X)	23.7	--	--	156.1	--	--	0.8	-	-
*ADI 555 (2X)	23.8	26	--	168.1	177	--	0.0	0	-
Voris V2532 (2X)	23.9	27	28	158.0	172	155	0.7	2	2
Average	20.6	23	24	143.7	155	140	0.8	2	2
Range	17.3 to 23.9	19 to 27	19 to 29	89.7 to 173.9	107 to 186	104 to 160	0.0 to 14.0	0 to 7	0 to 5
Least significant difference	1.0	0.8	0.7		10	6			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*May 4*	*May 10*	*May 15*
Harvested	*October 27*	*October 14*	*October 14*
Soil type	*Gilford sandy loam*	*Gilford sandy loam*	*Gilford sandy loam*
Previous crop	*Corn*	*Corn*	*Corn*
Population	*20,600*	*20,900*	*19,100*
Rows	*30"*	*30"*	*30"*
Fertilizer	*157-69-0*	*165-64-0*	*132-83-60*
Soil test: pH	*7.1*	*7.1*	*7.0*
P	*178 (very high)*	*234 (very high)*	*214 (very high)*
K	*248 (high)*	*227 (high)*	*210 (high)*

Farm Cooperator: George Matthews, Union City

County Extension Director: Paul Thompson, Coldwater

Table 4 — SOUTHERN MICHIGAN — Zone 1

Kalamazoo County Trial

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 3093 (3X)	17.1	21	21	96.7	100	88	0.9	0	8
Funk G-4195 (3X)	17.6	22	22	107.2	101	91	0.0	0	5
Michigan 333-3X (3X)	17.9	21	20	133.4	116	101	0.0	1	6
Migro M-0101 (2X)	18.0	23	23	119.0	102	90	0.0	7	12
Cargill 838 (2X)	18.0	--	--	108.3	---	--	1.6	-	-
Payco SX737 (2X)	18.9	--	--	110.6	---	--	0.8	-	-
Warwick SL501 (Sp.)	19.0	--	--	132.4	---	--	0.0	-	-
Michigan 3102 (2X)	19.0	23	23	130.2	120	106	0.8	0	3
Migro M-0105 (2X)	19.2	--	--	116.8	---	--	0.0	-	-
Warwick W966 (Sp.)	19.3	--	--	116.6	---	--	0.0	-	-

(Continued)

Table 4 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
*Pioneer 3901 (2X)	19.3	--	--	137.9	---	--	0.0	-	-
*Super Crost 1950 (2X)	19.4	--	--	137.1	---	--	0.0	-	-
Michigan 3953 (3X)	19.4	24	--	126.3	126	--	0.0	0	-
Wolverine W169 (2X)	19.6	--	--	119.2	---	--	2.3	-	-
*Migro M-2022X (2X)	19.8	26	--	143.2	139	--	0.0	1	-
Stanton 1095 (2X)	19.8	--	--	132.2	---	--	0.0	-	-
Golden Harvest H-2445 (MSX)	19.9	--	--	121.6	---	--	0.0	-	-
Trojan T1108 (MSX)	20.0	--	--	113.6	---	--	3.1	-	-
Pride 5525 (2X)	20.0	25	--	120.7	114	--	4.8	0	-
Amcorn 4100 (2X)	20.1	--	--	125.3	---	--	0.8	-	-
*Jacques JX122A (2X)	20.2	25	26	142.7	127	109	2.3	0	4
Funk G-4272 (3X)	20.2	24	24	104.8	121	109	0.0	0	4
Super Crost S27 (2X)	20.3	25	25	105.4	109	97	0.0	0	2
*Wolverine W166 (2X)	20.3	--	--	145.1	---	--	0.0	-	-
P-A-G SX189 (2X)	20.4	--	--	121.5	---	--	0.0	-	-
*Super Crost 2350 (2X)	20.4	25	25	137.3	122	104	0.8	0	2
Pioneer 3780 (2X)	20.4	25	26	128.9	125	110	0.8	2	6
Michigan 5443 (3X)	20.4	25	25	117.7	122	105	0.0	1	7
Jacques JX52 (2X)	20.4	--	--	122.5	---	--	0.0	-	-
Acco UC3002 (2X)	20.4	--	--	114.5	---	--	1.6	-	-
Michigan 407-2X (2X)	20.5	24	24	133.7	130	111	0.0	1	6
Amcorn 7480 (2X)	20.5	26	27	126.8	128	114	3.9	1	1
Amcorn 7300 (2X)	20.5	27	26	118.1	116	100	0.0	0	7
Blaney B606E (2X)	20.5	26	--	134.8	130	--	0.0	0	-
Pride 5578 (2X)	20.5	--	--	103.1	---	--	0.0	-	-
*Funk G-4323 (MSX)	20.7	--	--	146.2	---	--	0.0	-	-
Michigan 4122 (2X)	20.7	25	25	130.7	126	111	0.0	0	5
Asgrow RX58 (2X)	20.8	--	--	100.4	---	--	0.8	-	-
Golden Harvest H-2450 (2X)	20.9	26	--	140.1	129	--	0.0	1	-
Stanton 10100 (2X)	21.0	--	--	122.6	---	--	0.0	-	-
Migro M-2018X (2X)	21.0	26	--	135.0	135	--	0.0	0	-
Northrup King PX585 (3X)	21.0	26	--	100.7	110	--	0.8	0	-
Payco SX844 (2X)	21.0	--	--	111.4	---	--	0.0	-	-
Pioneer 3541 (2X)	21.0	--	--	131.5	---	--	0.0	-	-
*DeKalb XL42 (2X)	21.0	--	--	136.5	---	--	0.8	-	-
Jacques JX177 (2X)	21.1	28	28	135.9	119	106	0.0	0	1
Asgrow RX 2345 (2X)	21.1	27	27	125.1	128	104	0.8	0	3
Michigan 5802 (2X)	21.1	--	--	130.8	134	115	0.0	0	-
Warwick W1101 (2X)	21.5	--	--	101.5	---	--	0.0	-	-
Pride 4488 (2X)	21.5	--	--	131.2	---	--	0.0	-	-
Pioneer 3535 (2X)	21.8	26	27	131.9	123	109	0.0	0	3
*Funk G-4430 (2X)	21.8	26	--	146.5	146	--	0.0	0	-
Super Crost 2880 (2X)	21.9	--	--	109.1	---	--	1.6	-	-
*Michigan 5912 (2X)	21.9	26	--	140.4	139	--	0.0	0	-
Wolverine W174 (2X)	23.0	--	--	121.6	---	--	0.0	-	-
O's Gold SX1107 (2X)	23.7	--	--	111.0	---	--	0.0	-	-
*Migro M-0301 (2X)	24.5	29	30	146.9	126	106	0.0	1	8
Golden Harvest H-2600 (2X)	24.5	30	--	108.2	106	--	0.0	0	-
Migro M-0505 (2X)	24.7	--	--	122.8	---	--	0.0	-	-
Acco UC4201 (2X)	25.4	28	28	126.3	124	105	0.0	0	2
Gutwein 62 (2X)	25.9	--	--	134.9	---	--	0.0	-	-
Blaney B805 (2X)	26.7	--	--	124.5	---	--	3.3	-	-
Average	20.8	25	25	124.3	122	104	0.5	0.5	5
Range	17.1 to 26.7	21 to 30	20 to 30	96.7 to 146.9	100 to 146	88 to 115	0.0 to 4.8	0 to 7	1 to 12
Least significant difference	1.1	0.8	0.7	11.9	7	5			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*May 4*	*May 10*	*May 22*
Harvested	*October 30*	*October 17*	*October 17*
Soil type	*Fox sandy loam*	*Fox sandy loam*	*Fox sandy loam*
Previous crop	*Corn*	*Corn*	*Clover sod*
Population	*19,300*	*20,800*	*20,100*
Rows	*30"*	*30"*	*30"*
Fertilizer	*126-64-122*	*112-53-15*	*112-88-24*
Soil test: pH	*6.1*	*6.1*	*6.4*
P	*95 (high)*	*112 (very high)*	*54 (medium)*
K	*264 (high*	*227 (high)*	*223 (high)*

Farm Cooperator: Richard VanVrancken, Climax

County Extension Agent: Richard Bailey, Kalamazoo

Table 5 SOUTHERN MICHIGAN Zone 1

Cass County Trial - Irrigated Upland Soil

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 333-3X (3X)	17.1	19	20	122.2	112	126	3.6	10	8
Jacques JX30	17.2	--	--	104.2	---	---	5.0	-	-
Michigan 3102 (2X)	17.3	19	20	141.2	137	144	2.9	3	2
Michigan 3093 (3X)	17.4	19	20	112.6	111	127	5.9	7	4
P-A-G SX177 (2X)	17.6	21	--	144.3	140	---	5.1	3	-
Renk RK15 (2X)	17.7	21	--	151.4	152	---	5.2	3	-
Michigan 407-2X (2X)	17.8	21	22	147.9	147	159	3.6	3	2
Migro M-0101 (2X)	17.9	20	21	129.8	134	141	3.1	4	3
Garno S-95X (2X)	17.9	--	--	148.1	---	---	0.8	-	-
Warwick SL501 (Sp.)	17.9	20	--	144.5	140	---	6.5	6	-
Michigan 3953 (3X)	17.9	21	--	148.4	144	---	3.1	3	-
Super Crost 1950 (2X)	18.1	--	--	154.4	---	---	2.9	-	-
Parker 50A (2X)	18.1	--	--	154.8	---	---	0.0	-	-
Warwick W966 (Sp.)	18.2	--	--	161.4	---	---	6.7	-	-
Gutwein 40 (2X)	18.3	21	23	160.0	156	168	4.1	4	3
Dennis DS90 (2X)	18.4	21	--	124.2	127	---	7.9	7	-
Pioneer 3901 (2X)	18.4	21	--	167.0	146	---	0.7	1	-
Migro M-0105 (2X)	18.4	21	--	160.1	138	---	5.8	11	-
McCurdy MSX37 (2X)	18.4	--	--	169.2	---	---	3.4	-	-
Gutwein 46 (2X)	18.4	22	24	167.2	154	168	2.0	2	1
McCurdy MSX46 (2X)	18.4	22	23	166.5	159	162	2.1	2	1
Voris V2381 (2X)	18.4	--	--	152.9	---	---	0.7	-	-
Michigan 4122 (2X)	18.5	22	23	157.8	161	166	6.4	5	3
Asgrow RX53 (2X)	18.6	22	--	166.6	158	---	8.6	7	-
Super Crost 2350 (2X)	18.6	22	24	174.3	165	167	2.8	5	3
Michigan 5443 (3X)	18.6	22	23	147.2	146	157	4.4	7	5
Blaney B606 (2X)	18.6	23	24	158.2	150	163	12.6	8	5
Cargill 430 (3X)	18.6	--	--	129.1	---	---	13.0	-	-
Pride 5525 (2X)	18.6	22	24	155.4	144	156	0.7	0	0
Dairyland DX1008 (2X)	18.7	--	--	152.5	---	---	0.0	-	-
Renk RK66 (2X)	18.7	23	24	147.1	145	153	6.6	3	2
*Northrup King PX37(2X)	18.7	--	--	175.9	---	---	1.4	-	-
Michigan 5802 (2X)	18.8	23	24	170.2	168	176	3.1	3	2
Bayless SX434M (2X)	18.8	23	25	157.1	160	167	7.7	6	4
Cargill 838 (2X)	18.8	22	--	138.2	138	---	0.0	0	-
Parker 36A (2X)	18.8	--	--	159.4	---	---	5.1	-	-
O's Gold SX1107 (2X)	18.8	--	--	172.8	---	---	1.4	-	-
*Pioneer 3780 (2X)	18.8	22	24	181.3	169	176	6.9	7	5
*Golden Harvest H-2448 (2X)	18.9	--	--	187.4	---	---	0.7	-	-
*Pride 4488 (2X)	18.9	--	--	186.4	---	---	0.0	-	-
*Migro M-2022X (2X)	18.9	22	--	181.4	173	---	2.2	4	-
DeKalb XL25 (2X)	19.0	--	--	120.8	---	---	5.8	-	-
Northrup King PX585 (3X)	19.0	21	--	150.1	150	---	1.4	4	-
Warwick W1101 (2X)	19.0	22	--	125.3	138	---	4.6	5	-
Funk G-4321A (2X)	19.0	22	24	174.3	164	165	2.2	1	1
Super Crost S27 (2X)	19.1	22	24	151.5	157	159	3.0	2	2
Asgrow RX58 (2X)	19.1	22	--	161.8	164	---	11.3	8	-
Amcorn 7300 (2X)	19.2	22	23	173.0	151	159	2.2	11	7
Dairyland DX 1007 (2X)	19.2	22	--	161.1	157	---	0.0	2	-
Michigan 5912 (2X)	19.3	23	--	173.6	173	---	0.7	0	-
Acco UC3002 (2X)	19.3	--	--	165.1	---	---	0.0	-	-
USS 0011 (2X)	19.3	23	--	161.3	157	---	8.0	9	-
Blaney B-AA-WX (2X)	19.3	--	--	120.2	---	---	6.8	-	-
*McCurdy MSX 44A (2X)	19.3	22	24	176.3	167	167	3.4	6	4
P-A-G SX189 (2X)	19.3	--	--	151.5	---	---	2.1	-	-
*P-A-G SX249 (2X)	19.3	--	--	177.1	---	---	1.4	-	-
P-A-G SX69 (2X)	19.3	23	--	136.6	141	---	4.3	3	-
Golden Harvest H-2445 (MSX)	19.3	--	--	147.2	---	---	3.7	-	-
*Pioneer 3541 (2X)	19.3	--	--	188.0	---	---	1.4	-	-
O's Gold SX1100 (2X)	19.3	23	24	143.5	146	153	6.5	3	2
Gutwein 2250 (2X)	19.4	--	--	136.8	---	---	1.4	-	-
Golden Harvest H-2450 (2X)	19.4	24	25	158.3	149	153	8.5	7	5
Amcorn 7480 (2X)	19.4	22	24	160.1	150	159	0.7	3	2
Dennis DS6 (2X)	19.4	22	--	164.2	163	---	0.0	0	-
Trojan T1108 (2X)	19.4	--	--	170.0	---	---	0.0	-	-
Super Crost 2880 (2X)	19.5	--	--	152.9	---	---	4.2	-	-
*Northrup King PX49(2X)	19.5	--	--	185.5	---	---	1.4	-	-
Asgrow RX2345 (2X)	19.6	22	--	152.6	146	---	3.0	7	-
*Migro M-0301 (2X)	19.6	23	25	180.8	176	185	0.7	0	0
Blaney B703 (2X)	19.6	23	--	138.6	141	---	0.7	3	-

(Continued)

Table 5 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Jacques JX177 (2X)	19.7	--	--	156.6	---	---	0.7	-	-
P-A-G SX397 (2X)	19.7	24	--	162.3	161	---	2.6	4	-
Northrup King PX45(2X)	19.7	--	--	171.3	---	---	6.1	-	-
Prairie Stream SX33 (2X)	19.8	22	--	154.7	148	---	1.5	1	-
*Prairie Stream SX44 (2X)	19.8	24	--	186.3	167	---	4.2	4	-
*Michigan 5922 (2X)	19.8	--	--	189.0	---	---	0.7	-	-
Northrup King PX46(2X)	19.8	22	--	174.9	163	---	1.4	2	-
*Voris V2422 (2X)	19.8	22	--	179.7	175	---	2.0	6	-
Funk G-4444 (2X)	19.9	23	24	164.6	159	168	4.2	7	5
Garno S-100 (2X)	19.9	--	--	166.0	---	---	1.9	-	-
DeKalb XL54 (2X)	19.9	--	--	150.3	---	---	8.0	-	-
Migro M-2018 (2X)	20.0	22	--	166.8	158	---	2.9	4	-
Gutwein 44 (2X)	20.1	23	--	142.3	149	---	2.2	1	-
Funk G-4323 (MSX)	20.1	--	--	169.7	---	---	0.0	-	-
Blaney B601-WX (2X)	20.2	--	--	145.1	---	---	3.6	-	-
Acco UC3301A (2X)	20.2	23	--	169.7	160	---	4.8	3	-
Northrup King PX48(2X)	20.4	24	--	161.3	160	---	6.3	8	-
Pioneer 3535 (2X)	20.6	24	26	174.1	177	182	0.0	0	0
*Super Crost 5440 (2X)	20.6	--	--	180.4	---	---	0.7	-	-
Dennis DS47A (2X)	20.7	24	--	174.8	159	---	2.1	2	-
*O's Gold SX5500A (2X)	20.8	25	27	189.8	184	187	0.0	1	1
*Northrup King PX65(2X)	20.8	24	--	187.4	168	---	0.0	0	-
Gutwein 2340 (2X)	20.9	--	--	148.5	---	---	4.5	-	-
*Gutwein 62 (2X)	20.9	24	27	186.5	177	187	0.0	4	3
Muncy Chief SX777(2X)	21.0	--	--	151.3	---	---	0.7	-	-
USS 0555A (3X)	21.0	24	--	157.1	159	---	0.0	0	-
*Golden Harvest H-2500 (2X)	21.1	25	27	187.6	181	192	0.7	0	0
*Northrup King PX74(2X)	21.3	--	--	191.6	---	---	0.0	-	-
Dairyland DX 1010 (2X)	21.4	--	--	173.6	---	---	0.0	-	-
*Blaney B805 (2X)	21.4	25	27	178.7	179	189	0.0	0	0
Voris V2532 (2X)	21.5	24	27	168.5	161	177	0.0	0	0
*USS 1010 (2X)	21.5	--	--	188.3	---	---	0.0	-	-
*Dennis DS36 (2X)	21.5	--	--	179.6	---	---	0.0	-	-
Golden Harvest H-2600 (2X)	21.5	27	--	141.0	135	---	0.0	1	-
Northrup King PX69(2X)	21.6	--	--	155.0	---	---	0.0	-	-
*Funk G-4507 (2X)	21.6	14	--	183.1	170	---	0.0	1	-
*Trojan TXS115A (2X)	21.7	--	--	192.6	---	---	1.4	-	-
*McCurdy MSX60 (2X)	21.7	24	27	185.3	177	181	2.2	2	2
Muncy Chief 3X676(3X)	22.0	--	--	155.3	---	---	0.0	-	-
Muncy Chief SX662(2X)	22.1	--	--	157.1	---	---	0.0	-	-
Dennis DS37E (2X)	22.3	25	27	154.8	158	169	0.0	1	0
Acco UC7951 (2X)	22.6	--	--	137.4	---	---	0.0	-	-
Average	19.5	22	24	160.5	155	165	3.9	4	3
Range	17.1 to 22.6	19 to 27	20 to 27	104.2 to 192.6	111 to 184	126 to 192	0.0 to 13.0	0 to 11	0 to 8
Least significant difference	1.0	0.7	0.7	15.1	7	5			

Significantly better than average yield in 1978

		1978	1977	1976
Planted		*May 3*	*May 9*	*May 10*
Harvested		*November 1*	*October 19*	*October 19*
Soil type		*Kalamazoo sandy loam*	*Kalamazoo sandy loam*	*Kalamazoo sandy loam*
Previous crop		*Corn*	*Corn*	*Corn*
Population		*23,300*	*22,500*	*23,500*
Rows		*28"*	*28"*	*28"*
Fertilizer		*292-84-108, manure*	*315-54-138, manure*	*244-114-18, manure*
Irrigation:		*10 inches*	*8 inches*	*7 inches*
Soil test:	*pH*	*6.8*	*6.8*	*6.8*
	P	*179 (very high)*	*104 (very high)*	*120 (very high)*
	K	*480 (very high)*	*261 (high)*	*256 (high)*

Farm Cooperator: Dave Cripe, Cassopolis

County Estension Director: G. Wayne Hothem, Cassopolis

Table 6 SOUTHERN MICHIGAN Zone 1

Cass County Trial - Muck Soil

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 333-3X (3X)	17.8	20	24	99.0	99	101	7.5	5	4
Michigan 3093 (3X)	18.3	21	25	120.1	109	112	2.8	2	3
Migro M-0101 (2X)	18.9	24	26	125.7	128	122	2.1	2	1
Warwick SL501 (Sp.)	19.0	--	--	121.9	---	---	3.1	-	-
*Michigan 3102 (2X)	19.5	21	25	139.5	128	124	0.0	1	1
Northrup King PX26(2X)	20.1	--	--	130.3	---	---	0.8	-	-
Migro M-0105 (2X)	20.8	24	--	108.2	115	---	3.5	4	-
Funk G-4252 (3X)	20.9	25	--	116.5	128	---	2.2	3	-
Pioneer 3901 (2X)	21.0	24	--	110.2	119	---	0.0	0	-
Michigan 3953 (3X)	21.0	22	--	125.7	123	---	4.0	3	-
Pioneer X4758 (2X)	21.0	--	--	114.6	---	---	0.0	-	-
Funk G-4288 (3X)	21.0	24	28	129.0	130	127	6.8	4	3
Warwick W966 (Sp.)	21.0	--	--	99.6	---	---	2.2	-	-
*Northrup King PX32(2X)	21.0	23	--	134.6	130	---	5.0	4	-
Super Crost 1950 (2X)	21.3	--	--	111.9	---	---	4.3	-	-
Cargill 838 (2X)	21.3	25	--	97.0	103	---	4.7	3	-
Blaney EX7305 (2X)	21.4	25	28	106.5	117	115	4.6	7	5
Golden Harvest H-2340 (2X)	21.4	25	27	117.8	115	109	3.4	4	3
*McCurdy MSX37 (2X)	21.4	--	--	145.3	---	---	2.1	-	-
O's Gold SX949 (2X)	21.5	--	--	124.9	---	---	0.8	-	-
*Funk G-4272 (3X)	21.5	24	28	137.8	129	120	2.3	2	2
Golden Harvest H-2420 (2X)	21.5	--	--	113.6	---	---	1.0	-	-
Michigan 4122 (2X)	21.6	25	28	125.4	132	131	1.5	3	3
Northrup King PX45(2X)	21.8	--	--	108.7	---	---	5.3	-	-
Andersons SSE (2X)	21.8	25	--	112.0	124	---	6.5	4	-
Michigan 407-2X (2X)	21.8	25	27	129.6	132	132	2.3	2	4
Trojan TXS105A (2X)	21.8	--	--	117.1	---	---	3.6	-	-
McCurdy MSX22E (2X)	21.9	--	--	101.4	---	---	1.6	-	-
P-A-G SX177 (2X)	21.9	--	--	114.2	---	---	0.0	-	-
Trojan T1008 (2X)	22.0	--	--	113.2	---	---	2.2	-	-
P-A-G SX189 (2X)	22.1	--	--	101.7	---	---	5.7	-	-
Cargill 863 (2X)	22.2	25	--	122.9	126	---	0.0	1	-
Voris V2381 (2X)	22.2	--	--	127.6	---	---	0.0	-	-
*Funk G-4408 (2X)	22.2	26	28	136.8	142	136	0.0	2	3
Voris V2372 (2X)	22.2	25	--	123.3	129	---	6.7	6	-
Trojan TXS94 (2X)	22.3	--	--	108.6	---	---	0.0	-	-
*Super Crost 2350 (2X)	22.4	26	28	151.4	142	142	0.7	1	2
Pioneer 3780 (2X)	22.4	25	28	133.5	140	140	0.0	3	3
Cargill 430 (3X)	22.6	--	--	116.5	---	---	1.4	-	-
*Gold Tag 2060 (2X)	22.6	--	--	136.1	---	---	3.6	-	-
Parker 28 (2X)	22.6	--	--	124.6	---	---	0.7	-	-
Michigan 5443 (3X)	22.7	25	28	128.6	129	128	1.5	3	4
Super Crost S27 (2X)	22.7	26	29	125.6	140	140	0.8	3	2
*Payco SX775 (2X)	22.7	26	--	135.2	133	---	3.6	4	-
Pride 4488 (2X)	22.8	--	--	102.9	---	---	2.2	-	-
Michigan 5802 (2X)	22.8	26	29	126.6	136	133	2.2	4	2
Super Crost 2470 (2X)	22.8	26	29	119.3	125	118	0.0	0	0
Pride 5525 (2X)	22.8	26	28	127.7	139	134	0.0	1	2
Funk G-4323 (MSX)	22.9	--	--	119.5	---	---	2.9	-	-
Blaney B606 (2X)	22.9	26	29	111.1	122	115	0.8	5	4
Warwick W1101 (2X)	23.0	--	--	100.1	---	---	3.9	-	-
Migro M-2018X (2X)	23.1	26	--	109.9	125	---	2.5	2	-
Funk G-4224 (MSX)	23.2	--	--	121.8	---	---	0.8	-	-
McCurdy MSX 44A (2X)	23.2	--	--	126.8	---	---	2.2	-	-
Super Crost 2880 (2X)	23.2	--	--	122.6	---	---	4.4	-	-
Voris V2402 (2X)	23.3	--	--	115.6	---	---	2.3	-	-
Migro M-2022X (2X)	23.3	26	--	130.7	137	---	0.0	2	-
Andersons AX-4 (Sp.)	23.3	27	--	107.4	120	---	1.5	1	-
Payco SX844 (2X)	23.3	--	--	128.6	---	---	2.2	-	-
Acco UC3002 (2X)	23.3	26	--	112.7	123	---	0.8	1	-
*Acco UC2851 (2X)	23.5	--	--	135.4	---	---	3.0	-	-
*Michigan 5912 (2X)	23.5	27	--	146.1	143	---	0.8	0	-
Golden Harvest H-2450 (2X)	23.6	26	29	125.0	121	129	2.9	3	3
Northrup King PX585 (3X)	23.7	26	--	103.3	120	---	1.6	2	-
*Northrup King PX49(2X)	23.7	--	--	154.3	---	---	2.8	-	-
Golden Harvest H-2445 (MSX)	23.8	--	--	112.2	---	---	0.0	-	-
*Northrup King PX37(2X)	23.8	--	--	139.5	---	---	0.0	-	-
P-A-G SX379 (2X)	24.0	--	--	131.4	---	---	0.7	-	-
Andersons AX-5 (Sp.)	24.0	27	--	101.1	121	---	0.0	3	-
P-A-G SX249 (2X)	24.2	--	--	109.1	---	---	2.6	-	-

(Continued)

Table 6 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	2 yr.	3 yr.	Bushels per acre 1978	2 yr.	3 yr.	% Stalk lodging 1978	2 yr.	3 yr.
Cargill 890 (2X)	24.4	27	--	119.5	132	---	1.5	1	-
Northrup King PX48(2X)	24.4	27	--	132.1	137	---	6.1	4	-
Migro M-0301 (2X)	24.5	27	30	123.9	119	125	0.7	1	2
Acco UC3301 (2X)	24.5	27	30	141.9	144	144	0.0	3	3
Andersons SSM (2X)	24.8	28	--	112.9	115	---	0.8	0	-
*Northrup King PX46(2X)	25.3	29	--	143.5	137	---	0.0	1	-
*Pioneer 3535 (2X)	25.4	28	30	145.6	144	135	1.5	1	1
Northrup King PX69(2X)	25.7	--	--	130.4	---	---	0.0	-	-
Northrup King PX65(2X)	25.7	29	--	115.6	132	---	0.7	0	-
*Pioneer 3541 (2X)	25.9	--	--	150.9	---	---	0.8	-	-
Migro M-0505 (2X)	27.1	30	31	116.8	137	136	0.0	0	2
*Gold Tag X-880 (2X)	27.3	--	--	147.3	---	---	0.0	-	-
Average	22.6	25	28	121.3	127	127	2.0	2	2
Range	17.8 to 27.3	20 to 30	24 to 31	97.0 to 154.3	99 to 144	101 to 144	0.0 to 7.5	0 to 7	0 to 5
Least significant difference	1.1	0.8	0.8	13.2	7	5			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*May 20*	*May 17*	*May 22*
Harvested	*November 1*	*October 19*	*October 20*
Soil type	*Carlisle muck*	*Carlisle muck*	*Carlisle muck*
Previous crop	*Corn*	*Corn*	*Corn*
Population	*21,400*	*21,300*	*20,700*
Rows	*30"*	*30"*	*30"*
Fertilizer	*82-48-74*	*88-32-16*	*93-51-56*
Soil test: pH	*5.6*	*5.4*	*5.6*
P	*97 (high)*	*152 (very high)*	*107 (very high)*
K	*688 (very high)*	*645 (very high)*	*533 (very high)*

Farm Cooperators: Oliver, Russell and Roger Anderson, Cassopolis

County Extension Director: G. Wayne Hothem, Cassopolis

Table 7 SOUTH CENTRAL MICHIGAN Zone 2

Kent County Trial

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	2 yr.	3 yr.	Bushels per acre 1978	2 yr.	3 yr.	% Stalk lodging 1978	2 yr.	3 yr.
Michigan 280 (4X)	18.4	20	20	110.7	102	88	0.8	3	8
Michigan 3093 (3X)	18.6	20	21	110.6	109	99	0.0	2	3
Michigan 333-3X (3X)	19.0	21	21	119.1	114	99	2.2	0	1
Migro M-0101 (2X)	20.7	22	23	134.1	124	101	2.3	1	5
Pioneer 3901 (2X)	21.1	22	--	136.2	130	---	2.2	0	-
Super Crost 1950 (2X)	21.1	--	--	136.8	---	---	0.0	-	-
Michigan 3102 (2X)	21.3	22	22	145.8	132	110	1.6	0	2
DeKalb XL12 (2X)	21.3	22	24	130.9	118	99	0.0	0	9
Customaize CFS-715(2X)	21.4	--	--	125.4	---	---	0.0	-	-
Seneca T1163 (3X)	21.5	--	--	128.7	---	---	2.1	-	-
Michigan 3953 (3X)	21.5	22	--	133.9	125	---	0.0	1	-
Renk RK15 (2X)	21.6	22	--	131.2	114	---	0.0	2	-
Stanton 1090 (2X)	21.8	--	--	123.0	---	---	0.7	-	-
Migro M-0105 (2X)	21.8	22	--	155.7	135	---	0.0	1	-
Northrup King PX32(2X)	21.9	23	--	157.7	148	---	0.0	0	-
Blaney EX7305 (2X)	21.9	23	23	151.7	130	114	1.4	0	4
Andersons SSE (2X)	21.9	23	--	142.8	123	---	2.7	0	-
Northrup King PX37(2X)	22.0	--	--	151.2	---	---	0.7	-	-
Michigan 407-2X (2X)	22.0	23	24	151.6	139	119	0.7	1	5
Dairyland DX1005 (2X)	22.0	23	--	123.9	129	---	0.0	0	-
Stanton 1095 (2X)	22.1	--	--	153.3	---	---	0.0	-	-
Blaney B-AA-WX (2X)	22.1	--	--	156.2	---	---	2.1	-	-
Dairyland DX1002 (2X)	22.2	23	24	154.8	128	106	0.0	3	5
Michigan 4122 (2X)	22.2	23	24	158.6	152	128	0.0	1	2
*Super Crost 2350 (2X)	22.2	24	24	173.2	159	131	3.5	0	8

(Continued)

Table 7 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	2 yr.	3 yr.	Bushels per acre 1978	2 yr.	3 yr.	% Stalk lodging 1978	2 yr.	3 yr.
Funk G-4272 (3X)	22.2	23	25	154.1	145	122	2.1	0	2
Funk G-4321A (2X)	22.3	24	26	156.2	143	122	0.0	0	3
Voris V2372 (2X)	22.3	23	25	159.8	146	126	1.4	0	5
Acco UC2951 (2X)	22.3	--	--	153.9	---	---	1.4	-	-
Michigan 5443 (3X)	22.3	24	25	140.8	133	113	0.7	1	4
Wolverine W166 (2X)	22.4	24	25	156.1	136	115	0.0	1	3
Amcorn 4010 (2X)	22.4	23	--	110.0	107	---	0.0	0	-
Dairyland DX1099 (2X)	22.5	--	--	141.6	---	---	0.0	-	-
*Pioneer 3780 (2X)	22.5	24	26	175.3	159	130	0.0	0	4
Blaney B606E (2X)	22.6	24	--	146.3	140	---	0.7	1	-
Migro M-2018X (2X)	22.6	24	--	149.6	136	---	1.4	0	-
*Migro M-2022X (2X)	22.6	24	--	171.7	153	---	0.7	0	-
Amcorn 4100 (2X)	22.6	24	25	151.9	143	120	0.0	1	8
Amcorn 7480 (2X)	22.7	24	26	132.4	136	116	0.0	0	0
Super Crost S27 (2X)	22.7	24	25	128.8	126	109	0.0	3	7
Gutwein 46 (2X)	22.8	--	--	134.2	---	---	0.0	-	-
Dairyland DX1007 (2X)	22.8	--	--	152.8	---	---	1.5	-	-
Golden Harvest H-2370 (2X)	22.8	--	--	140.9	---	---	0.0	-	-
*Michigan 5802 (2X)	22.8	24	25	173.8	156	132	0.0	2	2
Golden Harvest H-2445 (MSX)	22.8	--	--	139.6	---	---	0.0	-	-
Jacques JX122 (2X)	22.8	24	--	151.3	134	---	0.0	0	-
Stanton 10100 (2X)	22.9	--	--	156.3	---	---	0.0	-	-
Trojan T1108 (MSX)	22.9	--	--	149.5	---	---	0.0	-	-
*Amcorn 7300 (2X)	23.0	24	25	167.5	147	126	0.0	4	5
Voris V2381 (2X)	23.0	--	--	154.5	---	---	0.0	-	-
Seneca S3195 (Sp.)	23.0	--	--	149.1	---	---	0.7	-	-
Cargill 863 (2X)	23.0	24	25	140.2	140	121	0.0	0	7
Trojan TXS 102 (2X)	23.0	25	26	145.4	139	118	0.0	2	4
*Gutwein 22 (2X)	23.1	24	--	167.1	154	---	0.0	1	-
*Northrup King PX49(2X)	23.1	--	--	180.0	---	---	2.1	-	-
*Funk G-4408 (2X)	23.1	24	--	169.2	153	---	0.0	0	-
O's Gold SX1100 (2X)	23.1	24	--	144.9	139	---	4.4	1	-
Michigan 5912 (2X)	23.2	25	--	162.2	157	---	0.0	0	-
Super Crost 2470 (2X)	23.2	25	26	140.9	134	115	0.0	0	1
Andersons AX-5 (Sp.)	23.3	25	--	148.8	129	---	0.0	0	-
Andersons AX-4 (Sp.)	23.3	24	--	136.6	118	---	0.0	0	-
*Funks G-4444 (2X)	23.4	25	26	164.4	150	128	0.0	1	6
Super Crost 2880 (2X)	23.8	--	--	158.1	---	---	0.0	-	-
Customaize CFS-WX120 (2X)	23.9	--	--	143.3	---	---	2.3	-	-
*Gutwein 2250 (2X)	24.0	--	--	170.2	---	---	0.0	-	-
Customaize CFS-WX128 (2X)	24.6	--	--	152.9	---	---	0.0	-	-
*Pioneer 3591 (Sp.)	24.6	25	--	174.3	163	---	0.0	0	-
*Voris V2422 (2X)	25.1	27	--	174.1	128	---	2.2	10	-
Acco UC3301-A (2X)	25.2	--	--	142.7	---	---	0.0	-	-
DeKalb XL42 (2X)	25.2	25	--	154.4	147	---	0.0	0	-
*Pioneer 3535 (2X)	25.2	25	27	163.6	152	123	0.0	0	1
Migro M-0301 (2X)	25.3	26	28	161.4	147	123	0.7	0	7
Gutwein 2340 (2X)	25.9	--	--	146.5	---	---	0.0	-	-
*Pioneer 3541 (2X)	25.9	--	--	177.7	---	---	1.4	-	-
Average	22.6	23	24	148.9	137	117	0.6	0.6	5
Range	18.4 to 25.9	20 to 26	20 to 28	110.7 to 180.0	102 to 163	88 to 132	0.0 to 4.4	0 to 4	0 to 10
Least significant difference	1.2	0.8	0.6	14.1	8	5			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*May 8*	*May 3*	*May 12*
Harvested	*November 2*	*October 20*	*October 21*
Soil type	*Belville loam*	*Belville loam*	*Belville loam*
Previous crop	*Corn*	*Corn*	*Wheat*
Population	*21,700*	*22,100*	*20,000*
Rows	*30"*	*30"*	*30"*
Fertilizer	*124-52-60*	*112-57-60*	*127-69-60, manure*
Soil test: pH	*6.1*	*6.0*	*6.7*
P	*100 (high)*	*86 (high)*	*88 (high)*
K	*356 (very high)*	*258 (high)*	*278 (high)*

Farm Cooperator: Gerald Kayser, Caledonia

County Extension Agent: Robert Knisely, Grand Rapids

Table 8 — SOUTH CENTRAL MICHIGAN — Zone 2

Ottawa and Muskegon Counties

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 280 (4X)	20.1	21	22	118.3	112	95	4.1	2	3
Michigan 333-3X (3X)	20.8	--	--	127.3	---	---	0.0	-	-
Northrup King PX20(2X)	22.0	--	--	113.1	---	---	0.7	-	-
Migro M-0101 (2X)	22.2	24	25	127.8	132	110	0.0	0	0
Michigan 3093 (3X)	22.3	23	24	134.1	120	102	0.0	2	3
Michigan 3102 (2X)	22.5	24	24	142.3	138	115	0.7	0	0
Super Crost S18 (2X)	23.1	24	--	110.7	117	---	1.4	4	-
Pioneer 3901 (2X)	23.2	24	--	134.4	132	---	0.7	1	-
Migro M-0105 (2X)	23.3	24	--	127.1	122	---	2.0	1	-
Amcorn 4010 (2X)	23.4	24	28	106.9	107	104	0.0	0	1
Funk G-4171 (3X)	23.5	--	--	118.1	---	---	2.9	-	-
Funk G-4252 (3X)	23.6	25	26	126.3	126	108	0.0	0	0
Michigan 3953 (3X)	23.7	25	--	120.5	126	---	2.8	3	-
Michigan 4122 (2X)	24.2	26	27	136.6	136	117	1.2	1	1
Blaney B406 (2X)	24.4	--	--	120.5	---	---	0.0	-	-
Super Crost 1950 (2X)	24.6	--	--	119.6	---	---	0.7	-	-
Golden Harvest H-2340 (2X)	24.6	26	--	113.5	110	---	0.7	0	-
Golden Harvest H-2370 (2X)	24.7	25	--	117.2	116	---	2.1	1	-
Amcorn 4100 (2X)	24.7	26	--	140.7	128	---	0.0	1	-
Pride 4417 (2X)	24.8	--	--	142.9	---	---	0.0	-	-
*Pioneer 3780 (2X)	24.9	26	29	150.3	146	123	0.0	0	0
*Blaney B506 (2X)	25.0	27	--	157.8	151	---	0.7	0	-
Michigan 407-2X (2X)	25.0	26	27	148.5	143	121	0.0	1	1
*Blaney EX7305 (2X)	25.0	26	28	156.6	137	120	0.0	0	0
Michigan 5443 (3X)	25.2	26	28	143.9	138	116	3.1	2	1
*McCurdy MSX37 (2X)	25.2	25	--	153.4	145	---	0.0	2	-
Migro M-2022X (2X)	25.2	27	--	145.6	146	---	0.0	0	-
Pride 5525 (2X)	25.2	--	--	139.9	---	---	0.0	-	-
Golden Harvest H-2373 (2X)	25.3	--	--	117.4	---	---	0.0	-	-
*Funk G-4272 (3X)	25.5	26	29	153.1	139	118	0.0	0	0
Amcorn 7480 (2X)	25.6	28	--	145.8	140	---	0.7	0	-
Amcorn 7300 (2X)	25.6	27	30	120.8	122	102	0.7	3	2
*Super Crost 2470 (2X)	25.6	28	30	149.4	139	115	0.0	0	0
Cardinal SX105 (2X)	25.7	--	--	136.4	---	---	0.0	-	-
*USS 0010 (2X)	25.8	26	--	150.0	141	---	0.0	1	-
Northrup King PX37(2X)	25.9	--	--	142.5	---	---	0.0	-	-
*Super Crost 2350 (2X)	25.9	28	29	153.6	146	124	0.8	0	0
Super Crost S27 (2X)	25.9	27	29	132.6	137	120	2.1	1	1
*Michigan 5802 (2X)	26.0	28	30	152.1	146	123	1.5	1	1
Migro M-2018X (2X)	26.1	28	--	133.4	139	---	0.0	0	-
*McCurdy MSX46 (2X)	26.5	28	30	154.1	150	126	0.0	0	0
Cardinal SX110 (2X)	26.5	--	--	125.1	---	---	2.7	-	-
DeKalb XL35 (2X)	26.6	--	--	127.0	---	---	0.0	-	-
*McCurdy MSX42 (2X)	26.6	29	30	149.1	131	110	0.0	0	0
*Michigan 5912 (2X)	26.6	29	--	158.6	156	---	0.0	0	-
*DeKalb XL42 (2X)	26.6	28	--	148.8	139	---	0.0	0	-
Acco UC2951 (2X)	26.7	--	--	121.5	---	---	0.0	-	-
Cargill 863 (2X)	26.8	--	--	144.1	---	---	0.0	-	-
Trojan TXS102 (2X)	26.8	--	--	141.8	---	---	3.5	-	-
O's Gold SX1107 (2X)	26.9	--	--	121.1	---	---	0.7	-	-
*Funk G-4444 (2X)	26.9	28	31	152.5	147	120	1.4	1	0
Acco UC3002 (2X)	27.0	29	--	143.0	141	---	0.0	0	-
*Golden Harvest H-2445 (2X)	27.0	--	--	163.3	---	---	2.0	-	-
Super Crost 2880 (2X)	27.0	--	--	145.3	---	---	0.0	-	-
Pride 4488 (2X)	27.1	--	--	137.4	---	---	0.0	-	-
McCurdy MSX44A (2X)	27.2	29	31	122.1	122	103	0.0	0	0
Trojan TXS 108A (2X)	27.2	28	--	131.0	138	---	0.0	0	-
*Migro M-0301 (2X)	27.5	29	31	150.8	148	121	0.0	0	0
USS 0011 (2X)	28.3	29	--	129.8	138	---	0.0	0	-
Pioneer 3535 (2X)	29.5	29	31	125.2	137	117	0.8	0	0
Migro M-0505 (2X)	30.9	32	33	125.7	139	119	0.7	0	0
Average	25.4	27	28	134.4	135	115	0.7	0.6	0.5
Range	20.1 to 30.9	21 to 32	22 to 33	106.9 to 163.3	107 to 156	95 to 126	0.0 to 4.1	0 to 4	0 to 3
Least significant difference	1.3	0.9	0.7	14.4	8	5			

Significantly better than average yield in 1978

(Continued)

Table 8 (continued)

		1978	1977	1976
Planted		May 19	May 11	May 24
Harvested		November 3	October 21	October 22
Soil type		Gladwin sandy loam and Iosco sandy loam	Gladwin sandy loam and Iosco sandy loam	Nester loam
Previous crop		Corn	Corn	Corn
Population		20,800	19,900	20,200
Rows		30"	30"	30"
Fertilizer		109-36-156	106-24-24	115-69-90
Soil test:	pH	5.7	5.4	6.9
	P	102 (very high)	117 (very high)	23 (low)
	K	236 (high)	133 (low)	126 (low)

Farm Cooperators: Gerald Geurink, Allendale (1978, 1977)
Robert Bonthuis, Ravenna (1976)

County Extension Directors: Lawrence Stebbins, Grand Haven (1978, 1977)
Harold Ferris, Muskegon (1976)

Table 9 — SOUTH CENTRAL MICHIGAN — Zone 2

Ingham County Trial - Grain

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Michigan 280 (4X)	19.1	20	21	82.2	91	87	0.8	2	3
Michigan 333-3X (3X)	19.7	21	22	99.3	105	101	0.0	1	2
Michigan 3093 (3X)	20.4	20	22	105.5	109	104	0.0	0	1
Pioneer 3965 (3X)	22.3	22	--	102.8	105	---	0.7	1	-
Migro M-0101 (2X)	22.5	--	--	87.4	---	---	1.4	-	-
Funk G-4141 (2X)	22.9	22	23	103.2	116	100	0.0	1	0
Super Crost 1590 (2X)	23.1	--	--	87.1	---	---	0.0	-	-
Warwick TX27 (3X)	23.2	23	23	98.2	97	90	0.0	2	2
Northrup King PX22(2X)	23.2	--	--	124.0	---	---	0.0	-	-
Garno S-90 (2X)	23.2	--	--	84.0	---	---	0.0	-	-
Michigan 3102 (2X)	23.3	22	23	121.9	124	110	0.0	0	0
Funk G-4323 (MSX)	23.8	--	--	112.9	---	---	0.0	-	-
Michigan 3953 (3X)	23.8	23	--	125.4	130	---	0.0	2	-
Northrup King PX504 (3X)	23.8	--	--	101.5	---	---	0.7	-	-
Super Crost 1692 (2X)	23.8	23	24	93.1	99	89	2.1	4	3
Golden Harvest H-2370 (2X)	23.9	23	--	89.1	102	--	1.4	1	-
Blaney B605-WX (2X)	24.0	24	26	105.0	125	120	0.0	3.	2
*Golden Harvest H-2373 (2X)	24.0	--	--	127.1	---	---	0.0	-	-
Dairyland DX1002 (2X)	24.1	--	--	83.2	---	---	0.7	-	-
Cargill 832 (2X)	24.1	--	--	101.0	---	---	0.0	-	-
Amcorn 4010 (2X)	24.2	24	--	87.0	100	---	0.7	0	-
P-A-G SX177 (2X)	24.2	23	24	100.6	109	98	0.7	0	0
Northrup King PX485 (3X)	24.3	--	--	112.0	---	---	0.0	-	-
*Pioneer 3901 (2X)	24.3	23	--	134.5	133	---	0.0	1	-
Dairyland DX1099 (2X)	24.3	--	--	99.7	---	---	0.0	-	-
*Voris V2372 (2X)	24.4	24	25	128.2	131	128	0.7	2	2
Blaney B406 (2X)	24.5	--	--	106.6	---	---	0.0	-	-
Cargill 838 (2X)	24.6	24	--	102.8	111	---	0.0	3	-
Super Crost S18 (2X)	24.7	23	--	86.0	97	---	0.0	2	-
Michigan 407-2X (2X)	24.7	24	25	125.1	133	125	0.0	2	1
Warwick W966 (Sp.)	24.8	24	--	121.4	115	---	0.0	1	-
Funk G-4224 (MSX)	24.9	--	--	114.2	---	---	1.4	-	-
Blaney B506 (2X)	24.9	24	--	98.6	114	---	0.0	0	-
Migro M-0105 (2X)	25.0	24	--	96.2	109	---	1.4	2	-
Seneca T1183 (3X)	25.1	--	--	124.9	---	---	0.0	-	-
McCurdy MSX37 (2X)	25.1	--	--	102.1	---	---	0.0	-	-
DeKalb XL15 (2X)	25.1	--	--	115.6	---	---	0.0	-	-
Warwick SL501 (Sp.)	25.2	--	--	105.1	---	---	0.0	-	-
*Renk RK15 (2X)	25.2	24	--	135.7	146	---	0.0	1	-
Voris V2381 (2X)	25.4	--	--	124.4	---	---	0.0	-	-
*Michigan 4122 (2X)	25.4	25	25	130.0	137	130	0.0	0	0
Super Crost 1950 (2X)	25.4	--	--	106.8	---	---	1.4	-	-
Asgrow RX53 (2X)	25.6	25	--	105.2	118	---	0.0	0	-
Dairyland DX1008 (2X)	25.7	--	--	116.4	---	---	0.0	-	-
Michigan 5443 (3X)	25.7	25	26	115.5	124	118	0.7	2	2

(Continued)

Table 9 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Garno S-84 (2X)	25.7	--	--	104.4	---	---	0.0	-	-
Dennis DS90 (2X)	25.7	24	--	97.1	96	---	0.0	1	-
*Super Crost 2350 (2X)	25.9	25	27	133.0	137	130	0.0	0	0
*McCurdy MSX46 (2X)	25.9	25	27	141.9	140	134	0.0	0	0
Wolverine W166 (2X)	26.0	--	--	110.4	---	---	0.7	-	-
Super Crost S27 (2X)	26.0	25	26	100.4	125	117	0.7	3	2
Dairyland DX1005 (2X)	26.1	--	--	108.3	---	---	0.0	-	-
Pride 4417 (2X)	26.1	--	--	103.7	---	---	0.0	-	-
Cargill 430 (3X)	26.1	--	--	117.8	---	---	0.7	-	-
*Amcorn 4100 (2X)	26.1	25	25	128.1	129	123	0.0	2	1
Wolverine W169 (2X)	26.1	25	--	108.4	121	---	0.0	0	-
*Pioneer 3780 (2X)	26.2	25	27	126.5	139	129	0.0	1	1
*McCurdy MSX42 (2X)	26.3	25	27	127.5	131	126	0.0	0	0
Northrup King PX32(2X)	26.3	25	--	109.9	126	---	0.7	2	-
Michigan 5802 (2X)	26.4	25	27	125.8	139	132	0.0	1	1
Super Crost 2470 (2X)	26.5	25	28	110.9	121	113	0.0	0	0
Pioneer 3709 (Sp.)	26.5	26	27	112.8	121	118	0.0	2	1
Renk RK44 (2X)	26.6	26	26	102.9	125	117	0.0	2	1
*Golden Harvest H-2450 (2X)	26.7	25	26	132.8	140	132	0.0	0	0
Northrup King PX37(2X)	26.7	--	--	102.3	---	---	0.0	-	-
Acco U334 (3X)	26.7	25	26	109.9	124	116	0.0	3	2
Cardinal SX110 (2X)	26.7	--	--	101.5	---	---	0.7	-	-
P-A-G SX189 (2X)	26.8	--	--	110.5	---	---	0.0	-	-
Northrup King PX529 (3X)	26.8	--	--	107.4	---	---	1.4	-	-
*Renk RK66E (2X)	26.8	--	--	129.6	---	---	0.0	-	-
Pride 4488 (2X)	26.9	--	--	105.0	---	---	0.0	-	-
Migro M-2022X (2X)	26.9	--	--	123.1	---	---	0.0	-	-
Seneca S3195 (Sp.)	27.0	--	--	101.4	---	---	0.0	-	-
DeKalb XL35 (2X)	27.0	26	--	111.0	131	---	0.0	0	-
Northrup King PX585 (3X	27.1	26	--	104.9	130	---	0.0	1	-
Renk RK40 (2X)	27.1	--	--	111.6	---	---	0.0	-	-
Andersons AX-5 (Sp.)	27.2	26	--	99.8	119	---	0.0	0	-
Blaney B606E (2X)	27.2	26	--	114.2	132	---	0.0	2	-
*Funk G-4408 (2X)	27.2	25	--	126.8	139	---	0.0	0	-
*Michigan 5912 (2X)	27.2	26	--	135.8	147	---	0.0	0	-
Trojan TXS102 (2X)	27.4	26	28	116.5	127	118	0.0	3	2
*Northrup King PX49(2X)	27.5	--	--	135.7	---	---	0.0	-	-
Renk RK66 (2X)	27.5	27	--	108.7	120	---	0.0	0	-
*Gutwein 46B (2X)	27.6	26	--	129.0	133	---	0.0	0	-
*Garno S-95X (2X)	27.6	--	--	140.3	---	---	0.0	-	-
*Funk G-4444 (2X)	27.6	26	27	126.7	141	127	0.0	0	0
Asgrow RX2345 (2X)	27.8	--	--	126.2	---	---	0.0	-	-
Andersons SSE (2X)	27.9	27	--	107.8	118	---	0.0	0	-
Pride 5525 (2X)	28.2	26	27	102.3	125	120	0.0	0	0
Super Crost 2880 (2X)	28.2	--	--	116.1	---	---	0.0	-	-
*Funk G-4430 (2X)	28.2	--	--	140.1	---	---	0.0	-	-
Golden Harvest H-2445 (MSX)	28.2	--	--	117.0	---	---	0.0	-	-
*Michigan 5922 (2X)	28.2	--	--	140.7	---	---	0.0	-	-
*Amcorn 7300 (2X)	28.3	27	28	129.7	136	122	0.0	2	3
Acco UC3302-A (2X)	28.3	27	--	104.6	130	---	0.0	0	-
Super Crost 3585(Sp.)	28.3	--	--	102.9	---	---	0.0	-	-
Northrup King PX48(2X)	28.3	27	--	112.3	133	---	0.0	0	-
*Amcorn 7480 (2X)	28.4	27	28	131.8	147	135	0.0	1	1
*Voris V2422 (2X)	28.5	--	--	147.1	---	---	0.0	-	-
*Migro M-0301 (2X)	28.6	27	29	133.7	145	128	0.0	2	2
*Dairyland DX1010 (2X)	28.6	--	--	137.8	---	---	0.0	-	-
Migro M-2018X (2X)	28.7	27	--	120.6	136	---	0.0	0	-
Migro M-3020 (4X)	28.9	27	28	116.4	133	119	0.0	1	1
Dennis DS6 (2X)	29.2	27	--	106.0	129	---	0.0	0	-
Muncy Chief SX777(2X)	29.8	28	--	120.5	132	---	0.0	1	-
Garno S-100 (2X)	29.8	28	29	118.6	136	122	0.0	0	0
Gutwein 2340 (2X)	29.8	--	--	115.3	---	---	0.0	-	-
Dennis DS47A (2X)	30.2	28	--	111.8	121	---	0.0	1	-
Andersons AX-4 (Sp.)	30.4	27	--	111.6	125	---	0.0	1	-
*Dennis DS37E (2X)	30.4	29	--	134.3	147	---	0.7	1	-
Muncy Chief SX662(2X)	30.5	29	31	125.8	137	123	1.4	1	1
Muncy Chief SX550(2X)	30.6	29	30	102.9	110	102	0.0	1	1
*Pioneer 3541 (2X)	30.6	--	--	130.7	---	---	0.0	-	-
*Pioneer 3535 (2X)	30.7	29	30	140.8	152	141	0.0	0	0
*Wolverine W174 (2X)	30.8	29	30	126.3	144	134	0.0	0	0

(Continued)

Table 9 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
*Golden Harvest H-2500 (2X)	31.1	29	31	131.0	146	137	0.0	1	1
Andersons Silo Filler (4X)	31.1	--	--	100.4	---	---	0.0	-	-
*Migro M-0505 (2X)	31.2	30	31	144.0	144	138	0.0	0	0
*Dennis DS36 (2X)	31.4	--	--	127.1	---	---	0.0	-	-
Muncy Chief 3X676(3X)	31.4	--	--	100.4	---	---	0.0	-	-
Migro M-4501 (2X)	32.0	30	31	98.1	122	111	1.4	2	1
*O's Gold SX5500A (2X)	32.3	--	--	127.8	---	---	0.0	-	-
*Golden Harvest H-2600 (2X)	32.5	31	--	127.5	135	---	0.0	0	-
Muncy Chief H764 (2X)	32.6	31	32	90.7	122	115	0.0	0	0
Average	26.7	25	27	114.1	126	119	0.2	0.9	0.9
Range	19.1 to 32.6	20 to 31	21 to 32	82.2 to 147.2	91 to 152	87 to 141	0.0 to 2.1	0 to 4	0 to 3
Least significant difference	1.4	0.9	0.7	12.2	8	5			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*April 26*	*April 30*	*April 30*
Harvested	*October 3*	*September 27*	*September 27*
Soil type	*Conover clay loam*	*Conover clay loam*	*Conover clay loam*
Previous crop	*Corn*	*Corn*	*Corn*
Population	*20,600*	*21,400*	*19,800*
Rows	*36"*	*36"*	*36"*
Fertilizer	*165-50-50*	*145-50-50*	*157-57-57*
Soil test: pH	*6.5*	*6.7*	*6.8*
P	*78 (high)*	*87 (high)*	*86 (high)*
K	*173 (medium)*	*270 (high)*	*174 (medium)*

Farm Cooperator: Michigan State University, East Lansing

County Extension Director: Marvin Preston, Mason

Table 10 — SOUTH CENTRAL MICHIGAN — Zone 2

Ingham County Trial - Silage

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1978	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1978	Dry weight 2 yr.	Dry weight 3 yr.
Michigan 280 (4X)	49.7	47.1	45.1	12.7	13.2	13.0	6.3	6.2	5.8
Northrup King PX22(2X)	48.5	---	---	13.6	---	---	6.6	---	---
Dennis DS90 (2X)	48.4	45.1	---	13.6	13.7	---	6.5	6.1	---
Funk G-4141 (2X)	48.3	43.7	41.8	15.0	16.6	15.8	7.2	7.1	6.5
Michigan 333-3X (3X)	48.0	46.1	43.4	14.8	14.0	14.0	7.0	6.4	6.0
Super Crost 1590 (2X)	47.7	---	---	13.6	---	---	6.4	---	---
Migro M-0101 (2X)	47.4	---	---	13.3	---	---	6.3	---	---
Michigan 3093 (3X)	47.3	45.4	42.9	13.5	14.3	15.0	6.4	6.5	6.4
Pioneer 3901 (2X)	47.2	44.7	---	13.1	14.4	---	6.0	6.3	---
Blaney B406 (2X)	47.2	---	---	15.7	---	---	7.4	---	---
Pride 4417 (2X)	46.8	---	---	14.5	---	---	6.8	---	---
Pioneer 3965 (3X)	46.5	43.3	---	15.5	14.7	---	7.2	6.4	---
Michigan 3953 (3X)	46.5	44.5	---	14.8	15.1	---	6.9	6.7	---
Golden Harvest H-2370 (2X)	46.5	40.8	---	14.8	14.6	---	6.9	6.0	---
Northrup King PX504 (3X)	46.1	---	---	15.5	---	---	7.1	---	---
P-A-G SX 177 (2X)	46.0	43.4	41.3	16.3	16.8	16.5	7.5	7.3	6.8
Cargill 832 (2X)	45.7	---	---	16.0	---	---	7.3	---	---
Warwick SL501 (Sp.)	45.7	---	---	12.6	---	---	5.7	---	---
Migro M-0105 (2X)	45.5	43.5	---	17.1	16.1	---	7.8	7.0	---
Warwick TX27 (3X)	45.3	43.3	41.5	13.1	13.1	11.8	5.9	5.6	4.9
Renk RK40 (2X)	45.2	---	---	17.1	---	---	7.7	---	---
Michigan 3102 (2X)	45.1	42.4	40.6	16.6	16.9	16.6	7.5	7.1	6.7
Northrup King PX529 (3X)	45.1	---	---	13.8	---	---	6.2	---	---
Super Crost 1692(2X)	45.0	42.9	40.7	14.8	14.5	15.1	6.6	6.2	6.1
Blaney B506 (2X)	44.6	41.0	---	15.2	16.3	---	6.8	6.7	---

(Continued)

Table 10 (continued)

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1978	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1978	Dry weight 2 yr.	Dry weight 3 yr.
Super Crost S18(2X)	44.3	40.2	---	16.2	16.5	---	7.1	6.6	---
Funk G-4224 (MSX)	43.9	---	---	16.9	---	---	7.4	---	---
Wolverine W169(2X)	43.9	39.6	---	15.2	17.3	---	6.7	6.7	---
Dairyland DX1008(2X)	43.8	---	---	17.4	---	---	7.6	---	---
Northrup King PX485 (3X)	43.7	---	---	17.4	---	---	7.6	---	---
Michigan 407-2X(2X)	43.7	40.7	39.2	16.7	17.3	16.4	7.3	7.0	6.4
DeKalb XL15 (2X)	43.4	---	---	16.6	---	---	7.2	---	---
Amcorn 4010 (2X)	43.2	42.9	---	15.0	14.3	---	6.5	6.1	---
Dairyland DX1099(2X)	43.2	---	---	16.7	---	---	7.2	---	---
Northrup King PX32 (2X)	43.0	40.3	---	16.9	18.1	---	7.3	7.2	---
Warwick W966 (Sp.)	43.0	41.9	---	15.4	15.8	---	6.6	6.6	---
Michigan 4122 (2X)	43.0	39.8	38.0	17.0	18.6	19.2	7.3	7.3	7.2
Voris V2372 (2X)	42.9	39.4	37.4	17.2	18.2	17.7	7.4	7.1	6.6
Garno S-90 (2X)	42.9	---	---	16.1	---	---	6.9	---	---
McCurdy MSX 37 (2X)	42.9	---	---	18.6	---	---	8.0	---	---
Super Crost S27(2X)	42.9	40.3	38.1	16.3	17.1	17.1	7.0	6.8	6.5
Michigan 5443 (3X)	42.9	39.4	37.5	16.6	17.6	18.2	7.1	6.9	6.7
Migro M-2022X (2X)	42.9	---	---	18.4	---	---	7.9	---	---
Golden Harvest H-2373 (2X)	42.8	---	---	15.5	---	---	6.6	---	---
Cargill 838 (2X)	42.7	43.1	---	15.5	15.6	---	6.6	6.7	---
Gutwein 46B (2X)	42.5	37.9	---	17.4	20.2	---	7.4	7.5	---
Garno S84 (2X)	42.4	---	---	15.0	---	---	6.4	---	---
Super Crost 1950 (2X)	42.2	---	---	14.7	---	---	6.2	---	---
P-A-G SX189 (2X)	42.2	---	---	18.2	---	---	7.7	---	---
Renk RK15 (2X)	41.8	39.7	---	15.9	17.4	---	6.6	6.8	---
Super Crost 2350(2X)	41.7	39.1	37.0	17.2	18.8	18.4	7.2	7.3	6.8
Michigan 5802 (2X)	41.7	38.6	36.5	17.0	18.0	18.7	7.1	7.0	6.8
Cardinal SX110 (2X)	41.6	---	---	17.4	---	---	7.1	---	---
Cargill 430 (3X)	41.5	---	---	16.8	---	---	6.9	---	---
DeKalb XL35 (2X)	41.4	36.9	---	15.7	18.4	---	6.5	6.6	---
Pioneer 3780 (2X)	41.3	38.9	37.0	16.7	18.2	18.1	6.9	7.0	6.7
Amcorn 4100 (2X)	41.3	40.3	38.2	18.1	17.3	16.6	7.5	6.9	6.3
Blaney B606E (2X)	41.2	36.6	---	19.6	19.0	---	8.1	6.9	---
Northrup King PX48(2X)	41.2	40.7	---	17.1	17.2	---	7.0	7.0	---
Pride 4488 (2X)	41.1	---	---	17.5	---	---	7.2	---	---
Funk G-4444 (2X)	41.1	38.6	36.9	19.7	20.0	19.3	8.1	7.7	7.1
Amcorn 7300 (2X)	40.9	36.5	---	16.9	19.2	---	6.9	6.9	---
Seneca T1183 (3X)	40.9	---	---	18.4	---	---	7.5	---	---
McCurdy MSX 42 (2X)	40.9	37.5	35.9	16.7	17.8	17.9	6.8	6.6	6.4
Asgrow RX53 (2X)	40.8	39.5	---	16.2	17.2	---	6.6	6.7	---
Garno S-95 (2X)	40.6	---	---	16.9	---	---	6.9	---	---
Wolverine W166 (2X)	40.4	---	---	17.7	---	---	7.1	---	---
Blaney B605-WX (2X)	40.4	37.0	35.8	18.6	18.8	18.9	7.5	6.9	6.8
Acco U334 (3X)	40.2	38.4	36.6	16.2	17.2	16.9	6.5	6.5	6.1
Renk RK66E (2X)	40.2	---	---	18.9	---	---	7.6	---	---
Andersons SSE (2X)	40.1	37.3	---	17.8	18.9	---	7.1	7.0	---
Dairyland DX1002(2X)	40.0	---	---	15.3	---	---	6.1	---	---
Northrup King PX37 (2X)	40.0	---	---	20.1	---	---	8.0	---	---
Dairyland DX1005(2X)	39.9	---	---	15.5	---	---	6.2	---	---
Trojan TXS102 (2X)	39.9	37.3	36.0	17.7	18.9	18.4	7.1	7.0	6.6
Michigan 5912 (2X)	39.8	37.3	---	19.6	20.9	---	7.8	7.8	---
Renk RK44 (2X)	39.8	38.0	35.8	15.3	16.8	17.0	6.1	6.3	6.0
Gutwein 2340 (2X)	39.7	---	---	18.4	---	---	7.3	---	---
Voris V2422 (2X)	39.5	---	---	18.9	---	---	7.4	---	---
Andersons AX-4 (Sp.)	39.5	37.3	---	19.4	19.2	---	7.6	7.1	---
Acco UC 3301-A (2X)	39.5	37.0	---	18.7	19.9	---	7.4	7.3	---
Renk RK66 (2X)	39.4	34.4	---	17.2	19.7	---	6.8	6.6	---
Super Crost 2470(2X)	39.3	37.1	35.2	18.4	18.8	19.8	7.2	6.9	6.9
Funk G-4408 (2X)	39.2	36.8	---	15.7	18.8	---	6.2	6.9	---
Super Crost 2880(2X)	39.0	---	---	18.2	---	---	7.1	---	---
Andersons AX-5 (Sp.)	38.8	35.6	---	16.8	19.0	---	6.5	6.7	---
Seneca S3195 (Sp.)	38.4	---	---	17.3	---	---	6.6	---	---
Golden Harvest H-2450 (2X)	38.4	36.3	35.7	18.0	18.8	17.8	6.9	6.3	6.3
Michigan 5922 (2X)	38.3	---	---	19.1	---	---	7.3	---	---
Pioneer 3709 (Sp.)	38.2	35.9	34.8	17.8	18.1	18.2	6.8	6.5	6.3
Muncy Chief SX550(2X)	38.0	35.6	35.2	17.4	17.8	16.9	6.6	6.3	5.9
Super Crost 3585 (Sp.)	37.9	---	---	19.1	---	---	7.3	---	---
Asgrow RX2345 (2X)	37.9	---	34.5	18.2	---	18.9	6.9	---	6.4
Muncy Chief SX662(2X)	37.9	34.7	34.2	21.9	22.5	21.3	8.3	7.8	7.2
Northrup King PX49 (2X)	37.8	---	---	21.5	---	---	8.1	---	---

(Continued)

Table 10 (continued)

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1978	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1978	Dry weight 2 yr.	Dry weight 3 yr.
Pioneer 3541 (2X)	37.7	---	---	18.2	---	---	6.8	---	---
Muncy Chief H764(4X)	37.6	33.0	31.5	20.6	23.2	21.8	7.8	7.6	6.9
Migro M-3020 (4X)	37.6	34.4	33.5	16.2	17.4	19.2	6.1	5.9	6.4
Funk G-4323 (MSX)	37.2	---	---	18.2	---	---	6.7	---	---
Pride 5525 (2X)	36.6	34.8	33.2	18.2	20.9	19.9	6.6	7.2	6.6
McCurdy MSX46 (2X)	36.6	34.1	32.9	22.4	21.4	20.2	8.2	7.3	6.7
Funk G-4430 (2X)	36.3	---	---	21.3	---	---	7.7	---	---
Amcorn 7480 (2X)	36.3	34.9	33.4	19.6	20.0	20.5	7.1	6.9	6.8
Golden Harvest H-2445 (MSX)	36.3	---	---	17.5	---	---	6.3	---	---
Pioneer 3535 (2X)	36.1	34.1	33.3	19.8	20.8	20.4	7.1	7.0	6.8
Voris V2381 (2X)	36.0	---	---	17.2	---	---	6.2	---	---
Garno S-100 (2X)	36.0	33.9	32.5	20.8	20.4	20.1	7.5	6.9	6.5
Dennis DS47A (2X)	35.9	33.3	---	21.1	21.4	---	7.5	7.0	---
Golden Harvest H-2500 (2X)	35.5	31.4	30.1	21.1	24.1	24.9	7.5	7.4	7.4
Dennis DS6 (2X)	35.5	---	---	18.6	---	---	6.6	---	---
Golden Harvest H-2600 (2X)	35.4	32.1	---	20.8	22.7	---	7.4	7.2	---
Northrup King PX585 (3X)	35.2	33.0	---	20.0	20.9	---	7.1	6.9	---
Migro M-2018X (2X)	35.2	31.8	---	17.0	18.9	---	6.0	5.9	---
Migro M-4501 (2X)	35.2	33.5	32.2	23.8	23.4	23.2	8.4	7.8	7.5
Migro M-0301 (2X)	34.9	34.4	33.1	22.0	22.3	22.2	7.7	7.7	7.2
Dennis DS36 (2X)	34.7	---	---	22.3	---	---	7.7	---	---
Migro M-0505 (2X)	34.6	32.3	30.7	21.2	23.0	22.1	7.3	7.4	6.7
Wolverine W174 (2X)	33.3	32.0	31.1	20.7	22.4	21.0	6.9	7.1	6.5
Dennis DS37E (2X)	33.0	31.1	---	19.4	21.5	---	6.4	6.6	---
O's Gold SX5500A (2X)	32.9	---	---	22.3	---	---	7.3	---	---
Muncy Chief 3X676(3X)	32.7	---	---	24.8	---	---	8.1	---	---
Dairyland DX1010 (2X)	32.6	---	---	22.3	---	---	7.3	---	---
Muncy Chief SX777 (2X)	30.3	29.3	---	21.7	23.5	---	6.5	6.8	---
Andersons Silo Filler (4X)	30.1	---	---	19.4	---	---	5.8	---	---
Average	40.8	38.1	36.3	17.5	18.3	18.4	7.0	6.8	6.5
Range	30.1 to 49.7	29.3 to 47.1	30.1 to 45.1	12.6 to 24.8	13.1 to 24.1	11.8 to 24.9	5.7 to 8.4	5.6 to 7.8	4.9 to 7.5
Least significant difference	2.0	1.3	0.9	1.5	0.8	0.6	0.6	0.5	0.4

		1978	1977	1976
Planted		*April 26*	*April 30*	*April 30*
Harvested		*September 5*	*August 25*	*August 31*
Soil type		*Conover clay loam*	*Conover clay loam*	*Conover clay loam*
Previous crop		*Corn*	*Corn*	*Corn*
Population		*20,400*	*21,100*	*19,300*
Rows		*36"*	*36"*	*36"*
Fertilizer		*165-50-50*	*145-50-50*	*157-57-57*
Soil test:	*pH*	*6.5*	*6.7*	*6.8*
	P	*78 (high)*	*87 (high)*	*86 (high)*
	K	*173 (medium)*	*270 (high)*	*174 (medium)*

Farm Cooperator: Michigan State University, East Lansing

County Extension Director: Marvin Preston, Mason

Table 11 NORTH CENTRAL MICHIGAN Zone 3

Sanilac County Trial - Grain

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels 2 yr.	Bushels 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Super Crost 1210 (2X)	20.6	--	--	77.9	---	---	0.0	-	-
P-A-G SX111 (2X)	20.6	--	--	93.4	---	---	0.0	-	-
Michigan 280 (4X)	20.7	22	24	94.9	104	98	0.0	0	0
Cargill 810 (2X)	22.2	22	--	77.4	94	---	0.0	0	-
Super Crost 1402 (2X)	22.3	--	--	91.7	---	---	0.0	-	-

(Continued)

Table 11 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Pioneer 3975A (Sp.)	22.4	--	--	108.8	---	---	0.0	-	-
Michigan 3093 (3X)	22.4	24	26	102.6	118	115	0.0	0	0
Super Crost 1303 (2X)	22.5	--	--	95.1	---	---	0.0	-	-
Jacques JX25 (2X)	22.6	24	--	90.1	106	---	0.0	0	-
Michigan 333-3X (3X)	22.6	24	26	104.6	122	116	0.0	0	0
Funk G-4195 (3X)	22.7	24	27	98.4	111	108	0.0	0	0
Northrup King PX22(2X)	23.4	--	--	91.8	---	---	0.0	-	-
Seneca 280 (3X)	23.7	--	--	81.7	---	---	0.0	-	-
Voris V2352 (Sp.)	23.9	25	--	96.9	120	---	0.0	0	-
Pride 2264 (2X)	24.1	25	--	96.7	114	---	0.0	0	-
Oxy 35A (2X)	24.2	--	--	105.4	---	---	0.0	-	-
Michigan 3102 (2X)	24.2	25	27	94.6	121	119	0.0	0	0
Renk RK15 (2X)	24.2	25	--	94.5	129	---	0.0	0	-
*Golden Harvest H-2340 (2X)	24.3	25	--	110.0	124	---	0.0	0	-
Super Crost 1692 (2X)	24.3	25	28	101.5	115	111	0.0	0	0
Amcorn 4010 (2X)	24.4	26	--	87.5	99	---	0.0	0	-
Stanton 1090 (2X)	24.4	--	--	91.2	---	---	0.0	-	-
Migro M-0101 (2X)	24.5	25	--	92.7	118	---	0.0	0	-
Super Crost 1590 (2X)	24.5	--	--	91.9	---	---	0.0	-	-
*Pioneer 3901 (2X)	24.8	26	--	123.5	143	---	0.0	0	-
Gutwein 2140 (2X)	24.8	--	--	90.3	---	---	0.0	-	-
USS U8543 (2X)	24.8	--	--	94.3	---	---	0.0	-	-
Blaney B302-WX (2X)	24.9	--	--	88.7	---	---	0.0	-	-
*Michigan 3953 (3X)	24.9	--	--	110.6	---	---	0.0	-	-
Migro M-0105 (2X)	25.0	26	--	100.2	131	---	0.0	0	-
*Jacques JX52 (2X)	25.1	26	--	116.3	127	---	0.0	0	-
Super Crost S18 (2X)	25.1	--	--	104.8	---	---	0.0	-	-
P-A-G SX177 (2X)	25.1	26	28	107.5	113	116	0.0	1	1
Jacques JX62 (2X)	25.1	25	--	87.2	112	---	0.0	0	-
*Super Crost 1950 (2X)	25.2	--	--	112.1	---	---	0.0	-	-
*Trojan TX90 (3X)	25.5	25	--	124.8	118	---	0.0	0	-
*Golden Harvest H-2370 (2X)	25.5	27	--	124.4	132	---	0.0	0	-
*Golden Harvest H-2373 (2X)	25.5	--	--	114.4	---	---	0.0	-	-
Oxy 32 (2X)	25.5	--	--	103.6	---	---	0.0	-	-
*Northrup King PX32(2X)	25.5	26	--	113.7	139	---	0.0	0	-
Renk RW2-WX (2X)	25.5	27	--	98.1	126	---	0.0	0	-
Oxy 476 (3X)	25.5	--	--	86.0	---	---	0.0	-	-
Stanton 1095 (2X)	25.5	--	--	96.7	---	---	0.0	-	-
Super Crost 31 (4X)	25.6	--	--	88.6	---	---	0.0	-	-
Wolverine W128 (2X)	25.8	25	27	80.4	106	102	0.0	0	0
*Northrup King PX26(2X)	25.9	--	--	122.6	---	---	0.0	-	-
Cargill 832 (2X)	26.0	--	--	91.1	---	---	0.0	-	-
Gutwein 112 (3X)	26.3	--	--	103.4	---	---	0.0	-	-
*Jacques JX90 (2X)	26.4	--	--	112.6	---	---	0.0	-	-
Michigan 407-2X (2X)	26.4	26	29	105.8	132	126	0.0	0	0
Cargill 838 (2X)	26.4	--	--	93.5	---	---	0.0	-	-
Trojan TXS99 (2X)	26.4	26	--	96.6	118	---	0.0	0	-
Cardinal SX98A (2X)	26.5	--	--	88.8	---	---	0.0	-	-
Asgrow RX40 (2X)	26.7	26	--	87.3	119	---	0.0	0	-
Acco UC2901 (2X)	26.8	27	30	108.0	126	119	0.0	0	0
Pride 4417 (2X)	26.8	--	--	87.6	---	---	0.0	-	-
*Funk G-4272 (3X)	26.8	27	30	114.8	136	130	0.0	0	0
*DeKalb XL15 (2X)	26.8	--	--	110.2	---	---	0.0	-	-
Acco UC2951 (2X)	26.9	--	--	101.9	---	---	0.0	-	-
Seneca 149 (3X)	26.9	--	--	85.4	---	---	0.0	-	-
Gutwein 2075 (2X)	26.9	--	--	101.1	---	---	0.0	-	-
*Voris V2372 (2X)	26.9	27	--	117.0	137	---	0.0	0	-
Stanton 10100 (2X)	27.0	--	--	97.3	---	---	0.0	-	-
Trojan T1008 (2X)	27.1	--	--	91.2	---	---	0.0	-	-
*Pioneer 3780 (2X)	27.3	28	30	112.5	135	128	0.0	1	0
Wolverine W155 (2X)	27.3	27	--	88.0	118	---	0.0	1	-
*Garno S-82 (2X)	27.6	27	29	111.9	129	125	0.0	0	0
Voris V2381 (2X)	27.7	--	--	96.7	---	---	0.0	-	-
Super Crost 2350 (2X)	27.7	28	30	102.0	120	110	0.0	0	0
Wolverine W169 (2X)	27.8	--	--	102.7	---	---	0.8	-	-
*Blaney B605-WX (2X)	27.8	28	--	112.1	129	---	0.0	0	-
Northrup King PX49(2X)	28.0	--	--	97.0	---	---	0.0	-	-
Blaney B443 (3X)	28.0	28	--	87.8	116	---	0.0	0	-
Northrup King PX529 (3X)	28.1	29	--	81.8	119	---	0.0	0	-
O's Gold SX1101 (2X)	28.1	--	--	84.9	---	---	0.0	-	-

(Continued)

Table 11 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
*Pioneer 3709 (Sp.)	28.1	29	31	115.4	137	127	0.0	0	0
Michigan 5443 (3X)	28.1	28	31	85.3	122	117	0.0	0	0
DeKalb XL25 (2X)	28.2	--	--	89.5	---	---	0.0	-	-
Oxy 36B (2X)	28.3	--	--	84.2	---	---	0.0	-	-
*Michigan 4122 (2X)	28.3	28	30	113.1	132	128	0.0	0	0
*Amcorn 7300 (2X)	28.4	29	--	111.1	127	---	0.0	0	-
Jacques JX122A (2X)	28.5	28	30	103.2	133	123	0.0	0	0
P-A-G 534 (3X)	28.5	30	31	109.8	133	128	0.0	0	0
Cargill 430 (3X)	28.5	--	--	90.3	---	---	0.0	-	-
Gutwein 40 (2X)	28.6	28	30	85.0	114	113	0.0	0	0
Renk RK40 (2X)	28.7	--	--	108.5	---	---	0.0	-	-
Amcorn 4100 (2X)	29.0	29	--	109.6	133	---	0.0	1	-
Northrup King PX45(2X)	29.1	--	--	102.6	---	---	0.0	-	-
Lowe LSX222 (2X)	29.1	--	--	98.8	---	---	0.0	-	-
Renk RK66 (2X)	29.2	30	--	88.9	107	---	0.0	1	-
Northrup King PX37(2X)	29.3	--	--	90.6	---	---	0.0	-	-
Northrup King PX46(2X)	29.5	30	--	99.4	131	---	0.0	0	-
Migro M-2018X (2X)	29.6	29	--	101.6	134	---	0.0	0	-
Golden Harvest H-2445 (MSX)	29.6	--	--	102.0	---	---	0.0	-	-
Michigan 5802 (2X)	29.6	30	32	108.2	132	126	0.0	0	0
Super Crost 2880 (2X)	29.7	--	--	91.3	---	---	0.0	-	-
Golden Harvest H-2450 (2X)	29.7	30	32	86.8	120	118	0.0	0	0
*Pride 4488 (2X)	29.8	--	--	116.7	---	---	0.0	-	-
Northrup King PX585 (3X)	29.8	--	--	89.8	---	---	0.0	-	-
*Amcorn 7480 (2X)	30.1	30	--	116.4	139	---	0.0	0	-
Pride 5525 (2X)	30.1	29	31	97.6	129	124	0.0	0	0
*Funk G-4323 (MSX)	30.5	--	--	113.8	---	---	0.0	-	-
Asgrow RX2345 (2X)	30.6	--	--	91.4	---	---	0.0	-	-
*Super Crost S27 (2X)	30.6	30	32	113.2	140	132	0.9	0	0
Jacques JX174 (2X)	30.8	--	--	106.8	---	---	0.0	-	-
P-A-G SX189 (2X)	30.8	30	--	100.2	119	---	0.0	0	-
*Michigan 5912 (2X)	30.9	--	--	112.8	---	---	0.0	-	-
Jacques JX177 (2X)	31.0	--	--	94.8	---	---	0.0	-	-
Blaney B606 (2X)	31.3	31	32	86.3	120	118	0.0	0	0
Customaize CFS-WX120 (2X)	31.5	--	--	86.6	---	---	0.0	-	-
*Northrup King PX48(2X)	31.6	31	--	116.4	139	---	0.0	0	-
Migro M-3020 (4X)	31.6	31	33	80.1	102	97	0.0	0	0
Gutwein 2340 (2X)	31.8	--	--	107.9	---	---	0.0	-	-
Garno S-100 (2X)	31.8	--	--	106.7	---	---	0.0	-	-
Wolverine W174 (2X)	32.1	--	--	89.8	---	---	0.0	-	-
Migro M-0301 (2X)	32.6	32	33	103.6	132	123	0.0	0	0
Migro M-4501 (2X)	33.1	--	--	100.7	---	---	0.0	-	-
*Migro M-0505 (2X)	34.3	--	--	111.1	---	---	0.0	-	-
Average	27.0	27	30	99.6	123	118	0.0	0	0
Range	20.6 to 34.3	22 to 32	24 to 33	77.4 to 124.8	94 to 143	97 to 132	0.0 to 0.8	0 to 1	0 to 1
Least significant difference	1.4	0.9	0.8	10.4	8	5			

Significantly better than average yield in 1978

		1978	1977	1976
Planted		*May 20*	*May 9*	*May 20*
Harvested		*November 4*	*October 28*	*October 21*
Soil type		*Brookston clay loam*	*Brookston clay loam*	*Brookston clay loam*
Previous crop		*Corn*	*Corn*	*Corn*
Population		*19,900*	*21,300*	*20,900*
Rows		*30"*	*30"*	*30"*
Fertilizer		*120-60-134*	*125-95-144*	*113-30-120*
Soil test:	*pH*	*6.9*	*6.6*	*6.9*
	P	*64 (medium high)*	*104 (very high)*	*78 (high)*
	K	*200 (medium)*	*173 (medium)*	*180 (medium)*

Farm Cooperator: Orville Orchard, Sandusky

County Extension Director: Rex Sieting, Sandusky

Table 12 NORTH CENTRAL MICHIGAN Zone 3

Sanilac County Trial - Silage

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1978	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1978	Dry weight 2 yr.	Dry weight 3 yr.
P-A-G SX111 (2X)	40.2	---	---	12.0	---	---	4.8	---	---
Michigan 280 (4X)	40.1	42.1	39.5	12.2	12.8	13.5	4.9	5.4	5.3
Cargill 810 (2X)	39.8	41.5	---	13.1	12.9	---	5.2	5.3	---
Pioneer 3975A (Sp.)	39.7	---	---	13.6	---	---	5.4	---	---
Super Crost 1303(3X)	39.7	---	---	10.0	---	---	3.9	---	---
Seneca 149 (3X)	37.2	---	---	13.3	---	---	5.0	---	---
Super Crost 1402(2X)	36.7	---	---	14.1	---	---	5.2	---	---
Michigan 333-3X (3X)	36.7	39.9	37.3	14.2	13.7	14.1	5.2	5.4	5.2
Seneca 280 (3X)	36.7	---	---	13.5	---	---	4.9	---	---
Cardinal SX98A (2X)	36.1	---	---	14.4	---	---	5.2	---	---
Michigan 3093 (3X)	36.0	39.0	36.8	13.6	13.9	14.4	4.9	5.4	5.3
Oxy 35A (2X)	36.0	---	---	14.9	---	---	5.4	---	---
Super Crost 1692 (2X)	35.6	37.0	35.3	15.8	15.5	16.2	5.6	5.7	5.7
Trojan TX90 (3X)	35.4	39.3	---	16.2	15.0	---	5.8	5.9	---
Golden Harvest H-2340 (2X)	35.3	36.6	---	17.3	17.8	---	6.1	6.5	---
Blaney B302-WX (2X)	35.0	---	---	13.0	---	---	4.5	---	---
Michigan 3102 (2X)	35.0	36.5	34.9	16.6	17.7	17.4	5.8	6.5	6.1
Migro M-0101 (2X)	34.9	---	---	16.5	---	---	5.7	---	---
Cargill 838 (2X)	34.8	---	---	13.0	---	---	4.6	---	---
Super Crost 1210 (2X)	34.6	---	---	11.4	---	---	3.9	---	---
Jacques JX52 (2X)	34.5	36.3	---	17.1	16.7	---	5.9	6.1	---
Blaney B443 (2X)	34.4	34.4	---	17.0	17.9	---	5.9	6.2	---
Gutwein 2140 (2X)	34.0	---	---	17.1	---	---	5.8	---	---
Michigan 3953 (3X)	34.0	---	---	16.8	---	---	5.7	---	---
Jacques JX 25 (2X)	34.0	37.3	---	15.5	16.2	---	5.2	5.9	---
Voris V2352 (Sp.)	34.0	35.6	---	14.2	15.6	---	4.9	5.6	---
Trojan TXS99 (2X)	33.7	5.7	---	14.8	15.0	---	5.0	5.4	---
Northrup King PX529 (3X)	33.6	34.9	---	15.2	18.3	---	5.0	6.4	---
Super Crost S18 (2X)	33.5	---	---	16.2	---	---	5.4	---	---
Northrup King PX26(2X)	33.5	---	---	15.7	---	---	5.2	---	---
Northrup King PX22(2X)	33.4	---	---	18.4	---	---	6.2	---	---
Funk G-4272 (3X)	33.2	34.1	32.2	15.1	18.7	17.8	5.0	6.4	5.8
USS U8543 (2X)	33.2	---	---	13.3	---	---	4.4	---	---
Renk RK15 (2X)	32.9	32.4	---	15.5	17.3	---	5.1	5.6	---
Northrup King PX32(2X)	32.9	33.9	---	18.4	19.2	---	6.1	6.6	---
Oxy 32 (2X)	32.9	---	---	16.9	---	---	5.6	---	---
Golden Harvest H-2370 (2X)	32.7	35.9	---	17.0	16.2	---	5.6	5.8	---
Acco UC2901 (2X)	32.7	32.0	30.9	16.7	18.9	18.9	5.5	6.0	5.8
Amcorn 4010 (2X)	32.6	33.3	---	13.2	15.4	---	4.3	5.1	---
Michigan 407-2X (2X)	32.4	34.2	32.8	17.0	18.0	17.6	5.5	6.2	5.8
Funk G-4195 (3X)	32.4	36.0	34.6	16.5	16.3	16.5	5.3	5.8	5.7
DeKalb XL15 (2X)	32.4	---	---	18.3	---	---	5.9	---	---
Lowe LS X222 (2X)	32.3	---	---	14.8	---	---	4.8	---	---
Voris V2372 (2X)	32.1	33.5	---	17.0	18.5	---	5.4	6.2	---
Michigan 4122 (2X)	32.1	33.7	32.0	16.2	18.8	19.1	5.2	6.4	6.1
Northrup King PX48 (2X)	32.1	31.5	---	15.3	18.5	---	4.9	5.8	---
Pride 2264 (2X)	32.0	36.4	---	15.5	15.4	---	5.0	5.6	---
P-A-G SX177 (2X)	32.0	33.9	31.9	15.9	18.8	18.5	5.1	6.4	5.9
Super Crost 1950(2X)	32.0	---	---	13.7	---	---	4.4	---	---
Golden Harvest H-2373 (2X)	31.9	---	---	15.8	---	---	5.0	---	---
Jacques JX62 (2X)	31.9	33.3	---	16.7	16.5	---	5.3	5.5	---
Super Crost 1590(2X)	31.7	---	---	14.1	---	---	4.5	---	---
Super Crost 31 (4X)	31.6	---	---	13.8	---	---	4.4	---	---
Gutwein 2075 (2X)	31.6	---	---	19.1	---	---	6.0	---	---
Garno S-82 (2X)	31.5	35.0	33.2	13.6	14.6	15.5	4.3	5.1	5.1
Wolverine W128 (2X)	31.5	36.8	35.2	14.3	13.2	13.4	4.5	4.8	4.6
Pioneer 3780 (2X)	31.5	33.2	31.5	15.9	19.4	18.8	5.0	6.5	6.0
P-A-G SX189 (2X)	31.5	33.6	---	16.4	17.0	---	5.2	5.8	---
Renk RK40 (2X)	31.3	---	---	17.4	---	---	5.4	---	---
Michigan 5443 (3X)	31.3	32.9	31.2	15.7	17.8	18.2	4.9	5.9	5.7
Renk RW2-WX (2X)	31.2	31.6	---	18.3	20.4	---	5.7	6.4	---
Wolverine W155 (2X)	31.1	33.2	---	15.2	15.5	---	4.7	5.1	---
Gutwein 40 (2X)	31.1	31.2	29.9	16.2	19.4	19.2	5.0	6.0	5.7
Customaize CFS-WX120 (2X)	31.1	---	---	16.9	---	---	5.2	---	---
Acco UC 2951 (2X)	31.1	---	---	15.9	---	---	4.9	---	---
Cargill 832 (2X)	31.1	---	---	14.5	---	---	4.5	---	---
Wolverine W169 (2X)	31.0	---	---	19.7	---	---	6.1	---	---
DeKalb XL 25 (2X)	31.0	---	---	15.2	---	---	4.7	---	---
Oxy 476 (3X)	31.0	---	---	14.9	---	---	4.6	---	---
Asgrow RX40 (2X)	30.9	33.2	---	14.3	14.7	---	4.4	4.9	---

(Continued)

Table 12 (continued)

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1978	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1978	Dry weight 2 yr.	Dry weight 3 yr.
Migro M-0105 (2X)	30.9	31.4	---	15.5	17.4	---	4.8	5.5	---
Pride 4417 (2X)	30.9	---	---	18.6	---	---	5.7	---	---
Pioneer 3901 (2X)	30.8	33.0	---	20.1	19.6	---	6.2	6.5	---
Trojan T1008 (2X)	30.8	---	---	17.9	---	---	5.5	---	---
Jacques JX90 (2X)	30.8	---	---	16.0	---	---	4.9	---	---
Pioneer 3709 (Sp.)	30.5	30.8	29.9	17.0	18.1	18.3	5.2	5.6	5.5
Super Crost 2350 (2X)	30.3	32.8	31.8	17.4	19.6	18.1	5.3	6.5	5.8
Oxy 368 (2X)	30.0	---	---	13.7	---	---	4.2	---	---
Cargill 430 (3X)	30.0	---	---	14.5	---	---	4.4	---	---
Jacques JX122A (2X)	29.9	32.3	31.0	18.5	20.2	20.1	5.5	6.5	6.2
Gutwein 112 (3X)	29.9	---	---	15.6	---	---	4.7	---	---
Golden Harvest H-2450 (2X)	29.9	32.4	30.5	16.7	17.5	17.4	5.0	5.7	5.3
Michigan 5802 (2X)	29.9	31.7	30.3	19.4	20.5	19.9	5.8	6.5	6.0
Northrup King PX46(2X)	29.9	30.6	---	17.1	19.3	---	5.1	5.9	---
Stanton 1090 (2X)	29.5	---	---	15.3	---	---	4.5	---	---
Gutwein 2340 (2X)	29.2	---	---	14.8	---	---	4.3	---	---
O's Gold SX1101 (2X)	29.1	---	---	18.0	---	---	5.2	---	---
Blaney B606 (2X)	29.0	30.5	29.3	18.6	20.5	19.5	5.4	6.3	5.8
Northrup King PX45(2X)	29.0	---	---	16.6	---	---	4.9	---	---
Super Crost S27 (2X)	29.0	31.3	30.1	18.9	18.4	17.9	5.5	5.8	5.4
Blaney B605-WX (2X)	38.7	30.5	---	17.8	21.2	---	5.1	6.5	---
Northrup King PX585 (3X)	28.6	---	---	18.8	---	---	5.3	---	---
Voris V2381 (2X)	28.5	---	---	16.5	---	---	4.7	---	---
Stanton 1095 (2X)	28.3	---	---	16.3	---	---	4.6	---	---
Amcorn 4100 (2X)	28.3	29.4	---	17.1	18.7	---	4.9	5.5	---
P-A-G 534 (3X)	28.3	30.2	29.5	18.1	20.5	20.5	5.1	6.2	6.1
Pride 4488 (2X)	28.1	---	---	16.5	---	---	4.7	---	---
Northrup King PX37 (2X)	27.9	---	---	20.1	---	---	5.6	---	---
Amcorn 7300 (2X)	27.8	30.5	---	18.7	18.7	---	5.2	5.7	---
Jacques JX 174 (2X)	27.7	---	---	19.6	---	---	5.4	---	---
Asgrown RX 2345 (2X)	27.7	---	---	20.5	---	---	5.7	---	---
Michigan 5912 (2X)	27.7	---	---	18.8	---	---	5.2	---	---
Golden Harvest H-2445 (MAX)	27.3	---	---	18.2	---	---	5.0	---	---
Funk G-4323 (MAX)	27.2	---	---	19.6	---	---	5.3	---	---
Pride 5525 (2X)	27.2	30.3	29.4	21.0	22.4	22.3	5.6	6.8	6.5
Jacques JX177 (2X)	27.0	---	---	16.6	---	---	4.5	---	---
Super Crost 2880 (2X)	26.9	---	---	18.2	---	---	4.9	---	---
Migro M-2018X (2X)	26.9	28.3	---	20.3	21.7	---	5.5	6.2	---
Migro M-0505 (2X)	26.4	---	---	20.6	---	---	5.4	---	---
Migro M-0301 (2X)	26.3	28.0	27.4	19.8	19.2	18.3	5.2	5.3	5.0
Northrup King PX49 (2X)	26.1	---	---	18.8	---	---	4.9	---	---
Renk RK 66 (2X)	26.0	29.0	---	18.1	19.6	---	4.7	5.7	---
Stanton 10100 (2X)	25.7	---	---	17.9	---	---	4.6	---	---
Wolverine W174 (2X)	25.6	---	---	22.8	---	---	4.9	---	---
Amcorn 7480 (2X)	25.4	25.8	---	17.8	18.1	---	4.5	4.6	---
Migro M-4501 (2X)	25.3	---	---	22.0	---	---	5.6	---	---
Migro M-3020 (4X)	24.8	28.1	27.8	19.0	20.8	20.1	4.7	5.9	5.6
Garno S-100 (2X)	23.4	---	---	21.4	---	---	5.0	---	---
Average	31.4	33.4	32.0	16.5	17.7	17.8	5.2	5.8	5.6
Range	23.4 to 40.2	25.8 to 42.1	27.4 to 39.5	10.0 to 22.8	12.8 to 22.4	13.4 to 22.3	3.9 to 6.2	4.6 to 6.8	4.6 to 6.5
Least significant difference	1.9	1.3	0.8	1.5	1.0	0.6	0.6	0.4	0.4

	1978	1977	1976
Planted	*May 20*	*April 30*	*May 13*
Harvested	*September 13*	*September 12*	*September 7*
Soil type	*Parkhill loam*	*Parkhill loam*	*Parkhill loam*
Previous crop	*Corn*	*Corn*	*Corn*
Population	*20,600*	*21,200*	*20,100*
Rows	*30"*	*30"*	*30"*
Fertilizer	*200-125-180*	*160-100-80*	*201-104-198*
Soil test: pH	*7.4*	*7.0*	*6.4*
P	*125 (high)*	*55 (medium)*	*90 (high)*
K	*415 (very high)*	*415 (very high)*	*477 (very high)*

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 - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Warwick W777 (2X)	18.0	--	--	103.8	---	---	13.1	-	-
Pioneer 3975A (Sp.)	18.4	--	--	114.5	---	---	0.8	-	-
Michigan 3093 (3X)	18.4	22	22	98.1	92	93	3.8	2	3
Sohigro S23 (2X)	18.5	--	--	99.7	---	---	7.4	-	-
Michigan 280 (4X)	18.5	21	21	93.2	86	82	5.1	3	6
Renk RK3 (2X)	18.7	21	--	88.9	83	---	5.6	3	-
Northrup King PX22(2X)	18.9	--	--	119.0	---	---	4.4	-	-
Migro M-0101 (2X)	18.9	23	23	114.7	103	95	4.2	4	4
Michigan 333-3X (3X)	18.9	22	23	114.5	101	97	1.4	1	1
Asgrow RX40 (2X)	18.9	23	--	95.3	94	---	0.7	1	-
Funk G-4141 (2X)	18.9	23	24	98.2	99	95	5.6	4	3
Gutwein 06 (2X)	19.0	--	--	83.4	---	---	6.6	-	-
ADI 195 (2X)	19.0	23	--	118.3	95	---	1.5	1	-
Gutwein 2140 (2X)	19.0	--	--	119.1	---	---	1.4	-	-
Michigan 3102 (2X)	19.0	23	24	120.9	106	101	2.8	1	3
Payco SX737 (2X)	19.1	--	--	95.9	---	---	4.3	-	-
Golden Harvest H-2230 (MSX)	19.2	--	--	108.6	---	---	3.5	-	-
Amcorn 2010 (2X)	19.3	--	--	94.9	---	---	9.2	-	-
ADI 232 (2X)	19.3	22	--	104.3	92	---	2.8	1	-
Amcorn 4010 (2X)	19.4	23	--	86.0	82	---	5.5	3	-
Renk RK6 (2X)	19.6	--	--	97.8	---	---	9.6	-	-
Payco SX680 (2X)	19.6	24	25	92.1	86	87	6.3	3	3
Andersons SSA (2X)	19.6	25	--	112.9	118	---	2.2	1	-
Pride 2264 (2X)	19.6	23	--	113.1	112	---	0.0	0	-
Andersons SSE (2X)	19.7	26	--	121.7	105	---	0.0	1	-
USS U8543 (2X)	19.7	--	--	100.6	---	---	10.5	-	-
Warwick SL501 (Sp.)	19.8	--	--	116.9	---	---	6.7	-	-
Michigan 3953 (3X)	19.8	23	--	116.0	114	---	3.6	2	-
*Sohigro S22 (2X)	19.8	--	--	125.2	---	---	6.2	-	-
Super Crost S18 (2X)	20.0	25	--	99.7	92	---	9.8	5	-
Voris V2321 (2X)	20.0	--	--	121.6	---	---	3.7	-	-
Warwick TX27 (3X)	20.0	--	--	103.4	---	---	3.8	-	-
Dairyland DX1002 (2X)	20.0	24	--	91.6	90	---	4.1	2	-
Golden Harvest H-2370 (2X)	20.2	25	25	123.0	112	102	3.8	2	2
Dairyland DX1099 (2X)	20.2	--	--	121.7	---	---	6.6	-	-
Dairyland DX 302 (3X)	20.2	25	--	109.8	101	---	2.2	1	-
Super Crost 1950 (2X)	20.4	--	--	108.5	---	---	2.9	-	-
Wolverine W169 (2X)	20.4	25	--	114.3	115	---	3.8	2	-
*Migro M-0105 (2X)	20.6	25	--	128.9	124	---	1.4	1	-
Anderson AX-3 (Sp.)	20.6	26	--	90.0	88	---	3.0	2	-
Super Crost 1692 (2X)	20.8	24	24	108.8	91	92	3.6	2	2
Voris V2381 (2X)	20.8	--	--	101.1	---	---	1.5	-	-
Gutwein 2075 (2X)	21.0	--	--	111.8	---	---	8.8	-	-
Pioneer 3965 (3X)	21.0	--	--	103.2	---	---	4.4	-	-
Northrup King PX46(2X)	21.1	26	--	122.2	115	---	2.1	2	-
Michigan 407-2X (2X)	21.1	25	26	120.8	111	108	1.7	1	2
Super Crost 1690 (2X)	21.1	--	--	107.9	---	---	2.2	-	-
DeKalb XL25 (2X)	21.1	--	--	100.1	---	---	2.4	-	-
Pride 4488 (2X)	21.1	--	--	123.7	---	---	0.7	-	-
*Northrup King PX32(2X)	21.2	25	26	127.0	111	106	5.1	3	3
Northrup King PX19(2X)	21.2	--	--	98.7	---	---	6.0	-	-
Pioneer 3901 (2X)	21.2	24	--	118.0	111	---	1.5	1	-
Stanton 1090 (2X)	21.3	--	--	108.7	---	---	2.5	-	-
Asgrow RX53 (2X)	21.4	25	--	100.5	104	---	6.8	3	-
Renk RK66E (2X)	21.4	--	--	112.2	---	---	0.7	-	-
Warwick W966 (Sp.)	21.5	--	--	114.2	---	---	1.4	-	-
*Funk G-4272 (3X)	21.5	26	--	126.9	115	---	2.2	1	-
*Voris V2372 (2X)	21.5	26	--	132.2	118	---	4.9	3	-
Michigan 5443 (3X)	21.5	26	27	114.0	112	107	5.0	3	4
Acco UC2851 (2X)	21.5	--	--	111.5	---	---	5.8	-	-
Northrup King PX504 (3X)	21.5	--	--	115.2	---	---	4.2	-	-
Amcorn 4100 (2X)	21.6	25	25	110.3	103	100	6.6	3	3
Blaney B401 (2X)	21.6	25	--	118.5	110	---	4.8	2	-
P-A-G SX189 (2X)	21.7	--	--	112.6	---	---	2.3	-	-
Northrup King PX26(2X)	21.7	--	--	119.7	---	---	0.7	-	-
*Northrup King PX485 (3X)	21.8	--	--	124.8	---	---	1.4	-	-
Sohigro S38 (2X)	21.9	--	--	117.0	---	---	1.4	-	-
*Stanton 10100 (2X)	22.0	--	--	124.2	---	---	3.7	-	-
Northrup King PX37(2X)	22.0	--	--	114.5	---	---	1.4	-	-
Dairyland DX 1008 (2X)	22.0	--	--	116.1	---	---	0.0	-	-

(Continued)

Table 13 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Blaney B605-WX (2X)	22.0	26	27	90.4	104	105	13.7	7	5
*Golden Harvest H-2373 (2X)	22.0	--	--	134.7	---	---	1.5	-	-
*Sohigro S39 (2X)	22.2	--	--	126.0	---	---	2.1	-	-
Muncy Chief SX442(2X)	22.2	26	27	94.5	86	84	3.9	2	2
Northrup King PX45(2X)	22.2	--	--	116.0	---	---	4.0	-	-
*Funk G-4323 (MSX)	22.2	--	--	130.4	---	---	2.1	-	-
*Super Crost S27 (2X)	22.3	26	27	125.3	118	112	6.3	3	4
Payco SX555 (2X)	22.3	25	--	108.8	95	---	5.8	3	-
*Stanton 1095 (2X)	22.4	--	--	132.1	---	---	0.8	-	-
*Asgrow RX58 (2X)	22.5	--	--	124.8	---	---	1.4	-	-
*Michigan 4122 (2X)	22.5	26	27	128.2	120	117	0.0	0	0
Muncy Chief H304 (4X)	22.5	27	28	99.2	94	90	8.0	5	4
*Lowe LSX 222 (2X)	22.5	--	--	132.5	---	---	2.8	-	-
Amcorn 7300 (2X)	22.5	27	28	108.0	103	98	3.8	3	2
Gutwein 22 (2X)	22.5	27	28	116.6	103	106	3.1	2	2
*Trojan TXS102 (2X)	22.6	27	29	128.7	119	109	2.1	1	3
Payco SX775 (2X)	22.7	27	--	94.6	93	---	12.7	6	-
*Pioneer 3709 (Sp.)	22.7	--	--	125.4	---	---	0.0	-	-
*Northrup King PX49(2X)	22.7	--	--	128.8	---	---	2.8	-	-
*Asgrow RX2345 (2X)	22.9	--	--	131.3	---	---	1.4	-	-
Northrup King PX585 (3X)	23.0	--	--	105.0	---	---	0.0	-	-
Cardinal SX112 (2X)	23.1	--	--	110.6	---	---	0.0	-	-
Funk G-4408 (2X)	23.1	27	--	119.8	106	---	2.3	1	-
DeKalb XL42 (2X)	23.1	--	--	121.0	---	---	5.1	-	-
Jacques JX177 (2X)	23.2	--	--	114.4	---	---	2.2	-	-
Super Crost 2350 (2X)	23.2	26	27	119.1	106	106	4.9	2	2
ADI 197 (2X)	23.2	28	--	100.6	95	---	4.4	2	-
*Michigan 5802 (2X)	23.2	27	28	128.7	117	112	1.5	1	1
*Funk G-4444 (2X)	23.4	28	28	125.8	128	119	2.2	1	1
Acco U334 (2X)	23.4	25	26	102.9	100	99	5.6	3	4
Pioneer 3780 (2X)	23.4	27	28	123.9	117	110	0.7	0	1
*O's Gold SX1100 (2X)	23.5	28	28	124.9	125	117	3.5	2	1
Super Crost 2880 (2X)	23.6	--	--	92.2	---	---	2.1	-	-
Garno S-100 (2X)	23.6	--	--	122.6	---	---	2.8	-	-
Super Crost 3585(Sp.)	23.6	--	--	97.2	---	---	4.3	-	-
*Pride 5525 (2X)	23.6	28	--	124.4	113	---	2.8	1	-
Michigan 5912 (2X)	23.6	27	--	114.5	123	---	0.0	0	-
Muncy Chief 3X553(3X)	24.1	28	--	110.1	103	---	3.5	2	-
Migro M-2022X (2X)	24.2	28	--	93.9	91	---	2.3	2	-
Acco UC3301A (2X)	25.7	--	--	91.5	---	---	5.0	-	-
Payco SX844 (2X)	25.8	--	--	101.3	---	---	2.8	-	-
ADI 315 (2X)	26.0	--	--	110.2	---	---	1.4	-	-
Amcorn 7480 (2X)	26.2	28	--	106.9	97	---	4.5	2	-
Migro M-2018X (2X)	26.5	29	--	107.3	100	---	4.9	3	-
Wolverine W174 (2X)	26.6	29	29	104.6	104	101	3.6	2	1
Migro M-0301 (2X)	27.3	30	32	119.3	108	99	8.8	4	3
Jacques JX174 (2X)	28.0	--	--	122.9	---	---	5.1	-	-
Muncy Chief SX550(2X)	29.3	32	31	88.2	86	85	5.6	3	5
Average	21.6	25	26	111.8	104	102	3.8	2	2
Range	18.0 to 29.3	21 to 32	21 to 32	83.4 to 134.7	82 to 128	82 to 119	0.0 to 13.7	0 to 7	0 to 6
Least significant difference	1.3	0.9	0.7	12.3	7	5			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*May 1*	*April 28*	*May 20*
Harvested	*October 30*	*November 1*	*October 14*
Soil type	*Brookston clay loam*	*Brookston clay loam*	*Brookston clay loam*
Previous crop	*Beans*	*Sugar beets*	*Corn*
Population	*20,400*	*19,100*	*19,700*
Rows	*30"*	*30"*	*30"*
Fertilizer	*224-96-48*	*177-108-108*	*174-96-48*
Soil test: pH	*7.4*	*7.5*	*7.1*
P	*106 (very high)*	*106 (very high)*	*178 (very high)*
K	*316 (very high)*	*297 (high)*	*245 (high)*

Farm Cooperators: Walter Reinbold & Sons, Reese

County Extension Director: Norman Brown, Saginaw

Table 14 NORTH CENTRAL MICHIGAN Zone 3

Huron County Trial - Grain

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Pride 2206 (2X)	17.4	--	--	104.1	---	---	2.3	-	-
Cargill 810 (2X)	17.7	22	--	84.9	102	---	4.1	3	-
Michigan 280 (4X)	17.7	21	21	93.8	97	96	6.5	5	3
P-A-G SX111 (2X)	17.8	--	--	98.3	---	---	0.7	-	-
Dairyland DX1095(2X)	18.2	--	--	101.7	---	---	0.0	-	-
Pioneer 3975A (Sp.)	18.2	--	--	107.6	---	---	2.4	-	-
Michigan 333-3X (3X)	18.2	22	23	95.2	110	108	0.8	0	0
Super Crost 1303 (3X)	18.3	--	--	76.9	---	---	1.5	-	-
Migro M-0101 (2X)	18.4	23	24	115.7	122	112	2.2	2	2
Asgrow RX40 (2X)	18.4	23	--	100.6	113	---	4.9	4	-
Michigan 3093 (3X)	18.5	22	23	118.2	125	118	1.3	2	2
Super Crost 1210 (2X)	18.5	--	--	76.1	---	---	1.4	-	-
Andersons SSA (2X)	18.7	24	--	116.6	118	---	0.0	0	-
Gutwein 06 (2X)	18.8	--	--	77.3	---	---	4.0	-	-
Super Crost 1402 (2X)	19.0	--	--	92.0	---	---	2.9	-	-
Pioneer 3958 (2X)	19.0	23	25	112.2	109	102	0.0	2	1
Dairyland DX1090 (2X)	19.1	--	--	109.1	---	---	0.0	-	-
*Sohigro S22 (2X)	19.2	--	--	128.6	---	---	0.0	-	-
Jacques JX62 (2X)	19.2	23	--	107.5	105	---	0.0	1	-
Michigan 3102 (2X)	19.2	23	25	123.2	129	122	0.0	0	0
Pride 2248 (2X)	19.2	25	--	94.6	107	---	0.0	2	-
Funk G-4141 (2X)	19.2	23	25	109.4	123	118	0.8	1	1
Pioneer 3901 (2X)	19.2	24	--	121.7	140	---	0.7	1	-
Amcorn 2010 (2X)	19.2	--	--	91.5	---	---	0.0	-	-
DeKalb XL12 (2X)	19.4	23	--	95.2	115	---	2.5	2	-
Cargill 832 (2X)	19.6	--	--	105.2	---	---	3.9	-	-
Super Crost 1692 (2X)	19.8	24	25	120.7	110	104	5.3	6	4
Super Crost 1590 (2X)	19.9	--	--	107.7	---	---	0.0	-	-
Amcorn 4010 (2X)	20.0	24	--	103.3	102	---	0.0	0	-
Garno S-90 (2X)	20.1	--	--	121.6	---	---	0.8	-	-
Golden Harvest H-2340 (2X)	20.1	23	--	105.1	119	---	1.4	3	-
Wolverine W128 (2X)	20.1	23	25	88.9	97	96	0.8	5	3
O's Gold SX1101 (2X)	20.2	--	--	118.9	---	---	0.7	-	-
Michigan 3953 (3X)	20.2	24	--	109.0	123	---	0.7	1	-
Payco SX680 (2X)	20.3	--	--	106.5	---	---	0.0	-	-
P-A-G SX177 (2X)	20.3	24	26	116.2	124	110	2.1	2	1
Dairyland DX1099 (2X)	20.3	--	--	122.5	---	---	0.7	-	-
Oxy 35A (2X)	20.3	--	--	103.0	---	---	0.7	-	-
Super Crost 1950 (2X)	20.4	--	--	118.2	---	---	1.5	-	-
Renk RK6 (2X)	20.5	--	--	116.3	---	---	0.0	-	-
*Gutwein 2140 (2X)	20.5	--	--	133.7	---	---	0.7	-	-
Cargill 838 (2X)	20.6	--	--	120.1	---	---	1.4	-	-
Super Crost 31 (4X)	20.6	--	--	114.4	---	---	0.0	-	-
Cardinal SX98A (2X)	20.7	--	--	114.7	---	---	3.6	-	-
Super Crost S18 (2X)	20.8	--	--	114.3	---	---	1.4	-	-
Trojan TXS99 (2X)	20.8	25	26	120.5	127	120	1.6	2	2
Golden Harvest H-2373 (2X)	20.9	--	--	105.4	---	---	0.0	-	-
*Michigan 407-2X (2X)	20.9	25	26	126.4	137	127	1.9	2	2
Blaney B302 (2X)	21.0	25	--	103.5	123	---	0.7	1	-
*Blaney B506 (2X)	21.0	--	--	128.1	---	---	0.0	-	-
Funk G-4224 (MSX)	21.0	--	--	92.8	---	---	3.6	-	-
Gutwein 2075 (2X)	21.1	--	--	107.6	---	---	1.4	-	-
Payco 3X622 (3X)	21.1	--	--	121.5	---	---	5.7	-	-
Migro M-0105 (2X)	21.1	25	--	114.2	122	---	2.2	3	-
ADI 195 (2X)	21.1	--	--	122.3	---	---	2.2	-	-
Garno S-84 (2X)	21.3	--	--	95.6	---	---	2.1	-	-
*Trojan TXS94 (2X)	21.3	25	26	133.0	130	121	0.0	2	1
*Pioneer 3780 (2X)	21.4	27	28	124.2	143	133	1.4	1	1
Amcorn 4100 (2X)	21.4	26	--	122.0	122	---	3.0	3	-
Pride 4417 (2X)	21.5	--	--	98.9	---	---	1.5	-	-
Payco SX555 (2X)	21.7	--	--	102.8	---	---	1.4	-	-
Payco SD106 (4X)	22.0	--	--	84.6	---	---	2.2	-	-
*Voris V2372 (2X)	22.0	26	--	125.2	137	---	2.2	1	-
*Asgrow RX53 (2X)	22.0	26	--	125.6	136	---	2.8	2	-
Golden Harvest H-2370 (2X)	22.0	24	26	103.9	111	103	0.7	2	2
*P-A-G SX189 (2X)	22.0	26	--	124.0	139	---	0.0	0	-
Andersons AX-3 (Sp.)	22.1	26	--	105.9	108	---	0.0	0	-
DeKalb XL25 (2X)	22.3	--	--	102.5	---	---	1.5	-	-
*Wolverine W166 (2X)	22.4	26	28	123.9	134	125	2.8	3	2
Voris V2381 (2X)	22.4	--	--	104.1	---	---	0.7	-	-

(Continued)

Table 14 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Oxy 476 (2X)	22.6	--	--	87.8	---	---	1.5	-	-
Michigan 4122 (2X)	22.6	26	27	120.7	136	129	0.7	2	1
*Acco U334 (3X)	22.6	26	28	126.6	131	126	0.7	1	1
Michigan 5443 (3X)	22.6	27	28	111.6	123	125	4.3	3	3
Pickseed 8858 (2X)	22.6	--	--	99.8	---	---	0.0	-	-
Gutwein 112 (3X)	22.7	--	--	101.3	---	---	0.7	-	-
Super Crost 2350 (2X)	22.7	27	29	123.4	128	125	0.7	0	0
*Asgrow RX2345 (2X)	22.9	--	--	124.5	---	---	2.4	-	-
Dairyland DX1008 (2X)	22.9	--	--	121.8	---	---	1.4	-	-
Blaney B-605WX (2X)	22.9	27	28	123.0	126	121	2.9	1	1
Migro M-2022X (2X)	23.0	28	--	122.6	130	---	1.4	1	-
Super Crost 2470 (2X)	23.2	28	30	117.3	125	118	0.7	2	1
Michigan 5802 (2X)	23.3	28	29	123.1	145	137	0.0	2	1
Amcorn 7300 (2X)	23.6	26	--	115.4	130	---	0.7	0	-
*Funk G-4272 (3X)	23.6	27	--	124.1	128	---	1.5	1	-
Amcorn 7480 (2X)	23.7	28	--	121.0	126	---	0.0	0	-
Super Crost S27 (2X)	23.7	28	29	123.0	137	129	1.4	1	1
*Gutwein 46B (2X)	23.7	29	--	127.7	137	---	0.0	0	-
Gutwein 2250 (2X)	23.7	--	--	117.1	---	---	0.0	-	-
*Michigan 5912 (2X)	23.8	29	--	129.9	149	---	1.4	1	-
*Sohigro S39 (2X)	23.8	--	--	129.1	---	---	0.7	-	-
*Golden Harvest H-2445 (MSX)	24.3	--	--	127.7	---	---	0.7	-	-
Garno S-100 (2X)	24.4	--	--	123.2	---	---	0.7	-	-
Pickseed XR44 (2X)	24.5	28	29	116.2	131	126	2.9	1	1
Lowe LSX222 (2X)	24.8	--	--	109.7	---	---	0.7	-	-
ADI 323 (2X)	24.9	--	--	93.4	---	---	1.5	-	-
*Funk G-4444 (2X)	25.0	28	30	124.1	143	131	0.7	2	1
Funk G-4323 (MSX)	25.1	--	--	105.1	---	---	1.5	-	-
*Acco UC3301-A (2X)	25.1	29	--	124.4	138	---	3.4	4	-
Migro M-3020 (4X)	25.1	29	31	100.5	125	118	5.8	3	2
Migro M-2018X (2X)	25.3	29	--	114.8	134	---	0.0	0	-
ADI 197 (2X)	25.4	--	--	122.7	---	---	0.7	-	-
Wolverine W174 (2X)	25.7	29	31	123.1	149	135	4.0	2	1
Blaney B606E (2X)	26.3	--	--	122.4	---	---	0.0	-	-
*Migro M-0301 (2X)	26.5	30	32	131.8	139	134	0.7	1	0
*Voris V2422 (2X)	26.6	--	--	132.0	---	---	2.8	-	-
Gutwein 2340 (2X)	26.6	--	--	121.2	---	---	0.7	-	-
Super Crost 2880 (2X)	26.8	--	--	108.9	---	---	0.7	-	-
Jacques JX177 (2X)	26.9	--	--	111.9	---	---	0.7	-	-
*ADI 315 (2X)	27.1	--	--	133.8	---	---	0.0	-	-
Trojan TXS102 (2X)	27.1	30	30	111.2	134	130	2.8	4	3
Andersons Silo Filler (4X)	27.6	--	--	83.2	---	---	2.1	-	-
Golden Harvest H-2500 (2X)	30.3	32	33	115.1	135	126	0.7	1	1
Average	21.8	26	27	112.1	126	120	1.4	2	1
Range	17.4 to 30.3	21 to 32	21 to 33	76.1 to 133.8	97 to 149	96 to 137	0.0 to 6.5	0 to 6	0 to 4
Least significant difference	1.3	1.0	0.8	11.8	8	5			

Significantly better than average yield in 1978

		1978	1977	1976
Planted		*April 27*	*April 30*	*May 13*
Harvested		*November 1*	*October 25*	*October 19*
Soil type		*Brookston clay loam*	*Brookston clay loam*	*Brookston clay loam*
Previous crop		*Corn*	*Corn*	*Corn*
Population		*20,800*	*21,100*	*19,600*
Rows		*30"*	*30"*	*30"*
Fertilizer		*160-105-208*	*182-92-202*	*188-82-12*
Soil test:	*pH*	*7.2*	*7.2*	*7.4*
	P	*47 (medium)*	*83 (high)*	*68 (high)*
	K	*208 (medium)*	*288 (high)*	*263 (high)*

Farm Cooperator: William McCrea, Bad Axe

Extension Livestock Agent: Lee Warschefsky, Bad Axe

Table 15 NORTH CENTRAL MICHIGAN Zone 3

Huron County Trial - Silage

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1978	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1978	Dry weight 2 yr.	Dry weight 3 yr.
Super Crost 1402 (2X)	59.2	---	---	11.1	---	---	6.6	---	---
P-A-G SX111 (2X)	58.7	---	---	10.4	---	---	6.1	---	---
Michigan 280 (4X)	58.5	52.9	51.2	10.3	12.7	12.4	6.0	6.6	6.2
Dairyland DX 1090(2X)	56.8	---	---	11.2	---	---	6.3	---	---
Dairyland DX 1095(2X)	54.0	---	---	11.0	---	---	5.9	---	---
Pioneer 3975A (Sp.)	53.3	---	---	13.7	---	---	7.3	---	---
Michigan 3093 (3X)	53.3	47.7	45.9	12.8	15.0	14.6	6.8	7.0	6.6
Pioneer 3958 (2X)	53.3	50.4	49.7	12.2	13.5	12.8	6.5	6.8	6.3
Blaney B302 (2X)	51.0	46.6	---	13.5	15.3	---	6.9	7.0	---
Michigan 333-3X (3X)	51.0	48.0	45.7	12.9	14.4	14.3	6.6	6.9	6.5
Andersons SSA (2X)	51.0	42.1	---	13.1	17.1	---	6.7	6.9	---
Payco 3X622 (3X)	50.7	---	---	13.0	---	---	6.6	---	---
Sohigro 22 (2X)	50.3	---	---	13.1	---	---	6.6	---	---
Voris V2381 (2X)	50.2	---	---	11.9	---	---	6.0	---	---
Cargill 810 (2X)	50.2	47.0	---	10.7	13.4	---	5.3	6.2	---
Jacques JX62 (2X)	50.1	45.8	---	11.1	14.1	---	5.6	6.3	---
Funk G-4141 (2X)	50.0	43.5	42.5	14.7	17.8	16.3	7.3	7.5	6.8
Migro M-0101(2X)	49.6	45.3	42.7	15.0	16.4	16.1	7.4	7.3	6.8
Gutwein 06 (2X)	49.5	---	---	11.1	---	---	5.5	---	---
Oxy 35A (2X)	49.3	---	---	13.4	---	---	6.6	---	---
Michigan 3953 (3X)	49.2	43.0	---	14.0	17.7	---	6.9	7.4	---
Super Crost 1590 (2X)	49.2	---	---	11.7	---	---	5.8	---	---
Super Crost 1692 (2X)	49.1	46.1	43.1	13.0	15.2	14.8	6.4	6.9	6.3
Pioneer 3901 (2X)	49.0	42.1	---	14.5	20.0	---	7.1	8.0	---
Dairyland DX 1099(2X)	48.8	---	---	13.3	---	---	6.5	---	---
Michigan 3102 (2X)	48.6	43.9	42.1	14.8	18.2	17.5	7.2	7.8	7.3
Renk RK6 (2X)	48.3	---	---	13.2	---	---	6.4	---	---
DeKalb XL12 (2X)	48.3	44.2	---	12.0	15.3	---	5.8	6.6	---
Funk G-4224 (MSX)	47.8	---	---	13.0	---	---	6.2	---	---
Blaney B506 (2X)	47.6	---	---	13.8	---	---	6.6	---	---
P-A-G SX177 (2X)	47.3	40.6	39.4	13.7	19.0	18.9	6.5	7.3	7.2
Funk G-4272 (3X)	47.2	41.0	---	14.0	18.8	---	6.6	7.4	---
Golden Harvest H-2373 (2X)	47.0	---	---	14.7	---	---	6.9	---	---
Super Crost 31 (4X)	47.0	---	---	13.0	---	---	6.1	---	---
Gutwein 112 (3X)	47.0	---	---	15.5	---	---	7.3	---	---
Garno S-90 (2X)	46.9	---	---	16.0	---	---	7.5	---	---
Pride 2206 (2X)	46.8	---	---	16.5	---	---	7.7	---	---
Gutwein 2140 (2X)	46.7	---	---	16.6	---	---	7.8	---	---
Super Crost 1303 (3X)	46.7	---	---	15.5	---	---	6.7	---	---
Amcorn 4010 (2X)	46.7	39.9	---	12.4	16.4	---	5.8	6.3	---
Cargill 832 (2X)	46.6	---	---	13.7	---	---	6.3	---	---
Michigan 4122 (2X)	46.6	42.0	39.9	16.1	19.5	19.4	7.5	8.0	7.6
Super Crost 1950 (2X)	46.5	---	---	16.4	---	---	7.6	---	---
Dairyland 1008 (2X)	46.4	---	---	15.5	---	---	7.2	---	---
Wolverine W128 (2X)	45.9	43.7	41.4	11.8	12.6	13.1	5.4	5.5	5.4
Oxy 476 (2X)	45.2	---	---	15.2	---	---	6.9	---	---
Golden Harvest H-2340 (2X)	44.9	40.1	---	13.9	18.8	---	6.2	7.2	---
Michigan 5443 (3X)	44.9	39.6	38.1	14.7	19.3	19.0	6.6	7.4	7.1
Cardinal SX 98A (2X)	44.9	---	---	13.4	---	---	6.0	---	---
Pride 2248 (2X)	44.8	40.2	---	12.3	17.0	---	5.5	6.5	---
Pickseed 8858 (2X)	44.7	---	---	15.2	---	---	6.8	---	---
Michigan 407-2X(2X)	44.6	40.1	39.0	15.7	19.3	18.7	7.0	7.6	7.2
P-A-G SX189 (2X)	44.5	39.7	---	16.4	19.5	---	7.3	7.6	---
ADI 197 (2X)	44.5	---	---	13.1	---	---	5.5	---	---
Payco SX680 (2X)	44.5	---	---	11.8	---	---	5.2	---	---
Gutwein 2075 (2X)	44.4	---	---	15.1	---	---	6.7	---	---
Trojan TXS94 (2X)	44.4	42.5	42.4	16.2	17.5	16.3	7.2	7.4	6.9
Asgrow RX40 (2X)	44.3	42.1	---	16.5	16.6	---	7.3	7.0	---
Voris V2372 (2X)	44.2	40.5	---	15.6	18.9	---	6.9	7.5	---
Payco SX555 (2X)	44.2	---	---	14.2	---	---	6.3	---	---
Garno S-84 (2X)	44.2	---	---	13.0	---	---	5.7	---	---
Cargill 838 (2X)	44.1	---	---	15.3	---	---	6.7	---	---
Super Crost 1210 (2X)	44.1	---	---	10.2	---	---	4.6	---	---
ADI 195 (2X)	44.0	---	---	12.0	---	---	5.3	---	---
Super Crost S18 (2X)	43.7	---	---	14.5	---	---	6.3	---	---
Super Crost 2350 (2X)	43.7	40.5	37.6	17.4	17.2	16.7	7.6	6.9	6.3
Payco SD106 (4X)	43.4	---	---	13.8	---	---	6.0	---	---
Trojan TXS99 (2X)	43.3	40.3	39.6	15.5	17.6	16.5	6.7	7.0	6.5
Pride 4417 (2X)	42.9	---	---	15.0	---	---	6.4	---	---
Michigan 5802 (2X)	42.9	38.7	37.2	17.7	21.4	20.7	7.6	8.1	7.6

(Continued)

Table 15 (continued)

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1978	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1978	Dry weight 2 yr.	Dry weight 3 yr.
Blaney B605-WX (2X)	42.6	37.4	36.7	17.6	20.8	19.9	7.5	7.6	7.2
Super Crost S27 (2X)	42.5	38.7	38.1	18.6	22.3	19.9	7.9	8.5	7.5
Golden Harvest H-2370 (2X)	42.3	38.1	37.7	14.8	17.7	16.7	6.3	6.6	6.2
Pioneer 3780 (2X)	42.2	38.7	37.7	16.6	19.3	18.9	7.0	7.4	7.1
Amcorn 2010 (2X)	41.9	---	---	14.1	---	---	5.9	---	---
Andersons AX-3 (Sp.)	41.9	38.3	---	14.7	17.3	---	6.2	6.5	---
Asgrow RX53 (2X)	41.5	38.6	---	15.2	20.0	---	6.3	7.6	---
Funk G-4444 (2X)	41.5	38.3	37.2	18.6	21.8	20.6	7.7	8.2	7.6
Migro M-2022X (2X)	41.5	37.8	---	15.9	19.5	---	6.6	7.2	---
Blaney B606E-WX (2X)	41.5	---	---	16.5	---	---	6.8	---	---
Pickseed XR44 (2X)	40.6	37.7	36.2	15.7	19.8	18.8	6.4	7.4	6.8
Trojan TXS 102 (2X)	40.6	38.0	37.2	17.5	19.4	18.8	7.1	7.3	7.0
Golden Harvest H-2445 (MSX)	39.8	---	---	18.1	---	---	7.2	---	---
Michigan 5912 (2X)	39.7	36.6	---	17.6	22.2	---	7.0	8.0	---
Wolverine W166 (2X)	39.7	39.9	38.5	18.9	17.4	17.2	7.5	6.9	6.6
Lowe LSX 222 (2X)	39.2	---	---	16.5	---	---	6.5	---	---
Gutwein 2340 (2X)	39.2	---	---	17.0	---	---	6.6	---	---
Funk G-4323 (MSX)	39.0	---	---	15.8	---	---	6.2	---	---
Migro M-2018X(2X)	39.0	34.5	---	17.5	23.0	---	6.8	7.7	---
Super Crost 2470 (2X)	38.9	34.9	33.4	18.3	22.0	21.6	7.1	7.5	7.1
Migro M-0105 (2X)	38.7	38.1	---	16.0	19.7	---	6.2	7.5	---
ADI 323 (2X)	38.6	---	---	17.2	---	---	6.6	---	---
Super Crost 2880 (2X)	37.9	---	---	17.2	---	---	6.5	---	---
Gutwein 46B (2X)	37.3	34.5	---	17.9	21.6	---	6.7	7.3	---
Amcorn 7300 (2X)	37.3	34.9	---	17.0	19.0	---	6.3	6.5	---
Garno S-100 (2X)	37.2	---	---	16.6	---	---	6.2	---	---
Gutwein 2250 (2X)	37.0	---	---	17.6	---	---	6.3	---	---
Amcorn 7480 (2X)	36.8	34.5	---	17.0	21.1	---	6.2	7.1	---
O's Gold SX1101 (2X)	36.8	---	---	16.1	---	---	6.0	---	---
Amcorn 4100 (2X)	36.8	34.7	---	17.4	19.2	---	6.4	6.6	---
Acco U334 (3X)	36.7	35.3	34.9	18.8	21.4	18.9	6.9	7.5	6.6
Voris V2422 (2X)	36.1	---	---	19.7	---	---	7.1	---	---
Asgrow RX2345 (2X)	36.1	---	---	17.0	---	---	6.1	---	---
Jacques JX177 (2X)	36.0	---	---	17.5	---	---	6.3	---	---
DeKalb XL25 (2X)	35.8	---	---	18.2	---	---	6.5	---	---
Acco UC3301-A (2X)	35.7	32.4	---	20.4	25.6	---	7.3	8.1	---
ADI 315 (2X)	35.2	---	---	21.9	---	---	7.7	---	---
Wolverine W174 (2X)	35.2	31.0	30.1	21.5	25.0	21.7	7.6	7.6	6.5
Sohigro 39 (2X)	34.9	---	---	17.2	---	---	6.0	---	---
Migro M-0301 (2X)	34.6	33.5	32.2	20.1	22.9	20.9	7.0	7.6	6.7
Migro M-3020 (4X)	34.5	32.9	32.8	19.7	24.1	22.5	6.8	7.8	7.3
Golden Harvest H-2500 (2X)	31.4	30.4	29.9	20.1	23.9	22.0	6.3	7.2	6.6
Andersons Silo Filler (4X)	30.9	---	---	21.0	---	---	6.5	---	---
Average	44.1	40.0	39.0	15.3	18.7	17.9	6.6	7.2	6.8
Range	30.9 to 59.2	30.4 to 52.9	29.9 to 51.2	10.2 to 21.9	12.6 to 25.0	12.4 to 22.5	4.6 to 7.9	5.5 to 8.5	5.4 to 7.6
Least significant difference	2.2	1.4	1.0	1.7	1.2	1.0	0.6	0.4	0.4

		1978	1977	1976
Planted		*April 27*	*April 30*	*May 13*
Harvested		*September 13*	*September 12*	*September 7*
Soil type		*Brookston clay loam*	*Brookston clay loam*	*Brookston clay loam*
Previous crop		*Corn*	*Corn*	*Corn*
Population		*20,100*	*20.700*	*19,400*
Rows		*30"*	*30"*	*30"*
Fertilizer		*160-105-208*	*182-92-202*	*38-82-12*
Soil test:	*pH*	*7.2*	*7.2*	*7.4*
	P	*47 (medium)*	*83 (high)*	*68 (high)*
	K	*208 (medium)*	*288 (high)*	*263 (high)*

Farm Cooperator: William McCrea, Bad Axe

Extension Livestock Agent: Lee Warschefsky, Bad Axe

Table 16

NORTH CENTRAL MICHIGAN
Isabella County Trial
One Year Averages - 1978

Zone 3

Hybrid (Brand-Variety)	% Moisture	Bushels per acre	% Stalk lodging
Pioneer 3975A (Sp.)	18.7	105.0	0.0
Michigan 280 (4X)	18.8	90.5	4.2
Dairyland DX285 (3X)	18.9	82.4	5.4
Renk RK3 (2X)	19.5	101.8	5.1
Pride R144 (3X)	19.5	97.9	0.7
Michigan 333-3X (3X)	19.6	108.3	1.5
Dairyland DX1090 (2X)	19.7	78.4	0.0
Pride 2248 (2X)	19.7	88.5	0.7
Dairyland DX1082 (2X)	19.7	89.5	0.7
Michigan 3093 (3X)	19.7	90.6	0.7
Garno S-84 (2X)	19.9	81.7	0.7
Dairyland DX1095 (2X)	19.9	88.4	1.4
Michigan 3102 (2X)	20.0	116.1	1.4
Sohigro 22 (2X)	20.1	111.7	2.8
Pride 2206 (2X)	20.1	93.1	0.0
Payco SX680 (2X)	20.1	82.8	0.7
Stanton 1090 (2X)	20.3	73.1	0.7
Pioneer 3965 (3X)	20.4	101.3	0.7
Trojan TXS94 (2X)	20.6	103.5	0.0
O's Gold 949 (2X)	20.8	107.4	0.0
*Blaney B401 (2X)	20.9	118.3	0.7
Pride 2264 (2X)	21.2	92.0	0.7
Blaney B302 (2X)	21.2	112.5	1.4
*Funk G-4141 (2X)	21.2	126.0	2.7
*Migro M-0101 (2X)	21.3	126.7	0.7
*Pioneer 3901 (2X)	21.4	122.9	2.2
P-A-G SX67 (2X)	21.4	102.2	0.0
*O's Gold 900	21.4	118.2	0.7
DeKalb XL25 (2X)	21.8	91.3	0.0
Jacques JX124A (2X)	21.9	107.6	0.7
Blaney B406 (2X)	21.9	105.8	0.7
Michigan 3953 (3X)	21.9	104.1	1.4
Voris V2321 (2X)	22.0	92.9	1.4
Blaney B506 (2X)	22.0	114.8	4.0
*Garno S-90 (2X)	22.1	135.1	2.0
P-A-G SX177 (2X)	22.2	95.8	2.1
*Acco UC2851(2X)	22.2	122.3	0.7
Michigan 407-2X (2X)	22.2	114.2	0.0
Wolverine W128 (2X)	22.3	81.4	0.0
Asgrow RX53 (2X)	22.3	109.8	0.0
Stanton 1095 (2X)	22.5	79.4	0.8
*Funk G-4224 (MSX)	22.5	116.5	0.7
*Voris V2372 (2X)	22.5	118.5	1.5
*Pioneer 3780 (2X)	22.6	132.1	3.4
Wolverine W169 (2X)	22.6	102.6	0.0
Renk RK66 (2X)	22.7	114.8	0.0
*Michigan 4122 (2X)	22.7	130.0	0.0
Amcorn 4100 (2X)	22.7	111.3	0.7
Northrup King PX32 (2X)	22.8	99.8	1.4
Migro M-0105 (2X)	23.1	112.5	2.0
Super Crost 2350 (2X)	23.2	110.2	0.7
Lowe LSX-222 (2X)	23.2	112.9	0.0
Funk G-4272 (3X)	23.3	109.2	3.4
Jacques JX122A (2X)	23.4	107.1	2.1
*Wolverine W166 (2X)	23.4	118.0	0.7
Northrup King PX26 (2X)	23.4	104.6	0.7
Payco SX775 (2X)	23.4	104.7	0.7
Stanton 10100 (2X)	23.8	93.5	0.0
DeKalb XL35 (2X)	24.0	109.4	0.7
Michigan 5443 (3X)	24.1	110.3	1.4
Acco UC2951 (2X)	24.1	96.1	1.4
Amcorn 7480 (2X)	24.1	114.7	0.0
Michigan 5802 (2X)	24.2	115.4	2.0
Lowe LSX-100 (2X)	24.3	84.8	4.1
Migro M-2018X (2X)	24.3	100.0	0.0
Pioneer 3709 (Sp.)	24.8	102.4	0.0
*Michigan 5912 (2X)	24.9	124.1	0.0
*Jacques JX174 (2X)	25.0	124.7	2.0
Super Crost S27 (2X)	25.5	92.0	2.1
Trojan TXS102 (2X)	26.1	94.5	0.7
*Migro M-0301 (2X)	26.5	116.5	0.0
Average	22.3	104.9	1.2

(Continued)

Table 16 (continued)

Hybrid (Brand-Variety)	% Moisture	Bushels per acre	% Stalk lodging
Range	18.7 to 26.5	73.1 to 135.1	0.0 to 5.4
Least significant difference	1.3	11.4	

Significantly better than average yield in 1978

	1978
Planted	*May 10*
Harvested	*November 7*
Soil type	*Selkirk loam*
Previous crop	*Corn*
Population	*18,400*
Rows	*38"*
Fertilizer	*133-77-140*

Farm Cooperator: Floyd Hauck, Rosebush

County Extension Director: Lyle Thompson, Mt. Pleasant

Table 17

NORTH CENTRAL MICHIGAN

Montcalm County Trial - Irrigated vs. Not Irrigated

One, Two, Three Year Averages - 1978, 1977, 1976

Zone 3

Hybrid (Brand - Variety)	% Moisture 1978	% Moisture 2 yrs.	% Moisture 3 yrs.	Bushels per acre 1978 Irrig	Bushels per acre 1978 Not Irrig	Bushels per acre 2 years Irrig	Bushels per acre 2 years Not Irrig	Bushels per acre 3 years Irrig	Bushels per acre 3 years Not Irrig	% Stalk lodging 1978 Irrig	% Stalk lodging 1978 Not Irrig	% Stalk lodging 2 years Irrig	% Stalk lodging 2 years Not Irrig	% Stalk lodging 3 years Irrig	% Stalk lodging 3 years Not Irrig
Michigan 280 (4X)	18.5	22	21	91.5	69.0	96	66	108	63	8.9	9.0	9	6	8	10
Acco UC1124 (2X)	18.9	--	--	112.5	71.7	---	---	---	---	10.4	9.0	--	--	--	--
Super Crost 1210 (2X)	19.0	--	--	86.1	62.1	---	---	---	---	4.4	2.4	--	--	--	--
Pioneer 3975A (Sp.)	19.1	--	--	138.4	84.8	---	---	---	---	1.5	0.8	--	--	--	--
Michigan 333-3X (3X)	19.2	22	21	133.1	88.5	121	78	129	78	3.8	3.0	3	2	3	2
Migro M-0101 (2X)	19.3	23	22	136.0	81.8	123	76	129	73	5.6	0.0	8	3	6	6
Michigan 3093 (3X)	19.4	23	22	123.9	87.2	119	75	129	76	4.2	3.6	3	3	3	5
Super Crost 1402 (2X)	19.8	--	--	91.8	61.1	---	---	---	---	6.0	2.4	--	--	--	--
Super Crost 1590 (2X)	19.8	--	--	109.5	68.8	---	---	---	---	2.2	0.8	--	--	--	--
ADI 195 (2X)	19.8	24	--	107.5	70.5	98	63	---	---	5.0	1.7	6	2	--	--
Pioneer 3965 (3X)	20.0	23	--	118.2	80.5	113	72	---	---	0.0	1.6	0	1	--	--
DeKalb XL12 (2X)	20.2	--	--	97.1	65.3	---	---	---	---	10.6	2.5	--	--	--	--
Pioneer 3958 (2X)	20.2	25	24	124.7	88.9	116	73	128	73	3.8	0.7	4	1	4	4
Stanton 1090 (2X)	20.6	--	--	103.5	66.3	---	---	---	---	13.5	4.6	--	--	--	--
Super Crost 31 (4X)	20.8	--	--	103.6	64.8	---	---	---	---	3.8	0.8	--	--	--	--
Customaize CFS-1000 (2X)	20.8	--	--	129.8	77.4	---	---	---	---	9.9	4.1	--	--	--	--
DeKalb XL15 (2X)	20.8	--	--	119.7	73.8	---	---	---	---	4.6	3.0	--	--	--	--
Garno S-84 (2X)	20.8	--	--	144.8	96.0	---	---	---	---	3.9	1.5	--	--	--	--
Pride 2206 (2X)	20.9	--	--	149.4	87.3	---	---	---	---	5.6	2.3	--	--	--	--
Super Crost S18 (2X)	21.0	25	--	141.3	83.7	125	74	---	---	3.7	2.3	3	1	--	--
Jacques JX52 (2X)	21.0	--	--	139.2	90.1	---	---	---	---	6.2	6.8	--	--	--	--
Super Crost 1692 (2X)	21.4	25	24	123.5	82.3	113	75	124	72	3.8	0.8	2	0	2	3
Blaney B302-WX (2X)	21.5	--	--	130.8	80.2	---	---	---	---	2.5	0.7	--	--	--	--
Garno S-90 (2X)	21.5	--	--	142.4	90.5	---	---	---	---	0.0	0.0	--	--	--	--
*+Michigan 3102 (2X)	21.5	25	24	180.5	102.0	153	86	155	83	2.6	3.3	3	2	3	4
Acco UC1151 (2X)	21.6	--	--	151.8	84.0	---	---	---	---	8.1	2.2	--	--	--	--
Stanton 1095 (2X)	21.6	--	--	130.5	76.6	---	---	---	---	6.9	2.1	--	--	--	--
Amcorn 4010 (2X)	21.8	26	--	94.0	65.6	92	61	---	---	6.7	4.4	5	2	--	--
Michigan 3953 (3X)	21.8	25	--	141.5	84.1	135	77	---	---	4.2	3.5	4	3	--	--
*+ADI 232 (2X)	21.8	25	--	163.0	99.5	140	77	---	---	8.7	6.8	4	5	--	--
P-A-G SX189 (2X)	21.8	--	--	147.3	85.0	---	---	---	---	6.6	3.1	--	--	--	--
*Stanton 10100 (2X)	21.8	--	--	159.5	87.3	---	---	---	---	3.0	0.0	--	--	--	--
*+Pioneer 3780 (2X)	21.9	26	25	181.0	104.4	166	96	170	91	8.8	2.4	5	1	5	6
Blaney B606 (2X)	21.9	27	27	150.3	95.5	136	86	148	88	2.3	0.8	2	0	1	1
*+Pioneer 3901 (2X)	22.0	26	--	164.3	100.5	156	92	---	---	0.0	0.7	2	0	--	--
*+Michigan 407-2X (2X)	22.1	26	25	161.9	102.1	152	93	160	89	3.0	1.7	3	1	2	5
*+Super Crost 1950 (2X)	22.1	--	--	166.6	98.3	---	---	---	---	7.1	4.6	--	--	--	--
*+Funk G-4408 (2X)	22.1	27	--	186.0	109.4	161	98	---	---	2.2	2.3	2	1	--	--
Blaney B406 (2X)	22.3	--	--	131.7	78.0	---	---	---	---	0.8	0.0	--	--	--	--
*+Blaney B506 (2X)	22.3	26	--	160.9	102.3	147	86	---	---	2.9	0.8	6	2	--	--
*+Super Crost 2350 (2X)	22.3	26	25	185.3	107.6	149	91	153	86	4.7	1.5	5	1	4	4
Amcorn 4100 (2X)	22.5	26	25	145.5	88.5	132	81	141	79	4.4	0.8	5	4	6	7
Michigan 4122 (2X)	22.5	26	25	142.4	96.0	140	86	153	87	5.1	0.9	4	2	4	5
Funk G-4224 (MSX)	22.5	--	--	139.7	81.1	---	---	---	---	8.8	2.5	--	--	--	--
Acco UC2301 (2X)	22.5	27	26	153.7	89.4	138	78	146	78	4.8	6.9	4	5	3	10
*+Amcorn 7480 (2X)	22.7	27	--	165.4	101.7	148	90	---	---	1.6	0.0	1	0	--	--
*+Migro M-2018X (2X)	22.8	27	--	181.4	106.5	162	96	---	---	0.0	0.0	1	0	--	--
*Pride 4417 (2X)	23.0	--	--	159.9	87.4	---	---	---	---	3.9	1.6	--	--	--	--
Michigan 5443 (3X)	23.0	27	26	147.1	96.1	138	86	148	84	6.0	4.1	6	3	5	7
Funk G-4272 (3X)	23.0	26	--	147.6	87.5	132	75	---	---	7.8	5.8	7	4	--	--
Amcorn 7300 (2X)	23.1	28	26	125.9	80.6	129	79	143	81	8.0	5.6	4	4	3	11
Renk RK66 (2X)	23.1	28	--	150.9	87.0	139	80	---	---	1.6	0.8	2	0	--	--
*+Pride 4488 (2X)	23.1	--	--	161.1	99.3	---	---	---	---	1.5	2.8	--	--	--	--
Northrup King PX48 (2X)	23.2	27	--	154.7	89.8	149	89	---	---	7.5	2.3	7	2	--	--
Voris V2372 (2X)	23.2	27	--	154.9	96.6	149	89	---	---	6.1	4.5	5	2	--	--

(Continued)

Table 17 (continued)

Hybrid (Brand - Variety)	% Moisture 1978	2 yrs.	3 yrs.	Bushels per acre 1978 Irrig	1978 Not Irrig	2 years Irrig	2 years Not Irrig	3 years Irrig	3 years Not Irrig	% Stalk lodging 1978 Irrig	1978 Not Irrig	2 years Irrig	2 years Not Irrig	3 years Irrig	3 years Not Irrig
Asgrow RX58 (2X)	23.4	27	27	149.0	86.6	147	84	155	81	4.5	8.0	5	4	5	8
Customaize CFS-115 (2X)	23.5	--	--	121.0	72.0	---	---	---	---	6.4	1.8	--	--	--	--
+Migro M-0105 (2X)	23.6	27	--	150.7	97.5	137	86	---	---	6.4	3.9	10	4	--	--
Pickseed XR44 (2X)	23.6	28	27	141.5	83.6	139	82	153	84	9.2	2.2	7	2	5	6
Super Crost S27 (2X)	23.6	28	27	152.6	94.5	141	88	154	87	3.1	2.3	2	2	2	8
Pickseed 8858 (2X)	23.7	--	--	122.7	75.1	---	---	---	---	3.3	0.9	--	--	--	--
*+Migro M-2022X (2X)	23.7	28	--	169.4	101.4	152	90	---	---	5.0	0.7	4	0	--	--
*+Trojan TXS102 (2X)	24.0	--	--	168.3	100.9	---	---	---	---	4.5	5.8	--	--	--	--
Michigan 5802 (2X)	24.0	28	27	153.9	96.2	143	88	155	88	4.3	3.0	4	3	4	7
+Funk G-4323 (MSX)	24.8	--	--	155.1	100.4	---	---	---	---	1.5	0.8	--	--	--	--
*+Funk G-4444 (2X)	24.8	28	27	165.3	99.4	148	88	160	85	6.3	0.0	6	0	4	7
*+Migro M-0301 (2X)	24.9	29	29	164.2	112.3	153	94	160	92	8.1	2.2	5	2	5	4
*+Acco UC3002 (2X)	25.3	29	--	168.8	97.5	155	90	---	---	10.8	0.0	7	0	--	--
*+ADI 315 (2X)	25.4	--	--	180.0	104.6	---	---	---	---	2.3	0.0	--	--	--	--
*+Michigan 5912 (2X)	25.4	29	--	168.6	102.8	163	95	---	---	2.1	0.0	1	0	--	--
*+Acco UC3301 (2X)	25.7	30	29	168.9	101.8	155	91	161	87	8.0	2.8	5	3	4	8
Customaize CFS-WX120 (2X)	26.5	--	--	118.7	70.4	---	---	---	---	12.9	4.0	--	--	--	--
*+ADI 197 (2X)	29.1	--	--	177.6	98.3	---	---	---	---	0.7	0.0	--	--	--	--
Average	22.2	26	25	143.6	88.2	138	84	146	82	5.1	2.5	4	2	4	6
Range	18.5 to 29.1	22 to 30	21 to 29	91.5 to 186.0	61.1 to 112.3	92 to 166	61 to 98	108 to 170	63 to 92	0.0 to 13.5	0.0 to 9.0	0 to 10	0 to 6	1 to 8	1 to 11
Least significant difference	1.2	0.9	0.7	13.9	8.6	8	6	6	5						

Significantly better than average yield, irrigated, 1978
+Significantly better than average yield, not irrigated, 1978

	1978	1977	1976
Planted	*May 3*	*April 26*	*May 5*
Harvested	*November 9*	*October 28*	*October 29*
Soil type	*Montcalm sandy loam*	*Montcalm sandy loam*	*Montcalm sandy loam*
Previous crop	*Corn*	*Corn*	*Clover*
Population	*20,700*	*20,500*	*19,300*
Rows	*30"*	*30"*	*30"*
Fertilizer	*197-60-60*	*283-90-90*	*336-156-156*
Irrigation	*8 inches*	*13 inches*	*12 inches*
Soil test: pH	*6.7*	*6.7*	*6.7*
P	*362 (very high)*	*391 (very high)*	*403 (very high)*
K	*188 (medium)*	*174 (medium)*	*163 (medium)*

Farm Cooperator: Theron Comden, Montcalm Experimental Farm, Lakeview

County Extension Director: James Crosby, Stanton

Table 18 NORTHERN MICHIGAN Zone 4
Mason County Trial
One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	2 yr.	3 yr.	Bushels per acre 1978	2 yr.	3 yr.	% Stalk lodging 1978	2 yr.	3 yr.
Seneca 149 (3X)	20.4	--	--	73.9	---	---	1.6	-	-
Super Crost 1303 (3X)	20.8	--	--	58.1	---	---	0.8	-	-
Super Crost 1210 (2X)	21.3	--	--	60.6	---	---	0.0	-	-
Pioneer 3965 (3X)	21.7	24	--	79.0	99	---	0.0	0	-
Seneca 280 (3X)	21.7	--	--	87.2	---	---	0.8	-	-
Michigan 2443 (3X)	21.7	23	--	85.4	93	---	0.0	0	-
O's Gold SX75	21.8	--	--	72.6	---	---	1.4	-	-
Northrup King PX443 (3X)	21.9	23	--	79.5	94	---	0.0	1	-
Northrup King PX20(2X)	21.9	23	22	81.8	96	91	0.0	0	0
Michigan 280 (4X)	21.9	23	22	87.0	98	92	0.0	0	0

(Continued)

Table 18 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	2 yr.	3 yr.	Bushels per acre 1978	2 yr.	3 yr.	% Stalk lodging 1978	2 yr.	3 yr.
*Pioneer 3975A (Sp.)	22.0	--	--	92.9	---	---	0.0	-	-
Wolverine 24 (4X)	22.3	25	24	64.8	78	81	2.6	1	1
Super Crost 1402 (2X)	22.3	--	--	60.5	---	---	0.0	-	-
Northrup King PX448 (3X)	22.6	--	--	69.0	---	---	0.0	-	-
Wolverine W120 (2X)	22.9	26	25	73.8	85	86	0.0	0	0
*Super Crost 1692 (2X)	23.1	26	26	95.6	106	96	0.0	0	0
Pride R144 (3X)	23.1	24	23	62.0	78	76	0.8	0	0
Michigan 3093 (3X)	23.2	25	24	86.9	98	96	0.0	0	0
Michigan 333-3X (3X)	23.2	25	24	92.2	110	102	0.0	0	0
*Pride 2206 (2X)	23.5	--	--	96.4	---	---	0.0	-	-

(Continued)

Table 18 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Funk G-4171 (3X)	23.8	--	--	79.4	---	---	0.0	-	-
*Pioneer 3958 (2X)	24.0	25	24	99.8	108	96	0.0	0	0
Trojan TXS94 (2X)	24.1	25	25	61.7	89	88	0.0	1	1
Super Crost 1590 (2X)	24.2	--	--	63.9	---	---	0.0	-	-
Funk G-4195 (3X)	24.4	26	24	72.5	98	96	0.0	2	1
Super Crost 31 (4X)	24.5	--	--	61.8	---	---	0.0	-	-
Blaney B303A (2X)	24.8	25	25	84.3	100	99	0.0	0	0
Blaney B302-WX(2X)	24.8	--	--	68.8	---	---	0.0	-	-
*Funk G-4141 (2X)	25.1	27	25	94.1	108	101	0.0	0	0
Funk G-4252 (3X)	25.2	28	26	79.1	96	97	0.0	1	1
*Michigan 3102 (2X)	25.3	27	25	94.4	104	100	0.0	0	0
Garno S-90 (2X)	25.4	--	--	87.1	---	---	0.0	-	-
*Migro M-0101 (2X)	25.4	27	25	98.9	102	99	0.0	0	0
Super Crost S18 (2X)	25.8	--	--	76.3	---	---	0.0	-	-
*Acco UC2301 (2X)	26.3	29	27	96.8	120	111	0.0	0	1
*Pioneer 3901 (2X)	26.3	27	--	108.7	119	---	0.0	0	-
Funk G-4272 (3X)	26.4	--	--	88.9	---	---	0.0	-	-
Funk G-4224 (MSX)	26.5	--	--	77.8	---	---	0.0	-	-
Blaney B443 (3X)	26.7	28	--	82.9	103	---	0.0	1	-
*Michigan 4122 (2X)	26.8	29	28	106.5	112	103	0.0	0	0
O's Gold SX949 (2X)	27.0	--	--	86.6	---	---	0.0	-	-
Super Crost 1950 (2X)	27.1	--	--	88.7	---	---	0.0	-	-
*Blaney B501A (2X)	27.2	29	28	97.3	109	105	0.0	0	1
Acco UC2951 (2X)	27.3	--	--	79.8	---	---	0.0	-	-
*Golden Harvest H-2373 (2X)	27.5	--	--	101.0	---	---	0.0	-	-
Michigan 3953 (3X)	27.6	29	--	85.7	110	---	0.0	0	-
*Super Crost 2350 (2X)	28.5	30	29	97.5	105	103	0.0	0	0
*Michigan 407-2X (2X)	28.6	30	29	97.6	113	108	0.0	0	1
Migro M-2022X (2X)	28.9	30	--	82.6	112	---	0.0	0	-
Pioneer 3780 (2X)	29.3	31	30	83.0	104	98	0.0	0	0
Migro M-0105 (2X)	29.4	31	--	78.1	98	---	0.0	0	-
Migro M-2018X(2X)	29.5	32	--	85.2	98	---	0.0	0	-
Michigan 5443 (3X)	30.1	31	30	78.6	99	96	0.7	0	1
*Blaney B606E (2X)	30.5	31	--	103.9	115	---	0.9	0	-
*Blaney B606E-WX (2X)	30.6	--	--	107.7	---	---	0.0	-	-
Golden Harvest H-2445 (MSX)	31.0	--	--	77.5	---	---	0.0	-	-
*Migro M-0301 (2X)	31.2	--	--	105.6	---	---	0.0	-	-
Average	25.7	27	26	83.8	102	96	0.2	0.3	0.3
Range	20.4 to 31.2	23 to 32	22 to 30	58.1 to 108.7	78 to 120	76 to 111	0.0 to 2.6	0 to 2	0 to 1
Least significant difference	1.4	0.9	0.7	8.7	7	5			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*May 11*	*May 11*	*May 12*
Harvested	*November 6*	*October 25*	*October 26*
Soil type	*Kawkalin sandy loam*	*Iosco sandy loam*	*Iosco sandy loam*
Previous crop	*Corn*	*Corn*	*Corn*
Population	*18,900*	*20,100*	*20,000*
Rows	*30"*	*30"*	*30"*
Fertilizer	*126-92-120*	*130-60-60*	*145-45-98*
Soil test: pH	*6.1*	*6.4*	*6.5*
P	*43 (medium)*	*68 (high)*	*125 (very high*
K	*276 (high)*	*120 (low)*	*235 (high)*

Farm Cooperators: Robert and August Ohse, Custer

County Extension Director: Dean Raven, Scottville

Table 19 NORTHERN MICHIGAN Zone 4

Grand Traverse County Trial

One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Warwick W777 (2X)	21.0	--	--	62.5	---	---	1.6	-	-
Pickseed 2277 (2X)	21.5	22	--	75.3	78	---	1.5	1	-
Jacques JX20 (2X)	21.6	--	--	78.9	---	---	0.8	-	-
Seneca 140 (3X)	21.7	--	--	63.9	---	---	5.4	-	-
Northrup King PX11(2X)	21.9	--	--	73.9	---	---	0.8	-	-
Pride R107 (3X)	22.5	22	21	69.0	71	76	0.0	1	2
Michigan 200 (4X)	22.5	23	22	73.2	81	83	1.9	1	2
Michigan 2013 (3X)	22.6	22	22	76.4	80	83	3.3	3	3
Funk G-5048 (4X)	23.0	24	--	64.5	75	---	1.7	1	-
Pickseed 2262 (2X)	23.1	24	--	81.4	90	---	2.9	4	-
Pride 1108 (2X)	23.1	--	--	74.3	---	---	4.4	-	-
Funk G-5191 (4X)	23.3	24	24	65.4	75	81	3.7	3	2
Super Crost 1210 (2X)	23.4	23	23	69.6	80	83	1.5	2	2
Pioneer 3977 (3X)	23.6	--	--	76.2	---	---	0.0	-	-
Seneca PC14 (2X)	23.6	--	--	73.0	---	---	0.7	-	-
Northrup King PX14(2X)	23.7	--	--	62.8	---	---	1.5	-	-
Super Crost 1402 (2X)	23.8	--	--	74.3	---	---	0.0	-	-
Wolverine 24 (4X)	23.9	24	24	62.6	73	79	5.3	3	3
Funk G-4085 (3X)	24.1	24	--	66.7	73	---	2.3	3	-
DeKalb XL9 (2X)	24.1	--	--	79.4	---	---	3.1	-	-
Michigan 2443 (3X)	24.2	25	--	80.6	91	---	3.1	2	-
Pickseed 4944 (2X)	24.3	--	--	62.6	---	---	0.0	-	-
Renk RK3 (2X)	24.3	--	--	66.5	---	---	0.0	-	-
Michigan 280 (4X)	24.4	24	24	79.7	85	87	3.0	3	3
Northrup King PX443 (3X)	24.6	25	--	64.0	80	---	0.0	2	-
Asgrow RX29 (4X)	24.7	--	--	77.9	---	---	3.8	-	-
*Pioneer 3975A (Sp.)	24.7	--	--	86.4	---	---	0.7	-	-
Pride R144 (3X)	24.7	24	25	72.0	76	83	1.6	1	1
Super Crost 1303 (3X)	24.9	--	--	62.9	---	---	1.5	-	-
Trojan TX90 (3X)	24.9	25	--	72.7	91	---	1.5	1	-
Wolverine W120 (2X)	25.3	25	25	69.7	76	80	1.5	1	1
Super Crost 1590 (2X)	25.5	--	--	66.1	---	---	0.0	-	-
Pride 2206 (2X)	25.6	--	--	75.4	---	---	2.2	-	-
*Garno S-85 (2X)	25.8	--	--	83.5	---	---	5.2	-	-
Northrup King PX19(2X)	26.0	--	--	69.4	---	---	5.3	-	-
Michigan 3093 (3X)	26.1	26	26	77.2	88	93	1.5	2	2
*Northrup King PX22(2X)	26.1	--	--	94.3	---	---	0.7	-	-
*Funk G-4195 (3X)	26.4	26	--	83.0	96	---	4.7	4	-
Funk G-4171 (3X)	26.6	--	--	69.2	---	---	0.0	-	-
*Northrup King PX15(2X)	26.7	27	--	84.3	98	---	0.7	0	-
*Michigan 333-3X (3X)	26.8	27	27	84.6	96	96	1.5	1	1
DeKalb XL12 (2X)	27.0	--	--	75.2	---	---	0.0	-	-
Super Crost 1692 (2X)	27.1	27	28	78.6	91	92	0.8	0	0
*Funk G-4141 (2X)	27.5	--	--	89.5	---	---	0.7	-	-
Pickseed 185 (Sp.)	27.5	--	--	68.7	---	---	0.0	-	-
Super Crost 31 (4X)	27.6	--	--	65.8	---	---	1.4	-	-
Jacques JX50 (2X)	28.3	--	--	74.2	---	---	2.3	-	-
Jacques JX52 (2X)	28.6	--	--	60.2	---	---	0.0	-	-
*Michigan 3102 (2X)	28.8	29	28	84.1	92	93	3.5	2	2
*Garno S-82 (2X)	29.2	--	--	87.2	---	---	2.7	-	-
Migro M-0101 (2X)	29.5	--	--	72.8	---	---	1.5	-	-
Garno S-90 (2X)	29.8	--	--	75.5	---	---	0.0	-	-
Migro M-0105 (2X)	30.0	--	--	81.8	---	---	0.0	-	-
Andersons AX-3 (Sp.)	30.2	29	--	62.6	75	---	1.5	1	-
Garno S-84 (2X)	30.3	--	--	78.1	---	---	0.0	-	-
Super Crost 1950 (2X)	31.1	--	--	70.3	---	---	0.0	-	-
*Pioneer 3901 (2X)	31.3	30	--	96.4	104	---	4.2	2	-
Michigan 3953 (3X)	31.6	--	--	78.2	---	---	0.8	-	-
*Michigan 4122 (2X)	31.7	--	--	88.9	---	---	1.7	-	-
*Michigan 407-2X (2X)	32.0	--	--	83.3	---	---	0.8	-	-
*Andersons SSA (2X)	32.6	32	--	87.2	95	---	0.0	0	-
Average	26.4	25	24	74.7	84	85	1.7	1.5	1.7
Range	21.0 to 32.6	22 to 32	21 to 28	60.2 to 96.4	71 to 104	76 to 96	0.0 to 5.4	0 to 4	0 to 3
Least significant difference	1.4	1.0	0.7	7.7	6	5			

Significantly better than average yield in 1978

(Continued)

Table 19 (continued)

		1978	1977	1976
Planted		*May 17*	*May 12*	*May 18*
Harvested		*November 7*	*October 27*	*October 28*
Soil type		*Coventry-Newaygo loam*	*Coventry-Newaygo loam*	*Coventry-Newaygo loam*
Previous crop		*Corn*	*Corn*	*Corn*
Population		*20,800*	*19,400*	*19.400*
Rows		*36"*	*38"*	*38"*
Fertilizer		*126-92-60, manure*	*132-57-57*	*100-80-40, manure*
Soil test:	*pH*	*6.7*	*6.7*	*7.0*
	P	*325 (very high)*	*358 (very high)*	*320 (very high)*
	K	*372 (very high)*	*336 (very high)*	*297 (high)*

Farm Cooperator: George Svec, Buckley

County Extention Director: George McQueen, Traverse City

Table 20 NORTHERN MICHIGAN Zone 4
Missaukee County Trial - Silage
One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1978	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1978	Dry weight 2 yr.	Dry weight 3 yr.
Pride R107 (3X)	30.5	25.5	---	10.2	12.7	---	3.1	3.1	---
P-A-G SX111 (2X)	30.1	---	---	12.0	---	---	3.7	---	---
Pioneer 3977 (3X)	29.8	24.5	---	11.8	12.7	---	3.5	3.0	---
Michigan 2013 (3X)	29.7	27.5	28.4	11.5	11.9	12.5	3.4	3.2	3.5
P-A-G 503 (3X)	29.2	---	---	9.0	---	---	2.6	---	---
Michigan 200 (4X)	29.0	25.5	26.0	11.7	13.3	13.8	3.4	3.3	3.5
Super Crost 1303 (3X)	28.9	---	---	10.5	---	---	3.0	---	---
Funk G-4085 (3X)	28.6	24.6	---	11.1	12.5	---	3.2	3.0	---
Michigan 280 (4X)	28.5	25.2	25.9	11.8	14.3	15.6	3.4	3.5	4.0
Super Crost 1210 (2X)	28.5	---	---	10.2	---	---	2.9	---	---
Michigan 2443 (3X)	27.5	25.6	---	13.8	15.9	---	3.8	4.0	---
DeKalb XL311 (3X)	27.5	24.5	---	10.4	13.3	---	2.9	3.2	---
Trojan TX85 (3X)	27.5	---	---	11.6	---	---	3.2	---	---
Pickseed 2262 (2X)	26.9	23.9	---	12.0	13.5	---	3.0	3.1	---
Pride 1128 (2X)	26.6	25.3	---	14.1	15.5	---	3.8	3.9	---
Super Crost 1590 (2X)	26.1	---	---	11.1	---	---	2.9	---	---
Super Crost 1402 (2X)	25.8	---	---	10.2	---	---	2.6	---	---
Pioneer 3975A (Sp.)	25.8	22.8	---	11.8	14.9	---	3.0	3.3	---
Super Crost 1692 (2X)	25.6	23.2	23.5	11.1	12.9	14.5	2.8	3.0	3.5
Pickseed 2277 (2X)	25.1	22.9	---	9.7	13.5	---	2.5	3.0	---
Funk G-4272 (3X)	25.1	---	---	13.3	---	---	3.3	---	---
Jacques JX25 (2X)	24.9	---	---	11.1	---	---	2.8	---	---
Michigan 3102 (2X)	24.7	21.6	21.8	14.0	16.4	17.0	3.5	3.5	3.7
DeKalb XL309 (3X)	24.5	---	---	12.1	---	---	3.0	---	---
Michigan 333-3X (3X)	24.1	---	---	13.3	---	---	3.2	---	---
Pickseed 4944 (2X)	24.1	---	---	10.5	---	---	2.5	---	---
Michigan 3093 (3X)	24.0	22.2	22.7	13.0	14.8	16.0	3.1	3.2	3.6
Jacques JX20 (2X)	24.0	22.0	22.6	9.8	12.3	13.5	2.3	2.6	3.0
Golden Harvest H-2370 (2X)	23.9	20.8	21.2	12.5	15.1	16.7	3.0	3.1	3.5
Funk G-4195 (3X)	23.7	---	---	11.3	---	---	2.7	---	---
Golden Harvest H-2230 (MSX)	23.7	---	---	11.6	---	---	2.8	---	---
Super Crost 31 (4X)	23.7	---	---	11.2	---	---	2.7	---	---
Super Crost 1950 (2X)	23.3	---	---	10.4	---	---	2.5	---	---
Michigan 3953 (3X)	23.1	---	---	14.2	---	---	3.3	---	---
Funk G-4224 (MSX)	22.8	---	---	13.4	---	---	3.1	---	---
Pioneer 3901 (2X)	22.5	---	---	14.3	---	---	3.2	---	---
Average	26.1	24.0	24.0	11.7	13.9	15.0	3.1	3.2	3.5
Range	22.5 to 30.5	20.8 to 27.5	21.2 to 28.4	9.0 to 14.3	11.9 to 16.4	12.5 to 17.0	2.3 to 3.8	2.6 to 4.0	3.0 to 4.0
Least significant difference	1.9	1.5	1.2	1.2	0.9	0.6	0.5	0.4	0.4

		1978	1977	1976
Planted		*May 17*	*May 19*	*May 14*
Harvested		*September 14*	*September 13*	*September 9*
Soil type		*Kent silt loam*	*Kent silt loam*	*Kent silt loam*
Previous crop		*Corn*	*Corn*	*Corn*
Population		*19,500*	*19.200*	*20,100*
Rows		*30"*	*30"*	*30"*
Fertilizer		*135-48-69*	*141-64-128*	*141-64-128*
Soil test:	*pH*	*5.6*	*6.4*	
	P	*47 (medium)*	*47 (medium)*	
	K	*157 (low)*	*128 (low)*	

Farm Cooperator: Lake City Experiment Station, Michigan State University

County Extension Director: Vern VandePol, Lake City

Cooperator: Dr. L.O. Copeland, Department of Crop and Soil Sciences Michigan State University, East Lansing

Table 21 NORTHERN MICHIGAN Zone 4
Alpena County Trial - Grain
One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	% Moisture 3 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	Bushels per acre 3 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.	% Stalk lodging 3 yr.
Seneca 140 (3X)	29.5	--	--	80.4	---	---	3.1	-	-
Warwick W777 (2X)	29.5	--	--	92.0	---	---	3.8	-	-
Warwick TX17 (3X)	30.9	29	28	76.2	71	72	7.3	12	12
Michigan 2013 (3X)	31.0	29	29	77.7	74	84	4.5	8	7
Michigan 200 (4X)	32.4	30	30	82.0	93	94	5.0	4	3
Pickseed 2111 (2X)	33.7	--	--	67.3	---	---	5.6	-	-
Pioneer 3977 (3X)	35.8	--	--	85.3	---	---	2.2	-	-
Pride R107 (3X)	36.1	32	31	86.1	78	83	2.9	9	7
Pickseed 2272 (2X)	36.1	32	--	85.2	96	--	1.0	3	-
Super Crost 1210 (2X)	36.6	33	33	68.2	87	89	1.5	6	4
Michigan 2443 (3X)	36.8	34	--	96.6	109	---	4.0	3	-
Pride 1108 (2X)	37.0	--	--	90.2	---	---	0.9	-	-
Warwick SL207 (2X)	37.0	33	32	71.2	88	95	1.4	5	4
Warwick TX20 (3X)	37.4	--	--	91.1	---	---	0.0	-	-
*Funk G-4040 (2X)	37.5	--	--	102.7	---	---	4.4	-	-
Customaize CFS-E660 (2X)	37.6	--	--	97.3	---	---	4.8	-	-
*Pride 1128 (2X)	37.6	33	--	106.5	115	---	1.9	5	-
Renk RK3 (2X)	37.8	--	--	91.5	---	---	1.8	-	-
Payco 3X443 (3X)	38.2	--	--	80.4	---	---	1.1	-	-
Michigan 280 (4X)	38.3	34	33	99.9	108	109	2.3	4	3
Golden Harvest H-2230 (MSX)	38.3	--	--	76.2	---	---	0.9	-	-
Acco UC1124 (2X)	38.5	--	--	99.9	---	---	3.3	-	-
Seneca PC14 (2X)	38.5	--	--	92.9	---	---	0.0	-	-
Pickseed 4944 (2X)	38.6	--	--	87.8	---	---	0.0	-	-
Michigan 3093 (3X)	39.6	38	37	94.5	108	109	0.0	1	2
*Pickseed 2262 (2X)	39.9	37	--	113.9	122	---	0.0	3	-
Super Crost 1303 (3X)	39.9	--	--	99.9	---	---	1.3	-	-
Voris V2271 (2X)	40.1	--	--	80.1	---	---	1.9	-	-
Pioneer 3975A (Sp.)	41.1	38	--	84.9	100	---	2.3	1	-
Super Crost 1690 (2X)	41.2	--	--	89.8	---	---	0.0	-	-
Funk G-4171 (3X)	41.4	--	--	92.4	---	---	0.0	-	-
Funk G-5191 (4X)	41.4	38	37	88.1	100	105	0.0	1	2
Asgrow RX29 (4X)	41.8	36	35	92.6	110	113	1.1	3	2
Blaney B201 (2X)	41.8	--	--	91.1	---	---	2.1	-	-
*Trojan TX90 (3X)	42.5	39	--	108.1	110	---	0.0	1	-
*Michigan 333-3X (3X)	42.5	39	39	106.5	114	114	0.0	2	2
Pickseed 185 (Sp.)	42.7	--	--	81.2	---	---	0.0	-	-
Acco U305 (3X)	43.1	--	--	77.0	---	---	1.6	-	-
Super Crost 1402 (2X)	43.1	--	--	83.0	---	---	0.0	-	-
USS U8543 (2X)	43.1	--	--	75.9	---	---	2.0	-	-
*Golden Harvest H-2370 (2X)	43.2	41	40	103.0	119	119	0.0	1	1
Super Crost 1692 (2X)	43.3	--	--	83.5	---	---	1.0	-	-
*Garnet-Ross 33X29(Sp.)	43.4	--	--	111.9	---	---	0.0	-	-
Voris V2321 (2X)	43.6	--	--	94.6	---	---	1.0	-	-
*Michigan 3102 (2X)	43.9	40	40	117.0	123	122	3.5	2	1
*Super Crost 31 (4X)	44.0	--	--	101.8	---	---	1.6	-	-
Andersons SSA (2X)	44.7	43	--	97.8	108	---	0.0	1	-
*Michigan 3953 (3X)	44.7	--	--	107.2	---	---	0.0	-	-
*Northrup King PX20(2X)	45.0	39	--	110.6	116	---	1.0	1	-
Pride R144 (3X)	45.1	41	40	84.9	97	102	0.0	2	1
Andersons AX-3 (Sp.)	46.1	44	--	87.8	93	---	0.0	2	-
Garnet-Ross 33 (Sp.)	46.1	--	--	92.9	---	---	0.0	-	-
*Pioneer 3901 (2X)	46.3	--	--	113.8	---	---	0.0	-	-
*Super Crost 1950 (2X)	47.1	--	--	108.6	---	---	0.9	-	-
Average	39.9	36	35	91.8	102	101	1.6	3	4

(Continued)

(Continued)

Table 21 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	2 yr.	3 yr.	Bushels per acre 1978	2 yr.	3 yr.	% Stalk lodging 1978	2 yr.	3 yr.
Range	29.5 to 47.1	29 to 44	28 to 40	67.3 to 113.9	71 to 123	72 to 122	0.0 to 7.3	1 to 12	1 to 12
Least significant difference	2.2	1.1	0.8	8.9	7	5			

Significantly better than average yield in 1978

	1978	1977	1976
Planted	*May 17*	*May 13*	*May 15*
Harvested	*October 20*	*November 1*	*October 7*
Soil type	*Onaway sandy loam*	*Onaway sandy loam*	*Onaway sandy loam*
Previous crop	*Corn*	*Corn*	*Wheat*
Population	*19,100*	*22,200*	*20,500*
Rows	*28"*	*28"*	*28"*
Fertilizer	*138-38-38, manure*	*130-38-38, manure*	*112-72-72, manure*
Soil test: pH	*7.2*	*7.3*	*6.6*
P	*56 (medium)*	*50 (medium)*	*53 (medium)*
K	*122 (low)*	*152 (low)*	*176 (medium)*

Farm Cooperator: Robert Cornell, Posen

County Extention Director: Melvin Matchett, Alpena

Cooperator: Dr. L. O. Copeland, Crop and Soil Sciences, Michigan State University, East Lansing, Michigan

Table 22 NORTHERN MICHIGAN Zone 4
Alpena County Trial - Silage
One, Two, Three Year Averages - 1978, 1977, 1976

Hybrid (Brand-Variety)	% Dry Matter 1978	2 yr.	3 yr.	Tons per acre Green weight 1978	2 yr.	3 yr.	Tons per acre Dry weight 1978	2 yr.	3 yr.
Warwick TX17 (3X)	29.6	26.6	28.5	16.5	18.6	17.1	4.9	4.9	4.8
Pride 1108 (2X)	29.2	---	---	16.3	---	---	4.8	---	---
Michigan 2013 (3X)	29.1	28.7	30.7	16.3	16.9	16.5	4.7	4.8	5.0
Warwick SL207 (2X)	28.6	26.4	26.9	16.6	18.8	18.4	4.7	4.9	4.9
Michigan 200 (4X)	28.4	27.3	29.6	20.9	20.5	19.2	5.9	5.6	5.6
Asgrow RX29 (4X)	27.6	26.9	27.4	22.1	21.3	21.2	6.1	5.7	5.8
Warwick W777 (2X)	27.0	---	---	21.6	---	---	5.8	---	---
Pickseed 2111 (2X)	26.7	---	---	15.8	---	---	4.2	---	---
Super Crost 1303(3X)	26.1	---	---	18.2	---	---	4.8	---	---
Michigan 2443 (3X)	26.1	25.8	---	19.4	22.0	---	5.1	5.7	---
Super Crost 1590 (2X)	26.1	---	---	20.2	---	---	5.3	---	---
Pickseed 2272 (2X)	26.1	25.1	---	18.2	21.3	---	4.8	5.3	---
Pickseed 2262 (2X)	25.9	23.8	---	17.8	22.0	---	4.6	5.1	---
Michigan 280 (4X)	25.9	25.8	27.2	21.7	22.5	22.8	5.6	5.8	6.2
Seneca 140 (3X)	25.6	---	---	15.5	---	---	4.0	---	---
Pride R107	25.6	26.5	29.3	17.1	18.8	17.6	4.4	5.0	5.1
Customaize CFS-E660 (2X)	25.3	---	---	23.8	---	---	6.0	---	---
Blaney B201 (2X)	25.3	---	---	22.5	---	---	5.6	---	---
Super Crost 1210 (2X)	25.3	---	---	16.2	---	---	4.1	---	---
Super Crost 1402 (2X)	25.1	---	---	17.7	---	---	4.4	---	---
Pride 1128 (2X)	25.0	24.9	---	23.4	25.9	---	5.9	6.5	---
Pioneer 3977 (3X)	24.9	---	---	17.9	---	---	4.2	---	---
Pickseed 185 (Sp.)	24.6	---	---	17.0	---	---	4.2	---	---
Voris V2271 (2X)	24.6	---	---	18.9	---	---	4.7	---	---
Golden Harvest H-2230 (MSX)	24.4	---	---	17.7	---	---	4.3	---	---
Renk RK3 (2X)	24.1	---	---	16.2	---	---	3.9	---	---
Super Crost 1692(2X)	24.0	---	---	22.1	---	---	5.3	---	---
Michigan 333-3X (3X)	24.0	23.5	24.8	21.5	25.3	25.0	5.2	5.9	6.2
Pickseed 4944 (2X)	23.9	---	---	18.1	---	---	4.3	---	---
Pioneer 3975A (Sp.)	23.6	23.1	---	19.3	21.9	---	4.6	5.1	---
Funk G-4171 (3X)	23.6	---	---	19.8	---	---	4.6	---	---
Voris V2321 (2X)	23.5	---	---	17.5	---	---	4.0	---	---
Seneca PC14 (2X)	23.4	23.6	---	18.3	21.7	---	4.3	5.1	---
Warwick TX20 (3X)	23.3	23.0	23.9	19.9	22.4	22.7	4.6	5.1	5.4
Funk G-4040 (2X)	23.3	---	---	16.9	---	---	3.9	---	---

(Continued)

Table 22 (continued)

Hybrid (Brand-Variety)	% Dry Matter 1978	2 yr.	3 yr.	Tons per acre Green weight 1978	2 yr.	3 yr.	Tons per acre Dry weight 1978	2 yr.	3 yr.
Payco 3X443 (3X)	23.1	---	---	15.5	---	---	3.6	---	---
Michigan 3093 (3X)	23.1	23.2	24.6	21.5	24.6	24.7	5.0	5.7	6.1
Andersons SSA (2X)	23.0	21.8	---	22.6	27.8	---	5.2	6.0	---
Funk G-5191 (4X)	23.0	22.2	23.5	22.3	25.1	25.9	5.1	5.5	6.1
Michigan 3102 (2X)	23.0	22.6	23.8	23.6	26.1	26.2	5.7	6.0	6.3
Northrup King PX 20 (2X)	22.8	23.5	---	24.0	26.3	---	5.5	6.2	---
Garnet-Ross 33 (Sp.)	22.8	---	---	17.8	---	---	4.1	---	---
Super Crost 1950(2X)	22.8	---	---	21.6	---	---	4.9	---	---
Pride R144 (3X)	22.8	23.3	23.8	18.3	20.7	20.0	4.2	4.9	4.8
Trojan TX90 (3X)	22.7	23.2	---	20.5	23.7	---	4.7	5.5	---
Garnet Ross 33X29(Sp.)	22.5	---	---	26.1	---	---	5.9	---	---
Super Crost 31 (4X)	22.4	---	---	21.7	---	---	4.8	---	---
Acco UC 1124 (2X)	22.2	---	---	22.6	---	---	5.0	---	---
USS U8543 (2X)	22.1	---	---	17.4	---	---	3.9	---	---
Michigan 3953 (3X)	22.0	---	---	25.4	---	---	5.6	---	---
Pioneer 3901 (2X)	21.7	---	---	25.7	---	---	5.6	---	---
Golden Harvest H-2370 (2X)	21.5	20.8	21.9	23.3	29.0	27.6	5.0	6.0	6.0
Andersons AX-3 (Sp.)	21.4	21.3	---	20.8	23.4	---	4.4	4.9	---
Acco U305 (3X)	21.2	---	---	23.4	---	---	5.0	---	---
Average	24.5	24.2	26.1	19.9	22.7	21.7	4.8	5.4	5.5
Range	21.2 to 29.6	20.8 to 28.7	21.9 to 30.7	15.5 to 26.1	16.9 to 29.0	16.5 to 27.6	3.6 to 6.0	4.8 to 6.5	4.8 to 6.3
Least significant difference	1.8	1.3	1.0	1.7	1.2	0.8	0.5	0.4	0.3

	1978	1977	1976
Planted	*May 17*	*May 13*	*May 15*
Harvested	*September 14*	*September 13*	*September 8*
Soil type	*Onaway sandy loam*	*Onaway sandy loam*	*Onaway sandy loam*
Previous crop	*Corn*	*Corn*	*Wheat*
Population	*19,100*	*22,400*	*19,500*
Rows	*28"*	*28"*	*28"*
Fertilizer	*138-38-38, manure*	*130-38-38, manure*	*118-72-72, manure*
Soil test: pH	*7.2*	*7.3*	*6.6*
P	*56 (medium)*	*50 (medium)*	*53 (medium)*
K	*122 (low)*	*152 (low)*	*176 (medium*

Farm Cooperator: Robert Cornell, Posen

County Extension Director: Melvin Matchett, Alpena

Cooperator: Dr. L. O. Copeland, Crop and Soil Sciences Department, Michigan State University, East Lansing

Table 23 NORTHERN MICHIGAN Zone 4
Alger County Trial - Silage
One, Two, Three Year Averages - 1977, 1976, 1975*

Hybrid (Brand-Variety)	% Dry Matter 1977	2 yr.	3 yr.	Tons per acre Green weight 1977	2 yr.	3 yr.	Tons per acre Dry weight 1977	2 yr.	3 yr.
Funk G-4077 (2X)	46.2	46.4	---	8.3	7.5	---	3.9	3.5	--
Pride R097 (3X)	45.5	43.7	---	9.9	8.4	---	4.5	3.7	--
Pride R107 (3X)	44.0	---	---	11.2	---	---	4.9	--	--
Michigan 2013 (3X)	43.9	43.8	38.8	10.0	8.9	10.5	4.4	3.9	3.9
Midland M-385 (3X)	41.4	---	---	12.1	---	---	5.0	--	--
Pride 1128 (2X)	40.8	---	---	13.0	---	---	5.3	--	--
Michigan 200 (4X)	40.4	41.0	36.1	12.4	10.0	11.5	5.0	4.1	4.0
Blaney B-22B (3X)	37.7	---	---	13.4	---	---	5.0	--	--
Funk G-4040 (2X)	36.8	39.0	33.5	15.3	12.5	13.3	5.6	4.8	4.3
Funk G-4082 (3X)	36.6	37.4	33.3	13.2	11.0	12.3	4.8	4.0	3.9
Michigan 280 (4X)	36.0	32.8	29.7	15.8	13.5	14.4	5.7	4.5	4.2
Michigan 3093 (3X)	35.6	---	---	16.3	---	---	5.8	--	--
Trojan TX85 (3X)	35.1	---	---	14.8	---	---	5.2	--	--
Funk G-5048 (4X)	35.1	36.0	31.9	13.7	11.3	13.0	4.8	4.0	4.0
Midland M-380 (3X)	34.9	---	---	12.4	---	---	4.3	--	--

(Continued)

Table 23 (continued)

Hybrid (Brand-Variety)	% Dry Matter 1977	% Dry Matter 2 yr.	% Dry Matter 3 yr.	Tons per acre Green weight 1977	Green weight 2 yr.	Green weight 3 yr.	Dry weight 1977	Dry weight 2 yr.	Dry weight 3 yr.
Midland M-373 (3X)	34.8	---	---	12.8	---	---	4.4	--	--
Michigan 2443 (3X)	34.8	37.9	---	17.5	13.1	---	6.1	4.8	--
DeKalb XL311 (3X)	34.8	34.1	29.7	17.7	13.3	13.2	6.4	4.7	4.0
Trojan TX90 (3X)	34.6	---	---	15.2	---	---	5.3	--	--
Acco UC1124 (2X)	34.6	---	---	16.9	---	---	5.8	--	--
Pioneer 3977 (3X)	34.2	---	---	16.9	---	---	5.8	--	--
Jacques JX20 (2X)	33.9	---	---	13.5	---	---	4.7	--	--
DeKalb XL12 (2X)	33.9	---	---	19.2	---	---	6.5	--	--
Funk G-5191 (4X)	33.8	---	---	17.0	---	---	5.8	--	--
Funk G-4085 (3X)	33.1	---	---	15.6	---	---	5.1	--	--
Stewart 3701 (3X)	32.9	31.8	28.4	18.1	14.1	14.6	6.0	4.5	4.1
Blaney 7601 (2X)	32.9	---	---	13.7	---	---	4.6	--	--
Jacques JX863 (3X)	32.8	---	---	14.0	---	---	4.6	--	--
Blaney B-220 (3X)	32.0	---	---	14.9	---	---	4.8	--	--
Midland M-375 (3X)	32.0	---	---	14.6	---	---	4.7	--	--
Pioneer 3965 (3X)	31.9	33.0	30.1	19.4	15.0	15.7	6.2	4.9	4.6
Midland M-488 (4X)	31.6	---	---	16.3	---	---	5.2	--	--
Pioneer 3975A (Sp.)	30.9	---	---	18.2	---	---	5.6	--	--
Stewart 38 (3X)	30.4	32.5	28.9	16.0	12.8	14.1	4.8	4.0	3.9
Midland M-390 (3X)	30.3	---	---	18.2	---	---	5.5	--	--
Acco UC1131 (2X)	30.0	---	---	14.9	---	---	4.5	--	--
Acco 305 (3X)	29.9	---	---	17.9	---	---	5.4	--	--
Acco 310 (3X)	27.9	---	---	18.9	---	---	5.2	--	--
Average	35.2	37.6	32.0	14.9	11.6	13.2	5.2	4.2	4.0
Range	27.9 to 46.2	31.8 to 46.4	28.4 to 38.8	8.3 to 19.4	7.5 to 15.0	10.5 to 15.7	3.9 to 6.5	3.5 to 4.9	3.9 to 4.6
Least significant difference	1.9	1.2	1.0	1.6	1.1	0.8	0.6	0.5	0.4

No results in 1978. Hail destroyed the plots.

		1977	1976	1975
Planted		*May 13*	*May 21*	*June 4*
Harvested		*October 7*	*September 24*	*October 1*
Soil type		*Chatham stoney loam*	*Chatham stoney loam*	*Chatham stoney loam*
Previous crop		*Oats*	*Corn*	*Fallow*
Population		*20,100*	*17,400*	*17,400*
Rows		*36"*	*36"*	*36"*
Fertilizer		*117-72-72*	*111-51-51*	*51-51-51*
Soil test:	*pH*	*7.2*	*7.5*	
	P	*161 (very high)*	*105 (very high)*	
	K	*177 (medium)*	*164 (medium)*	

Farm Cooperator: Michigan State University, Chatham

Cooperator: Dr. Richard Leep, Dept. Crop and Soil Sciences, Michigan State University, Marquette

County Extension Director: Arvid Norlin, Munising

Table 24 NORTHERN MICHIGAN Zone 4

Menominee County Trial - Grain

One and Two Year Averages - 1978, 1977

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.
Pride 1108 (2X)	22.7	--	53.8	--	20.3	-
Michigan 2013 (3X)	25.6	30	59.2	82	20.8	10
Jacques JX 20 (2X)	26.5	31	64.4	92	9.5	5
Northrup King PX14 (2X)	27.5	--	63.4	--	5.3	-
Pride R107 (3X)	27.6	31	65.3	83	42.3	21
Pride 1128 (2X)	28.7	31	67.6	95	6.7	3
Pickseed 2277 (2X)	28.8	--	61.2	--	8.5	-
Midland M385 (3X)	29.2	32	50.7	73	19.7	10
Blaney EX7601 (2X)	29.3	34	58.6	84	1.7	1
Funk G-5048 (4X)	29.4	33	66.7	93	3.0	2

(Continued)

Table 24 (continued)

Hybrid (Brand-Variety)	% Moisture 1978	% Moisture 2 yr.	Bushels per acre 1978	Bushels per acre 2 yr.	% Stalk lodging 1978	% Stalk lodging 2 yr.
Northrup King PX420 (3X)	29.5	--	71.1	--	18.0	-
*Trojan TXS82 (2X)	29.9	--	76.7	--	8.6	-
Pioneer 3978	30.4	--	63.9	--	7.6	-
Funk G-4082 (3X)	30.6	33	61.0	85	6.6	3
Pioneer 3990	31.3	--	57.4	--	19.0	-
Northrup King PX7	31.7	--	60.7	--	7.3	-
DeKalb XL311 (3X)	32.3	35	53.9	89	8.4	4
Northrup King PX414 (3X)	32.5	--	58.7	--	9.1	-
Northrup King PX443 (3X)	33.3	--	61.7	--	3.6	-
Funk G-5191 (4X)	33.6	37	75.5	98	4.5	2
Michigan 200 (4X)	33.6	34	55.9	87	11.1	6
Trojan TX90 (3X)	33.6	36	72.2	107	9.4	5
Jung TX89A	34.0	--	51.7	--	7.0	-
Midland M380 (3X)	34.1	35	44.8	69	26.3	13
Pioneer 3975A (Sp.)	34.5	35	75.8	107	0.7	0
DeKalb EX11	34.6	--	74.6	--	5.8	-
Jacques JX863 (3X)	34.7	37	51.8	83	15.1	8
Acco UC1124 (2X)	35.6	36	53.6	92	8.0	4
Midland M390 (3X)	35.7	39	62.5	86	13.3	7
Funk G-4195 (3X)	36.2	--	70.5	--	5.5	-
Funk G-4171 (3X)	36.5	--	60.4	--	6.9	-
Pioneer 3977 (3X)	37.0	37	67.1	93	7.4	4
Michigan 2443 (3X)	37.1	37	62.6	103	10.4	5
*Northrup King PX22 (2X)	37.7	--	92.4	--	1.5	-
Pioneer 3965A	38.5	--	71.0	--	0.8	-
Acco U305 (3X)	38.8	38	64.1	96	12.8	6
Jacques JX52 (2X)	38.8	--	71.7	--	9.1	-
*Northrup King PX19 (2X)	39.4	--	76.8	--	1.4	-
Michigan 280 (4X)	39.5	38	62.2	99	8.0	4
*DeKalb XL15 (2X)	40.3	--	91.3	--	5.1	-
Northrup King PX20 (2X)	40.9	--	53.3	--	3.2	-
*Northrup King PX485 (3X)	41.6	--	82.3	--	0.8	-
*Pioneer 3901 (2X)	41.9	--	82.7	--	4.6	-
*Andersons SSM (2X)	42.2	--	85.3	--	1.5	-
Trojan TXS 94 (2X)	42.3	--	66.6	--	2.9	-
*Andersons AX-5 (Sp.)	44.2	--	90.3	--	2.4	-
*Andersons Silo Filler(4X)	50.4	--	80.9	--	1.5	-
Average	34.6	35	66.5	90	8.8	6
Range	22.7 to 50.4	30 to 39	44.8 to 92.4	69 to 107	0.7 to 42.3	0 to 21
Least significant difference	2.5	1.8	10.1	8		

Significantly better than average yield in 1978

		1978	1977
Planted		*May 11*	*May 9*
Harvested		*October 11*	*October 4*
Soil type		*Onaway loam*	*Onaway loam*
Previous crop		*Corn*	*Corn*
Population		*20,400*	*24,100*
Rows		*30"*	*30"*
Fertilizer		*100-75-75*	*110-72-72*
Soil test:	*pH*	-----	*7.1*
	P	-----	*50 (medium*
	K	-----	*160 (medium)*

Farm Cooperator: D & C Equipment, Stephenson

County Extension Director: Richard A. Breyer, Stephenson

Cooperator: Dr. Richard Leep, Dept. Crop & Soil Sciences, Michigan State University, Marquette

Table 25 NORTHERN MICHIGAN Zone 4

Menominee County Trial - Silage

One and Two Year Averages - 1978, 1977

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	Tons per acre Green weight 1978	Tons per acre Green weight 2 yr.	Tons per acre Dry weight 1978	Tons per acre Dry weight 2 yr.
Pride 1108 (2X)	58.4	---	6.4	---	3.8	---
Michigan 2013 (3X)	52.6	50.9	7.2	9.2	3.8	4.7
Jacques JX20 (2X)	52.2	48.0	8.0	12.7	4.2	5.9
Midland M385 (3X)	51.4	48.2	6.4	9.4	3.3	4.4
Funk G-4085 (3X)	49.0	46.6	7.6	11.3	3.7	5.2
Pride 1128 (2X)	48.9	46.3	10.0	14.6	4.9	6.6
DeKalb XL311 (3X)	48.8	45.0	9.0	13.1	4.4	5.7
Pickseed 2277 (2X)	48.7	---	7.8	---	3.8	---
Blaney EX7601 (2X)	48.7	44.8	7.1	10.9	3.5	4.8
Northrup King PX14 (2X)	48.1	---	7.8	---	3.8	---
Pride R107 (3X)	47.9	45.7	7.8	9.8	3.7	4.4
DeKalb EX11	47.3	---	10.5	---	5.0	---
Funk G-5191 (4X)	47.0	44.2	8.6	13.4	4.0	5.8
Acco UC1124 (2X)	46.7	45.1	9.7	13.8	4.6	6.2
Jacques JX52 (2X)	46.5	---	10.1	---	4.7	---
Michigan 200 (4X)	46.5	45.2	7.4	11.1	3.4	4.9
Pioneer 3975A (Sp.)	46.3	42.6	10.4	15.4	4.8	6.3
Pioneer 3977 (3X)	45.8	43.3	8.3	12.2	3.8	5.2
Trojan TX92 (3X)	45.2	43.2	9.4	13.1	4.3	5.6
Funk G-4171 (3X)	45.2	---	8.7	---	3.9	---
Funk G-4141 (2X)	45.0	---	13.6	---	6.1	---
Northrup King PX443(3X)	44.9	---	9.6	---	4.3	---
Northrup King PX20 (2X)	44.9	---	7.2	---	3.3	---
Northrup King PX19 (2X)	44.8	---	12.5	---	5.6	---
Jung JC1A	44.8	---	8.3	---	3.7	---
Jung JX98B	44.7	---	11.8	---	5.3	---
Michigan 2443 (3X)	43.6	43.6	9.6	14.3	4.2	6.2
Midland M380 (3X)	43.3	41.9	7.2	9.6	3.1	4.0
Jacques JX863 (3X)	43.3	43.6	7.8	10.4	3.4	4.6
Funk G-4195 (3X)	42.9	---	9.8	---	4.2	---
Pioneer 3965 (3X)	42.4	40.0	10.9	15.9	4.6	6.2
Michigan 280 (4X)	41.1	41.2	10.6	14.9	4.3	6.1
Northrup King PX485(3X)	40.7	---	12.4	---	5.1	---
Funk G-4288 (3X)	40.5	---	15.6	---	6.2	---
DeKalb XL15 (2X)	40.4	---	10.9	---	4.4	---

(Continued)

Table 25 (continued)

Hybrid (Brand-Variety)	% Dry Matter 1978	% Dry Matter 2 yr.	Tons per acre Green weight 1978	Tons per acre Green weight 2 yr.	Tons per acre Dry weight 1978	Tons per acre Dry weight 2 yr.
Michigan 3093 (3X)	39.8	39.3	11.3	16.4	4.6	6.5
Pioneer 3901 (2X)	39.3	---	12.5	---	4.8	---
Northrup King PX22 (2X)	39.2	---	14.4	---	5.6	---
Midland M390 (3X)	39.1	37.5	9.3	14.4	3.7	5.3
Andersons SSM (2X)	38.4	---	14.1	---	5.4	---
Acco U305 (3X)	38.2	37.8	12.2	15.8	4.6	5.9
Andersons AX-5 (Sp.)	35.2	---	15.7	---	5.5	---
Michigan 333-3X (3X)	35.0	---	12.8	---	4.5	---
Andersons Silo Filler (4X)	31.8	---	18.8	---	6.0	---
Average	44.4	43.8	10.2	12.8	4.4	5.4
Range	31.8 to 58.4	37.5 to 50.9	6.4 to 18.8	9.2 to 16.4	3.1 to 6.2	4.0 to 6.0
Least significant difference	3.6	2.3	2.3	2.0	1.0	0.8

	1978	1977
Planted	*May 11*	*May 9*
Harvested	*September 27*	*September 16*
Soil type	*Onaway loam*	*Onaway loam*
Previous crop	*Corn*	*Corn*
Population	*20,300*	*23,900*
Rows	*30"*	*30"*
Fertilizer	*100-75-75*	*110-72-72*
Soil test: pH	----	*7.1*
P	----	*50 (medium)*
K	----	*160 (medium)*

Farm Cooperator: D & C Equipment, Stephenson

County Extension Director: Richard A. Breyer, Stephenson

Cooperator: Dr. Richard Leep, Dept. Crop & Soil Sciences Michigan State University, Marquette

Table 26

Index for 410 hybrids entered as 2,061 entries in the 1978 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, (MSX) indicates a modified single cross and (Sp.) indicates 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 50421
- Acco U305 (3X) (21,22,23,24,25)
- Acco 310 (3X) (23)
- Acco U334 (3X) (9,10,13,14,15)
- Acco UC1124(2X) (17,21,22,23,24, 25)
- Acco UC1131 (2X) (23)
- Acco UC1151 (2X) (17)
- Acco UC2301 (2X) (17,18)
- Acco UC2851 (2X) (1,6,13,16)
- Acco UC2901 (2X) (11,12)
- Acco UC2951 (2X) (2,7,8,11,12,16,18)
- Acco UC3002 (2X) (1,3,4,5,6,8,17)
- Acco UC3301 (2X) (6,17)
- Acco UC3301-A (2X) (1,3,5,7,9,10,13,14 15)
- Acco UC4201 (2X) 2,3,4)
- Acco UC7951 (2X) (5)

ADI Distributors, Inc., Carmel, Indiana 46032
- ADI 195 (2X) (13,14,15,17)
- ADI 197 (2X) (13,14,15,17)
- ADI 232 (2X) (13,17)
- ADI 315 (2X) (3,13,14,15,17)
- ADI 323 (2X) (3,14,15)
- ADI 555 (2X) (3)
- ADI 575 (3X) (3)

The Andersons, Maumee, Ohio 43537
- Anderson AX-3 (Sp.) (13,14,15, 19,21,22)
- Anderson AX-4 (Sp.) (1,2,3,6,7, 9,10)
- Anderson AX-5 (Sp.) (1,2,3,6,7,9, 10,24,25)
- Anderson SSA (2X) (13,14,15,19,21,22)
- Anderson SSE (2X) (1,2,3,6,7,9,10,13)
- Anderson SSM (2X) (1,2,3,6,24,25)
- Anderson Silo Filler (4X) (9,10,14, 15,24,25)

Asgrow Seed Co., DesMoines, Iowa 50063
- Asgrow RX29 (4X) (19,21,22)
- Asgrow RX40 (2X) (11,12,13,14,15)
- Asgrow RX53 (2X) (5,9,10,13,14, 15,16)
- Asgrow RX58 (2X) (4,5,13,17)
- Asgrow RX2345 (2X) (4,5,9,10,11,12,13 14,15)

Bayless Hybrids, Inc., Bluffton, Indiana 46714
- Bayless SX434M (2X) (2,3,5)
- Bayless SX447 (2X) (2,3)
- Bayless SX637 (2X) (2,3)

Blaney Farms, Inc., Madison, Wisconsin 53711
- Blaney B-AA (2X) (1,2,3,5,7)
- Blaney B22B (3X) (23)
- Blaney B201 (2X) (21,22)
- Blaney B220 (3X) (23)
- Blaney B302 (2X) (14,15,16)
- Blaney B302WX (2X) (11,12,17,18)
- Blaney B303A (2X) (18)
- Blaney B401 (2X) (3,13,16)
- Blaney B406 (2X) (8,9,10,16,17)
- Blaney B443 (3X) (11,12,18)
- Blaney B501A (2X) (2,18)
- Blaney B506 (2X) (2,8,9,10,14,15,17)
- Blaney B601WX (2X) (1,2,3,5)
- Blaney B605WX (2X) (9,10,11,12,13,14, 15,16)
- Blaney B606 (2X) (1,2,3,5,6,11,12,17)
- Blaney B606E (2X) (1,4,7,9,10,18)
- Blaney B606E-WX (2X) (13,14,18)
- Blaney B703 (2X) (1,2,3,5)
- Blaney B805 (2X) (1,3,4,5)
- Blaney EX7305 (2X) (6,7,8)
- Blaney EX7601 (2X) (23,24,25)

Cardinal Seed Co., Quincy, Michigan 49082
- Cardinal SX98A (2X) (11,12,14,15)
- Cardinal SX105 (2X) (8)
- Cardinal SX110 (2X) (3,8,9,10)
- Cardinal SX112 (2X) (1,3,13)

Cargill Seeds, Minneapolis, Minnesota 55440
- Cargill 430 (3X) (3,5,6,9,10,11, 12)
- Cargill 449 (3X) (3)
- Cargill 810 (2X) (11,12,14,15)
- Cargill 832 (2X) (9,10,11,12, 14,15)
- Cargill 838 (2X) (1,2,3,4,5,6,9,10,11, 12,14,15)
- Cargill 863 (2X) (1,6,7,8)
- Cargill 890 (2X) (6)
- Cargill 924 (2X) (1,2)

Cowbell Seeds, Inc., Bradley, Michigan 49311
- Amcorn 2010 (2X) (13,14,15)
- Amcorn 4010 (2X) (7,8,9,10,11, 12,13,14,15,17)
- Amcorn 4100 (2X) (3,4,7,8,9,10, 11,12,13,14,15,16,17)
- Amcorn 7300 (2X) (1,2,3,4,5,7,8,9,10, 11,12,13,14,15,17)
- Amcorn 7480 (2X) (1,2,3,4,5,7,8,9,10, 11,12,13,14,15,16,17)

Customaize, Inc., Momence, Illinois 60954
- Customaize CFS 115 (2X) (7,17)
- Customaize CFS-WX120 (2X) (7, 11,12,17)
- Customaize CFS-WX128 (2X) (7)
- Customaize CFS-E660 (2X) (21,22)
- Customaize CFS1000 (2X) (17)

Dairyland Seed Co., Inc., Keewaskum, Wisconsin 53040
- Dairyland DX285 (3X) (16)
- Dairyland DX302 (3X) (13)
- Dairyland DX1002 (2X) (7,9,10,13)
- Dairyland DX1005 (2X) (2,7,9,10)
- Dairyland DX1007 (2X) (1,2,3,5,7)
- Dairyland DX1008 (2X) (1,2,3,5,9, 10,13,14,15)
- Dairyland DX1010X (2X) (1,3,5,9,10)
- Dairyland DX1016 (2X) (3)
- Dairyland DX1082 (2X) (16)
- Dairyland DX1090 (2X) (14,15,16)
- Dairyland DX1095 (2X) (14,15,16)
- Dairyland DX1099 (2X) (7,9,10,13,14, 15)

DeKalb Ag Research, Inc., DeKalb, Illinois 60115
- DeKalb XL9 (2X) (19)
- DeKalb EX11 (24,25)
- DeKalb XL12 (2X) (7,14,15,17,19, 23)
- DeKalb XL15 (2X) (9,10,11,12,17, 24,25)
- DeKalb XL25 (2X) (5,11,12,13,14, 15,16)
- DeKalb XL35 (2X) (8,9,10,16)
- DeKalb XL42 (2X) (2,4,7,8,13)
- DeKalb XL54 (2X) (1,2,5)
- DeKalb XL309 (3X) (20)
- DeKalb XL311 (3X) (20,23,24,25)

Dennis Hybrid Corp., Windfall, Indiana 46076
- Dennis DS6 (2X) (1,3,5,9,10)
- Dennis DS36 (2X) (1,3,5,9,10)
- Dennis DS37E (2X) (1,3,5,9,10)
- Dennis DS47A (2X) (1,3,5,9,10)
- Dennis DS90 (2X) (1,3,5,9,10)

Farmers Corn Co., Jerome, Michigan 49249
- Farmers FCC224 (2X) (1,2,3)
- Farmers FCC277 (2X) (1,2,3)

Ferry-Morse Seed Co., Geneseo, Illinois 61254
- Gold Tag X-770 (2X) (1,2)
- Gold Tag X-880 (2X) (6)
- Gold Tag 2060 (2X) (1,2,3,6)
- Gold Tag 2080 (2X) (3)

Edward J. Funk & Sons, Inc., Kentland, Indiana 47951
- Super Crost S18 (2X) (8,9,10,12, 11,12,13,14,15,17,18)
- Super Crost 1950 (2X) (4,5,6,7,8,9,10, 11,12,13,14,15,17,18,19,20,21,22)

Super Crost S27 (2X) (4,5,6,7,8, 9,10,11,12,13,14,15,16,17)
Super Crost 31 (4X) (11,12,14,15, 17,18,19,20,21,22)
Super Crost 1210 (2X) (11,12,14, 15,17,18,19,20,21,22)
Super Crost 1303 (3X) (11,12,14, 15,18,19,20,21,22)
Super Crost 1402 (2X) (11,12,14, 15,17,18,19,20,21,22)
Super Crost 1590 (2X) (9,10,11, 12,13,14,15,17,18,19,20,21,22)
Super Crost 1692 (2X) (9,10,11,12, 13,14,15,17,18,19,20,21,22)
Super Crost 2350 (2X) (1,2,3,4,5,6,7, 8,9,10,11,12,13,14,15,16,17,18)
Super Crost 2470 (2X) (1,2,3,6,7,8,9, 10,14,15)
Super Crost 2880 (2X) (1,2,3,4,5,6,7, 8,9,10,11,12,13,14,15)
Super Crost 3585 (2X) (1,2,3,9,10,13)
Super Crost 4242 (2X) (3)
Super Crost 4350 (2X) 1,2,3)
Super Crost 5440 (2X) (1,2,3,5)

Funk Seeds International, Bloomington, Indiana 61701
Funk G-4040 (2X) (21,22,23)
Funk G-4077 (3X) (23)
Funk G-4082 (3X) (23,24)
Funk G-4085 (3X) (19,20,23,25)
Funk G-4141 (2X) (9,10,13,14,15, 16,18,19,25)
Funk G-4171 (3X) (8,18,19,21,22, 24,25)
Funk G-4195 (3X) (4,11,12,18,19, 20,24,25)
Funk G-4224 (MSX) (6,9,10,14,15, 16,17,18,20)
Funk G-4252 (3X) (6,8,18)
Funk G-4272 (3X) (4,6,7,8,11,12,13,14, 15,16,17,18,20)
Funk G-4288 (3X) (6,25)
Funk G-4321A (2X) (2,3,5,7)
Funk G-4323 (MSX) (2,4,5,6,9,10,11, 12,13,14,15,17)
Funk G-4408 (2X) (6,7,9,10,13,17)
Funk G-4430 (2X) (1,2,3,4,9,10)
Funk G-4444 (2X) (1,5,7,8,9,10,13,14, 15,17)
Funk G-4507 (2X) (1,3,5)
Funk G-5048 (4X) (19,23,24)
Funk G-5191 (4X) (19,21,22,23,24,25)

Garnett-Ross, Inc., Bethesda, Maryland 20014
Garnett-Ross 33 (Sp.) (21,22)
Garnett-Ross 33X29 (Sp.) (21,22)

Garno Seed Co., Inc., Palmyra, Michigan 49268
Garno S-82 (2X) (11,12,19)
Garno S-84 (2X) (9,10,14,15,16, 17,19)
Garno S-85 (2X) (19)
Garno S-90 (2X) (9,10,14,15,16,17, 18,19)
Garno S-95X (2X) (1,5,9,10)
Garno S-100 (2X) (1,3,5,9,10,11,12, 13,14,15)

Fred Gutwein & Sons, Inc., Francesville, Indiana 47946
Gutwein 06 (2X) (13,14,15)
Gutwein 22 (2X) (2,7,13)
Gutwein 40 (2X) (5,11,12)
Gutwein 44 (2X) (3,5)
Gutwein 46 (2X) (2,5,7)
Gutwein 46B (2X) (9,10,14,15)
Gutwein 62 (2X) (2,4,5)
Gutwein 69A (2X) (3)
Gutwein 112 (2X) (2,11,12,14,15)
Gutwein 2075 (2X) (11,12,13,14,15)
Gutwein 2140 (2X) (11,12,13,14,15)
Gutwein 2250 (2X) (2,5,7,14,15)
Gutwein 2340 (2X) (2,5,7,9,10,11,12, 14,15)

Jacques Seed Co., Prescott, Wisconsin 54021
Jacques JX20 (2X) (19,20,23,24, 25)
Jacques JX25 (2X) (11,12,20)
Jacques JX30 (5)
Jacques JX50 (19)
Jacques JX52 (2X) (1,4,11,12,17, 19,24,25)
Jacques JX62 (2X) (11,12,14,15)
Jacques JX90 (2X) (11,12)
Jacques JX92 (2X) (1)
Jacques JX122A (2X) (2,4,7,11,12,16)
Jacques JX124A (2X) (2,16)
Jacques JX127 (2X) (16)
Jacques JX174 (2X) (1,11,12,13,16)
Jacques JX177 (2X) (1,2,4,5,11,12,13, 14,15)
Jacques JX863 (23,24,25)

Jung Farms, Inc., Randolph, Wisconsin
Jung JC1A (25)
Jung JX89A (25)
Jung TX98B (24)

Lowe Seed Co., Kankakee, Illinois 60901
Lowe LSX-100 (2X) (16)
Lowe LSX-222 (11,12,13,14,15,16)

McCurdy Seed Co., Fremont, Iowa 52561
McCurdy MSX 22E (2X) (6)
McCurdy MSX37 (2X) (5,6,8,9,10)
McCurdy MSX42 (2X) (8,9,10)
McCurdy MSX44A (2X) (5,6,8)
McCurdy MSX46 (2X) (5,8,9,10)
McCurdy MSX60 (2X) (5)

Michigan Crop Improvement Association, East Lansing, Michigan 48823
Michigan 200 (4X) (19,20,21,22, 23,24,25)
Michigan 2013 (3X) (19,20,21,22, 23,24,25)
Michigan 2443 (3X) (18,19,20,21, 22,23,24,25)
Michigan 280 (4X) (7,8,9,10,11,12, 13,14,15,16,17,18,19,20,21,22, 23,24,25)
Michigan 3093 (3X) (1,2,3,4,5,6,7, 8,9,10,11,12,13,14,15,16,17,18, 19,20,21,22,23,24,25)
Michigan 3102 (2X) (1,2,3,4,5,6,7, 8,9,10,11,12,13,14,15,16,17, 18,19,20,21,22)
Michigan 333-3X (3X) (1,2,3,4,5,6, 7,8,9,10,11,12,13,14,15,16,17, 18,19,20,21,22,25)
Michigan 3953 (3X) (1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16,17,18,19,20, 21,22)
Michigan 407-2X (1,2,3,4,5,6,7,8,9,10, 11,12,13,14,15,16,17,18,19)
Michigan 4122 (2X) (1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16,17,18,19)
Michigan 5443 (3X) (1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16,17,18)
Michigan 5802 (2X) 1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16,17)
Michigan 5912 (2X) (1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16,17)
Michigan 5922 (2X) (1,2,3,5,9,10)

Michigan Hybrid Seed Co., East Lansing, Michigan 48823
Wolverine 24 (4X) (18,19)
Wolverine W120 (2X) (18,19)
Wolverine W128 (2X) (11,12,14, 15,16)
Wolverine W155 (2X) (11,12)
Wolverine W166 (2X) (4,7,9,10,14,15,16)
Wolverine W169 (2X) (3,4,9,10,11,12,13, 16)
Wolverine W174 (2X) (1,2,3,4,9,10,11, 12,13,14,15)

Midland Cooperative, Minneapolis, Minnesota
Midland M373 (3X) (23,25)
Midland M375 (3X) (23)
Midland M380 (3X) (23,25)
Midland M385 (3X) 23,25)
Midland M390 (3X) (23,25)
Midland M488 (4X) (23)

Migro Hybrids, Mitchell, Indiana 47446
Migro M-0101(2X) (1,2,3,4,5,6, 7,8,9,10,11,12,13,14,15,16, 17,18,19)
Migro M-105 (2X) (1,2,3,4,5,6, 7,8,9,10,11,12,13,14,15,16, 17,18,19)
Migro M-0301 (2X) (1,2,3,4,5, 6,7,8,9,10,11,12,13,14,15, 16,17,18)
Migro M-0505 (2X) (1,2,3,4,6,8,9,10, 11,12)
Migro M-2018X(2X) (1,2,3,4,5,6,7,8,9, 10,11,12,13,14,15,16,17,18)
Migro M-2022X (2X) (1,2,3,4,5,6,7,8, 9,10,13,14,15,17,18)
Migro M-3020 (4X) (9,10,11,12,14,15)
Migro M-4501 (2X) (2,9,10,11,12)

Muncy Chief Hybrids, Muncy, Pennsylvania 17756
Muncy Chief H304 (4X) (13)
Muncy Chief SX442 (2X) (13)
Muncy Chief SX550 (2X) (9,10,13)
Muncy Chief 3X553 (3X) (13)
Muncy Chief SX662 (2X) (5,9,10)
Muncy Chief 3X676 (3X) (5,9,10)
Muncy Chief H764 (3X) (9,10)
Muncy Chief SX777 (2X) (5,9,10)

Northrup King & Co., Minneapolis, Minnesota 55440
Northrup King PX7 (24)
Northrup King PX11 (2X) (19)
Northrup King PX14 (2X) (19,24,25)
Northrup King PX15 (2X) (19)
Northrup King PX19 (2X) (13,19 24,25)
Northrup King PX20 (2X) (8,18,21, 22,24,25)
Northrup King PX22 (2X) (9,10,11, 12,13,19,24,25)
Northrup King PX26 (2X) (6,11,12, 13,16)
Northrup King PX32 (2X) (6,7,9, 10,11,12,13,16)
Northrup King PX37 (2X) (1,2,3,5, 6,7,8,9,10,11,12,13)
Northrup King PX45 (2X) (1,2,3, 5,6,11,12,13)
Northrup King PX46 (2X) (1,3,5,6, 11,12,13)
Northrup King PX48 (2X) (2,3,5,6,9, 10,11,12,17)
Northrup King PX49 (2X) (1,2,3,5,6,7, 9,10,11,12,13)
Northrup King PX65 (2X) (1,2,3,5,6)
Northrup King PX69 (2X) (1,2,3,5,6)
Northrup King PX74 (2X) (1,2,3,5)
Northrup King PX414 (3X) (24)
Northrup King PX420 (3X) (24)
Northrup King PX443 (3X) (18,20,24, 25)
Northrup King PX448 (3X) (18)
Northrup King PX485 (3X) (9,10,13, 24,25)
Northrup King PX504 (3X) (9,10,13)
Northrup King PX529 (3X) (9,10,11, 12)
Northrup King PX585 (3X) (1,2,4,5,6, 9,10,11,12,13)

O's Gold Seed Co., Parkersburg, Iowa 50665
O's Gold SX75 (18)
O's Gold 104B (2)
O's Gold SX900 (16)
O's Gold SX949 (2X) (6,16,18)
O's Gold SX1100 (2X) (1,2,5,7,13)
O's Gold SX1101 (11,12,14,15)
O's Gold SX1107 (2X) (1,4,5,8)
O's Gold SX5500A (2X) (5,9,10)

Occidental Chemical Co., Decatur, Indiana 46733
Oxy 32 (2X) (11,12)
Oxy 35A (2X) (11,12,14,15)
Oxy 36B (2X) (11,12)
Oxy 476 (3X) (11,12,13,14)

O-Y-O Seed Associates, Inc., Marysville, Ohio 43040
O-Y-O 110 (2X) (1,2)
O-Y-O 125 (2X) (1,2)
O-Y-O 275 (2X) (1,2)

P-A-G Seeds, Minneapolis, Minnesota 55440
P-A-G SX67 (2X) (16)
P-A-G SX69 (2X) (5)
P-A-G SX111 (2X) (11,12,14,15,20)
P-A-G SX177 (2X) (5,6,9,10,11, 12,14,15,16)
P-A-G SX189 (2X) (1,2,3,4,5,6,9, 10,11,12,13,14,15,17)
P-A-G SX249 (2X) (1,2,3,5,6)
P-A-G SX397 (2X) (3,5,6)
P-A-G 503 (3X) (20)
P-A-G 534 (3X) (11,12)

Roy W. Parker & Sons, Inc., Kimmell, Indiana 46760
Parker 28 (2X) (6)
Parker 36A (2X) (5)
Parker 50A (2X) (5)
Parker 60 (2X) (3)

Payco Seeds, Dassel, Minnesota 55325
Payco SD106 (4X) (14,15)
Payco 3X443 (3X) (21,22)
Payco SX555 (2X) (13,14,15)
Payco 3X622 (3X) (14,15)
Payco SX680 (2X) (13,14,15,16)
Payco SX737 (2X) (1,4,13)
Payco SX775 (2X) (1,6,13,16)
Payco SX844 (2X) (1,4,6,13)
Payco SX990 (2X) (1)

Pfizer Genetics, Inc., Olivia, Minnesota 56277
Trojan TXS82 (2X) (24)
Trojan TX85 (3X) (21,23)
Trojan TX90 (3X) (11,12,19,21,22, 23,24)
Trojan TX92 (3X) (25)
Trojan TXS94 (2X) (2,6,14,15,16, 18,24)
Trojan TXS99 (2X) (11,12,14,15)
Trojan TXS102 (2X) (7,8,9,10,13,14, 15,16,17)
Trojan TXS105A (2X) (6)
Trojan TXS108A (2X) (8)
Trojan TXS115A (2X) (1,2,3,5)
Trojan T1008 (2X) (6,11,12)
Trojan T1108 (2X) (1,4,5,7)

Pfizer Chemical and Genetics, Ltd., Blenheim, Ontario
Warwick TX17 (3X) (21,22)
Warwick TX20 (3X) (21,22)
Warwick TX27 (3X) (9,10,13)
Warwick SL207 (2X) (21,22)
Warwick SL501 (Sp.) (2,4,5,6,9,10,13)
Warwick W777 (2X) (13,20,21,22)
Warwick W966 (Sp.) (2,4,5,6,9,10,13)
Warwick W1101 (2X) (2,4,5,6)

Otto Pick & Sons, Ltd., Richmond Hill, Ontario
Pickseed XR44 (2X) (14,15,17)
Pickseed 185 (Sp.) (19,21,22)
Pickseed 2111 (2X) (21,22,24,25)
Pickseed 2262 (2X) (19,20,21,22)
Pickseed 2277 (2X) (19,20,21,22,24, 25)
Pickseed 4944 (2X) (19,20,21,22)
Pickseed 8858 (2X) (14,15,17)

Pioneer Hi-Bred International, Inc., Tipton, Indiana 46072
Pioneer 3535 (2X) (1,2,3,4,5,6,7, 8,9,10)
Pioneer 3541 (2X) (1,2,3,4,5,6,7, 9,10)
Pioneer 3591 (Sp.) (1,7)
Pioneer 3709 (MSX) (2,9,10,11,12, 13,16)
Pioneer 3780 (2X) (1,2,3,4,5,6,7, 8,9,10,11,12,13,14,15,16,17,18)
Pioneer 3901 (2X) (1,2,3,4,5,6,7, 8,9,10,11,12,13,14,15,16,17, 18,19,20,21,22,24,25)
Pioneer 3958 (2X) (14,15,17,18)
Pioneer 3965 (3X) (9,10,13,16,17,18, 23)
Pioneer 3965A (24,25)
Pioneer 3975A (Sp.) (11,12,13,14,15, 16,17,18,19,20,21,22,23,24,25)
Pioneer 3977 (3X) (19,20,21,22,23,24, 25)
Pioneer 3978 (24)
Pioneer 3990 (24)
Pioneer X4758 (2X) (6)
Pioneer X5711 (2X) (1)

Prairie Stream Farms, Inc., Frankfort, Indiana 46041
Prairie Stream SX33 (2X) (5)
Prairie Stream SX44 (2X) (5)

Pride Seed, Inc., Carson City, Michigan 48811
Pride R097 (3X) (23)
Pride R107 (3X) (19,20,21,22,23, 24,25)
Pride R144 (3X) (16,18,19,21,22)
Pride 1108 (2X) (21,22,24,25)
Pride 1128 (2X) (19,20,21,22,23, 24,25)
Pride 2206 (2X) (14,15,16,17, 18,19)
Pride 2248 (2X) (14,15,16)
Pride 2264 (2X) (11,12,13,16)
Pride 4417 (2X) (8,9,10,11,12,14,15,17)
Pride 4488 (2X) (4,5,6,8,9,10,11,12,13, 17)
Pride 5525 (2X)(2,4,5,6,8,9,10,11,12,13)
Pride 5578 (2X) (1,2,3,4)
Pride 7715 (2X) (1,2,3)

Renk Seed Co., Sun Prairie, Wisconsin 53590
Renk RW2-WX (2X) (11,12)
Renk RK3 (2X) (13,16,19,21,22)
Renk RK6 (2X) (13,14,15)
Renk RK15 (2X) (3,5,7,9,10,11,12)
Renk RK40 (2X) (3,9,10,11,12)
Renk RK44 (2X) (9,10)
Renk RK66 (2X) (1,3,5,9,10,11,12,16,17)
Renk RK66E (2X) (9,10,13)
Renk RK77 (2X) (1,3)

Robson Seed Farms, Corp., Hall, New York 14463
Seneca PC14 (2X) (19,21,22)
Seneca 140 (3X) (19,21,22)
Seneca 149 (3X) (11,12,18)
Seneca 280 (3X) (11,12,18)
Seneca T1183 (3X) (7,9,10)
Seneca S3195 (Sp.)(8,9,10)

Solar Seed Service, Colon, Michigan 49040
- Solar 1001 (2X) (3)
- Solar 1201 (2X) (3)
- Solar 1301 (2X) (3)
- Solar 1401 (2X) (3)
- Solar 1501 (2X) (3)
- Solar 1602 (2X) (3)

Sommer Bros. Seed Co., Pekin, Illinois 61554
- Golden Harvest H-2230 (MSX) (13, 20, 21,22)
- Golden Harvest H-2340 (2X) (6,8, 11,12,14,15)
- Golden Harvest H-2370 (2X) (7,8, 9,10,11,12,13,14,15,20,21,22)
- Golden Harvest H-2373 (2X) (8,9, 10,11,12,13,14,15,18)
- Golden Harvest H-2420 (2X) (6)
- Golden Harvest H-2445 (MSX) (1,3,4, 5,6,7,8,9,10,11,12,14,15,18)
- Golden Harvest H-2448 (2X) (5)
- Golden Harvest H-2450 (2X) (1,3,4, 5,6,9,10,11,12)
- Golden Harvest H-2500 (2X) (1,3,5, 9,10,14,15)
- Golden Harvest H-2600 (2X) (1,4,5, 9,10)

Stanton Seed & Supply Co., Saginaw, Michigan 48605
- Stanton 1090 (2X) (7,11,12,13,16, 17)
- Stanton 1095 (2X) (1,2,4,7,11,12, 13,16,17)
- Stanton 10100 (2X) (1,2,4,7,11,12,13, 16,17)

Stewart Seeds, Ailsa Craig, Ontario
- Stewart 38 (3X) (23)
- Stewart 3701 (3X) (23)

U.S.Steel Agri-Chemicals, Atlanta, Georgia 30301
- USS 0010 (2X) (1,8)
- USS 0011 (2X) (1,5,8)
- USS 0555A (3X) (5)
- USS 1010 (2X) (2,5)
- USS U8543 (2X) (11,12,13,21,22)

Vistron Corp., Lima, Ohio 45802
- Sohigro S22 (2X) (13,14,15,16)
- Sohigro S23 (2X) (13)
- Sohigro S38 (2X) (13)
- Sohigro S39 (2X) (13,14,15)

Voris Seeds, Inc., Windfall, Indiana 46076
- Voris V2271 (2X) (21,22)
- Voris V2321 (2X) (13,16,21,22)
- Voris V2352 (Sp.) (11,12)
- Voris V2372 (2X) (6,7,9,10,11, 12,13,14,15,16,17)
- Voris V2381 (2X) (3,5,6,7,9,10, 11,12,13,14,15)
- Voris V2402 (2X) (6)
- Voris V2422 (2X) (1,3,5,7,9,10,14,15)
- Voris V2472 (2X) (1)
- Voris V2532 (2X) (1,3,5)