

1992



FILE COPY
DO NOT REMOVE

Michigan Corn Production

H Y B R I D S C O M P A R E D

HYBRIDS COMPARED 1992

By: Keith Dysinger, Mervin Chamberlain,
Richard H. Leep, and Dale D. Harpstead*

1 Hybrid corn trials are conducted each year by the Department of Crop and Soil Sciences, Michigan Agricultural Experiment Station, in cooperation with the Cooperative Extension Service, seed corn companies, and farmers.

Many hybrids are offered for sale in Michigan. They differ in yield capacity, maturity, lodging resistance, and other characteristics. Choosing the best corn hybrids is an important part of profitable corn production. By planting the hybrids best suited to the individual farm location, a grower can obtain higher yields with little or no increase in total production costs. Seed of hybrids with the best performance records in Michigan will generally cost no more than seed of hybrids with lower performance ratings.

The highest yielding hybrids in the 1991 trials produced 42 bushels more per acre than the average of 311 hybrids tested (Table A) and 81 bushels more than the lowest yielding hybrids.

*Research assistant, labor technician, and professors, respectively, Crop and Soil Sciences Department.

Twelve trial locations contained 21 tests. Average yield of all hybrids grown in Zone I was 131, Zone II was 173, Zone III was 196, and Zone IV was 115. The driest hybrids at harvest contained 3 percent less moisture than the average and 7 percent less moisture than the highest moisture hybrids tested. Stalk breakage averaged 11 percent for the hybrids with the highest amount of stalk lodging, 3 percent for the average and .3 percent for the lowest (Table A).

Entries

All seed companies are invited to enter hybrids in the trials each year. A fee is charged to cover some of the direct expenses.

Table 20 presents a list of all hybrids planted in the 1991 trials. At the 13 locations, 311 hybrids from 38 seed companies were tested as 1595 entries. Company names used in association with hybrid numbers refer to the brand. The numbers are the companies' designations.

Methods

The major changes made in the testing methods employed in 1990 were continued in the 1991 season. Three locations were identified in each of the maturity zones. These zones are based on growing degree-days established from long-term weather records. Hybrids to be tested in each zone are entered in all locations representing that zone. Hybrids tested at each location are grouped according to the maturity ratings provided by the seed companies.

Two-row plots are used. Plots are 22 feet long with a 30-inch row spacing. The plantings are made at the rate of approximately 28,000 seeds per acre in maturity zones I, II, and III (except at the Mason location in zone III which was planted at 26,000). All plantings in zone IV were made at 24,000 seeds per acre. A three-replication, triple-lattice design is used throughout the testing program.

All hybrids were grown under similar conditions at each location. They are grown in farmers' fields with equal fertilizer, population, date of planting, and other management practices.

Stand counts are taken prior to tasseling. Lodging measurements are made prior to harvest. Plots are harvested mechanically for both grain and silage. Grain yields are reported at a standard 15.5 percent moisture; silage yield estimates are based on an air-dried sample. Silage yields were measured in Ingham, Huron, and Missaukee counties (Tables 17, 18, and 19). Trials in Cass, Montcalm, and Mason counties were irrigated. A limited number of hybrids were entered for further evaluation by means of an in-vitro silage digestibility analysis. This work is being done in cooperation with the Department of Animal Science.

The results obtained from the 1992 silage digestibility trials are presented in Tables 17, 18, and 19. This is first year, preliminary data and should be interpreted with great care. No historical pattern exists relative to the silage digestibility performance of a specific hybrid.

Results of four analyses are presented. They are:

1. **DMD = Dry matter digestibility.** This has been shown to be highly related to results from animal digestibility trials and to the best way to compare digestibility of a large number of samples.
2. **FD = Fiber digestibility.** This is related to animal dry matter intake for the forage.
These procedures measure digestibility of dry matter or fiber by inoculating the forage (with bacteria harvested from the rumen of a cow) in a flask. The sample is incubated for 30 hours as this is the average retention time of fiber in the rumen of a lactating dairy cow.
3. **NDF = Neutral detergent fiber.** This is a measure of fiber content and has been related to animal dry matter intake of the forage.
4. **CP = Crude protein.**

*All analyses were determined by wet-chemical methods.

From seed packaging through harvest and data processing, each hybrid is identified only by a code number to assure that an unbiased estimate is made of each hybrid's potential. The code is deciphered after the data have been processed.

Growing Conditions

All plantings were completed between May 5 and May 20. Planting was timely. Highly favorable growing conditions for both temperature and moisture prevailed from planting throughout the growing season in nearly all areas of corn production. The most notable exception was in the southeastern part of Michigan typified by the Monroe county location in Zone I. Corn in this area was severely damaged by mid and late season drought. Yields were greatly reduced and highly variable. Drought in southeastern Michigan was largely responsible for the somewhat lower estimated average yield of 112 bushels per acre made by the Michigan Crop Reporting Service, down from 115 bushels in 1990.

The area harvested for silage has been estimated at 350,000 acres. Average silage yields were not available at time of publication.

How to Use This Bulletin

One-, two-, and three-year averages are presented for all hybrids tested during 1991, 1990, and 1989 wherever the data are available. One-year results 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.

Yields averaged from the three-location entry system have been included. Tables 4, 8, 12, and 16 report the average measurements made on entries within a maturity zone.

The tables report the following information about the hybrids tested:

1. Average moisture content at harvest.
2. Average yield (in bushels) of shelled corn at 15.5 percent moisture.
3. Average percent of stalk lodging (plants broken below the ear at harvest).

Hybrids are recorded in the tables in order of their approximate maturity in the current growing season (early to late), based on moisture 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 can be caused by corn borers and/or stalk rot diseases.

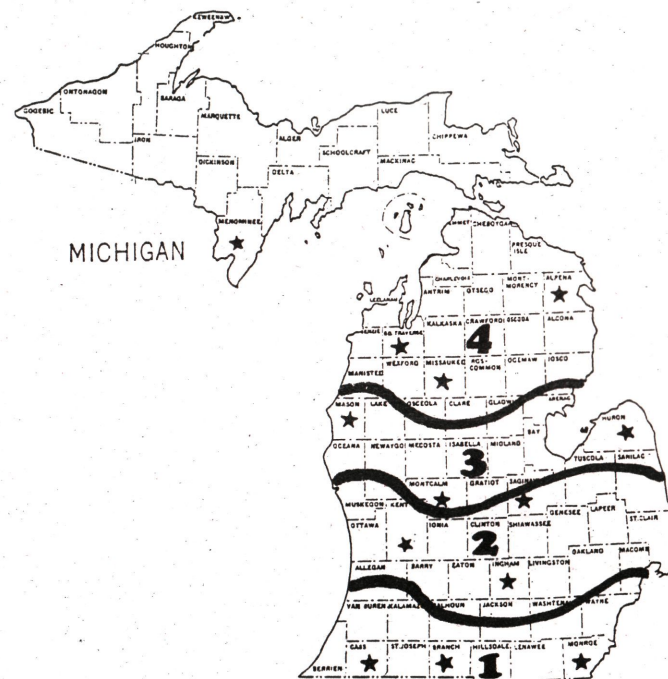
Two or more plots of the same hybrid in the same field may produce somewhat different results because of uncontrolled variability in the soil and other environmental factors. Replication and randomization of the entries are two methods used to reduce these errors. Because these methods do not eliminate all of these variables, the magnitude of difference necessary for statistical significance has been calculated for yield and moisture content. The value calculated as the "least significant difference" or "LSD" is the amount that an individual hybrid would have to differ from the experiment average to be significantly different from that average.

Hybrids with yields significantly better than the average grain yield at each location are marked with an asterisk (*) in each table. Other agronomic information relative to each trial is given at the bottom of the table. Fertilizer amounts are shown as total pounds per acre of nitrogen, P_2O_5 and K_2O applied during the season.

How to Choose a Hybrid Adaptation

The following map shows the locations of the trials, and it divides Michigan into four generalized maturity zones. 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 that gives results for the trials conducted nearest to you. Also, refer to the table of averages listed for your zone. A hybrid that has done well at two or more locations is more likely to be a good hybrid for your farm, also.



Corn Maturity Zones and Locations (*) of Trials

Planting Rate

The number of seeds sown per acre in Michigan has increased steadily over the past several years. High plant populations (26,000 or more per acre) should be considered only for soils consistently producing more than 100 bushels per acre. With high plant populations, rainfall deficiencies and other growing season stresses frequently result in no increase in yield and may actually result in decreased yield compared with a more modest plant population of approximately 22,000 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 are 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 reflects a delay in maturity of about two days. Corn is mature when moisture reaches about 32 percent in the grain or 38 percent in the ear.

For Grain

It is better to choose an early hybrid (below average moisture content) than a late hybrid for grain. Data in the tables show that good yields do not totally depend on later maturity. Advantages of early-maturing hybrids are:

- They usually mature before killing frosts.
- Adapted early hybrids generally yield as much or more than late hybrids in most areas of Michigan.
- Early hybrids with lower moisture content at harvest reduce drying costs and market

discounts for moisture.

- Mature, dry corn makes better livestock feed.
- Harvest can take place earlier in the fall when weather conditions are most favorable. Early harvest may reduce corn losses resulting from broken stalks and dropped ears.
- Fall tillage of corn stubble may be possible with early hybrids on land not subject to erosion.

For Silage

A good rule of thumb for selecting a superior silage hybrid is to choose one that also has the potential for high grain production. High dry-weight production per acre is a better reason for choosing hybrids for silage than tons of green weight.

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

Other Considerations

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

Some degree of "crop insurance" can be obtained by choosing two or three hybrids that differ slightly in their maturity. If one hybrid encounters unfavorable weather at a critical growth stage, another may be less affected and produce a good crop.

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

Ways to Reduce Stalk Lodging

Several stalk-rotting fungi may cause broken stalks at harvest and create a major problem in corn production. Stalk rot occurs when fungi increase rapidly after the plant has matured or when the plant dies prematurely. The highest incidence of stalk rot occurs in years when corn matures early and harvest is delayed. Infection and disease development are favored by warm, humid weather and 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 consistently be depended upon 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—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 when harvest is delayed. Early hybrids that mature in September will have more stalk breakage than late-maturing hybrids if harvest occurs in November and December. There may be little or no advantage to planting the early-maturing hybrids if harvest is delayed.

To avoid problems, choose high-yielding, early-maturing hybrids, plant early and harvest early.

Ways to Avoid Moldy Corn in 1992

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

Table A. Average, highest, and lowest grain yield, moisture content, and stalk lodging at 12 locations in 1991

County—Location	No. of Hybrids	Bushels per Acre			% Moisture			% Stalk Lodging		
		Average	Highest	Lowest	Average	Highest	Lowest	Average	Highest	Lowest
Monroe — Early	74	91	127	36	18	21	16	3	9	0
— Late	78	110	153	70	21	233	18	4	10	1
Branch — Early	74	121	164	79	19	24	16	1	4	0
— Late	78	106	156	66	22	27	19	1	3	0
Cass — Early	74	173	216	127	17	20	14	10	23	2
— Late	78	186	236	146	19	21	17	4	18	1
Average—Zone 1		131	175	87	19	23	17	7	11	0.5
Kent — Early	78	198	229	155	19	22	16	3	9	0
— Late	73	205	246	163	22	26	19	3	8	0
Ingham — Early	78	135	212	77	18	22	15	2	12	0
— Late	73	177	235	105	20	24	17	2	6	0
Saginaw — Early	78	161	190	132	20	24	16	1	4	0
— Late	73	165	191	119	24	27	20	1	4	0
Average—Zone 2		173	217	125	21	24	17	2	7	0
Huron — Early	78	183	215	134	19	22	17	1	15	0
— Late	58	184	232	136	22	27	19	2	6	0
Montcalm — Early	78	209	258	160	19	21	17	3	7	0
— Late	58	214	249	188	21	23	18	3	9	0
Mason — Early	78	188	241	120	23	29	20	4	41	0
— Late	58	198	238	173	28	37	22	3	6	0
Average—Zone 3		196	239	152	22	27	19	2	14	0
Alpena	53	98	124	80	28	38	21	5	11	1
Grand Traverse	53	121	153	100	20	25	17	4	10	0
Menominee	57	126	176	94	23	29	17	11	24	1
Average—Zone 4		115	151	92	24	31	18	7	15	0.5
Average—All Zones		159	201	117	21	25	18	3	11	0.3

- Plan for adequate artificial drying. Drying in the field or in the crib is slow and undependable in Michigan. Ready access to drying facilities will permit more timely harvest and prevent high pre-harvest loss, a major factor in reduced corn profits.

Seed Supplies for 1992

Production of hybrid seed corn in 1991 was highly favorable. Average temperatures and more timely rains in most seed production areas resulted in high quality seed. Supplies of most hybrids should be adequate for planting in 1992.

Table B. Precipitation, temperature, and growing degree day summary

Location/Zone	*	May		June		July		August	
		AVE.	DEV.	AVE.	DEV.	AVE.	DEV.	AVE.	DEV.
Monroe/1	TEMP	66.2	6.9	71.9	2.6	74.0	0.6	72.6	0.8
	PPT	4.50	1.51	1.82	-1.78	1.30	-1.55	3.75	0.76
	GDD	532	177	642	64	720	10	682	12
Branch/1	TEMP	65.4	7.6	70.8	3.6	73.0	2.2	70.8	1.6
	PPT	3.69	0.66	1.14	-2.59	2.31	-1.70	1.75	-1.65
	GDD	514	172	615	80	700	54	630	28
Cass/1	TEMP	67.6	8.7	73.9	5.7	75.2	3.6	73.7	3.5
	PPT	3.80	0.73	0.53	-3.31	2.67	-1.67	3.72	0.36
	GDD	577	198	697	138	752	91	714	87
Kent/2	TEMP	64.6	7.2	71.2	4.1	72.4	1.0	70.6	1.1
	PPT	2.16	-0.75	1.76	-2.10	6.24	3.22	3.78	0.64
	GDD	515	180	634	104	694	40	636	26
Ingham/2	TEMP	64.0	6.9	69.6	2.5	71.6	0.9	69.6	0.6
	PPT	1.57	-1.00	2.78	-0.22	3.01	0.23	3.38	0.34
	GDD	510	177	598	73	671	31	608	7
Saginaw/2	TEMP	63.2	6.3	69.5	2.8	69.4	-2.8	70.2	1.3
	PPT	3.99	1.54	1.50	-1.27	3.47	0.64	5.83	2.79
	GDD	476	170	596	84	643	2	622	34
Huron/3	TEMP	61.2	6.1	67.4	2.5	69.5	0.2	69.1	1.3
	PPT	4.04	1.46	1.54	-1.34	3.15	0.22	2.88	-0.13
	GDD	430	132	541	62	616	14	594	25
Montcalm/3	TEMP	62.3	4.6	68.3	1.2	69.6	-1.4	68.1	-1.2
	PPT	2.87	-0.01	2.36	-1.07	6.36	3.86	1.96	-1.88
	GDD	471	120	567	31	611	-35	572	-31
Mason/3	TEMP	59.9	5.5	69.5	5.7	71.0	2.4	68.7	1.5
	PPT	2.55	0.08	0.75	-2.18	5.01	2.83	1.60	-2.19
	GDD	419	146	556	106	602	15	602	50
Alpena/4	TEMP	58.4	6.9	65.6	4.4	67.7	1.7	69.1	4.2
	PPT	6.26	3.43	0.20	-2.96	5.16	2.05	3.29	0.06
	GDD	378	127	515	102	556	23	589	93
Grand Traverse/4	TEMP	60.5	7.0	69.3	6.2	70.7	1.9	70.8	3.5
	PPT	2.26	-0.22	0.34	-2.81	4.60	1.72	1.12	-1.81
	GDD	415	142	610	156	631	44	631	79
Menominee/4	TEMP	58.2	4.5	66.6	3.9	67.1	-0.3	68.4	3.4
	PPT	5.59	2.02	1.81	-1.91	4.52	0.89	1.24	-2.09
	GDD	213	61	453	110	554	34	577	97

*TEMP = Temperature (°F)

PPT = Precipitation

GDD = Growing Degree Days are calculated base 50°F, with 50°F and 86°F cutoffs.

DEV = Deviations are based on the difference of the observed and the 1951-1980 normals.

TABLE 1

SOUTHERN MICHIGAN
MONROE COUNTY TRIAL

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

ZONE 1

EARLY TRIAL (108 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
GOLDEN ACRES	GA4550	15.9	--	--	68.2	--	--	0.9	--	--
CROW'S	237	16.2	17	--	103.4	132	--	5.6	6	--
PIONEER	3733	16.5	17	--	90.7	125	--	4.4	4	--
STINE	1021	16.5	--	--	70.8	--	--	2.8	--	--
CROW'S	179	16.6	--	--	95.0	--	--	9.1	--	--
GREAT LAKES	GL499	16.7	--	--	80.8	--	--	3.5	--	--
*UAPX	15013	16.7	--	--	117.0	--	--	5.6	--	--
STINE	1015	16.7	--	--	90.3	--	--	2.8	--	--
*PIONEER	3573	16.8	17	18	117.0	152	158	3.8	5	4
GREAT LAKES	GL468	17.0	--	--	71.7	--	--	0.5	--	--
PIONEER	XO215	17.0	--	--	99.5	--	--	2.0	--	--
COUNTRYMARK	C502X	17.1	--	--	70.7	--	--	4.5	--	--
GREAT LAKES	GL450	17.2	--	--	69.8	--	--	2.4	--	--
ASGROW	RX578	17.2	18	18	88.5	119	119	3.3	4	3
DAIRYLAND	STEALTH-1206	17.2	--	--	58.9	--	--	4.7	--	--
GOLDEN HARVEST	H-2331	17.2	--	--	84.2	--	--	3.7	--	--
DEKALB	DK524	17.3	17	--	100.6	149	--	4.2	3	--
FUNK'S	Exp. 3112X	17.3	--	--	98.5	--	--	2.8	--	--
PIONEER	3751	17.3	16	16	83.5	117	124	1.9	4	4
STINE	1077	17.3	--	--	101.3	--	--	2.4	--	--
GOLDEN HARVEST	H-2349	17.3	--	--	101.6	--	--	4.2	--	--
FUNK'S	G-BRAND 4385	17.5	--	--	86.1	--	--	5.0	--	--
JACQUES	4770	17.5	--	--	57.9	--	--	4.7	--	--
AMCORN	PSX7450	17.5	19	--	75.1	114	--	2.6	3	--
GUTWEIN	2390	17.6	--	--	104.7	--	--	5.1	--	--
CROW'S	227	17.6	--	--	88.3	--	--	3.3	--	--
CALLAHAN	C748	17.6	19	--	105.8	133	--	3.2	3	--
*PIONEER	3527	17.7	18	--	124.0	151	--	3.9	4	--
DEKALB	DK535	17.8	18	18	98.5	139	134	2.8	2	2
CALLAHAN	27199X	17.9	--	--	90.7	--	--	3.0	--	--
CROW'S	414	18.0	--	--	87.5	--	--	5.1	--	--
FUNK'S	Exp. 4145X	18.1	--	--	102.4	--	--	1.9	--	--
COUNTRYMARK	C565X	18.2	19	20	83.9	137	141	2.1	4	4
CALLAHAN	24448X	18.2	--	--	90.4	--	--	0.5	--	--
FUNK'S	G-BRAND 4393	18.3	--	--	89.1	--	--	2.9	--	--
GRIES	GSF-4103	18.3	--	--	84.7	--	--	3.1	--	--
*TOP FARM	TFsX1104A	18.3	--	--	112.4	--	--	5.1	--	--
GREAT LAKES	GL536	18.4	--	--	81.0	--	--	3.3	--	--
GREAT LAKES	GL577	18.4	--	--	35.7	--	--	2.9	--	--
RENK	RK702	18.4	20	19	95.5	120	125	2.8	3	2
AMCORN	PSX5757	18.5	--	--	82.1	--	--	3.7	--	--
PARKER	350	18.6	--	--	92.8	--	--	4.9	--	--
TOP FARM	TFsX1107	18.6	--	--	86.9	--	--	2.0	--	--
GOLDEN HARVEST	H-2465	18.6	20	--	98.8	144	--	6.0	5	--
DEKALB	DK550	18.7	20	--	101.0	137	--	3.8	2	--
SUPER CROST	2989	18.7	--	--	68.7	--	--	5.2	--	--
PIONEER	3417	18.7	20	--	74.3	140	--	0.5	1	--
PROVICO	PRO811	18.7	19	--	74.6	122	--	3.1	2	--
GOLDEN HARVEST	H-2485	18.7	--	--	71.7	--	--	2.8	--	--
KING AGRO	GG1008A	18.8	21	--	87.4	137	--	2.5	4	--
PIONEER	X9310	18.9	--	--	74.3	--	--	0.5	--	--
CALLAHAN	C759	18.9	19	--	81.3	136	--	4.3	2	--
BLANEY	B506	19.0	--	--	80.0	--	--	1.9	--	--
PIONEER	3475	19.0	19	19	84.7	120	130	3.6	4	3
RUPP	XR1739	19.0	21	--	86.0	133	--	3.3	2	--

LATE TRIAL (109 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
BLANEY	B603	18.5	--	--	97.4	--	--	4.7	--	--
PAYCO	811	18.9	--	--	78.7	--	--	5.3	--	--
DAIRYLAND	STEALTH-1112	19.2	--	--	105.7	--	--	4.7	--	--
TERRA	TR1060	19.4	20	21	118.8	160	149	3.8	6	4
AMCORN	PSX9009	19.4	--	--	104.3	--	--	1.9	--	--
BLANEY	B608	19.5	--	--	121.5	--	--	9.5	--	--
GRIES	GSF-6110	19.5	--	--	113.6	--	--	5.9	--	--
DYNA-GRO	5410	19.5	20	--	100.8	138	--	7.0	6	--
*CROW'S	488	19.5	20	20	139.9	168	161	1.9	4	3
AMCORN	PSX9292	19.5	21	21	98.9	131	135	2.4	5	5
CARGILL	SX269	19.6	21	--	70.0	125	--	0.9	3	--
TERRA	TR1040	19.6	--	--	80.6	--	--	3.8	--	--
RENK	RK873	20.0	--	--	105.1	--	--	2.4	--	--
*PAYCO	829	20.0	--	--	136.0	--	--	3.4	--	--
DYNA-GRO	5470	20.1	21	--	111.1	156	--	2.8	2	--
ASGROW	RX706	20.1	20	21	102.4	146	147	1.9	4	2
PRAIRIE STREAM	SX420	20.1	--	--	129.4	--	--	1.4	--	--
GOLDEN HARVEST	EX545	20.1	--	--	126.2	--	--	6.7	--	--
CALLAHAN	27148X	20.1	--	--	124.7	--	--	2.8	--	--
*WOLVERINE	W167	20.2	--	--	138.5	--	--	2.3	--	--
PRO-SEED	XS1091	20.2	--	--	113.2	--	--	4.5	--	--
BLANEY	B609	20.3	--	--	96.1	--	--	6.2	--	--
PRAIRIE STREAM	SX475	20.3	22	--	93.5	134	--	5.3	4	--
CROW'S	449	20.3	21	--	97.2	138	--	1.4	3	--
RUPP	XR1774	20.4	--	--	102.5	--	--	3.5	--	--
*RENK	RK721	20.5	20	20	152.5	179	167	3.8	3	2
SUPER CROST	4366	20.6	--	--	109.0	--	--	4.9	--	--
GOLDEN ACRES	GA7141	20.6	--	--	113.0	--	--	4.4	--	--
COUNTRYMARK	C682X	20.6	--	--	82.6	--	--	2.9	--	--
GREAT LAKES	GL586	20.7	--	--	97.2	--	--	2.3	--	--
TERRA	TR1090	20.7	--	--	110.2	--	--	3.8	--	--
RENK	RK803	20.7	23	23	128.1	140	144	3.4	3	3
PROVICO	PRO920	20.8	22	--	100.3	144	--	4.3	5	--
PROVICO	PRO900	20.8	--	--	101.9	--	--	4.4	--	--
CARGILL	6227	20.8	22	21	113.6	152	148	4.3	5	3
RUPP	XR1808	20.8	--	--	121.2	--	--	2.4	--	--
GOLDEN HARVEST	H-2532	20.8	22	21	91.1	142	153	5.1	4	4
GUTWEIN	2650	20.9	--	--	101.6	--	--	4.3	--	--
PIONEER	3379	20.9	22	21	131.0	163	166	3.3	3	2
BECK'S	66X	20.9	22	22	88.8	141	144	4.2	5	4
CALLAHAN	24459X	20.9	--	--	104.9	--	--	3.8	--	--
*SUPER CROST	5460	21.0	--	--	142.4	--	--	2.9	--	--
STINE	1116	21.0	21	--	118.6	153	--	4.8	4	--
KING AGRO	K647	21.0	23	23	102.5	148	139	3.8	4	3
CARGILL	7877	21.0	22	23	125.1	162	154	2.9	3	3
ASGROW	RX745	21.1	--	--	111.6	--	--	7.2	--	--
CROW'S	498	21.1	22	--	113.4	139	--	3.8	3	--
GRIES	GSF-635	21.2	--	--	121.2	--	--	4.4	--	--
DAIRYLAND	DX-1110	21.2	--	--	113.3	--	--	1.9	--	--
PARKER	63	21.2	--	--	122.4	--	--	6.1	--	--
BECK'S	63X	21.2	23	--	97.4	138	--	2.8	4	--
GOLDEN ACRES	GA7149	21.3	--	--	126.1	--	--	4.6	--	--
TERRA	TR1125	21.3	--	--	110.4	--	--	2.9	--	--
DAIRYLAND	DX-1014	21.3	--	--	107.8	--	--	4.5	--	--
*PIONEER	3357	21.4	--	--	137.8	--	--	1.0	--	--

(continued below)

(continued below)

EARLY TRIAL (108 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
	1991	2	3	1991	2	3	1991	2	3
	YR	YR	YR	YR	YR	YR	YR	YR	YR
CROW'S 210	19.1	--	--	92.8	--	--	5.1	--	--
CALLAHAN 27188X	19.2	--	--	91.4	--	--	2.8	--	--
GOLDEN ACRES GA6839	19.4	--	--	72.8	--	--	4.6	--	--
*GEN-TECH 1070	19.5	--	--	119.5	--	--	5.9	--	--
PROVICO PRO880	19.5	20	--	95.8	139	--	2.7	3	--
*NORTHROP KING N6330	19.6	20	--	113.0	146	--	2.8	4	--
ANDERSONS PSX380	19.6	20	--	107.4	139	--	3.9	5	--
GREAT LAKES GL583	19.7	--	--	111.0	--	--	4.7	--	--
*GUTWEIN 2484	19.8	--	--	112.1	--	--	2.4	--	--
*PRO-SEED XS1043	19.8	--	--	127.2	--	--	5.6	--	--
BECK'S 57X	19.8	21	--	77.9	125	--	1.9	3	--
COUNTRYMARK C660X	19.9	21	20	96.2	119	132	2.5	3	3
BECK'S 58X	19.9	--	--	79.8	--	--	0.0	--	--
*ANDERSONS PSX370	20.0	21	--	127.4	151	--	2.5	3	--
*BECK'S 54XA	20.0	20	--	115.1	151	--	4.4	3	--
PIONEER 3394	20.1	--	--	98.1	--	--	4.2	--	--
CALLAHAN C764	20.2	21	21	89.5	139	143	1.0	2	2
PRO-SEED XS1062	20.6	--	--	108.6	--	--	4.3	--	--
*STINE 1128	20.6	--	--	116.0	--	--	2.8	--	--
AVERAGE	18.3	19	19	91.2	134	134	3.4	3	3
RANGE	15.9	16	16	35.7	114	119	0.0	1	2
	TO	TO	TO	TO	TO	TO	TO	TO	TO
	20.6	21	21	127.4	152	158	9.1	6	4
LEAST SIGNIFICANT DIFFERENCE	.9			20.2					
COEFFICIENT OF VARIANCE	23%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (109 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
	1991	2	3	1991	2	3	1991	2	3
	YR	YR	YR	YR	YR	YR	YR	YR	YR
PROVICO PRO970	21.4	24	--	109.6	150	--	1.7	3	--
CARGILL 7697	21.4	--	--	121.3	--	--	0.9	--	--
CARGILL 7993	21.6	23	24	111.8	152	145	6.5	4	3
FUNK'S G-BRAND 4472	21.8	22	--	119.8	150	--	3.3	2	--
BLANEY B702wx	21.9	24	--	94.5	146	--	2.4	2	--
PIONEER 3293	21.9	--	--	106.5	--	--	1.9	--	--
GOLDEN HARVEST EX447	21.9	--	--	125.2	--	--	2.4	--	--
PIONEER 3241	22.1	23	--	111.7	150	--	2.0	2	--
UAPX 15014	22.1	--	--	103.6	--	--	2.8	--	--
CARGILL 8027	22.1	24	--	92.5	131	--	3.7	3	--
DAIRYLAND DX-1015	22.2	--	--	103.2	--	--	2.6	--	--
CALLAHAN C771	22.2	--	--	104.0	--	--	6.2	--	--
DAIRYLAND DX-1117	22.3	24	24	87.3	135	134	0.5	1	1
NORTHROP KING X728	22.4	--	--	88.7	--	--	4.2	--	--
*RUPP Exp.1-190	22.4	--	--	136.2	--	--	2.3	--	--
GEN-TECH 1101	22.5	--	--	97.2	--	--	5.5	--	--
RENK RK76	22.5	24	24	98.1	154	154	3.3	4	3
RUPP XR1884	22.6	--	--	100.5	--	--	5.2	--	--
*JACQUES 7970	22.8	--	--	143.0	--	--	0.5	--	--
TERRA TR1120	22.8	24	23	103.1	153	153	5.3	4	3
CARGILL 7997	22.9	--	--	114.0	--	--	4.8	--	--
BECK'S 74X	23.2	25	--	113.3	153	--	2.9	3	--
DEKALB DK636	23.3	25	24	110.4	156	141	1.9	2	2
AVERAGE	21.0	22	22	110.2	148	149	3.6	3	3
RANGE	18.5	20	20	70.0	125	134	0.5	1	1
	TO	TO	TO	TO	TO	TO	TO	TO	TO
	23.3	25	24	152.5	179	167	9.5	6	5
LEAST SIGNIFICANT DIFFERENCE	1.0			21.5					
COEFFICIENT OF VARIANCE	20%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

	1991	1990	1989
PLANTED	May 20	May 8	May 12
HARVESTED	October 15	November 2	October 28
SOIL TYPE	Metamora-Corunna Sandy Loam	Tedrow Loamy Sand	Brookston Loam
PREVIOUS CROP	Corn	Soybeans	Soybeans
POPULATION	27,200	22,900	19,200
ROW WIDTH	30"	30"	30"
FERTILIZER	186-65-218	189-62-191+zinc	166-61-165
SOIL TEST: pH	5.7	5.9	6.3
P	306 (very high)	200 (very high)	84 (high)
K	432 (very high)	263 (high)	311 (very high)

FARM COOPERATORS: Jerry Kuehnlein, Monroe (1991, 1990), Gerald Heath, Milan (1989)
COUNTY EXTENSION DIRECTOR: Dale Brose, Monroe
EXTENSION AGRICULTURAL AGENT: Paul Marks, Monroe

Monroe county experienced extremely dry weather during the 1991 growing season. Poor yields with a very high coefficient of variance (20% & 23%) were obtained. Due to these results, yields are reported as an adjusted yield based on the lattice design. Data with high CV's are not as reliable and should be viewed with extreme caution. Zone 1 averages (in Table 4) do not include Monroe data.

TABLE 2

SOUTHERN MICHIGAN
BRANCH COUNTY TRIAL

ZONE 1

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (108 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
		YR	YR	YR	YR	YR	YR	YR	YR	YR
UAPX	15013	16.5	--	--	122.7	--	--	1.0	--	--
GREAT LAKES	GL450	16.6	--	--	125.2	--	--	1.5	--	--
AMCORN	PSX7450	16.6	20	--	78.6	141	--	0.6	0	--
GREAT LAKES	GL499	16.7	--	--	103.3	--	--	2.1	--	--
GOLDEN HARVEST	H-2331	16.8	--	--	120.8	--	--	0.5	--	--
PIONEER	XO215	16.9	--	--	135.7	--	--	0.0	--	--
STINE	1015	16.9	--	--	121.7	--	--	2.8	--	--
DEKALB	DK524	17.0	19	19	130.5	157	160	0.5	1	2
GOLDEN ACRES	GA4550	17.1	--	--	95.4	--	--	0.0	--	--
FUNK'S	Exp. 3112X	17.2	--	--	94.7	--	--	1.0	--	--
*PIONEER	3733	17.3	19	--	143.4	162	--	0.5	1	--
CROW'S	179	17.3	--	--	113.2	--	--	3.9	--	--
*PIONEER	3527	17.4	21	--	150.3	172	--	1.1	1	--
*CROW'S	237	17.4	20	--	137.9	154	--	1.0	1	--
DEKALB	DK535	17.5	20	20	116.4	153	164	1.9	1	2
CROW'S	414	17.6	--	--	101.4	--	--	1.0	--	--
FUNK'S	G-BRAND 4393	17.7	--	--	124.4	--	--	1.5	--	--
GREAT LAKES	GL468	17.7	--	--	119.3	--	--	1.1	--	--
PIONEER	X9310	17.7	--	--	115.0	--	--	0.0	--	--
STINE	1021	17.7	--	--	110.0	--	--	0.0	--	--
GOLDEN HARVEST	H-2349	17.7	--	--	112.8	--	--	0.9	--	--
DAIRYLAND	STEALTH-1206	17.8	--	--	89.8	--	--	1.0	--	--
*PIONEER	3573	17.9	20	20	157.8	179	167	3.6	3	3
ASGROW	RX578	17.9	21	21	119.8	139	148	2.0	1	1
PROVICO	PRO811	17.9	21	--	126.8	156	--	0.6	1	--
FUNK'S	G-BRAND 4385	18.1	--	--	111.8	--	--	1.0	--	--
GUTWEIN	2390	18.2	--	--	130.9	--	--	0.0	--	--
CROW'S	227	18.2	--	--	125.8	--	--	1.9	--	--
AMCORN	PSX5757	18.2	--	--	126.2	--	--	0.9	--	--
PIONEER	3751	18.3	19	18	118.2	142	150	1.0	1	1
CALLAHAN	24448X	18.3	--	--	120.7	--	--	1.0	--	--
TOP FARM	TFsx1104A	18.4	--	--	121.2	--	--	0.0	--	--
GREAT LAKES	GL577	18.7	--	--	83.5	--	--	1.0	--	--
BLANEY	B506	18.8	--	--	106.1	--	--	0.0	--	--
GRIES	GSP-4103	18.9	--	--	127.5	--	--	1.2	--	--
RUPP	XR1739	18.9	22	--	129.5	162	--	0.0	0	--
CROW'S	210	18.9	--	--	112.0	--	--	1.4	--	--
JACQUES	4770	19.0	--	--	122.6	--	--	0.0	--	--
COUNTRYMARK	C502X	19.0	--	--	99.8	--	--	2.1	--	--
PIONEER	3475	19.1	21	21	110.0	141	148	0.5	1	1
COUNTRYMARK	C660X	19.1	24	23	131.6	162	175	1.1	1	1
*PIONEER	3394	19.2	--	--	164.2	--	--	1.0	--	--
STINE	1077	19.2	--	--	117.4	--	--	0.5	--	--
GREAT LAKES	GL536	19.3	--	--	118.8	--	--	0.5	--	--
CALLAHAN	C759	19.3	23	--	112.1	144	--	0.0	0	--
SUPER CROST	2989	19.4	--	--	125.2	--	--	0.5	--	--
*PRO-SEED	XS1043	19.4	--	--	137.5	--	--	0.0	--	--
RENK	RK702	19.4	22	21	132.2	144	157	0.5	0	0
TOP FARM	TFsx1107	19.4	--	--	114.1	--	--	2.0	--	--
GOLDEN HARVEST	H-2465	19.5	22	--	127.3	160	--	1.0	1	--
CALLAHAN	27199X	19.5	--	--	133.7	--	--	0.5	--	--
COUNTRYMARK	C565X	19.6	23	22	123.3	152	156	0.5	1	1
DEKALB	DK550	19.7	23	--	103.1	137	--	1.5	2	--
GREAT LAKES	GL582	19.7	--	--	119.5	--	--	0.5	--	--
*NORTHUP KING	N6330	19.7	24	--	145.4	160	--	2.9	2	--

LATE TRIAL (109 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
		YR	YR	YR	YR	YR	YR	YR	YR	YR
DYNA-GRO	5410	19.0	23	--	108.5	140	--	0.5	1	--
BLANEY	B603	19.1	--	--	122.8	--	--	1.4	--	--
DAIRYLAND	STEALTH-1112	19.9	--	--	80.0	--	--	0.0	--	--
WOLVERINE	W167	20.0	--	--	100.5	--	--	0.5	--	--
PROVICO	PRO920	20.1	25	--	97.0	130	--	0.0	1	--
TERRA	TR1090	20.2	--	--	117.1	--	--	1.0	--	--
*AMCORN	PSX9292	20.2	24	23	132.1	166	173	1.5	1	2
CROW'S	498	20.3	25	--	124.3	153	--	2.0	1	--
PAYCO	811	20.3	--	--	69.6	--	--	0.0	--	--
BLANEY	B609	20.4	--	--	101.2	--	--	0.0	--	--
ASGROW	RX706	20.4	24	24	110.1	160	166	1.4	1	2
DAIRYLAND	DX-1014	20.4	--	--	111.5	--	--	0.5	--	--
GRIES	GSP-6110	20.5	--	--	87.6	--	--	0.5	--	--
TERRA	TR1125	20.5	--	--	122.9	--	--	1.0	--	--
*DAIRYLAND	DX-1110	20.5	--	--	134.0	--	--	0.5	--	--
GOLDEN HARVEST	EX545	20.5	--	--	108.3	--	--	0.5	--	--
AMCORN	PSX9009	20.5	--	--	106.9	--	--	2.5	--	--
*PIONEER	3379	20.6	24	23	141.2	162	173	1.0	1	1
GOLDEN ACRES	GA7149	20.6	--	--	114.3	--	--	0.5	--	--
PARKER	63	20.8	--	--	96.1	--	--	0.6	--	--
RENK	RK721	20.9	24	23	123.8	164	176	0.5	1	0
CARGILL	6227	21.0	24	24	111.3	153	159	0.5	0	1
BLANEY	B608	21.1	--	--	120.8	--	--	1.0	--	--
PRAIRIE STREAM	SX420	21.2	--	--	117.4	--	--	0.5	--	--
PAYCO	829	21.3	--	--	110.9	--	--	1.0	--	--
TERRA	TR1040	21.3	--	--	98.4	--	--	1.5	--	--
*RENK	RK803	21.4	25	25	130.2	148	153	1.0	1	2
NORTHUP KING	X728	21.5	--	--	100.7	--	--	0.5	--	--
*CROW'S	488	21.5	25	24	143.7	169	170	0.0	1	2
CARGILL	SX269	21.6	24	--	122.5	157	--	1.4	1	--
GOLDEN ACRES	GA7141	21.6	--	--	122.9	--	--	1.9	--	--
*GOLDEN HARVEST	H-2532	21.6	25	24	126.2	170	168	1.4	1	2
RENK	RK873	21.7	--	--	91.8	--	--	1.0	--	--
BECK'S	66X	21.7	25	25	67.1	129	147	0.5	2	2
CARGILL	7697	21.8	--	--	75.9	--	--	1.0	--	--
DYNA-GRO	5470	21.9	24	--	115.9	160	--	0.5	2	--
CROW'S	449	21.9	26	--	89.3	127	--	0.9	0	--
GRIES	GSP-635	22.0	--	--	97.3	--	--	0.5	--	--
SUPER CROST	4366	22.1	--	--	120.1	--	--	1.0	--	--
RENK	RK76	22.1	27	25	102.4	143	164	0.0	0	1
CALLAHAN	24459X	22.1	--	--	109.1	--	--	0.5	--	--
PROVICO	PRO970	22.2	26	--	96.6	143	--	1.0	1	--
RUPP	XR1808	22.2	--	--	107.0	--	--	0.0	--	--
BECK'S	63X	22.2	26	25	94.6	148	156	0.0	0	1
GEN-TECH	1101	22.3	--	--	110.7	--	--	0.5	--	--
TERRA	TR1120	22.3	26	25	99.9	136	145	0.5	2	2
KING AGRO	K647	22.4	26	25	93.5	146	141	0.5	1	1
STINE	1116	22.5	24	--	118.7	161	--	1.6	2	--
DEKALB	DK636	22.6	27	25	97.8	145	149	0.0	0	1
*PIONEER	3293	22.6	--	--	152.4	--	--	0.5	--	--
SUPER CROST	5460	22.7	--	--	85.0	--	--	0.5	--	--
PROVICO	PRO900	22.7	--	--	118.7	--	--	2.1	--	--
GREAT LAKES	GL586	22.8	--	--	103.4	--	--	1.0	--	--
FUNK'S	G-BRAND 4472	22.9	25	--	70.1	123	--	0.5	1	--
*PIONEER	3241	22.9	26	--	155.7	172	--	1.5	1	--

(continued below)

(continued below)

EARLY TRIAL (108 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
		YR	YR	YR	YR	YR	YR	YR	YR	YR
*PIONEER	3417	19.8	23	--	146.3	175	--	0.5	0	--
*ANDERSONS	PSX370	19.9	23	--	137.9	170	--	0.5	1	--
GOLDEN HARVEST	H-2485	19.9	--	--	122.1	--	--	2.0	--	--
CALLAHAN	C748	20.0	22	--	104.7	145	--	1.9	2	--
GUTWEIN	2484	20.1	--	--	113.3	--	--	1.0	--	--
PARKER	350	20.1	--	--	118.2	--	--	1.5	--	--
*CALLAHAN	27188X	20.1	--	--	144.0	--	--	0.0	--	--
CALLAHAN	C764	20.2	24	24	121.9	158	146	0.5	0	2
PROVICO	PRO880	20.3	23	--	130.3	160	--	0.0	1	--
GOLDEN ACRES	GA6839	20.4	--	--	124.7	--	--	0.5	--	--
BECK'S	54XA	20.4	23	22	129.9	164	177	0.5	1	0
FUNK'S	Exp. 4145X	20.9	--	--	117.3	--	--	0.5	--	--
GEN-TECH	1070	20.9	--	--	120.4	--	--	1.6	--	--
KING AGRO	GG1008A	21.2	25	--	125.5	154	--	0.5	1	--
ANDERSONS	PSX380	21.4	25	24	120.6	139	151	1.0	1	1
BECK'S	58X	22.6	--	--	126.4	--	--	1.0	--	--
STINE	1128	22.8	--	--	110.1	--	--	0.5	--	--
BECK'S	57X	23.4	26	--	103.3	128	--	0.0	1	--
PRO-SEED	XS1062	23.7	--	--	107.1	--	--	0.0	--	--
AVERAGE		18.9	22	21	120.8	154	158	0.9	1	1
RANGE		16.5	19	18	78.6	128	146	0.0	0	0
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		23.7	26	24	164.2	179	177	3.9	3	3
LEAST SIGNIFICANT DIFFERENCE		.9			15.9					
COEFFICIENT OF VARIANCE		14%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (109 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
		YR	YR	YR	YR	YR	YR	YR	YR	YR
TERRA	TR1060	22.9	25	24	113.3	150	160	0.5	1	1
DAIRYLAND	DX-1015	23.1	--	--	101.1	--	--	1.0	--	--
CALLAHAN	C771	23.2	--	--	94.1	--	--	1.0	--	--
UAPX	15014	23.3	--	--	102.2	--	--	0.5	--	--
CARGILL	7993	23.3	27	26	80.3	140	154	0.5	1	1
RUPP	KR1774	23.3	--	--	106.4	--	--	2.1	--	--
*PIONEER	3357	23.5	--	--	134.2	--	--	1.5	--	--
JACQUES	7970	23.6	--	--	103.4	--	--	1.5	--	--
RUPP	KR1884	23.7	--	--	125.1	--	--	1.4	--	--
GUTWEIN	2650	23.9	--	--	101.3	--	--	0.0	--	--
PRO-SEED	XS1091	24.0	--	--	81.6	--	--	1.0	--	--
ASGROW	RX745	24.1	--	--	88.1	--	--	0.0	--	--
DAIRYLAND	DX-1117	24.1	28	27	86.1	123	136	0.0	0	1
*GOLDEN HARVEST	EX447	24.1	--	--	142.3	--	--	2.8	--	--
CALLAHAN	27148X	24.1	--	--	121.0	--	--	1.0	--	--
CARGILL	8027	24.2	28	26	66.2	128	134	1.0	2	2
PRAIRIE STREAM	SX475	24.2	26	--	88.4	133	--	1.0	2	--
BLANEY	B702wx	24.6	28	--	67.9	126	--	0.5	2	--
RUPP	Exp. 1-190	24.6	--	--	90.7	--	--	0.0	--	--
COUNTRYMARK	C682X	24.7	--	--	114.5	--	--	0.0	--	--
CARGILL	7877	24.7	27	26	76.9	132	144	0.0	0	0
CARGILL	7997	25.7	--	--	94.3	--	--	0.5	--	--
BECK'S	74X	27.1	31	--	88.9	133	--	1.5	1	--
AVERAGE		22.1	26	25	105.8	146	156	0.8	1	1
RANGE		19.0	23	23	66.2	123	134	0.0	0	0
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		27.1	31	27	155.7	172	176	2.8	2	2
LEAST SIGNIFICANT DIFFERENCE		1.4			19.4					
COEFFICIENT OF VARIANCE		19%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

1991
PLANTED May 12
HARVESTED October 14
SOIL TYPE Teasdale Fine Sandy Loam
PREVIOUS CROP Corn
POPULATION 26,600
ROW WIDTH 30"
FERTILIZER 99-0-90+sulfur
SOIL TEST: pH 6.1
P 114 (very high)
K 556 (very high)

1990
PLANTED May 7
HARVESTED October 31
SOIL TYPE Sibewa Loam
PREVIOUS CROP Corn
POPULATION 21,700
ROW WIDTH 30"
FERTILIZER 186-55-150
SOIL TEST: pH 5.4
P 220 (very high)
K 438 (very high)

1989
PLANTED May 4
HARVESTED October 27
SOIL TYPE Sibewa Loam
PREVIOUS CROP Corn
POPULATION 18,500
ROW WIDTH 30"
FERTILIZER 185-74-180
SOIL TEST: pH 5.9
P 186 (very high)
K 303 (very high)

FARM COOPERATORS: Neil Carpenter, Quincy (1991), David Labar, Union City (1990, 1989)
COUNTY EXTENSION DIRECTOR: Raymond Fast, Coldwater
EXTENSION AGRICULTURAL AGENT: Natalie Rector, Marshall

TABLE 3

SOUTHERN MICHIGAN
CASS COUNTY - IRRIGATED TRIAL

ZONE 1

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (108 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
GOLDEN HARVEST	H-2349	14.1	--	--	155.9	--	--	10.0	--	--
CROW'S	179	14.2	--	--	150.5	--	--	14.9	--	--
JACQUES	4770	14.7	--	--	148.5	--	--	15.9	--	--
*CROW'S	237	14.7	16	--	204.2	170	--	9.4	7	--
*PIONEER	X0215	15.0	--	--	194.4	--	--	5.1	--	--
GOLDEN ACRES	GA4550	15.2	--	--	126.8	--	--	12.3	--	--
STINE	1021	15.2	--	--	138.3	--	--	5.9	--	--
STINE	1015	15.2	--	--	137.2	--	--	14.8	--	--
GOLDEN HARVEST	H-2331	15.2	--	--	137.7	--	--	13.9	--	--
GREAT LAKES	GL450	15.3	--	--	148.0	--	--	22.7	--	--
PIONEER	3751	15.3	16	16	167.2	158	158	6.9	6	4
PIONEER	X9310	15.3	--	--	170.1	--	--	13.4	--	--
FUNK'S	G-BRAND 4385	15.5	--	--	160.2	--	--	8.3	--	--
ASGROW	RK578	15.5	16	17	177.8	160	166	8.1	5	5
RENK	RK702	15.5	17	18	171.9	165	163	9.0	7	5
*AMCORN	PSX5757	15.5	--	--	193.2	--	--	16.6	--	--
GREAT LAKES	GL536	15.6	--	--	173.4	--	--	11.3	--	--
PIONEER	3733	15.7	16	--	179.2	174	--	12.1	10	--
CROW'S	414	15.7	--	--	139.5	--	--	13.0	--	--
GREAT LAKES	GL499	15.8	--	--	154.8	--	--	6.6	--	--
PROVICO	PRO811	15.8	17	--	174.7	171	--	9.3	5	--
FUNK'S	G-BRAND 4393	15.9	--	--	174.3	--	--	2.3	--	--
*CALLAHAN	C748	15.9	17	--	197.9	187	--	9.3	6	--
UAPX	15013	16.0	--	--	148.4	--	--	9.8	--	--
CROW'S	227	16.0	--	--	140.6	--	--	18.4	--	--
*AMCORN	PSX7450	16.0	18	18	194.3	185	183	2.0	3	2
DEKALB	DK550	16.1	18	--	186.8	180	--	2.9	3	--
GRIES	GSF-4103	16.1	--	--	127.3	--	--	9.4	--	--
GREAT LAKES	GL468	16.1	--	--	160.8	--	--	10.4	--	--
*PIONEER	3573	16.1	17	17	215.7	207	197	13.2	8	5
STINE	1077	16.1	--	--	170.8	--	--	17.9	--	--
GOLDEN HARVEST	H-2465	16.1	18	18	177.7	184	179	16.3	11	8
BLANEY	B506	16.2	--	--	153.1	--	--	9.0	--	--
TOP FARM	TFsx1107	16.2	--	--	153.1	--	--	8.3	--	--
CALLAHAN	24448X	16.2	--	--	163.5	--	--	9.5	--	--
*CALLAHAN	27199X	16.2	--	--	190.9	--	--	7.7	--	--
DAIRYLAND	STEALTH-1206	16.3	--	--	168.7	--	--	19.0	--	--
COUNTRYMARK	C502X	16.4	--	--	184.0	--	--	10.2	--	--
DEKALB	DK524	16.5	17	--	170.8	179	--	10.0	8	--
GUTWEIN	2390	16.5	--	--	180.6	--	--	14.4	--	--
TOP FARM	TFsx1104A	16.5	--	--	180.9	--	--	21.3	--	--
GOLDEN ACRES	GA6839	16.6	--	--	159.4	--	--	16.3	--	--
PARKER	350	16.7	--	--	170.6	--	--	13.2	--	--
CALLAHAN	27188X	16.7	--	--	181.6	--	--	8.8	--	--
*FUNK'S	Exp. 3112X	16.8	--	--	192.0	--	--	9.0	--	--
GREAT LAKES	GL577	16.8	--	--	172.3	--	--	7.2	--	--
*ANDERSONS	PSX380	16.8	19	19	190.2	183	178	5.1	6	5
CROW'S	210	16.8	--	--	156.4	--	--	13.4	--	--
*BECK'S	57X	16.8	20	--	208.0	202	--	4.7	5	--
GOLDEN HARVEST	H-2485	16.9	--	--	164.9	--	--	11.3	--	--
DEKALB	DK535	17.0	17	17	185.8	180	183	8.3	5	5
COUNTRYMARK	C565X	17.0	18	--	148.6	167	--	10.1	9	--
COUNTRYMARK	C660X	17.0	18	--	188.2	190	--	10.1	6	--
ANDERSONS	PSX370	17.0	18	--	156.7	182	--	7.1	6	--
SUPER CROST	2989	17.2	--	--	155.9	--	--	12.8	--	--

LATE TRIAL (109 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
PROVICO	PRO900	16.8	--	--	189.3	--	--	0.5	--	--
AMCORN	PSX9009	16.9	--	--	189.6	--	--	2.5	--	--
GREAT LAKES	GL586	17.0	--	--	184.9	--	--	4.6	--	--
TERRA	TR1040	17.0	--	--	156.6	--	--	4.0	--	--
PAYCO	811	17.1	--	--	175.8	--	--	1.5	--	--
BLANEY	B603	17.2	--	--	194.8	--	--	3.3	--	--
TERRA	TR1060	17.3	19	--	201.6	195	--	4.7	6	--
WOLVERINE	W167	17.4	--	--	171.2	--	--	3.8	--	--
PAYCO	829	17.4	--	--	186.2	--	--	6.6	--	--
BLANEY	B609	17.5	--	--	201.9	--	--	2.4	--	--
*PIONEER	3379	17.5	19	19	210.1	186	193	3.5	3	2
CROW'S	449	17.5	19	21	171.1	177	177	5.3	4	3
GOLDEN HARVEST	EX545	17.6	--	--	195.9	--	--	2.5	--	--
CARGILL	SX269	17.7	19	20	157.2	172	180	11.6	8	7
PRAIRIE STREAM	SX475	17.8	20	--	182.8	180	--	5.7	4	--
RENK	RK873	17.8	--	--	169.7	--	--	3.6	--	--
PRO-SEED	XS1091	17.9	--	--	185.9	--	--	7.1	--	--
*DAIRYLAND	DX-1110	17.9	--	--	216.4	--	--	2.8	--	--
*CROW'S	488	17.9	20	20	211.6	194	192	18.4	10	8
DAIRYLAND	STEALTH-1112	18.0	--	--	150.9	--	--	1.9	--	--
ASGROW	RK706	18.1	19	20	195.8	192	187	3.3	3	3
STINE	1116	18.1	19	--	176.2	181	--	1.0	3	--
*CARGILL	6227	18.1	20	21	209.6	198	198	1.9	2	2
CALLAHAN	27148X	18.1	--	--	188.3	--	--	2.5	--	--
UAPX	15014	18.2	--	--	175.5	--	--	2.4	--	--
*TERRA	TR1090	18.2	--	--	211.9	--	--	3.7	--	--
*GOLDEN HARVEST	EX447	18.2	--	--	211.3	--	--	3.0	--	--
RENK	RK721	18.3	20	20	166.1	172	174	3.8	4	3
DYNA-GRO	5410	18.4	19	--	184.8	171	--	4.2	5	--
PROVICO	PRO920	18.4	21	--	186.7	176	--	4.0	4	--
PRAIRIE STREAM	SX420	18.4	--	--	199.6	--	--	3.9	--	--
GOLDEN ACRES	GA7141	18.5	--	--	167.2	--	--	2.9	--	--
GRIES	GSF-6110	18.5	--	--	194.3	--	--	3.3	--	--
BLANEY	B608	18.7	--	--	179.7	--	--	4.0	--	--
COUNTRYMARK	C682X	18.7	--	--	191.4	--	--	3.0	--	--
DAIRYLAND	DX-1014	18.7	--	--	181.2	--	--	2.6	--	--
AMCORN	PSX9292	18.7	20	--	190.1	187	--	4.2	5	--
BECK'S	66X	18.7	20	--	159.6	164	--	7.6	8	--
GOLDEN ACRES	GA7149	18.8	--	--	181.4	--	--	5.8	--	--
DYNA-GRO	5470	18.8	21	--	178.7	185	--	2.6	2	--
RUPP	XR1774	18.8	--	--	188.2	--	--	1.9	--	--
SUPER CROST	4366	18.9	--	--	167.7	--	--	8.4	--	--
GEN-TECH	1101	18.9	--	--	193.1	--	--	2.5	--	--
BECK'S	74X	18.9	22	--	199.8	202	--	3.0	4	--
GRIES	GSF-635	19.0	--	--	172.1	--	--	3.9	--	--
TERRA	TR1125	19.0	--	--	146.4	--	--	5.1	--	--
CROW'S	498	19.0	21	--	173.1	164	--	6.6	5	--
RENK	RK803	19.1	22	22	149.0	150	158	5.1	4	3
*RUPP	XR1808	19.1	--	--	209.5	--	--	2.4	--	--
*ASGROW	RX745	19.2	--	--	216.3	--	--	2.0	--	--
*GOLDEN HARVEST	H-2532	19.2	21	21	235.9	224	222	6.7	5	5
*PIONEER	3293	19.3	--	--	213.6	--	--	1.5	--	--
PARKER	63	19.4	--	--	181.3	--	--	3.2	--	--
FUNK'S	G-BRAND 4472	19.5	21	--	183.2	183	--	0.5	2	--
CARGILL	8027	19.5	22	23	174.9	189	193	3.2	3	2

(continued below)

(continued below)

EARLY TRIAL (108 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
	1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
*PIONEER 3417	17.2	18	--	207.5	195	--	4.7	3	--
*PIONEER 3527	17.2	18	--	209.6	197	--	2.4	2	--
CALLAHAN C759	17.3	19	--	154.0	170	--	6.9	4	--
PIONEER 3475	17.5	17	18	148.4	156	164	6.0	6	5
*KING AGRO GG1008A	17.7	19	--	191.2	188	--	4.6	6	--
*FUNK'S Exp.4145X	17.8	--	--	190.9	--	--	5.3	--	--
*GUTWEIN 2484	17.8	--	--	204.8	--	--	5.0	--	--
*PRO-SEED XS1043	17.8	--	--	203.1	--	--	4.4	--	--
STINE 1128	17.8	--	--	181.4	--	--	5.7	--	--
GREAT LAKES GL583	17.9	--	--	180.4	--	--	5.1	--	--
*RUPP XR1739	17.9	19	20	212.5	201	189	14.5	11	8
*BECK'S 54XA	17.9	19	--	192.9	190	--	5.2	5	--
CALLAHAN C764	17.9	19	20	177.6	185	171	8.4	6	5
GEN-TECH 1070	18.0	--	--	176.5	--	--	12.8	--	--
PROVICO PRO880	18.0	19	--	186.7	193	--	8.9	6	--
BECK'S 58X	18.0	--	--	188.5	--	--	5.7	--	--
NORTHROP KING N6330	18.4	19	--	183.7	190	--	12.2	9	--
PIONEER 3394	18.7	--	--	177.3	--	--	4.4	--	--
PRO-SEED XS1062	19.6	--	--	167.9	--	--	8.5	--	--
AVERAGE	16.5	18	18	173.4	182	176	9.9	6	5
RANGE	14.1	16	16	126.8	156	158	2.0	2	2
	19.6	20	20	215.7	207	197	22.7	11	8
LEAST SIGNIFICANT DIFFERENCE	.6			16.5					
COEFFICIENT OF VARIANCE	10%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (109 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
	1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
RENK RK76	19.5	22	22	170.5	179	183	3.6	3	3
SUPER CROST 5460	19.6	--	--	174.0	--	--	3.1	--	--
JACQUES 7970	19.6	--	--	185.7	--	--	6.9	--	--
CARGILL 7697	19.6	--	--	195.2	--	--	2.8	--	--
DEKALB DK636	19.7	22	22	169.3	179	182	2.5	3	2
PIONEER 3357	19.7	--	--	202.9	--	--	2.5	--	--
RUPP Exp.1-190	19.7	--	--	178.8	--	--	2.3	--	--
CARGILL 7877	19.8	22	22	197.3	210	202	7.3	5	5
*PIONEER 3241	19.9	22	--	217.9	203	--	2.6	2	--
GUTWEIN 2650	20.0	--	--	180.9	--	--	4.6	--	--
PROVICO PRO970	20.0	22	--	158.4	171	--	4.1	4	--
BECK'S 63X	20.0	22	22	186.2	180	191	2.4	2	2
CARGILL 7993	20.1	22	22	199.9	201	200	5.2	4	4
DAIRYLAND DX-1117	20.1	23	23	150.0	166	170	2.1	5	5
DAIRYLAND DX-1015	20.1	--	--	190.8	--	--	2.1	--	--
RUPP XR1884	20.1	--	--	181.3	--	--	1.5	--	--
NORTHROP KING X728	20.2	--	--	193.0	--	--	6.2	--	--
KING AGRO K647	20.3	22	22	159.0	169	158	2.8	4	3
TERRA TR1120	20.3	22	--	208.1	196	--	1.9	4	--
CALLAHAN 24459X	20.4	--	--	183.0	--	--	1.9	--	--
CALLAHAN C771	20.5	--	--	205.2	--	--	3.0	--	--
BLANEY B702wx	21.2	23	--	149.6	172	--	1.5	2	--
*CARGILL 7997	21.4	--	--	224.6	--	--	3.7	--	--
AVERAGE	18.8	21	21	185.9	183	186	3.8	4	4
RANGE	16.8	19	19	146.4	150	158	0.5	2	2
	21.4	23	23	235.9	224	222	18.4	10	8
LEAST SIGNIFICANT DIFFERENCE	.7			23.6					
COEFFICIENT OF VARIANCE	13%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

	1991	1990	1989
PLANTED	May 8	May 7	May 5
HARVESTED	October 12	November 1	October 24-25
SOIL TYPE	Oshtemo Sandy Loam	Oshtemo Sandy Loam	Oshtemo Sandy Loam
PREVIOUS CROP	Corn	Corn	Corn
POPULATION	27,100	23,200	20,200
ROW WIDTH	30"	30"	30"
FERTILIZER	214-40-128+sulfur+zinc	139-40-128+sulfur+zinc	214-40-8+sulfur+zinc
SOIL TEST: pH	6.1	6.0	6.8
P	224 (very high)	196 (very high)	200 (very high)
K	497 (very high)	564 (very high)	372 (very high)
IRRIGATION	7 inches	4 inches	3 inches

FARM COOPERATORS: Dave and Melvin Cripe, Cassopolis
COUNTY EXTENSION DIRECTOR: Lois Marsh, Cassopolis
COUNTY EXTENSION AGRICULTURAL AGENT: Ronald Hayden, Cassopolis

TABLE 4 SOUTHERN MICHIGAN ZONE 1
AVERAGE OF BRANCH & CASS COUNTY TRIAL +
ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (108 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
CROW'S	179	15.8	--	--	131.9	--	--	9.4	--	--
GOLDEN HARVEST	H-2349	15.9	--	--	134.4	--	--	5.5	--	--
GREAT LAKES	GL450	16.0	--	--	136.6	--	--	12.1	--	--
*PIONEER	XO215	16.0	--	--	165.1	--	--	2.6	--	--
GOLDEN HARVEST	H-2331	16.0	--	--	129.3	--	--	7.2	--	--
STINE	1015	16.1	--	--	129.5	--	--	8.8	--	--
*CROW'S	237	16.1	18	--	171.1	163	--	5.2	5	--
GOLDEN ACRES	GA4550	16.2	--	--	111.1	--	--	6.2	--	--
GREAT LAKES	GL499	16.3	--	--	129.1	--	--	4.4	--	--
UAPX	15013	16.3	--	--	135.6	--	--	5.4	--	--
AMCORN	PSX7450	16.3	19	19	136.5	157	165	1.3	2	2
*PIONEER	3733	16.5	17	--	161.3	166	--	6.3	5	--
PIONEER	X9310	16.5	--	--	142.6	--	--	6.7	--	--
STINE	1021	16.5	--	--	124.2	--	--	3.0	--	--
ASGROW	RX578	16.7	18	19	148.8	149	151	5.1	4	3
CROW'S	414	16.7	--	--	120.5	--	--	7.0	--	--
DEKALB	DK524	16.8	18	18	150.7	170	169	5.3	4	3
FUNK'S	G-BRAND 4385	16.8	--	--	136.0	--	--	4.7	--	--
FUNK'S	G-BRAND 4393	16.8	--	--	149.4	--	--	1.9	--	--
PIONEER	3751	16.8	17	17	142.7	149	151	4.0	4	3
JACQUES	4770	16.9	--	--	135.6	--	--	8.0	--	--
GREAT LAKES	GL468	16.9	--	--	140.1	--	--	5.8	--	--
PROVICO	PRO811	16.9	19	--	150.8	162	--	5.0	3	--
*AMCORN	PSX5757	16.9	--	--	159.7	--	--	8.8	--	--
FUNK'S	Exp. 3112X	17.0	--	--	143.4	--	--	5.0	--	--
*PIONEER	3573	17.0	18	18	186.8	191	182	8.4	6	5
DAIRYLAND	STEALTH-1206	17.1	--	--	129.3	--	--	10.0	--	--
CROW'S	227	17.1	--	--	133.2	--	--	10.2	--	--
DEKALB	DK535	17.3	18	18	151.1	166	166	5.1	3	3
*PIONEER	3527	17.3	19	--	180.0	182	--	1.8	2	--
CALLAHAN	24448X	17.3	--	--	142.1	--	--	5.3	--	--
GUTWEIN	2390	17.4	--	--	155.8	--	--	7.2	--	--
BLANEY	B506	17.5	--	--	139.1	--	--	4.5	--	--
GRIES	GSF-4103	17.5	--	--	127.4	--	--	5.3	--	--
GREAT LAKES	GL536	17.5	--	--	146.1	--	--	5.9	--	--
RENK	RK702	17.5	20	19	152.1	153	155	4.8	4	3
TOP FARM	TFsx1104A	17.5	--	--	151.1	--	--	10.7	--	--
COUNTRYMARK	C502X	17.7	--	--	141.9	--	--	6.2	--	--
STINE	1077	17.7	--	--	144.1	--	--	9.2	--	--
GREAT LAKES	GL577	17.8	--	--	127.9	--	--	4.1	--	--
TOP FARM	TFsx1107	17.8	--	--	133.6	--	--	5.2	--	--
GOLDEN HARVEST	H-2465	17.8	20	20	152.5	172	171	8.7	6	5
DEKALB	DK550	17.9	20	--	145.0	159	--	2.2	2	--
CROW'S	210	17.9	--	--	134.2	--	--	7.4	--	--
*CALLAHAN	27199X	17.9	--	--	162.3	--	--	4.1	--	--
CALLAHAN	C748	18.0	19	--	151.3	163	--	5.6	4	--
*COUNTRYMARK	C660X	18.1	20	21	159.9	168	171	5.6	4	3
SUPER CROST	2989	18.3	--	--	140.6	--	--	6.7	--	--
PIONEER	3475	18.3	19	19	129.2	147	152	3.3	3	3
COUNTRYMARK	C565X	18.3	20	20	136.0	161	159	5.3	5	4
CALLAHAN	C759	18.3	20	--	133.1	159	--	3.5	2	--
PARKER	350	18.4	--	--	144.4	--	--	7.4	--	--
*RUPP	KR1739	18.4	21	21	171.0	179	174	7.3	5	4
GOLDEN HARVEST	H-2485	18.4	--	--	143.5	--	--	6.7	--	--
*CALLAHAN	27188X	18.4	--	--	162.8	--	--	4.4	--	--

(continued below)

LATE TRIAL (109 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))										
		% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
HYBRID (BRAND-VARIETY)		1991	YR	3	1991	YR	3	1991	YR	3
BLANEY	B603	18.2	--	--	158.8	--	--	2.4	--	--
WOLVERINE	W167	18.7	--	--	135.9	--	--	2.2	--	--
DYNA-GRO	5410	18.7	21	--	146.7	157	--	2.4	3	--
PAYCO	811	18.7	--	--	122.7	--	--	0.8	--	--
AMCORN	PSX9009	18.7	--	--	148.3	--	--	2.5	--	--
BLANEY	B609	19.0	--	--	151.6	--	--	1.2	--	--
DAIRYLAND	STEALTH-1112	19.0	--	--	115.5	--	--	1.0	--	--
*PIONEER	3379	19.1	21	21	175.7	178	182	2.3	2	2
GOLDEN HARVEST	EX545	19.1	--	--	152.1	--	--	1.5	--	--
*TERRA	TR1090	19.2	--	--	164.5	--	--	2.4	--	--
*DAIRYLAND	DX-1110	19.2	--	--	175.2	--	--	1.7	--	--
TERRA	TR1040	19.2	--	--	127.5	--	--	2.8	--	--
ASGROW	RX706	19.3	21	21	153.0	175	172	2.4	3	3
PROVICO	PRO920	19.3	22	--	141.9	157	--	2.0	3	--
PAYCO	829	19.4	--	--	148.6	--	--	3.8	--	--
*AMCORN	PSX9292	19.5	22	22	161.1	172	169	2.9	4	4
GRIES	GSF-6110	19.6	--	--	141.0	--	--	1.9	--	--
CARGILL	6227	19.6	22	22	160.5	176	174	1.2	2	2
DAIRYLAND	DX-1014	19.6	--	--	146.4	--	--	1.6	--	--
RENK	RK721	19.6	21	21	145.0	171	171	2.2	2	2
CARGILL	SX269	19.7	22	21	139.9	163	174	6.5	5	5
GOLDEN ACRES	GA7149	19.7	--	--	147.9	--	--	3.2	--	--
*CROW'S	488	19.7	22	21	177.7	183	178	9.2	6	5
CROW'S	449	19.7	22	23	130.2	153	161	3.1	3	2
CROW'S	498	19.7	23	--	148.7	158	--	4.3	3	--
PROVICO	PRO900	19.8	--	--	154.0	--	--	1.3	--	--
TERRA	TR1125	19.8	--	--	134.7	--	--	3.1	--	--
PRAIRIE STREAM	SX420	19.8	--	--	158.5	--	--	2.2	--	--
RENK	RK873	19.8	--	--	130.8	--	--	2.3	--	--
BLANEY	B608	19.9	--	--	150.3	--	--	2.5	--	--
GREAT LAKES	GL586	19.9	--	--	144.2	--	--	2.8	--	--
GOLDEN ACRES	GA7141	20.1	--	--	145.1	--	--	2.4	--	--
PARKER	63	20.1	--	--	138.7	--	--	1.9	--	--
TERRA	TR1060	20.1	22	22	157.5	175	168	2.6	4	3
BECK'S	66X	20.2	22	23	113.4	149	155	4.1	5	4
STINE	1116	20.3	22	--	147.5	170	--	1.3	2	--
RENK	RK803	20.3	24	23	139.6	148	153	3.1	2	2
DYNA-GRO	5470	20.4	22	--	147.3	173	--	1.6	2	--
*GOLDEN HARVEST	H-2532	20.4	22	22	181.1	194	191	4.1	4	3
SUPER CROST	4366	20.5	--	--	143.9	--	--	4.7	--	--
GRIES	GSF-635	20.5	--	--	134.7	--	--	2.2	--	--
GEN-TECH	1101	20.6	--	--	151.9	--	--	1.5	--	--
CARGILL	7697	20.7	--	--	135.6	--	--	1.9	--	--
RUPP	KR1808	20.7	--	--	158.3	--	--	1.2	--	--
UAPX	15014	20.8	--	--	138.9	--	--	1.5	--	--
RENK	RK76	20.8	24	24	136.5	165	171	1.8	2	2
NORTHUP KING	X728	20.9	--	--	146.9	--	--	3.4	--	--
*PIONEER	3293	21.0	--	--	183.0	--	--	1.0	--	--
PRO-SEED	XS1091	21.0	--	--	133.8	--	--	4.1	--	--
PRAIRIE STREAM	SX475	21.0	23	--	135.6	156	--	3.4	3	--
PROVICO	PRO970	21.1	24	--	127.5	158	--	2.6	3	--
RUPP	KR1774	21.1	--	--	147.3	--	--	2.0	--	--
BECK'S	63X	21.1	24	23	140.4	162	173	1.2	2	2
CALLAHAN	27148X	21.1	--	--	154.7	--	--	1.8	--	--
DEKALB	DK636	21.2	24	24	133.6	164	160	1.3	2	2

(continued below)

EARLY TRIAL (108 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
*PIONEER	3417	18.5	20	--	176.9	187	--	2.6	2	--
GOLDEN ACRES	GA6839	18.5	--	--	142.1	--	--	8.4	--	--
ANDERSONS	PSX370	18.5	20	--	147.3	171	--	3.8	3	--
*PRO-SEED	XS1043	18.6	--	--	170.3	--	--	2.2	--	--
GREAT LAKES	GL583	18.8	--	--	150.0	--	--	2.8	--	--
*GUTWEIN	2484	19.0	--	--	159.1	--	--	3.0	--	--
*PIONEER	3394	19.0	--	--	170.8	--	--	2.7	--	--
*NORTHROP KING	N6330	19.1	21	--	164.6	174	--	7.6	6	--
ANDERSONS	PSX380	19.1	21	21	155.4	161	165	3.1	4	3
CALLAHAN	C764	19.1	21	21	149.8	171	160	4.5	3	3
*PROVICO	PRO880	19.2	21	--	158.5	174	--	4.5	4	--
*BECK'S	54XA	19.2	21	21	161.4	176	185	2.9	3	2
FUNK'S	Exp. 4145X	19.4	--	--	154.1	--	--	2.9	--	--
GEN-TECH	1070	19.5	--	--	148.5	--	--	7.2	--	--
*KING AGRO	GG1008A	19.5	21	--	158.4	172	--	2.6	4	--
BECK'S	57X	20.1	23	--	155.7	164	--	2.4	3	--
STINE	1128	20.3	--	--	145.8	--	--	3.1	--	--
BECK'S	58X	20.3	--	--	157.5	--	--	3.4	--	--
PRO-SEED	XS1062	21.7	--	--	137.5	--	--	4.3	--	--
AVERAGE		17.7	20	19	147.1	167	165	5.4	4	3
RANGE		15.8	17	17	111.1	147	151	1.3	2	2
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		21.7	23	21	186.8	191	185	12.1	6	5
LEAST SIGNIFICANT DIFFERENCE		.5			11.2					

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

+SECOND AND THIRD YEAR DATA ALSO CONTAIN MONROE COUNTY DATA

LATE TRIAL (109 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
FUNK'S	G-BRAND 4472	21.2	23	--	126.7	153	--	0.5	1	--
SUPER CROST	5460	21.2	--	--	129.5	--	--	1.8	--	--
*GOLDEN HARVEST	EX447	21.2	--	--	176.8	--	--	2.9	--	--
TERRA	TR1120	21.3	24	24	154.0	170	166	1.2	3	3
CALLAHAN	24459X	21.3	--	--	146.1	--	--	1.2	--	--
*PIONEER	3241	21.4	24	--	186.8	187	--	2.1	2	--
KING AGRO	K647	21.4	24	23	126.3	158	149	1.7	3	2
JACQUES	7970	21.6	--	--	144.6	--	--	4.2	--	--
*PIONEER	3357	21.6	--	--	168.6	--	--	2.0	--	--
DAIRYLAND	DX-1015	21.6	--	--	146.0	--	--	1.6	--	--
ASGROW	RX745	21.7	--	--	152.2	--	--	1.0	--	--
COUNTRYMARK	C682X	21.7	--	--	153.0	--	--	1.5	--	--
CARGILL	7993	21.7	24	24	140.1	169	170	2.9	2	2
CARGILL	8027	21.9	25	24	120.6	154	161	2.1	2	2
RUPP	XR1884	21.9	--	--	153.2	--	--	1.5	--	--
CALLAHAN	C771	21.9	--	--	149.7	--	--	2.0	--	--
GUTWEIN	2650	22.0	--	--	141.1	--	--	2.3	--	--
DAIRYLAND	DX-1117	22.1	25	24	118.1	147	150	1.1	2	2
RUPP	Exp. 1-190	22.2	--	--	134.8	--	--	1.2	--	--
CARGILL	7877	22.3	24	24	137.1	170	168	3.7	3	3
BLANEY	B702wx	22.9	25	--	108.8	150	--	1.0	2	--
BECK'S	74X	23.0	26	--	144.4	168	--	2.3	3	--
CARGILL	7997	23.6	--	--	159.5	--	--	2.1	--	--
AVERAGE		20.5	23	23	145.9	165	167	2.3	3	3
RANGE		18.2	21	21	108.8	147	149	0.5	1	2
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		23.6	26	24	186.8	194	191	9.2	6	5
LEAST SIGNIFICANT DIFFERENCE		.7			15.0					

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

+SECOND AND THIRD YEAR DATA ALSO CONTAIN MONROE COUNTY DATA

TABLE 5

SOUTH CENTRAL MICHIGAN
KENT COUNTY TRIAL

ZONE 2

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (104 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
STINE	900	16.4	--	--	164.2	--	--	3.3	--	--
NORTHUP KING	N3624	16.5	17	--	185.0	172	--	1.4	1	--
PICKSEED	83-280	16.5	--	--	160.6	--	--	1.0	--	--
DAIRYLAND	DX-1100	17.0	18	--	213.7	188	--	2.8	2	--
FUNK'S	G-BRAND 4260	17.1	--	--	193.7	--	--	0.5	--	--
*PIONEER	XO215	17.1	--	--	228.7	--	--	1.9	--	--
PICKSEED	83-282	17.1	--	--	167.0	--	--	1.9	--	--
GREAT LAKES	GL446	17.2	18	--	194.5	183	--	3.7	4	--
FUNK'S	Exp. 2078X	17.3	--	--	211.9	--	--	1.4	--	--
PROVICO	PRO630X	17.3	--	--	183.3	--	--	1.0	--	--
RENK	RK602	17.3	--	--	202.3	--	--	2.8	--	--
*SUPER CROST	1900	17.4	--	--	219.3	--	--	2.8	--	--
NORTHUP KING	N3808	17.4	--	--	193.5	--	--	3.3	--	--
KING AGRO	K416	17.5	--	--	187.8	--	--	3.2	--	--
GOLDEN HARVEST	H-2331	17.6	18	19	199.6	198	182	6.0	4	3
NORTHUP KING	N4242	17.7	--	--	188.6	--	--	2.8	--	--
FUNK'S	G-BRAND 4299	17.8	--	--	213.9	--	--	4.2	--	--
PIONEER	3751	17.8	19	20	204.8	188	183	2.4	3	2
SUPER CROST	2000	17.9	19	--	182.2	198	--	3.2	4	--
GREAT LAKES	GL459	17.9	19	--	196.6	190	--	2.8	3	--
CARGILL	3427	17.9	--	--	202.1	--	--	1.9	--	--
GOLDEN HARVEST	H-2349	17.9	--	--	204.8	--	--	2.3	--	--
*DEKALB	DK485	18.0	19	--	224.8	214	--	0.9	1	--
WOLVERINE	W158	18.2	20	--	178.2	174	--	2.8	3	--
COUNTRYMARK	C432X	18.2	--	--	210.2	--	--	9.3	--	--
STINE	1015	18.2	--	--	186.4	--	--	0.9	--	--
CALLAHAN	27128X	18.3	--	--	192.4	--	--	0.5	--	--
JACQUES	4770	18.4	--	--	193.9	--	--	2.8	--	--
WOLVERINE	W156	18.4	19	20	199.4	185	176	2.3	4	4
PIONEER	X9310	18.4	--	--	206.6	--	--	0.0	--	--
*DAIRYLAND	STEALTH-1198	18.4	--	--	216.2	--	--	4.6	--	--
DAIRYLAND	STEALTH-1201	18.4	--	--	201.8	--	--	4.4	--	--
CROW'S	179	18.4	--	--	165.3	--	--	4.6	--	--
*GUTWEIN	2100	18.5	--	--	226.4	--	--	3.9	--	--
SUPER CROST	1999	18.6	--	--	154.8	--	--	3.7	--	--
STINE	1021	18.6	--	--	187.3	--	--	2.3	--	--
*CROW'S	237	18.6	--	--	219.1	--	--	2.8	--	--
KING AGRO	K451	18.7	--	--	183.0	--	--	2.3	--	--
PAYCO	687	18.7	--	--	189.8	--	--	3.7	--	--
GREAT LAKES	GL499	18.8	--	--	214.4	--	--	2.0	--	--
*GOLDEN HARVEST	H-2390	18.8	--	--	226.6	--	--	0.0	--	--
DEKALB	DK524	18.9	19	--	206.0	203	--	2.8	2	--
*GREAT LAKES	GL450	18.9	--	--	227.0	--	--	1.9	--	--
NORTHUP KING	N4545	18.9	20	21	209.4	192	175	2.9	2	1
KING AGRO	K402	18.9	--	--	210.5	--	--	2.6	--	--
TOP FARM	TFsx1101	18.9	19	--	197.8	182	--	2.3	2	--
CROW'S	227	18.9	--	--	196.8	--	--	2.4	--	--
JACQUES	5170	19.0	--	--	208.3	--	--	1.9	--	--
PIONEER	3733	19.1	20	--	191.7	187	--	1.6	2	--
PRO-SEED	XS1002	19.1	--	--	180.7	--	--	2.1	--	--
TERRA	TR1010	19.1	20	20	189.7	172	166	1.4	2	1
BLANEY	B405	19.3	20	21	190.5	178	168	2.8	2	2
RUPP	XR1505	19.3	--	--	182.4	--	--	1.0	--	--
DAIRYLAND	DX-1103	19.4	20	21	188.1	180	163	3.8	3	2
TERRA	TR1020	19.5	20	--	176.4	166	--	1.9	2	--

(continued below)

LATE TRIAL (105 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
UAPX	15013	18.6	--	--	208.9	--	--	2.8	--	--
PICKSEED	8833	18.7	--	--	196.2	--	--	1.5	--	--
DAIRYLAND	STEALTH-1203	19.9	--	--	210.4	--	--	2.8	--	--
FUNK'S	G-BRAND 4385	20.0	21	21	209.6	194	193	1.5	3	2
AMCORN	PSX7450	20.1	--	--	216.3	--	--	2.9	--	--
FUNK'S	Exp. 3112X	20.2	--	--	203.4	--	--	3.7	--	--
FUNK'S	G-BRAND 4393	20.4	21	22	206.2	184	180	2.4	2	3
DAIRYLAND	STEALTH-1206	20.5	--	--	163.4	--	--	4.9	--	--
BLANEY	B603	20.7	--	--	207.6	--	--	2.3	--	--
*PIONEER	3527	20.8	21	--	225.9	214	--	3.1	2	--
AMCORN	PSX8181	20.9	21	--	179.6	182	--	6.6	4	--
CALLAHAN	24448X	20.9	--	--	204.8	--	--	4.2	--	--
SUPER CROST	2989	21.0	--	--	183.2	--	--	1.6	--	--
CALLAHAN	27199X	21.0	--	--	205.0	--	--	2.5	--	--
CARGILL	5327	21.1	21	--	209.7	208	--	6.5	4	--
GUTWEIN	2390	21.2	--	--	186.5	--	--	2.4	--	--
CARGILL	4327	21.2	--	--	198.3	--	--	4.8	--	--
TERRA	TR1040	21.2	22	23	173.4	178	181	2.4	2	1
KING AGRO	K5574	21.3	22	22	190.8	198	182	1.4	1	1
RENK	RK702	21.3	22	22	211.3	191	170	2.3	2	1
DYNA-GRO	5351	21.4	21	--	173.4	161	--	2.8	3	--
*CARGILL	SK269	21.5	23	--	238.2	223	--	2.8	2	--
TOP FARM	TFsx1107	21.5	--	--	192.3	--	--	2.3	--	--
CALLAHAN	C748	21.5	21	--	204.9	203	--	1.4	1	--
PROVICO	PRO811	21.6	22	--	194.9	183	--	0.9	1	--
GOLDEN HARVEST	H-2465	21.7	22	--	197.0	193	--	6.9	5	--
AMCORN	PSX9009	21.7	--	--	197.9	--	--	3.8	--	--
DAIRYLAND	DX-1107	21.8	--	--	213.5	--	--	3.2	--	--
ANDERSONS	PSX360	21.8	22	23	203.0	185	171	7.9	4	4
PAYCO	872	21.8	--	--	214.5	--	--	5.1	--	--
RUPP	XR1639	22.0	--	--	202.8	--	--	5.1	--	--
NORTHUP KING	N5729	22.1	--	--	174.0	--	--	3.7	--	--
*PIONEER	3394	22.1	--	--	245.5	--	--	1.4	--	--
COUNTRYMARK	C565X	22.1	23	--	213.4	200	--	3.4	2	--
GREAT LAKES	GL577	22.2	--	--	219.0	--	--	0.5	--	--
PIONEER	3475	22.2	21	22	195.9	182	174	1.4	1	1
KING AGRO	GG1008A	22.2	25	--	223.1	206	--	3.8	3	--
TOP FARM	TFsx1104A	22.2	--	--	197.5	--	--	1.9	--	--
BLANEY	B608	22.3	--	--	205.4	--	--	2.3	--	--
BLANEY	B609	22.3	--	--	199.4	--	--	1.4	--	--
GREAT LAKES	GL579	22.3	23	--	183.3	190	--	4.1	4	--
RUPP	XR1739	22.4	--	--	201.3	--	--	2.5	--	--
*DAIRYLAND	DX-1110	22.5	24	25	229.3	215	196	2.3	2	2
GOLDEN HARVEST	EX545	22.5	--	--	207.6	--	--	1.9	--	--
GOLDEN HARVEST	H-2485	22.6	--	--	187.4	--	--	3.0	--	--
*TERRA	TR1090	22.7	--	--	226.5	--	--	2.3	--	--
*WOLVERINE	W167	22.9	24	--	229.6	219	--	1.9	1	--
DYNA-GRO	5410	22.9	23	--	211.9	201	--	0.5	1	--
GREAT LAKES	GL569	23.0	--	--	191.5	--	--	3.2	--	--
GRIES	GSF-635	23.1	--	--	215.0	--	--	3.3	--	--
DYNA-GRO	5470	23.2	--	--	220.6	--	--	1.4	--	--
TERRA	TR1060	23.2	24	24	205.7	197	190	4.2	2	2
GREAT LAKES	GL583	23.3	--	--	224.4	--	--	1.9	--	--
*STINE	1116	23.3	24	--	238.2	213	--	2.9	3	--
PROVICO	PRO880	23.3	23	--	198.0	202	--	4.5	3	--

(continued below)

EARLY TRIAL (104 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
=====										
PAYCO	648	19.5	--	--	195.1	--	--	1.9	--	--
GREAT LAKES	GL482	19.6	21	22	197.8	175	177	1.9	2	1
GREAT LAKES	GL468	19.6	--	--	191.4	--	--	2.4	--	--
RENK	RK646	19.7	--	--	204.4	--	--	3.2	--	--
CROW'S	210	19.7	--	--	185.6	--	--	3.7	--	--

GUTWEIN	2191	19.9	21	--	181.9	166	--	3.3	4	--
PIONEER	3573	20.0	20	21	213.8	211	198	7.9	4	3
BLANEY	B505	20.1	20	21	189.2	191	173	2.4	2	2
PROVICO	PRO760X	20.1	--	--	204.8	--	--	1.9	--	--
NORTHROP KING	N4428	20.2	20	--	203.1	178	--	0.5	2	--

*COUNTRYMARK	C502X	20.2	--	--	217.1	--	--	1.9	--	--
ANDERSONS	PSX345	20.2	--	--	199.2	--	--	1.9	--	--
GREAT LAKES	GL496	20.3	--	--	199.3	--	--	5.1	--	--
STINE	1077	20.7	--	--	207.5	--	--	1.9	--	--
*DEKALB	DK535	20.8	21	22	220.1	212	202	2.3	2	2

GRIES	GSF-4103	20.9	--	--	170.1	--	--	3.1	--	--
GREAT LAKES	GL536	20.9	--	--	189.0	--	--	1.9	--	--
PROVICO	PRO790	20.9	--	--	184.6	--	--	4.3	--	--
ASGROW	RX626	21.0	21	22	181.3	189	175	0.5	1	1
AMCORN	PSX5757	21.1	--	--	208.3	--	--	0.9	--	--

PAYCO	711	21.3	--	--	214.1	--	--	3.2	--	--
ASGROW	RX578	21.5	21	22	209.2	198	192	1.4	1	2
*PRO-SEED	XS1043	21.9	--	--	223.0	--	--	1.0	--	--
=====										
AVERAGE		18.8	20	21	197.7	187	179	2.6	2	2

RANGE		16.4	17	19	154.8	166	163	0.0	1	1
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		21.9	21	22	228.7	214	202	9.3	4	4
=====										
LEAST SIGNIFICANT DIFFERENCE		.6								
COEFFICIENT OF VARIANCE		9%								
=====										
*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991										

LATE TRIAL (105 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
		YR	YR	YR	YR	YR	YR	YR	YR	YR
AMCORN	PSX9292	23.3	24	--	206.3	187	--	2.3	2	--
CALLAHAN	27188X	23.3	--	--	216.0	--	--	1.4	--	--
CALLAHAN	C759	23.3	24	--	204.1	189	--	1.4	1	--
CARGILL	6227	23.4	25	25	200.0	193	182	2.8	2	2
PIONEER	3357	23.5	--	--	199.5	--	--	2.5	--	--
*ASGROW	RX706	23.6	24	25	233.8	223	210	2.8	1	1
*ANDERSONS	PSX370	23.6	24	25	226.9	211	205	2.9	1	1
GRIES	GSF-6110	23.7	--	--	224.0	--	--	0.5	--	--
DAIRYLAND	STEALTH-1112	23.7	--	--	223.6	--	--	0.0	--	--
CALLAHAN	C764	23.8	24	--	205.9	197	--	2.3	2	--
PROVICO	PRO920	24.3	--	--	177.3	--	--	2.2	--	--
*UAPX	15014	24.5	--	--	227.4	--	--	1.4	--	--
CROW'S	498	24.5	--	--	188.8	--	--	4.2	--	--
PROVICO	PRO900	24.7	--	--	198.1	--	--	3.8	--	--
CROW'S	449	24.7	24	--	165.8	188	--	1.4	1	--
RUPP	XR1774	25.4	--	--	210.0	--	--	1.0	--	--
COUNTRYMARK	C682X	25.7	--	--	215.4	--	--	1.9	--	--
RENK	RK721	25.8	25	25	203.9	203	189	1.0	2	2
AVERAGE		22.3	23	23	205.4	197	187	2.7	2	2
RANGE		18.6	21	21	163.4	161	170	0.0	1	1
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		25.8	25	25	245.5	223	210	7.9	5	4
LEAST SIGNIFICANT DIFFERENCE		1.0			19.4					
COEFFICIENT OF VARIANCE		10%								
*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991										

PLANTED
 HARVESTED
 SOIL TYPE
 PREVIOUS CROP
 POPULATION
 ROW WIDTH
 FERTILIZER
 SOIL TEST: pH
 P
 K

1991
 May 10
 October 11

Spinks Loamy Sand
 Alfalfa Sod
 27,700
 30"
 123-0-0
 6.4
 62 (high)
 256 (high)

1990
 May 7
 November 15
 Belleville Loam
 Wheat/Soybeans
 21,400
 30"
 152-0-120
 6.3
 79 (high)
 400 (very high)

1989
 May 9
 October 24
 Belleville Loam
 Corn
 18,100
 30"
 100-0-0+5 tons manure
 6.4
 141 (very high)
 613 (very high)

FARM COOPERATOR: Gerald Kayser, Caledonia
 COUNTY EXTENSION DIRECTOR: William Harrison, Grand Rapids
 EXTENSION AGRICULTURAL AGENT: William Steenwyk, Grand Rapids

TABLE 6 **SOUTH CENTRAL MICHIGAN** **ZONE 2**
INGHAM COUNTY TRIAL - GRAIN
ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (104 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	YR	3	1991	YR	3	1991	YR	3
NORTHUP KING	N4242	14.9	--	--	116.3	--	--	0.5	--	--
PICKSEED	83-280	15.3	--	--	83.3	--	--	3.6	--	--
NORTHUP KING	N3624	15.4	16	--	105.7	139	--	2.1	2	--
*JACQUES	4770	15.9	--	--	154.9	--	--	1.9	--	--
NORTHUP KING	N3808	16.0	--	--	135.7	--	--	0.0	--	--
GOLDEN HARVEST	H-2331	16.0	17	19	131.3	161	162	3.8	4	3
STINE	900	16.1	--	--	121.5	--	--	1.0	--	--
FUNK'S	Exp. 2078X	16.2	--	--	144.5	--	--	1.5	--	--
SUPER CROST	1999	16.3	--	--	99.7	--	--	0.0	--	--
*GREAT LAKES	GL450	16.4	--	--	167.2	--	--	1.0	--	--
CROW'S	179	16.4	--	--	126.8	--	--	1.5	--	--
DEKALB	DK485	16.6	18	20	131.0	146	145	2.2	2	3
WOLVERINE	W156	16.6	18	--	127.3	147	--	1.5	3	--
*KING AGRO	K402	16.6	--	--	157.0	--	--	3.7	--	--
*DAIRYLAND	STEALTH-1201	16.6	--	--	161.1	--	--	1.8	--	--
JACQUES	5170	16.7	--	--	127.5	--	--	4.5	--	--
*GUTWEIN	2100	16.7	--	--	159.9	--	--	3.6	--	--
*GOLDEN HARVEST	H-2390	16.7	--	--	156.0	--	--	2.9	--	--
*DEKALB	DK524	16.8	19	22	152.0	171	172	2.6	3	3
SUPER CROST	2000	16.8	19	--	111.9	148	--	4.7	5	--
COUNTRYMARK	C432X	16.8	--	--	145.7	--	--	3.0	--	--
DAIRYLAND	STEALTH-1198	16.8	--	--	125.7	--	--	3.7	--	--
TOP FARM	TFsx1101	16.8	18	--	120.8	137	--	2.5	5	--
GOLDEN HARVEST	H-2349	16.8	--	--	141.6	--	--	2.0	--	--
FUNK'S	G-BRAND 4299	16.9	--	--	147.0	--	--	1.0	--	--
STINE	1015	17.0	--	--	128.4	--	--	1.5	--	--
STINE	1021	17.2	--	--	95.4	--	--	2.7	--	--
TERRA	TR1020	17.3	19	--	124.5	142	--	1.9	4	--
CROW'S	227	17.3	--	--	141.4	--	--	1.0	--	--
*GREAT LAKES	GL459	17.4	20	--	156.8	158	--	1.9	7	--
DAIRYLAND	DX-1100	17.4	18	--	96.8	126	--	7.5	5	--
PAYCO	687	17.4	--	--	116.3	--	--	1.5	--	--
PICKSEED	83-282	17.4	--	--	77.2	--	--	2.8	--	--
*GREAT LAKES	GL499	17.5	--	--	176.3	--	--	2.7	--	--
NORTHUP KING	N4545	17.5	20	22	147.5	160	158	2.5	3	2
KING AGRO	K451	17.5	--	--	113.0	--	--	1.5	--	--
RENK	RK602	17.5	--	--	124.6	--	--	1.4	--	--
CARGILL	3427	17.6	--	--	87.9	--	--	5.1	--	--
BLANEY	B405	17.7	19	--	106.8	123	--	1.0	3	--
PAYCO	648	17.8	--	--	143.1	--	--	3.0	--	--
PIONEER	XO215	17.9	--	--	112.4	--	--	1.0	--	--
TERRA	TR1010	17.9	19	--	144.5	149	--	2.1	7	--
*CROW'S	237	17.9	--	--	163.0	--	--	0.5	--	--
*BLANEY	B505	18.0	20	--	158.4	161	--	1.0	2	--
SUPER CROST	1900	18.0	--	--	96.0	--	--	4.1	--	--
*PROVICO	PRO760X	18.0	--	--	156.4	--	--	2.7	--	--
*RUPP	XR1505	18.0	--	--	153.9	--	--	0.0	--	--
PIONEER	X9310	18.1	--	--	97.8	--	--	11.8	--	--
FUNK'S	G-BRAND 4260	18.2	--	--	105.3	--	--	1.0	--	--
GREAT LAKES	GL482	18.2	20	21	139.2	158	150	3.0	4	5
WOLVERINE	W158	18.2	19	--	120.0	136	--	1.5	3	--
PROVICO	PRO630X	18.2	--	--	92.1	--	--	1.2	--	--
PRO-SEED	XS1002	18.3	--	--	125.8	--	--	2.4	--	--
CALLAHAN	27128X	18.3	--	--	97.4	--	--	1.0	--	--
*COUNTRYMARK	C502X	18.4	--	--	186.1	--	--	2.2	--	--

LATE TRIAL (105 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	YR	3	1991	YR	3	1991	YR	3
*AMCORN	PSX7450	17.3	--	--	193.9	--	--	3.3	--	--
DAIRYLAND	STEALTH-1206	17.7	--	--	129.9	--	--	2.2	--	--
DAIRYLAND	STEALTH-1203	17.8	--	--	143.0	--	--	2.1	--	--
UAPK	15013	18.1	--	--	174.8	--	--	0.5	--	--
BLANEY	B603	18.2	--	--	172.0	--	--	1.6	--	--
CALLAHAN	24448X	18.3	--	--	145.7	--	--	2.4	--	--
FUNK'S	G-BRAND 4393	18.7	22	23	167.4	172	167	0.5	1	1
NORTHUP KING	N5729	18.7	--	--	146.3	--	--	0.5	--	--
CALLAHAN	27199X	18.9	--	--	167.3	--	--	2.3	--	--
GUTWEIN	2390	19.0	--	--	134.5	--	--	2.6	--	--
KING AGRO	K5574	19.1	23	24	179.1	177	171	1.6	5	4
TOP FARM	TFsx1104A	19.2	--	--	140.9	--	--	0.5	--	--
*GOLDEN HARVEST	H-2485	19.2	--	--	205.2	--	--	1.6	--	--
*GRIES	GSF-6110	19.3	--	--	234.5	--	--	1.5	--	--
PIONEER	3527	19.3	22	--	164.3	186	--	2.2	1	--
*STINE	1116	19.3	24	--	207.8	194	--	0.0	2	--
CARGILL	5327	19.3	22	--	182.2	189	--	3.0	3	--
COUNTRYMARK	C565X	19.4	24	25	140.3	156	165	2.7	3	4
TERRA	TR1040	19.5	23	--	125.3	152	--	1.1	3	--
AMCORN	PSX9009	19.5	--	--	163.4	--	--	1.9	--	--
FUNK'S	G-BRAND 4385	19.6	22	24	166.0	168	167	0.5	1	1
GREAT LAKES	GL569	19.6	--	--	155.9	--	--	1.6	--	--
PROVICO	PRO811	19.6	22	--	135.1	149	--	0.0	1	--
WOLVERINE	W167	19.7	24	--	182.0	184	--	0.0	3	--
FUNK'S	Exp. 3112X	19.9	--	--	183.8	--	--	2.8	--	--
CARGILL	SK269	19.9	24	26	178.8	177	178	0.5	1	2
PAYCO	872	19.9	--	--	161.7	--	--	0.0	--	--
GOLDEN HARVEST	EX545	19.9	--	--	188.1	--	--	1.9	--	--
AMCORN	PSX8181	19.9	22	--	172.0	182	--	2.7	2	--
DYNA-GRO	5351	20.0	23	--	154.6	157	--	0.0	1	--
CALLAHAN	C748	20.0	23	25	167.1	170	164	2.0	2	2
GOLDEN HARVEST	H-2465	20.2	23	24	161.5	174	169	0.5	3	2
*CALLAHAN	27188X	20.2	--	--	200.5	--	--	2.0	--	--
GREAT LAKES	GL579	20.3	23	25	154.5	171	166	2.9	4	3
*ASCROW	RX706	20.3	25	27	211.0	202	179	2.0	4	3
RUPP	XR1639	20.3	--	--	149.2	--	--	2.3	--	--
*RUPP	XR1739	20.4	--	--	204.5	--	--	1.1	--	--
ANDERSONS	PSX360	20.4	24	25	182.9	162	166	1.0	3	3
SUPER CROST	2989	20.5	--	--	136.0	--	--	3.0	--	--
DAIRYLAND	DX-1107	20.5	--	--	158.7	--	--	0.5	--	--
*BLANEY	B609	20.6	--	--	194.3	--	--	2.4	--	--
*PROVICO	PRO900	20.6	--	--	197.7	--	--	1.9	--	--
CROW'S	449	20.6	24	27	184.4	171	160	1.0	1	1
*BLANEY	B608	20.7	--	--	220.1	--	--	1.0	--	--
*TERRA	TR1090	20.7	--	--	211.4	--	--	2.2	--	--
PIONEER	3394	20.8	--	--	179.6	--	--	1.1	--	--
TOP FARM	TFsx1107	20.8	--	--	177.9	--	--	2.4	--	--
*AMCORN	PSX9292	20.8	25	--	234.7	210	--	1.0	2	--
*DAIRYLAND	DX-1110	21.1	25	27	226.4	208	194	0.5	1	1
*CALLAHAN	C764	21.1	25	27	208.9	193	175	0.5	2	2
*DYNA-GRO	5470	21.2	--	--	211.0	--	--	1.6	--	--
*DAIRYLAND	STEALTH-1112	21.2	--	--	194.9	--	--	2.0	--	--
GRIES	GSF-635	21.3	--	--	170.9	--	--	2.9	--	--
DYNA-GRO	5410	21.3	25	--	169.0	166	--	3.2	3	--
PROVICO	PRO880	21.3	26	--	175.0	170	--	1.8	2	--

(continued below)

(continued below)

EARLY TRIAL (104 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
		YR	YR	YR	YR	YR	YR	YR	YR	YR
*GRIES	GSF-4103	18.5	--	--	167.0	--	--	3.9	--	--
NORTHERUP KING	N4428	18.5	20	--	141.9	150	--	2.0	2	--
KING AGRO	K416	18.5	--	--	82.8	--	--	4.3	--	--
*PAYCO	711	18.5	--	--	185.8	--	--	1.5	--	--
DAIRYLAND	DX-1103	18.6	20	22	131.0	152	151	2.1	4	4
*DEKALB	DK535	18.8	21	22	170.3	183	182	1.0	1	2
*PIONEER	3573	18.8	21	22	178.1	184	179	2.1	2	3
*PROVICO	PRO790	18.9	--	--	170.3	--	--	2.3	--	--
GREAT LAKES	GL468	19.0	--	--	110.7	--	--	3.4	--	--
GREAT LAKES	GL446	19.1	19	--	104.4	131	--	5.8	5	--
RENK	RK646	19.1	--	--	133.1	--	--	2.5	--	--
*ANDERSONS	PSX345	19.1	--	--	159.6	--	--	2.2	--	--
GUTWEIN	2191	19.2	20	--	143.9	156	--	2.5	3	--
*ASGROW	RX578	19.2	21	23	155.1	162	161	1.0	2	2
*AMCORN	PSX5757	19.2	--	--	170.3	--	--	1.4	--	--
*GREAT LAKES	GL496	19.3	--	--	156.9	--	--	2.1	--	--
GREAT LAKES	GL536	19.4	--	--	148.6	--	--	1.5	--	--
PIONEER	3751	19.8	19	21	101.3	132	122	2.3	3	7
ASGROW	RX626	19.9	23	25	148.4	155	153	2.4	2	2
*STINE	1077	20.0	--	--	163.3	--	--	2.3	--	--
*PRO-SEED	XS1043	20.1	--	--	212.1	--	--	3.6	--	--
PIONEER	3733	20.5	21	--	129.8	153	--	0.0	1	--
CROW'S	210	22.4	--	--	117.2	--	--	0.5	--	--
AVERAGE		17.8	19	22	134.8	151	158	2.3	3	3
RANGE		14.9	16	19	77.2	123	120	0.0	1	2
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		22.4	23	25	212.1	184	182	11.8	7	7
LEAST SIGNIFICANT DIFFERENCE		.9			16.1					
COEFFICIENT OF VARIANCE		12%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (105 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
		YR	YR	YR	YR	YR	YR	YR	YR	YR
*ANDERSONS	PSX370	21.3	26	--	223.8	211	--	1.0	3	--
*RENK	RK721	21.4	25	27	205.4	198	182	2.0	4	4
*CALLAHAN	C759	21.6	25	--	195.9	183	--	0.5	1	--
GREAT LAKES	GL577	21.7	--	--	186.4	--	--	1.6	--	--
RENK	RK702	21.7	24	26	161.8	151	153	0.5	1	1
*GREAT LAKES	GL583	21.8	--	--	198.5	--	--	2.7	--	--
*KING AGRO	GG1008A	21.8	26	--	209.5	200	--	1.6	1	--
PIONEER	3475	21.9	22	24	117.1	151	152	2.8	2	3
TERRA	TR1060	21.9	26	--	170.4	172	--	2.0	2	--
PIONEER	3357	22.0	--	--	184.0	--	--	2.1	--	--
PROVICO	PRO920	22.0	--	--	161.5	--	--	1.1	--	--
CARGILL	4327	22.0	--	--	104.6	--	--	1.0	--	--
CROW'S	498	22.3	--	--	175.7	--	--	4.5	--	--
*CARGILL	6227	22.5	26	28	210.8	203	193	0.5	1	2
PICKSEED	8833	22.9	--	--	111.4	--	--	6.3	--	--
*COUNTRYMARK	C682X	23.2	--	--	224.8	--	--	1.1	--	--
*RUPP	XR1774	23.7	--	--	216.5	--	--	0.5	--	--
*UAPX	15014	23.9	--	--	207.4	--	--	0.5	--	--
AVERAGE		20.4	24	25	176.8	178	171	1.6	2	2
RANGE		17.3	22	23	104.6	149	152	0.0	1	1
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		23.9	26	28	234.7	211	194	6.3	5	4
LEAST SIGNIFICANT DIFFERENCE		.9			15.2					
COEFFICIENT OF VARIANCE		9%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

1991
PLANTED May 5
HARVESTED October 7
SOIL TYPE Capac Loam
PREVIOUS CROP Soybeans
POPULATION 25,400
ROW WIDTH 30"
FERTILIZER 165-50-50
SOIL TEST: pH 6.8
P 54 (medium)
K 133 (low)

1990
PLANTED May 8
HARVESTED October 29-30
SOIL TYPE Capac Loam
PREVIOUS CROP Corn
POPULATION 22,800
ROW WIDTH 30"
FERTILIZER 165-50-50
SOIL TEST: pH 6.1
P 93 (high)
K 200 (medium)

1989
PLANTED April 27
HARVESTED October 10
SOIL TYPE Capac Loam
PREVIOUS CROP Corn
POPULATION 20,900
ROW WIDTH 36"
FERTILIZER 165-50-50
SOIL TEST: pH 6.1
P 156 (very high)
K 228 (high)

FARM COOPERATOR: Michigan State University, East Lansing
COUNTY EXTENSION DIRECTOR: Marvin Preston, Mason
EXTENSION AGRICULTURAL AGENTS: John Hayden and Laura Rhodes, Mason

TABLE 7

SOUTH CENTRAL MICHIGAN
SAGINAW COUNTY TRIAL

ZONE 2

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (104 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		2			2			2		
		1991	YR	YR	1991	YR	YR	1991	YR	YR
NORTHRUP KING	N3624	15.7	17	--	157.2	167	--	1.5	2	--
STINE	900	16.1	--	--	148.1	--	--	3.5	--	--
*NORTHRUP KING	N3808	16.7	--	--	175.0	--	--	1.5	--	--
NORTHRUP KING	N4242	16.8	--	--	170.3	--	--	1.4	--	--
SUPER CROST	1900	17.3	--	--	160.1	--	--	0.5	--	--
GREAT LAKES	GL446	17.3	19	19	152.7	151	158	1.0	9	7
*PIONEER	3751	17.4	18	18	178.1	168	164	1.0	4	3
PROVICO	PRO630X	17.5	--	--	152.9	--	--	1.8	--	--
CARGILL	3427	17.5	--	--	143.1	--	--	0.6	--	--
RENK	RK602	17.6	--	--	165.7	--	--	1.5	--	--
WOLVERINE	W156	17.7	19	19	153.8	157	158	1.6	4	3
DAIRYLAND	DX-1100	17.8	18	--	138.4	144	--	2.6	7	--
FUNK'S	G-BRAND 4260	17.9	--	--	166.6	--	--	1.1	--	--
PICKSEED	83-280	17.9	--	--	152.3	--	--	0.0	--	--
PIONEER	XO215	18.0	--	--	166.8	--	--	1.0	--	--
PICKSEED	83-282	18.0	--	--	150.7	--	--	2.1	--	--
JACQUES	4770	18.1	--	--	158.7	--	--	1.1	--	--
CROW'S	179	18.1	--	--	134.6	--	--	1.0	--	--
SUPER CROST	2000	18.2	20	--	159.8	160	--	1.5	5	--
KING AGRO	K416	18.4	--	--	163.8	--	--	1.0	--	--
GOLDEN HARVEST	H-2349	18.6	--	--	139.7	--	--	0.5	--	--
DEKALB	DK485	18.7	19	--	157.2	160	--	2.6	4	--
FUNK'S	Exp. 2078X	18.8	--	--	168.7	--	--	1.1	--	--
*FUNK'S	G-BRAND 4299	18.8	--	--	176.8	--	--	1.0	--	--
JACQUES	5170	18.8	--	--	169.9	--	--	0.5	--	--
COUNTRYMARK	C432X	18.8	--	--	171.6	--	--	1.0	--	--
GOLDEN HARVEST	H-2331	18.8	19	18	164.8	174	163	4.4	8	6
WOLVERINE	W158	18.9	20	--	163.3	148	--	1.6	5	--
*PIONEER	3733	18.9	20	--	190.3	178	--	0.0	2	--
NORTHRUP KING	N4428	19.2	21	--	155.6	154	--	1.1	2	--
KING AGRO	K402	19.2	--	--	161.0	--	--	1.7	--	--
CROW'S	237	19.2	--	--	163.8	--	--	3.2	--	--
GREAT LAKES	GL496	19.3	--	--	155.6	--	--	0.0	--	--
NORTHRUP KING	N4545	19.3	21	20	161.0	156	153	1.0	2	2
DAIRYLAND	STEALTH-1198	19.3	--	--	155.6	--	--	1.1	--	--
*GREAT LAKES	GL499	19.4	--	--	184.2	--	--	0.5	--	--
STINE	1015	19.5	--	--	157.1	--	--	0.5	--	--
DAIRYLAND	STEALTH-1201	19.5	--	--	152.9	--	--	1.6	--	--
SUPER CROST	1999	19.6	--	--	154.9	--	--	0.5	--	--
GREAT LAKES	GL450	19.7	--	--	148.7	--	--	1.0	--	--
*PIONEER	3573	19.7	21	20	184.1	184	179	0.5	3	4
PIONEER	X9310	19.7	--	--	163.0	--	--	2.1	--	--
TERRA	TR1020	19.7	20	--	164.4	159	--	0.5	2	--
STINE	1021	19.8	--	--	160.3	--	--	2.6	--	--
CALLAHAN	27128X	19.8	--	--	160.0	--	--	0.0	--	--
GREAT LAKES	GL459	19.9	21	--	144.5	153	--	0.5	3	--
GUTWEIN	2100	19.9	--	--	165.4	--	--	1.1	--	--
GUTWEIN	2191	20.0	21	--	162.2	161	--	1.0	4	--
GOLDEN HARVEST	H-2390	20.1	--	--	150.0	--	--	1.0	--	--
PRO-SEED	XS1002	20.2	--	--	164.9	--	--	1.0	--	--
TERRA	TR1010	20.2	21	21	161.1	165	159	0.5	2	2
*PAYCO	648	20.2	--	--	176.0	--	--	0.5	--	--
PAYCO	687	20.2	--	--	158.5	--	--	1.6	--	--
DEKALB	DK524	20.3	21	20	132.0	159	163	2.0	4	4
*GREAT LAKES	GL536	20.3	--	--	173.6	--	--	0.5	--	--

LATE TRIAL (105 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		2			2			2		
		1991	YR	YR	1991	YR	YR	1991	YR	YR
PICKSEED	8833	19.7	--	--	165.9	--	--	0.6	--	--
UAPX	15013	20.6	--	--	176.5	--	--	1.7	--	--
*CARGILL	4327	20.9	--	--	183.3	--	--	2.2	--	--
DAIRYLAND	STEALTH-1203	20.9	--	--	157.0	--	--	1.2	--	--
CARGILL	5327	21.0	22	--	148.2	156	--	2.3	2	--
FUNK'S	G-BRAND 4385	21.2	22	21	166.8	157	157	0.6	0	1
FUNK'S	G-BRAND 4393	21.2	22	22	158.7	160	160	0.5	1	2
CALLAHAN	27199X	21.4	--	--	166.1	--	--	0.5	--	--
*PIONEER	3527	21.7	22	--	187.3	192	--	0.0	0	--
GREAT LAKES	GL577	22.0	--	--	156.5	--	--	0.6	--	--
RENK	RK702	22.1	23	--	119.2	129	--	1.2	3	--
TOP FARM	TFsx1104A	22.2	--	--	168.8	--	--	1.2	--	--
NORTHRUP KING	N5729	22.5	--	--	171.2	--	--	2.9	--	--
PIONEER	3475	22.5	22	--	164.7	172	--	1.1	2	--
DYNA-GRO	5351	22.5	22	--	151.9	147	--	3.5	3	--
AMCORN	PSX8181	22.5	23	--	154.5	163	--	1.2	2	--
DAIRYLAND	STEALTH-1206	22.6	--	--	153.2	--	--	1.8	--	--
*PIONEER	3394	22.8	--	--	183.8	--	--	0.6	--	--
PROVICO	PRO811	22.9	--	--	165.5	156	--	0.0	1	--
TERRA	TR1040	22.9	23	23	165.5	167	161	1.8	5	3
CALLAHAN	C748	22.9	23	23	137.1	147	151	0.5	2	2
GREAT LAKES	GL579	23.2	23	23	161.0	175	165	2.4	3	2
ANDERSONS	PSX360	23.2	24	--	177.6	177	--	1.3	3	--
SUPER CROST	2989	23.3	--	--	144.8	--	--	2.0	--	--
GUTWEIN	2390	23.4	--	--	155.9	--	--	0.0	--	--
KING AGRO	K5574	23.4	24	23	168.0	179	171	2.4	3	3
TOP FARM	TFsx1107	23.4	--	--	163.8	--	--	0.6	--	--
*CARGILL	SX269	23.7	25	--	182.5	189	--	2.3	2	--
COUNTRYMARK	C565X	23.8	24	--	154.6	168	--	0.6	3	--
RUPP	XR1639	23.8	--	--	154.9	--	--	2.4	--	--
AMCORN	PSX7450	23.8	--	--	159.9	--	--	1.1	--	--
FUNK'S	Exp. 3112X	23.9	--	--	167.3	--	--	1.1	--	--
PIONEER	3357	23.9	--	--	166.8	--	--	0.0	--	--
GOLDEN HARVEST	H-2465	23.9	24	24	168.6	178	171	1.6	3	2
PAYCO	872	24.0	--	--	176.2	--	--	1.1	--	--
BLANEY	B603	24.2	--	--	158.3	--	--	2.9	--	--
WOLVERINE	W167	24.2	24	24	164.4	169	161	1.7	3	3
*DYNA-GRO	5410	24.2	24	--	182.8	175	--	0.0	2	--
DAIRYLAND	DX-1107	24.4	--	--	156.2	--	--	1.8	--	--
TERRA	TR1060	24.4	25	24	161.5	167	164	2.9	2	2
CALLAHAN	24448X	24.4	--	--	154.2	--	--	1.8	--	--
BLANEY	B609	24.5	--	--	153.6	--	--	1.7	--	--
GOLDEN HARVEST	EX545	24.6	--	--	158.7	--	--	1.7	--	--
GREAT LAKES	GL569	24.7	--	--	153.8	--	--	0.6	--	--
*KING AGRO	GG1008A	24.7	25	--	181.3	182	--	0.0	2	--
RUPP	XR1739	24.7	--	--	178.4	--	--	1.1	--	--
CROW'S	449	24.7	25	26	162.1	160	159	0.5	0	1
AMCORN	PSX9009	24.7	--	--	156.9	--	--	2.9	--	--
*CALLAHAN	27188X	25.0	--	--	180.5	--	--	2.8	--	--
AMCORN	PSX9292	25.3	25	--	179.1	176	--	0.0	1	--
RENK	RK721	25.4	26	25	159.5	164	162	0.6	0	1
CROW'S	498	25.4	--	--	156.1	--	--	1.1	--	--
GOLDEN HARVEST	H-2485	25.4	--	--	149.2	--	--	2.2	--	--
DYNA-GRO	5470	25.5	--	--	178.6	--	--	1.7	--	--
DAIRYLAND	STEALTH-1112	25.6	--	--	167.3	--	--	4.3	--	--

(continued below)

(continued below)

EARLY TRIAL (104 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
		1991	YR	3	1991	YR	YR	1991	YR	YR
RENK	RK646	20.3	--	--	148.3	--	--	1.0	--	--
GREAT LAKES	GL482	20.4	21	21	171.2	163	161	0.0	4	3
*COUNTRYMARK	C502X	20.4	--	--	179.3	--	--	0.0	--	--
DAIRYLAND	DX-1103	20.4	21	21	152.7	150	151	1.8	6	5
TOP FARM	TFsx1101	20.4	20	--	153.6	160	--	0.5	4	--
BLANEY	B405	20.5	20	20	141.7	148	153	0.0	2	3
BLANEY	B505	20.5	21	21	158.5	153	155	1.0	4	3
*RUPP	XR1505	20.6	--	--	178.8	--	--	1.6	--	--
PAYCO	711	20.6	--	--	156.3	--	--	1.0	--	--
KING AGRO	K451	20.7	--	--	160.9	--	--	0.5	--	--
CROW'S	227	21.0	--	--	161.7	--	--	0.0	--	--
CROW'S	210	21.1	--	--	157.1	--	--	0.5	--	--
DEKALB	DK535	21.5	22	21	169.6	176	169	1.0	3	3
GREAT LAKES	GL468	21.6	--	--	151.6	--	--	0.6	--	--
STINE	1077	21.7	--	--	170.2	--	--	2.1	--	--
*GRIES	GSF-4103	21.8	--	--	174.1	--	--	0.0	--	--
ASGROW	RX578	21.9	22	22	156.3	156	151	0.5	1	1
PROVICO	PRO760X	21.9	--	--	162.2	--	--	0.0	--	--
AMCORN	PSX5757	22.1	--	--	157.4	--	--	1.1	--	--
ASGROW	RX626	22.9	23	23	150.2	168	162	1.6	2	3
ANDERSONS	PSX345	23.0	--	--	170.8	--	--	2.1	--	--
PROVICO	PRO790	23.4	--	--	153.6	--	--	0.0	--	--
*PRO-SEED	XS1043	24.0	--	--	178.3	--	--	0.5	--	--
AVERAGE		19.6	20	20	160.7	160	160	1.1	4	3
RANGE		15.7	17	18	132.0	144	151	0.0	1	1
		24.0	23	23	190.3	184	179	4.4	9	7
LEAST SIGNIFICANT DIFFERENCE		.7			12.7					
COEFFICIENT OF VARIANCE		8%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (105 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
		1991	YR	3	1991	YR	YR	1991	YR	YR
DAIRYLAND	DX-1110	25.6	26	26	178.7	174	164	0.6	2	2
GREAT LAKES	GL583	25.7	--	--	168.9	--	--	3.5	--	--
STINE	1116	25.7	26	--	166.4	173	--	1.2	2	--
PROVICO	PRO920	25.7	--	--	169.1	--	--	1.7	--	--
PROVICO	PRO900	25.7	--	--	163.4	--	--	1.9	--	--
*BLANEY	B608	25.8	--	--	190.8	--	--	1.2	--	--
CARGILL	6227	25.8	26	--	170.5	174	--	0.0	3	--
CALLAHAN	C759	25.8	26	26	164.9	162	145	2.4	2	2
TERRA	TR1090	26.0	--	--	176.6	--	--	0.0	--	--
UAPX	15014	26.1	--	--	172.0	--	--	1.7	--	--
ANDERSONS	PSX370	26.1	27	--	165.1	173	--	2.3	2	--
ASGROW	RX706	26.2	26	--	165.4	171	--	1.3	1	--
GRIES	GSF-6110	26.3	--	--	175.1	--	--	0.5	--	--
PROVICO	PRO880	26.4	26	--	171.6	175	--	0.0	1	--
COUNTRYMARK	C682X	26.5	--	--	176.9	--	--	1.2	--	--
CALLAHAN	C764	27.0	26	26	172.2	169	154	1.3	3	3
RUPP	XR1774	27.1	--	--	169.0	--	--	1.2	--	--
GRIES	GSF-635	27.3	--	--	149.1	--	--	2.5	--	--
AVERAGE		24.1	24	24	165.2	168	160	1.4	2	2
RANGE		19.7	22	21	119.2	129	145	0.0	0	1
		27.3	27	26	190.8	192	171	4.3	5	3
LEAST SIGNIFICANT DIFFERENCE		.9			13.7					
COEFFICIENT OF VARIANCE		9%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

	1991	1990	1989
PLANTED	May 14	May 12	May 3
HARVESTED	October 17	November 9,12	October 30
SOIL TYPE	Charity Clay	Charity Clay	Brookston Clay Loam
PREVIOUS CROP	Dry Beans	Dry Beans	Sugar Beets
POPULATION	24,000	23,200	19,100
ROW WIDTH	30"	30"	28"
FERTILIZER	150-0-0	21-7-14	235-60-50
SOIL TEST: pH	7.2	7.6	7.1
P	77 (high)	128 (very high)	75 (high)
K	336 (very high)	415 (very high)	271 (high)

FARM COOPERATORS: Paul Horny, Saginaw Beet & Bean Research Farm, Saginaw (1991, 1990)

Stuart Reinbold, Reese (1989)

COUNTY EXTENSION DIRECTOR: James Thews, Saginaw

EXTENSION AGRICULTURAL AGENT: Steven Poindexter, Saginaw

TABLE 8 SOUTH CENTRAL MICHIGAN ZONE 2
AVERAGE OF KENT, INGHAM & SAGINAW COUNTY TRIALS
ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (104 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
NORTHROP KING	N3624	15.9	17	--	149.3	159	--	1.7	2	--
STINE	900	16.2	--	--	144.6	--	--	2.6	--	--
NORTHROP KING	N4242	16.5	--	--	158.4	--	--	1.6	--	--
PICKSEED	83-280	16.6	--	--	132.1	--	--	1.5	--	--
NORTHROP KING	N3808	16.7	--	--	168.1	--	--	1.6	--	--
*FUNK'S	Exp. 2078X	17.4	--	--	175.0	--	--	1.3	--	--
DAIRYLAND	DX-1100	17.4	18	--	149.6	153	--	4.3	5	--
JACQUES	4770	17.5	--	--	169.2	--	--	1.9	--	--
RENK	RK602	17.5	--	--	164.2	--	--	1.9	--	--
GOLDEN HARVEST	H-2331	17.5	18	19	165.2	178	169	4.7	5	4
PICKSEED	83-282	17.5	--	--	131.6	--	--	2.3	--	--
SUPER CROST	1900	17.6	--	--	158.5	--	--	2.5	--	--
SUPER CROST	2000	17.6	19	--	151.3	169	--	3.1	4	--
WOLVERINE	W156	17.6	19	19	160.2	163	162	1.8	4	3
CROW'S	179	17.6	--	--	142.2	--	--	2.4	--	--
FUNK'S	G-BRAND 4260	17.7	--	--	155.2	--	--	0.9	--	--
PIONEER	X0215	17.7	--	--	169.3	--	--	1.3	--	--
PROVICO	PRO630X	17.7	--	--	142.8	--	--	1.3	--	--
CARGILL	3427	17.7	--	--	144.4	--	--	2.5	--	--
DEKALB	DK485	17.8	19	20	171.0	173	163	1.9	2	3
*FUNK'S	G-BRAND 4299	17.8	--	--	179.2	--	--	2.1	--	--
GOLDEN HARVEST	H-2349	17.8	--	--	162.0	--	--	1.6	--	--
GREAT LAKES	GL446	17.9	18	18	150.5	155	161	3.5	6	5
*COUNTRYMARK	C432X	17.9	--	--	175.8	--	--	4.4	--	--
KING AGRO	K416	18.1	--	--	144.8	--	--	2.8	--	--
SUPER CROST	1999	18.2	--	--	136.5	--	--	1.4	--	--
JACQUES	5170	18.2	--	--	168.6	--	--	2.3	--	--
*KING AGRO	K402	18.2	--	--	176.2	--	--	2.7	--	--
STINE	1015	18.2	--	--	157.3	--	--	1.0	--	--
DAIRYLAND	STEALTH-1198	18.2	--	--	165.8	--	--	3.1	--	--
DAIRYLAND	STEALTH-1201	18.2	--	--	171.9	--	--	2.6	--	--
*GREAT LAKES	GL450	18.3	--	--	181.0	--	--	1.3	--	--
PIONEER	3751	18.3	19	20	161.4	162	156	1.9	3	4
GREAT LAKES	GL459	18.4	20	--	166.0	167	--	1.7	4	--
WOLVERINE	W158	18.4	19	--	153.8	153	--	2.0	4	--
*GUTWEIN	2100	18.4	--	--	183.9	--	--	2.9	--	--
STINE	1021	18.5	--	--	147.7	--	--	2.5	--	--
*GOLDEN HARVEST	H-2390	18.5	--	--	177.5	--	--	1.3	--	--
*GREAT LAKES	GL499	18.6	--	--	191.6	--	--	1.7	--	--
NORTHROP KING	N4545	18.6	20	21	172.6	169	162	2.1	2	2
*CROW'S	237	18.6	--	--	182.0	--	--	2.2	--	--
DEKALB	DK524	18.7	20	21	163.3	178	176	2.5	3	3
PIONEER	X9310	18.7	--	--	155.8	--	--	4.6	--	--
TOP FARM	TFsx1101	18.7	19	--	157.4	160	--	1.8	4	--
TERRA	TR1020	18.8	20	--	155.1	156	--	1.4	3	--
PAYCO	687	18.8	--	--	154.9	--	--	2.3	--	--
CALLAHAN	27128X	18.8	--	--	149.9	--	--	0.5	--	--
KING AGRO	K451	19.0	--	--	152.3	--	--	1.4	--	--
TERRA	TR1010	19.1	20	20	165.1	162	158	1.3	4	3
CROW'S	227	19.1	--	--	166.6	--	--	1.1	--	--
BLANEY	B405	19.2	20	20	146.3	149	151	1.3	2	3
PRO-SEED	XS1002	19.2	--	--	157.1	--	--	1.8	--	--
PAYCO	648	19.2	--	--	171.4	--	--	1.8	--	--
NORTHROP KING	N4428	19.3	20	--	166.9	161	--	1.2	2	--
RUPP	XR1505	19.3	--	--	171.7	--	--	0.9	--	--

LATE TRIAL (105 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))										
		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
HYBRID (BRAND-VARIETY)		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
UAPX	15013	19.1	--	--	186.7	--	--	1.7	--	--
DAIRYLAND	STEALTH-1203	19.5	--	--	170.1	--	--	2.0	--	--
FUNK'S	G-BRAND 4393	20.1	22	22	177.4	172	169	1.1	1	2
FUNK'S	G-BRAND 4385	20.3	22	22	180.8	173	172	0.9	1	1
DAIRYLAND	STEALTH-1206	20.3	--	--	148.8	--	--	3.0	--	--
PICKSEED	8833	20.4	--	--	157.8	--	--	2.8	--	--
AMCORN	PSX7450	20.4	--	--	190.0	--	--	2.4	--	--
CALLAHAN	27199X	20.4	--	--	179.5	--	--	1.8	--	--
CARGILL	5327	20.5	22	--	180.0	184	--	3.9	3	--
*PIONEER	3527	20.6	22	--	192.5	197	--	1.8	1	--
BLANEY	B603	21.0	--	--	179.3	--	--	2.3	--	--
NORTHROP KING	N5729	21.1	--	--	163.8	--	--	2.4	--	--
AMCORN	PSX8181	21.1	22	--	168.7	175	--	3.5	3	--
GUTWEIN	2390	21.2	--	--	159.0	--	--	1.7	--	--
TOP FARM	TFsx1104A	21.2	--	--	169.1	--	--	1.2	--	--
TERRA	TR1040	21.2	23	23	154.7	166	167	1.8	3	2
CALLAHAN	24448X	21.2	--	--	168.2	--	--	2.8	--	--
FUNK'S	Exp.3112X	21.3	--	--	184.8	--	--	2.5	--	--
DYNA-GRO	5351	21.3	22	--	160.0	155	--	2.1	2	--
KING AGRO	K5574	21.3	23	23	179.3	185	175	1.8	3	3
PROVICO	PRO811	21.4	23	--	165.2	163	--	0.3	1	--
CARGILL	4327	21.4	--	--	162.1	--	--	2.7	--	--
CALLAHAN	C748	21.5	23	24	169.7	173	168	1.3	2	2
SUPER CROST	2989	21.6	--	--	154.7	--	--	2.2	--	--
*CARGILL	SX269	21.7	24	26	199.8	196	191	1.9	2	2
RENK	RK702	21.7	23	24	164.1	157	153	1.3	2	2
COUNTRYMARK	C565X	21.8	23	25	169.4	175	177	2.2	3	3
ANDERSONS	PSX360	21.8	23	24	174.5	175	170	3.4	4	3
GREAT LAKES	GL579	21.9	23	24	166.3	178	169	3.1	4	3
*PIONEER	3394	21.9	--	--	203.0	--	--	1.0	--	--
TOP FARM	TFsx1107	21.9	--	--	178.0	--	--	1.8	--	--
PAYCO	872	21.9	--	--	184.1	--	--	2.1	--	--
GOLDEN HARVEST	H-2465	21.9	23	24	175.7	182	173	3.0	4	3
GREAT LAKES	GL577	22.0	--	--	187.3	--	--	0.9	--	--
RUPP	XR1639	22.0	--	--	169.0	--	--	3.3	--	--
AMCORN	PSX9009	22.0	--	--	172.7	--	--	2.9	--	--
PIONEER	3475	22.2	22	23	159.2	168	164	1.8	2	2
DAIRYLAND	DX-1107	22.2	--	--	176.1	--	--	1.8	--	--
*WOLVERINE	W167	22.3	24	24	192.0	191	175	1.2	3	3
GOLDEN HARVEST	EX545	22.3	--	--	184.8	--	--	1.8	--	--
GREAT LAKES	GL569	22.4	--	--	167.1	--	--	1.8	--	--
GOLDEN HARVEST	H-2485	22.4	--	--	180.6	--	--	2.3	--	--
BLANEY	B609	22.5	--	--	182.4	--	--	1.8	--	--
*RUPP	XR1739	22.5	--	--	194.7	--	--	1.6	--	--
DYNA-GRO	5410	22.8	24	--	187.9	181	--	1.2	2	--
*STINE	1116	22.8	24	--	204.1	193	--	1.4	2	--
*CALLAHAN	27188X	22.8	--	--	199.0	--	--	2.1	--	--
*BLANEY	B608	22.9	--	--	205.4	--	--	1.5	--	--
*KING AGRO	GG1008A	22.9	25	--	204.6	196	--	1.8	2	--
*GRIES	GSF-6110	23.1	--	--	211.2	--	--	0.8	--	--
PIONEER	3357	23.1	--	--	183.4	--	--	1.5	--	--
*TERRA	TR1090	23.1	--	--	204.8	--	--	1.5	--	--
*DAIRYLAND	DX-1110	23.1	25	26	211.5	199	185	1.1	1	2
*AMCORN	PSX9292	23.1	25	--	206.7	191	--	1.1	2	--
TERRA	TR1060	23.2	25	24	179.2	179	175	3.0	2	2

(continued below)

(continued below)

EARLY TRIAL (104 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
GREAT LAKES	GL482	19.4	21	21	169.4	165	163	1.6	3	3
BLANEY	B505	19.5	20	21	168.7	168	162	1.5	3	2
*PIONEER	3573	19.5	20	21	192.0	193	185	3.5	3	3
PIONEER	3733	19.5	20	--	170.6	173	--	0.5	2	--
DAIRYLAND	DX-1103	19.5	20	21	157.3	161	155	2.6	4	4
GREAT LAKES	GL496	19.6	--	--	170.6	--	--	2.4	--	--
GUTWEIN	2191	19.7	21	--	162.7	161	--	2.3	4	--
*COUNTRYMARK	C502X	19.7	--	--	194.2	--	--	1.4	--	--
RENK	RK646	19.7	--	--	161.9	--	--	2.2	--	--
*PROVICO	PRO760X	20.0	--	--	174.5	--	--	1.5	--	--
GREAT LAKES	GL468	20.1	--	--	151.2	--	--	2.1	--	--
*PAYCO	711	20.1	--	--	185.4	--	--	1.9	--	--
GREAT LAKES	GL536	20.2	--	--	170.4	--	--	1.3	--	--
*DEKALB	DK535	20.4	21	22	186.7	190	184	1.4	2	2
GRIES	GSF-4103	20.4	--	--	170.4	--	--	2.3	--	--
*STINE	1077	20.8	--	--	180.3	--	--	2.1	--	--
*ANDERSONS	PSX345	20.8	--	--	176.5	--	--	2.1	--	--
*AMCORN	PSX5757	20.8	--	--	178.7	--	--	1.1	--	--
*ASGROW	RX578	20.9	21	22	173.5	172	168	1.0	1	2
PROVICO	PRO790	21.1	--	--	169.5	--	--	2.2	--	--
CROW'S	210	21.1	--	--	153.3	--	--	1.6	--	--
ASGROW	RX626	21.3	22	23	160.0	171	163	1.5	2	2
*PRO-SEED	XS1043	22.0	--	--	204.5	--	--	1.7	--	--
AVERAGE		18.7	20	21	164.4	166	165	2.0	3	3
RANGE		15.9	17	18	131.6	149	151	0.5	1	2
		22.0	22	23	204.5	193	185	4.7	6	5
LEAST SIGNIFICANT DIFFERENCE		.4			8.7					

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (105 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
*DYNA-GRO	5470	23.3	--	--	203.4	--	--	1.6	--	--
CROW'S	449	23.3	24	26	170.8	173	165	1.0	1	1
*ASGROW	RX706	23.4	25	26	203.4	198	186	2.0	2	2
*DAIRYLAND	STEALTH-1112	23.5	--	--	195.3	--	--	2.1	--	--
*GREAT LAKES	GL583	23.6	--	--	197.3	--	--	2.7	--	--
CALLAHAN	C759	23.6	25	26	188.3	178	156	1.4	1	1
PROVICO	PRO880	23.7	25	--	181.5	182	--	2.1	2	--
PROVICO	PRO900	23.7	--	--	186.4	--	--	2.5	--	--
*ANDERSONS	PSX370	23.7	26	26	205.3	198	197	2.1	2	2
GRIES	GSF-635	23.9	--	--	178.3	--	--	2.9	--	--
*CARGILL	6227	23.9	25	27	193.8	190	182	1.1	2	2
PROVICO	PRO920	24.0	--	--	169.3	--	--	1.7	--	--
*CALLAHAN	C764	24.0	25	26	195.7	186	168	1.4	2	2
CROW'S	498	24.1	--	--	173.5	--	--	3.3	--	--
RENK	RK721	24.2	25	26	189.6	188	178	1.2	2	2
*UAPX	15014	24.8	--	--	202.3	--	--	1.2	--	--
*COUNTRYMARK	C682X	25.1	--	--	205.7	--	--	1.4	--	--
*RUPP	XRI774	25.4	--	--	198.5	--	--	0.9	--	--
AVERAGE		22.3	24	24	182.5	181	173	1.9	2	2
RANGE		19.1	22	22	146.8	155	153	0.3	1	1
		25.4	26	27	211.5	199	197	3.9	4	3
LEAST SIGNIFICANT DIFFERENCE		.5			9.2					

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

TABLE 9

NORTH CENTRAL MICHIGAN
HURON COUNTY TRIAL - GRAIN

ZONE 3

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (100 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
DEKALB	DK401	16.7	---	---	193.0	---	---	1.0	---	---
*FUNK'S	G-BRAND 4120	16.9	---	---	206.7	---	---	1.9	---	---
STINE	860	17.4	---	---	143.0	---	---	1.9	---	---
AMCORN	PSX3333	17.4	19	---	192.2	167	---	0.9	3	---
*TERRA	TR940	17.5	20	---	202.8	177	---	1.0	9	---
CROW'S	167	17.6	19	---	151.7	148	---	0.5	8	---
*CALLAHAN	C725	17.6	19	---	201.1	179	---	0.9	13	---
CARGILL	2437	17.7	---	---	142.8	---	---	3.8	---	---
TOP FARM	TFsx1195A	17.7	19	---	198.6	173	---	1.4	14	---
PROVICO	PRO540X	17.8	---	---	154.6	---	---	0.5	---	---
RENK	RK505	17.8	19	20	183.7	162	157	0.9	4	3
*PICKSEED	83-282	17.8	---	---	205.5	---	---	1.4	---	---
ASGROW	RX406	17.9	19	20	189.1	171	172	0.9	12	8
KING AGRO	K2204	17.9	19	---	171.8	163	---	0.5	6	---
CARGILL	2927	18.0	---	---	193.1	---	---	3.3	---	---
RENK	RK430	18.1	19	---	163.8	154	---	1.9	5	---
JACQUES	4120	18.2	---	---	168.1	---	---	0.5	---	---
NORTHTRUP KING	N3624	18.2	20	20	182.6	173	176	0.5	5	3
PICKSEED	5545	18.2	19	20	184.8	173	175	0.5	1	2
FUNK'S	G-BRAND 4140	18.3	---	---	180.2	---	---	1.9	---	---
UAPX	15011	18.3	---	---	133.8	---	---	15.1	---	---
COUNTRYMARK	C323X	18.4	---	---	151.9	---	---	3.3	---	---
JUNG	2496	18.4	20	---	195.7	181	---	3.2	4	---
*UAPX	15012	18.5	---	---	202.0	---	---	1.0	---	---
ASGROW	RX409	18.5	19	---	166.8	160	---	0.5	1	---
WOLVERINE	W133	18.6	19	---	156.2	139	---	3.4	11	---
STINE	900	18.6	---	---	158.5	---	---	0.0	---	---
TOP FARM	TFsx1097A	18.6	---	---	180.1	---	---	1.4	---	---
FUNK'S	G-BRAND 4160	18.7	19	---	180.9	158	---	0.5	6	---
SUPER CROST	1900	18.7	20	---	184.6	169	---	2.1	11	---
GREAT LAKES	GL446	18.7	20	20	187.5	173	172	1.4	7	5
RENK	RK534	18.7	19	22	166.4	158	156	0.9	8	5
PROVICO	PRO630X	18.8	---	---	176.8	---	---	0.0	---	---
KING AGRO	R416	18.8	20	21	194.6	184	179	1.9	3	2
NORTHTRUP KING	N3808	18.9	---	---	192.0	---	---	1.4	---	---
*PIONEER	XO215	18.9	---	---	199.6	---	---	0.0	---	---
*CARGILL	3427	18.9	20	---	205.1	188	---	1.4	7	---
*GOLDEN HARVEST	H-2331	18.9	20	21	203.9	195	187	1.4	6	5
PICKSEED	5665	18.9	20	20	166.7	164	174	0.0	0	1
RENK	RK602	19.1	---	---	162.0	---	---	1.4	---	---
GREAT LAKES	GL459	19.2	21	---	188.8	172	---	1.9	3	---
RUPP	EXP.1-191	19.2	---	---	178.1	---	---	0.5	---	---
GREAT LAKES	GL438	19.3	---	---	188.1	---	---	0.5	---	---
*PIONEER	3751	19.3	20	20	209.0	184	182	2.1	3	2
*DAIRYLAND	STEALTH-1198	19.3	---	---	199.3	---	---	0.9	---	---
CALLAHAN	C729	19.3	20	---	164.4	154	---	1.0	5	---
SUPER CROST	2000	19.4	---	---	175.9	---	---	1.4	---	---
WOLVERINE	W156	19.4	20	22	192.3	171	164	0.5	5	3
DAIRYLAND	DX-1100	19.4	21	---	187.1	172	---	0.9	3	---
CALLAHAN	C743	19.4	21	---	197.2	180	---	1.4	4	---
SUPER CROST	1999	19.5	---	---	196.2	---	---	1.0	---	---
GREAT LAKES	GL482	19.7	21	22	184.6	177	171	0.9	3	2
*NORTHTRUP KING	N4242	19.7	---	---	204.4	---	---	2.8	---	---
AMCORN	PSX5555	19.7	22	23	199.5	178	180	0.9	2	1
*DEKALB	DK485	19.9	21	22	203.5	193	181	0.0	4	3

LATE TRIAL (101 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
PICKSEED	83-280	19.2	---	---	162.8	---	---	0.0	---	---
FUNK'S	G-BRAND 4299	19.4	21	22	195.1	185	185	2.0	2	2
JUNG	2696	19.5	---	---	199.1	---	---	4.3	---	---
PAYCO	648	19.9	---	---	187.4	---	---	1.9	---	---
STINE	1015	20.1	---	---	171.1	---	---	2.9	---	---
*FUNK'S	Exp. 2078X	20.2	---	---	205.8	---	---	1.9	---	---
TERRA	Exp. 190	20.2	---	---	187.1	---	---	2.8	---	---
TERRA	TR1010	20.5	23	23	201.1	181	177	1.0	1	1
BLANEY	B505	20.6	21	23	197.9	169	169	0.9	5	4
UAPX	15013	20.7	---	---	193.8	---	---	0.5	---	---
*PIONEER	3527	20.8	22	---	212.9	207	---	0.5	0	---
BLANEY	B405	20.9	---	---	176.8	---	---	2.3	---	---
*PIONEER	3573	21.0	21	22	232.4	214	211	1.0	6	4
CROW'S	414	21.2	23	---	169.9	161	---	2.3	8	---
GREAT LAKES	GL499	21.3	---	---	177.7	---	---	1.9	---	---
CROW'S	227	21.3	22	---	165.5	162	---	0.5	3	---
TERRA	TR1020	21.4	22	---	191.0	173	---	0.0	11	---
RENK	RK646	21.4	23	---	194.4	169	---	3.7	3	---
*PIONEER	3475	21.5	23	24	205.8	189	180	0.0	1	1
KING AGRO	K402	21.7	---	---	164.8	---	---	1.6	---	---
KING AGRO	K451	21.8	---	---	172.0	---	---	1.0	---	---
CARGILL	4327	21.8	22	23	186.7	184	177	0.9	3	2
PROVICO	PRO760X	21.9	---	---	172.6	---	---	1.0	---	---
GREAT LAKES	GL536	22.0	---	---	188.4	---	---	4.2	---	---
COUNTRYMARK	C502X	22.0	---	---	190.0	---	---	1.0	---	---
PROVICO	PRO751	22.1	23	---	192.8	182	---	0.5	4	---
AMCORN	PSX5757	22.2	---	---	187.6	---	---	3.2	---	---
STINE	1077	22.3	---	---	197.3	---	---	1.4	---	---
CARGILL	37012	22.3	---	---	182.7	---	---	2.3	---	---
KING AGRO	K5574	22.4	24	25	199.5	190	182	6.3	6	4
CARGILL	5157	22.4	24	25	178.1	170	169	2.4	3	2
RENK	RK702	22.6	---	0	197.6	---	153	1.4	---	2
GREAT LAKES	GL579	22.7	25	26	189.5	194	189	2.0	2	2
ASGROW	RX578	23.0	23	24	188.2	170	173	0.5	3	2
CALLAHAN	24448X	23.0	---	---	197.7	---	---	1.0	---	---
BLANEY	B603	23.1	---	---	190.0	---	---	0.0	---	---
PROVICO	PRO811	23.1	24	---	172.2	166	---	1.5	8	---
AMCORN	PSX7450	23.1	---	---	193.2	---	---	1.0	---	---
SUPER CROST	2989	23.2	---	---	172.1	---	---	2.0	---	---
GOLDEN HARVEST	H-2465	23.3	24	---	191.1	180	---	1.4	5	---
CALLAHAN	27199X	23.3	---	---	172.4	---	---	0.5	---	---
CROW'S	380	23.4	25	---	159.6	159	---	3.2	8	---
DYNA-GRO	5351	23.5	24	---	186.4	145	---	1.5	3	---
GOLDEN HARVEST	H-2485	23.7	---	---	191.3	---	---	1.4	---	---
GOLDEN HARVEST	EX545	23.7	---	---	188.0	---	---	1.9	---	---
CALLAHAN	C748	23.7	---	---	168.4	---	---	0.5	---	---
PROVICO	PRO790	23.8	---	---	177.8	---	---	2.0	---	---
ASGROW	RX626	23.9	25	25	185.0	176	175	0.9	3	2
COUNTRYMARK	C565X	23.9	---	---	175.3	---	---	1.6	---	---
RUPP	XR1639	23.9	---	---	159.8	---	---	0.5	---	---
BLANEY	B607wx	24.2	25	---	165.1	159	---	0.5	7	---
GREAT LAKES	GL577	24.3	---	---	167.5	---	---	0.5	---	---
RENK	RK721	24.3	26	27	193.3	176	170	2.8	2	2
GREAT LAKES	GL569	24.6	---	---	167.1	---	---	0.9	---	---
WOLVERINE	W167	25.2	---	---	178.2	---	---	0.9	---	---

(continued below)

(continued below)

EARLY TRIAL (100 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
	1991	YR	YR	1991	YR	YR	1991	YR	YR
FUNK'S COUNTRYMARK	20.0	21	---	187.5	172	---	0.0	1	---
*CALLAHAN	20.0	---	---	193.3	---	---	3.8	---	---
*JACOUES	20.1	22	---	200.2	---	---	0.5	---	---
*GOLDEN HARVEST	20.1	---	---	215.1	197	---	0.5	2	---
ANDERSONS	20.2	---	---	201.9	---	---	1.4	---	---
PIONEER	20.3	21	---	184.3	---	---	0.5	---	---
*GREAT LAKES	20.4	---	---	182.2	180	---	1.9	3	---
CROW'S	20.6	---	---	196.3	---	---	2.3	---	---
DAIRYLAND	20.6	---	---	203.2	---	---	2.8	---	---
JUNG	20.8	---	---	161.8	---	---	0.9	---	---
PAYCO	21.0	---	---	166.1	---	---	0.0	---	---
GREAT LAKES	21.2	---	---	172.0	---	---	1.0	---	---
PIONEER	21.2	---	---	187.3	---	---	0.9	---	---
ASGROW	21.2	21	---	167.8	---	---	0.0	---	---
GOLDEN HARVEST	21.4	---	---	165.6	---	---	0.5	---	---
TOP FARM	21.6	22	---	187.7	171	---	1.9	5	---
STINE	21.8	---	---	177.0	---	---	0.9	---	---
ANDERSONS	21.8	22	23	186.3	178	---	3.2	11	---
AMCORN	21.8	---	---	192.1	---	---	0.5	---	---
RUPP	21.9	---	---	189.0	177	176	1.0	2	2
KING AGRO	22.1	23	23	146.1	---	---	2.1	---	---
AVERAGE	19.2	20	21	157.4	---	---	0.0	---	---
RANGE	16.7	19	20	194.6	179	181	0.5	2	1
LEAST SIGNIFICANT DIFFERENCE	1.3	---	---	133.8	139	156	0.0	0	1
COEFFICIENT OF VARIANCE	9%	---	---	20 TO	20 TO	20 TO	15.1	14	8
	22.1	23	23	215.1	197	187	15.1	14	8

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (101 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
	1991	YR	YR	1991	YR	YR	1991	YR	YR
CALLAHAN	25.3	---	---	189.9	---	---	0.5	---	---
PROVICO	25.5	---	---	182.5	---	---	0.0	---	---
COUNTRYMARK	27.4	---	---	177.8	---	---	0.0	---	---
AVERAGE	22.4	23	24	183.9	176	180	1.5	4	2
RANGE	19.2	21	22	136.4	145	169	0.0	0	1
LEAST SIGNIFICANT DIFFERENCE	27.4	26	27	232.4	214	211	6.3	11	4
COEFFICIENT OF VARIANCE	11%	---	---	---	---	---	---	---	---

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

1991
PLANTED May 15
HARVESTED October 16
SOIL TYPE Kilmanagh Loam
PREVIOUS CROP Corn
POPULATION 27,400
ROW WIDTH 30"
FERTILIZER 160-141-6
SOIL TEST: pH 6.9
P 98 (high)
K 384 (very high)

1990
PLANTED May 14
HARVESTED November 16
SOIL TYPE Kilmanagh Loam
PREVIOUS CROP Corn
POPULATION 24,500
ROW WIDTH 30"
FERTILIZER 163-57-98
SOIL TEST: pH 7.6
P 140 (very high)
K 187 (medium)

1989
PLANTED May 10
HARVESTED October 29
SOIL TYPE Kilmanagh Loam
PREVIOUS CROP Corn
POPULATION 19,900
ROW WIDTH 30"
FERTILIZER 193-49-97
SOIL TEST: pH 7.8
P 104 (very high)
K 172 (medium)

FARM COOPERATOR: William McCrea, Bad Axe
COUNTY EXTENSION DIRECTOR: Robert Johnson, Bad Axe
EXTENSION AGRICULTURAL AGENT: James LeCureux, Bad Axe

TABLE 10

NORTH CENTRAL MICHIGAN
MONTCALM COUNTY - IRRIGATED TRIAL
ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

ZONE 3

EARLY TRIAL (100 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
STINE	860	16.6	--	--	191.3	--	--	2.3	--	--
DEKALB	DK401	16.7	--	--	213.7	--	--	2.3	--	--
UAPX	15011	17.0	--	--	199.3	--	--	0.5	--	--
CARGILL	2927	17.1	--	--	214.8	--	--	5.1	--	--
JACQUES	4120	17.2	--	--	200.5	--	--	5.1	--	--
NORTHUP KING	N3624	17.3	22	20	220.3	184	191	0.9	1	2
CROW'S	167	17.3	20	--	159.9	150	--	6.5	4	--
WOLVERINE	W133	17.4	21	--	192.5	161	--	4.2	3	--
KING AGRO	K2204	17.4	21	--	194.2	160	--	2.8	3	--
STINE	900	17.4	--	--	195.9	--	--	4.2	--	--
COUNTRYMARK	C323X	17.5	--	--	185.8	--	--	4.4	--	--
FUNK'S	G-BRAND 4120	17.6	--	--	223.9	--	--	0.9	--	--
PROVICO	PRO540X	17.7	--	--	200.1	--	--	1.9	--	--
PICKSEED	5545	17.7	22	--	194.1	172	--	0.0	2	--
NORTHUP KING	N3808	17.8	--	--	210.9	--	--	3.7	--	--
RENK	RK534	17.8	22	--	195.1	168	--	0.9	6	--
PICKSEED	83-282	17.8	--	--	223.8	--	--	0.9	--	--
GREAT LAKES	GL459	18.0	22	--	206.8	191	--	2.3	3	--
*UAPX	15012	18.0	--	--	229.0	--	--	0.0	--	--
RENK	RK505	18.0	22	--	183.8	151	--	3.3	4	--
PICKSEED	5665	18.0	21	--	211.5	180	--	3.4	6	--
GREAT LAKES	GL446	18.1	24	--	210.4	186	--	1.4	3	--
CALLAHAN	C725	18.1	21	19	197.2	175	175	3.2	5	3
NORTHUP KING	N4242	18.2	--	--	215.5	--	--	3.2	--	--
ASGROW	RX409	18.2	23	--	214.3	186	--	3.8	2	--
ASGROW	RX406	18.2	23	21	191.9	168	178	4.2	4	3
PROVICO	PRO630X	18.2	--	--	202.8	--	--	3.5	--	--
RENK	RK430	18.2	22	--	187.8	160	--	2.9	3	--
FUNK'S	G-BRAND 4140	18.3	--	--	202.0	--	--	3.7	--	--
KING AGRO	K416	18.3	23	20	203.7	176	174	2.8	3	3
TERRA	TR940	18.3	23	--	199.7	174	--	2.3	6	--
*GOLDEN HARVEST	H-2331	18.3	23	21	229.0	205	187	2.9	4	4
CALLAHAN	C729	18.3	22	20	194.3	167	168	2.3	1	1
*DEKALB	DK485	18.4	24	--	237.6	208	--	2.8	4	--
FUNK'S	G-BRAND 4160	18.4	21	--	205.2	181	--	0.0	2	--
SUPER CROST	1900	18.4	24	--	208.5	194	--	2.8	5	--
*JACQUES	4770	18.4	24	--	227.8	202	--	1.4	2	--
*PIONEER	XO215	18.6	--	--	249.9	--	--	2.3	--	--
CARGILL	3427	18.6	24	--	216.1	197	--	1.4	4	--
RENK	RK602	18.6	--	--	187.9	--	--	4.6	--	--
*PIONEER	3751	18.7	22	20	226.3	188	177	1.9	5	5
COUNTRYMARK	C432X	18.7	--	--	215.8	--	--	0.0	--	--
CARGILL	2437	18.7	--	--	179.1	--	--	3.7	--	--
TOP FARM	TFsx1195A	18.7	23	--	202.1	181	--	2.8	7	--
AMCORN	PSX3333	18.7	22	20	216.7	181	182	3.7	5	4
DAIRYLAND	DX-1100	18.8	24	--	225.7	193	--	0.9	3	--
RUPP	Exp. 1-191	18.8	--	--	193.8	--	--	2.3	--	--
SUPER CROST	2000	18.9	--	--	216.1	--	--	0.9	--	--
*DAIRYLAND	STEALTH-1198	18.9	--	--	243.0	--	--	2.8	--	--
*DAIRYLAND	STEALTH-1201	19.0	--	--	248.0	--	--	2.3	--	--
JUNG	2496	19.0	24	22	199.6	169	175	2.8	3	4
GOLDEN HARVEST	H-2349	19.0	--	--	215.8	--	--	1.4	--	--
ANDERSONS	PSX250	19.1	--	--	199.6	--	--	2.3	--	--
GREAT LAKES	GL438	19.2	--	--	208.0	--	--	1.9	--	--
*PIONEER	X9310	19.2	--	--	258.3	--	--	0.5	--	--

LATE TRIAL (101 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))										
		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
HYBRID (BRAND-VARIETY)		1991	2	3	1991	2	3	1991	2	3
PICKSEED	83-280	18.2	--	--	220.1	--	--	2.4	--	--
FUNK'S	G-BRAND 4299	18.3	24	--	215.7	185	--	2.3	3	--
KING AGRO	K402	19.0	--	--	223.6	--	--	1.4	--	--
CROW'S	227	19.0	26	--	225.6	179	--	0.5	1	--
GREAT LAKES	GL499	19.3	--	--	225.4	--	--	2.3	--	--
CARGILL	37012	19.4	--	--	220.2	--	--	1.9	--	--
COUNTRYMARK	C502X	19.5	--	--	191.6	--	--	1.9	--	--
STINE	1015	19.5	--	--	207.1	--	--	1.9	--	--
GREAT LAKES	GL536	19.6	--	--	210.7	--	--	1.9	--	--
BLANEY	B405	19.7	--	--	196.3	--	--	9.3	--	--
BLANEY	B505	19.7	25	23	198.5	175	171	3.2	4	4
TERRA	TR1020	19.7	26	--	200.1	182	--	2.8	4	--
UAPX	15013	19.8	--	--	210.3	--	--	4.6	--	--
JUNG	2696	19.8	--	--	219.3	--	--	6.6	--	--
TERRA	TR1010	19.9	25	--	193.1	173	--	3.4	3	--
PAYCO	648	20.0	--	--	221.1	--	--	0.5	--	--
KING AGRO	K451	20.1	--	--	187.6	--	--	2.5	--	--
FUNK'S	Exp. 2078X	20.2	--	--	220.1	--	--	1.4	--	--
TERRA	Exp. 190	20.2	--	--	194.5	--	--	2.8	--	--
*PIONEER	3573	20.3	26	23	242.8	201	192	3.7	3	3
*PIONEER	3527	20.3	27	--	249.4	213	--	1.0	1	--
CROW'S	414	20.3	26	--	221.3	184	--	5.1	3	--
RENK	RK646	20.4	25	--	193.6	170	--	1.4	3	--
ASGROW	RX578	20.6	26	24	203.7	177	172	1.9	1	2
PROVICO	PRO751	20.6	27	--	215.0	179	--	3.1	2	--
CALLAHAN	27199X	20.6	--	--	201.2	--	--	4.3	--	--
AMCORN	PSX7450	20.7	--	--	213.1	--	--	0.5	--	--
*BLANEY	B603	20.9	--	--	233.8	--	--	0.5	--	--
PROVICO	PRO760X	20.9	--	--	210.9	--	--	1.9	--	--
KING AGRO	K5574	21.0	27	24	223.7	192	189	4.9	5	4
CARGILL	4327	21.0	27	25	217.1	184	186	3.4	3	3
CARGILL	5157	21.1	27	24	213.4	190	186	2.8	4	3
AMCORN	PSX5757	21.1	--	--	221.1	--	--	2.8	--	--
CALLAHAN	24448X	21.2	--	--	226.8	--	--	0.9	--	--
COUNTRYMARK	C565X	21.3	--	--	215.5	--	--	4.9	--	--
DYNA-GRO	5351	21.4	26	--	195.1	168	--	1.4	2	--
PROVICO	PRO790	21.4	--	--	209.1	--	--	1.5	--	--
STINE	1077	21.4	--	--	216.4	--	--	2.3	--	--
CROW'S	380	21.4	26	--	210.9	179	--	4.2	7	--
SUPER CROST	2989	21.5	--	--	205.7	--	--	5.0	--	--
WOLVERINE	W167	21.5	--	--	224.7	--	--	0.9	--	--
*PIONEER	3475	21.5	26	24	234.3	196	178	1.0	1	2
GOLDEN HARVEST	H-2465	21.5	26	--	223.9	193	--	3.7	4	--
RUPP	XR1639	21.6	--	--	205.2	--	--	4.2	--	--
CALLAHAN	C748	21.6	--	--	212.8	--	--	0.5	--	--
ASGROW	RX626	21.7	28	26	198.9	177	172	3.7	2	2
PROVICO	PRO811	21.8	28	--	212.6	178	--	1.9	3	--
GREAT LAKES	GL579	22.0	27	--	217.3	197	--	3.2	5	--
RENK	RK702	22.0	--	--	191.0	--	--	3.2	--	--
GREAT LAKES	GL569	22.1	--	--	205.9	--	--	6.0	--	--
GREAT LAKES	GL577	22.2	--	--	224.0	--	--	2.0	--	--
BLANEY	B607wx	22.4	28	--	218.3	181	--	1.4	2	--
RENK	RK721	22.4	30	27	232.8	188	180	2.3	2	2
GOLDEN HARVEST	H-2485	22.5	--	--	232.1	--	--	0.5	--	--
CALLAHAN	27188X	23.0	--	--	208.4	--	--	3.7	--	--

(continued below)

(continued below)

EARLY TRIAL (100 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
ASGROW	RX469	19.3	24	--	223.6	195	--	1.4	4	--
JUNG	2514	19.3	--	--	199.3	--	--	2.3	--	--
CROW'S	179	19.3	--	--	191.3	--	--	4.2	--	--
AMCORN	PSX4343	19.3	--	--	181.7	--	--	3.3	--	--
CALLAHAN	C743	19.3	25	23	214.0	183	177	6.5	6	4
FUNK'S	G-BRAND 4260	19.4	22	--	211.7	170	--	1.4	2	--
GREAT LAKES	GL468	19.4	--	--	181.6	--	--	1.9	--	--
AMCORN	PSX5555	19.5	25	23	204.9	183	181	1.4	4	5
SUPER CROST	1999	19.6	--	--	194.9	--	--	1.5	--	--
*GREAT LAKES	GL450	19.6	--	--	232.5	--	--	3.7	--	--
*PIONEER	3733	19.6	24	--	242.2	209	--	2.8	2	--
STINE	1021	19.6	--	--	207.2	--	--	1.9	--	--
GREAT LAKES	GL482	19.7	23	22	203.8	176	173	1.9	4	3
WOLVERINE	W156	19.7	23	22	213.1	186	177	2.3	4	3
GREAT LAKES	GL496	19.9	--	--	214.3	--	--	2.8	--	--
TOP FARM	TFsx1101	19.9	25	--	213.7	184	--	2.8	3	--
TOP FARM	TFsx1097A	20.0	--	--	188.2	--	--	1.9	--	--
*ANDERSONS	PSX290	20.0	25	--	229.9	199	--	0.9	2	--
*GOLDEN HARVEST	H-2390	20.0	--	--	239.1	--	--	1.9	--	--
RUPP	XR1505	20.1	--	--	213.0	--	--	1.9	--	--
PAYCO	687	20.1	--	--	222.6	--	--	5.1	--	--
CALLAHAN	27128X	20.5	--	--	193.3	--	--	3.4	--	--
KING AGRO	GG955	20.7	26	23	205.1	173	172	1.9	2	3
AVERAGE		18.6	23	21	208.9	181	178	2.5	3	3
RANGE		16.6	20	19	159.9	150	168	0.0	1	1
		20.7	26	23	258.3	209	191	6.5	7	5
LEAST SIGNIFICANT DIFFERENCE		1.2			17.0					
COEFFICIENT OF VARIANCE		8%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (101 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
GOLDEN HARVEST	EX545	23.1	--	--	221.1	--	--	3.2	--	--
PROVICO	PRO880	23.4	--	--	213.4	--	--	2.0	--	--
COUNTRYMARK	C682X	23.4	--	--	223.4	--	--	0.0	--	--
AVERAGE		20.9	26	24	214.1	184	181	2.7	3	3
RANGE		18.2	24	23	187.6	168	171	0.0	1	2
		23.4	30	27	249.4	213	192	9.3	7	4
LEAST SIGNIFICANT DIFFERENCE		.8			19.6					
COEFFICIENT OF VARIANCE		10%								

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

1991
PLANTED May 10
HARVESTED October 21
SOIL TYPE Montcalm-McBride
Sandy Loam
PREVIOUS CROP Potatoes
POPULATION 28,100
ROW WIDTH 30"
FERTILIZER 180-0-120
SOIL TEST: pH 6.2
P 310 (very high)
K 151 (low)
IRRIGATION 5.5 inches

1990
PLANTED May 14
HARVESTED November 7
SOIL TYPE Montcalm-McBride
Sandy Loam
PREVIOUS CROP Potatoes
POPULATION 22,600
ROW WIDTH 30"
FERTILIZER 150-15-60
SOIL TEST: pH 5.4
P 429 (very high)
K 175 (medium)
IRRIGATION 6.2 inches

1989
PLANTED May 6
HARVESTED October 30-31
SOIL TYPE Montcalm-McBride
Sandy Loam
PREVIOUS CROP Potatoes
POPULATION 19,200
ROW WIDTH 30"
FERTILIZER 232-60-75
SOIL TEST: pH 6.0
P 428 (very high)
K 296 (high)
IRRIGATION 8 inches

FARM COOPERATOR: Richard Crawford, Montcalm Research Farm, Entrican
COUNTY EXTENSION DIRECTOR: Donald Smucker, Stanton
EXTENSION AGRICULTURAL AGENT: George Atkeson, Stanton

TABLE 11 NORTH CENTRAL MICHIGAN ZONE 3
MASON COUNTY - IRRIGATED TRIAL
ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (100 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
FUNK'S	G-BRAND 4120	19.7	--	--	193.9	--	--	2.0	--	--
RENK	RK430	19.8	21	--	166.0	152	--	4.9	4	--
STINE	860	20.0	--	--	177.9	--	--	4.4	--	--
DEKALB	DK401	20.1	--	--	166.4	--	--	4.7	--	--
NORTHTRUP KING	N3624	20.2	21	19	194.8	179	168	1.0	1	1
UAPX	15011	20.2	--	--	179.1	--	--	2.0	--	--
KING AGRO	R2204	20.2	21	--	174.2	165	--	2.9	2	--
PICKSEED	83-282	20.5	--	--	192.4	--	--	2.9	--	--
SUPER CROST	1900	20.6	22	--	201.1	197	--	2.0	3	--
PROVICO	PRO540X	21.0	--	--	162.0	--	--	2.0	--	--
JACQUES	4120	21.1	--	--	184.1	--	--	3.9	--	--
WOLVERINE	W156	21.4	23	--	158.5	162	--	2.6	3	--
ASGROW	RX406	21.5	23	21	170.2	164	156	4.9	5	3
*PIONEER	X9310	21.7	--	--	231.6	--	--	1.5	--	--
COUNTRYMARK	C323X	21.8	--	--	168.9	--	--	3.6	--	--
CROW'S	167	21.8	21	--	160.0	157	--	4.9	3	--
PICKSEED	5545	21.8	22	--	182.1	166	--	3.0	3	--
*DAIRYLAND	DX-1100	21.9	23	--	209.9	195	--	4.9	4	--
CARGILL	2437	22.0	--	--	193.4	--	--	3.9	--	--
*PIONEER	XO215	22.1	--	--	236.2	--	--	0.0	--	--
GREAT LAKES	GL446	22.2	23	--	193.9	188	--	5.4	4	--
KING AGRO	R416	22.2	23	21	197.5	181	164	2.5	3	3
PICKSEED	5665	22.2	22	--	198.6	177	--	3.4	3	--
CARGILL	2927	22.3	--	--	186.5	--	--	4.0	--	--
CALLAHAN	C725	22.3	22	--	177.9	168	--	2.9	4	--
FUNK'S	G-BRAND 4140	22.5	--	--	179.0	--	--	2.5	--	--
RENK	RK534	22.5	22	--	182.7	171	--	2.9	3	--
RENK	RK505	22.6	22	--	154.3	135	--	5.9	5	--
*CARGILL	3427	22.8	23	--	211.0	199	--	5.4	4	--
TOP FARM	TFsx1195A	22.8	23	--	172.1	163	--	2.0	4	--
AMCORN	PSX3333	22.9	23	21	175.4	157	145	2.5	4	4
CALLAHAN	27128X	22.9	--	--	157.7	--	--	4.9	--	--
FUNK'S	G-BRAND 4260	23.9	24	--	182.2	174	--	1.0	1	--
GREAT LAKES	GL438	23.0	--	--	170.7	--	--	2.5	--	--
TERRA	TR940	23.0	23	--	197.2	173	--	3.4	4	--
*UAPX	15012	23.1	--	--	209.7	--	--	1.5	--	--
COUNTRYMARK	C432X	23.1	--	--	193.9	--	--	3.4	--	--
RENK	RK602	23.1	--	--	202.2	--	--	1.5	--	--
RUPP	Exp.1-191	23.1	--	--	183.3	--	--	2.0	--	--
CALLAHAN	C729	23.1	23	--	171.3	161	--	4.4	3	--
GREAT LAKES	GL459	23.2	23	--	188.8	169	--	1.0	4	--
WOLVERINE	W133	23.2	23	--	192.8	167	--	2.0	3	--
PIONEER	3751	23.3	24	21	203.5	190	175	4.0	4	3
NORTHTRUP KING	N4242	23.4	--	--	202.1	--	--	3.4	--	--
STINE	900	23.4	--	--	171.4	--	--	2.5	--	--
TOP FARM	TFsx1097A	23.4	--	--	171.4	--	--	1.5	--	--
CROW'S	179	23.6	--	--	186.0	--	--	3.4	--	--
NORTHTRUP KING	N3808	23.7	--	--	196.8	--	--	5.4	--	--
*GREAT LAKES	GL496	23.8	--	--	208.4	--	--	4.4	--	--
*DAIRYLAND	STEALTH-1201	23.9	--	--	219.0	--	--	1.5	--	--
JUNG	2514	24.0	--	--	176.9	--	--	2.5	--	--
FUNK'S	G-BRAND 4160	24.1	24	--	189.0	172	--	2.5	2	--
JACQUES	4770	24.1	23	--	201.6	185	--	1.5	3	--
ANDERSONS	PSX250	24.1	--	--	160.1	--	--	3.4	--	--
*PIONEER	3733	24.2	26	--	241.2	208	--	1.0	1	--

LATE TRIAL (101 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2	3	1991	2	3	1991	2	3
PICKSEED	83-280	22.3	--	--	182.0	--	--	4.2	--	--
FUNK'S	G-BRAND 4299	23.3	25	22	203.4	181	173	2.5	2	1
STINE	1015	23.3	--	--	176.7	--	--	4.4	--	--
JUNG	2696	23.8	--	--	196.1	--	--	4.9	--	--
BLANEY	B505	24.4	25	--	175.1	157	--	3.4	2	--
TERRA	TR1010	24.6	24	--	188.1	162	--	2.9	2	--
BLANEY	B405	24.7	--	--	193.1	--	--	3.4	--	--
FUNK'S	Exp.2078X	24.8	--	--	193.7	--	--	0.5	--	--
TERRA	Exp.190	24.8	--	--	187.8	--	--	2.9	--	--
KING AGRO	K402	24.9	--	--	204.7	--	--	2.5	--	--
RENK	RK646	24.9	26	--	186.2	161	--	1.0	2	--
TERRA	TR1020	25.5	27	--	175.7	167	--	0.5	2	--
UAPX	15013	25.8	--	--	196.3	--	--	2.0	--	--
*PIONEER	3573	25.9	27	24	237.7	207	194	2.9	2	2
PAYCO	648	26.1	--	--	179.0	--	--	2.0	--	--
*STINE	1077	26.2	--	--	215.6	--	--	2.5	--	--
KING AGRO	K451	26.6	--	--	198.7	--	--	1.5	--	--
CROW'S	414	27.0	27	--	180.2	158	--	5.4	4	--
CROW'S	227	27.2	28	--	187.4	164	--	1.0	1	--
COUNTRYMARK	C502X	27.3	--	--	201.4	--	--	3.4	--	--
AMCORN	PSX5757	27.3	--	--	203.0	--	--	1.5	--	--
*CARGILL	4327	27.4	28	--	221.6	193	--	3.4	3	--
CARGILL	5157	27.4	28	--	199.7	190	--	1.0	1	--
DYNA-GRO	5351	27.5	29	--	177.3	155	--	1.5	1	--
PROVICO	PRO760X	27.7	--	--	206.6	--	--	2.5	--	--
*GREAT LAKES	GL536	27.8	--	--	218.2	--	--	1.5	--	--
PROVICO	PRO751	27.8	29	--	191.1	175	--	4.4	3	--
GREAT LAKES	GL499	27.9	--	--	211.4	--	--	3.5	--	--
RUPP	XR1639	27.9	--	--	200.8	--	--	4.9	--	--
*PIONEER	3475	28.0	28	26	227.0	209	193	2.1	2	2
GREAT LAKES	GL579	28.1	29	--	212.5	204	--	5.4	4	--
CROW'S	380	28.1	29	--	206.0	178	--	3.4	5	--
*KING AGRO	K5574	28.6	30	27	219.1	193	177	5.9	4	3
COUNTRYMARK	C565X	28.6	--	--	184.2	--	--	2.5	--	--
CALLAHAN	27199X	28.6	--	--	184.1	--	--	1.0	--	--
PIONEER	3527	28.8	30	--	212.4	194	--	0.0	0	--
ASGROW	RX578	28.9	29	26	178.8	163	150	2.9	2	2
CARGILL	37012	28.9	--	--	190.6	--	--	2.0	--	--
SUPER CROST	2989	29.0	--	--	178.4	--	--	2.1	--	--
GOLDEN HARVEST	H-2465	29.0	30	--	206.0	181	--	2.9	2	--
BLANEY	B603	29.2	--	--	206.9	--	--	2.0	--	--
PROVICO	PRO790	29.6	--	--	201.2	--	--	5.4	--	--
*BLANEY	B607wx	29.8	30	--	220.5	196	--	2.0	3	--
PROVICO	PRO811	29.9	30	--	186.4	170	--	1.0	1	--
CALLAHAN	24448X	30.0	--	--	195.3	--	--	2.0	--	--
AMCORN	PSX7450	30.1	--	--	204.7	--	--	3.6	--	--
*CALLAHAN	27188X	30.3	--	--	224.0	--	--	2.5	--	--
CALLAHAN	C748	30.5	--	--	184.8	--	--	1.5	--	--
RENK	RK702	30.6	--	--	180.2	--	--	2.0	--	--
GOLDEN HARVEST	H-2485	31.0	--	--	193.1	--	--	1.5	--	--
WOLVERINE	W167	31.2	--	--	199.5	--	--	2.5	--	--
ASGROW	RX626	31.2	30	--	172.5	168	--	3.9	3	--
GREAT LAKES	GL577	31.4	--	--	196.2	--	--	1.0	--	--
GREAT LAKES	GL569	31.5	--	--	211.8	--	--	1.5	--	--
RENK	RK721	32.1	34	--	192.6	174	--	2.5	1	--

(continued below)

(continued below)

EARLY TRIAL (100 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	YR	YR	1991	YR	YR	1991	YR	YR
ASGROW	RX409	24.2	24	--	172.4	168	--	2.5	2	--
SUPER CROST	1999	24.3	--	--	185.1	--	--	2.5	--	--
JUNG	2496	24.3	24	--	186.0	182	--	5.4	5	--
PAYCO	687	24.3	--	--	188.9	--	--	5.9	--	--
GOLDEN HARVEST	H-2349	24.3	--	--	203.2	--	--	2.9	--	--
CALLAHAN	C743	24.5	24	--	184.4	170	--	3.9	5	--
SUPER CROST	2000	24.6	--	--	182.1	--	--	2.5	--	--
*STINE	1021	24.6	--	--	212.3	--	--	1.5	--	--
AMCORN	PSX4343	24.6	--	--	163.3	--	--	1.0	--	--
GREAT LAKES	GL468	24.7	--	--	185.1	--	--	3.0	--	--
*DAIRYLAND	STEALTH-1198	24.7	--	--	215.8	--	--	2.9	--	--
AMCORN	PSX5555	24.9	25	--	192.9	169	--	5.9	5	--
*GOLDEN HARVEST	H-2331	25.1	25	--	215.9	206	--	3.4	4	--
ASGROW	RX469	25.2	25	--	201.9	182	--	2.5	3	--
TOP FARM	TFsx1101	25.3	26	--	200.7	187	--	2.5	2	--
KING AGRO	GG955	25.4	26	23	193.2	180	169	4.4	4	2
RUPP	XR1505	25.6	--	--	188.2	--	--	0.5	--	--
GREAT LAKES	GL482	25.7	25	23	175.3	167	152	3.4	4	4
GREAT LAKES	GL450	25.7	--	--	198.5	--	--	2.5	--	--
*ANDERSONS	PSX290	26.0	27	--	215.1	192	--	3.4	2	--
*GOLDEN HARVEST	H-2390	27.3	--	--	210.7	--	--	6.4	--	--
DEKALB	DK485	28.1	27	--	186.1	183	--	4.4	5	--
PROVICO	PRO630X	29.4	--	--	120.2	--	--	41.2	--	--
AVERAGE		23.2	23	21	188.3	175	161	3.6	3	3
RANGE		19.7	21	19	120.2	135	145	0.0	1	1
		29.4	27	23	241.2	208	175	41.2	5	4
LEAST SIGNIFICANT DIFFERENCE		1.9			19.7					
COEFFICIENT OF VARIANCE		11%								
*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991										

LATE TRIAL (101 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	YR	YR	1991	YR	YR	1991	YR	YR
GOLDEN HARVEST	EX545	32.8	--	--	193.8	--	--	0.5	--	--
PROVICO	PRO880	33.0	--	--	204.2	--	--	3.6	--	--
COUNTRYMARK	C682X	36.8	--	--	198.1	--	--	1.0	--	--
AVERAGE		28.1	28	25	197.5	178	177	2.6	2	2
RANGE		22.3	24	22	172.5	155	150	0.0	0	1
		36.8	34	27	237.7	209	194	5.9	5	3
LEAST SIGNIFICANT DIFFERENCE		1.1			17.3					
COEFFICIENT OF VARIANCE		9%								
*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991										

	1991	1990	1989
PLANTED	May 11	May 18	May 11
HARVESTED	October 9	November 8	November 1
SOIL TYPE	Arenac Loamy Sand	Iosco Sandy Loam	Iosco Sandy Loam
PREVIOUS CROP	Snap beans-rye cover	Snap beans	Snap beans-rye cover
POPULATION	26,600	24,400	19,600
ROW WIDTH	30"	30"	30"
FERTILIZER	109-23-30+10 tons manure	116-41-60	135-20-80
SOIL TEST: pH	6.6	6.8	6.5
P	169 (very high)	299 (very high)	201 (very high)
K	328 (very high)	449 (very high)	272 (high)
IRRIGATION	4 inches	1 inch	4 inches
FARM COOPERATORS:	Robert and August Oshe,	Scottville	
COUNTY EXTENSION DIRECTOR:	David Peterson,	Scottville	

TABLE 12 NORTH CENTRAL MICHIGAN ZONE 3
AVERAGE OF HURON, MONTCALM & MASON COUNTY TRIALS
ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (100 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	YR	3	1991	YR	3	1991	YR	3
DEKALB	DK401	17.8	--	--	191.0	--	--	2.7	--	--
STINE	860	18.0	--	--	170.7	--	--	2.9	--	--
*FUNK'S	G-BRAND 4120	18.1	--	--	208.2	--	--	1.6	--	--
UAPX	15011	18.5	--	--	170.7	--	--	5.9	--	--
KING AGRO	K2204	18.5	20	--	180.1	163	--	2.1	4	--
NORTHROP KING	N3624	18.6	21	20	199.2	179	178	0.8	2	2
RENK	RK430	18.7	21	--	172.5	155	--	3.2	4	--
*PICKSEED	83-282	18.7	--	--	207.2	--	--	1.7	--	--
JACQUES	4120	18.8	--	--	184.2	--	--	3.2	--	--
PROVICO	PRO540X	18.8	--	--	172.2	--	--	1.5	--	--
CROW'S	167	18.9	20	--	157.2	152	--	4.0	5	--
CARGILL	2927	19.1	--	--	198.1	--	--	4.1	--	--
SUPER CROST	1900	19.2	22	--	198.1	187	--	2.3	6	--
ASGROW	RK406	19.2	22	20	183.7	168	168	3.3	7	5
COUNTRYMARK	C323X	19.2	--	--	168.9	--	--	3.8	--	--
PICKSEED	5545	19.2	21	21	187.0	171	173	1.2	2	2
CALLAHAN	C725	19.3	21	19	192.1	174	175	2.3	7	5
CARGILL	2437	19.5	--	--	171.8	--	--	3.8	--	--
RENK	RK505	19.5	21	21	173.9	150	149	3.4	4	4
TERRA	TR940	19.6	22	--	197.6	175	--	2.2	7	--
FUNK'S	G-BRAND 4140	19.7	--	--	187.1	--	--	2.7	--	--
GREAT LAKES	GL446	19.7	22	22	197.3	182	178	2.7	4	3
RENK	RK534	19.7	21	23	181.4	166	161	1.6	5	4
WOLVERINE	W133	19.7	21	--	180.5	156	--	3.2	5	--
TOP FARM	TFsx1195A	19.7	22	--	190.9	172	--	2.1	9	--
PICKSEED	5665	19.7	21	21	192.3	174	181	2.3	3	3
AMCORN	PSX3333	19.7	21	20	194.8	169	163	2.4	4	4
KING AGRO	K416	19.8	22	21	198.6	180	173	2.4	3	3
STINE	900	19.8	--	--	175.3	--	--	2.2	--	--
*PIONEER	XO215	19.9	--	--	228.6	--	--	0.8	--	--
*UAPX	15012	19.9	--	--	213.6	--	--	0.8	--	--
*DAIRYLAND	DX-1100	20.0	23	--	207.6	187	--	2.2	4	--
GREAT LAKES	GL459	20.1	22	--	194.8	177	--	1.7	3	--
NORTHROP KING	N3808	20.1	--	--	199.9	--	--	3.5	--	--
*CARGILL	3427	20.1	22	--	210.7	194	--	2.7	5	--
WOLVERINE	W156	20.2	22	22	188.0	173	167	1.8	4	3
CALLAHAN	C729	20.2	22	20	176.7	161	164	2.6	3	2
ASGROW	RK409	20.3	22	--	184.5	171	--	2.3	2	--
RENK	RK602	20.3	--	--	184.0	--	--	2.5	--	--
FUNK'S	G-BRAND 4160	20.4	22	--	191.7	170	--	1.0	3	--
*NORTHROP KING	N4242	20.4	--	--	207.3	--	--	3.1	--	--
*PIONEER	3751	20.4	22	21	212.9	187	178	2.7	4	3
RUPP	Exp.1-191	20.4	--	--	185.1	--	--	1.6	--	--
GREAT LAKES	GL438	20.5	--	--	189.3	--	--	1.6	--	--
COUNTRYMARK	C432X	20.6	--	--	201.0	--	--	2.4	--	--
JUNG	2496	20.6	23	21	193.8	177	181	3.8	4	4
*PIONEER	X9310	20.7	--	--	218.5	--	--	0.8	--	--
TOP FARM	TFsx1097A	20.7	--	--	179.9	--	--	1.6	--	--
FUNK'S	G-BRAND 4260	20.8	22	--	197.1	172	--	0.8	1	--
*GOLDEN HARVEST	H-2331	20.8	23	22	216.3	202	188	2.6	5	4
*JACQUES	4770	20.9	23	--	214.8	194	--	1.1	2	--
SUPER CROST	2000	21.0	--	--	191.4	--	--	1.6	--	--
*DAIRYLAND	STEALTH-1198	21.0	--	--	219.4	--	--	2.2	--	--
SUPER CROST	1999	21.1	--	--	192.1	--	--	1.7	--	--
ANDERSONS	PSX250	21.1	--	--	181.3	--	--	2.1	--	--

(continued below)

LATE TRIAL (101 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))										
HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
PICKSEED	83-280	19.9	--	--	188.3	--	--	2.2	--	--
FUNK'S	G-BRAND 4299	20.3	24	22	204.7	183	179	2.3	2	2
STINE	1015	21.0	--	--	185.0	--	--	3.1	--	--
JUNG	2696	21.0	--	--	204.8	--	--	5.3	--	--
BLANEY	B505	21.6	24	23	190.5	167	167	2.5	4	3
FUNK'S	Exp.2078X	21.7	--	--	206.5	--	--	1.3	--	--
TERRA	Exp.190	21.7	--	--	189.8	--	--	2.8	--	--
TERRA	TR1010	21.7	24	24	194.1	172	171	2.4	2	2
BLANEY	B405	21.8	--	--	188.7	--	--	5.0	--	--
KING AGRO	K402	21.9	--	--	197.7	--	--	1.8	--	--
PAYCO	648	22.0	--	--	195.8	--	--	1.5	--	--
UAPX	15013	22.1	--	--	200.1	--	--	2.4	--	--
TERRA	TR1020	22.2	25	--	188.9	174	--	1.1	6	--
RENK	RK646	22.2	25	--	191.4	167	--	2.0	2	--
*PIONEER	3573	22.4	25	23	237.6	207	199	2.5	4	3
CROW'S	227	22.5	25	--	192.8	168	--	0.7	2	--
GREAT LAKES	GL499	22.8	--	--	204.8	--	--	2.6	--	--
KING AGRO	K451	22.8	--	--	186.1	--	--	1.7	--	--
CROW'S	414	22.8	25	--	190.5	168	--	4.3	5	--
COUNTRYMARK	C502X	22.9	--	--	194.3	--	--	2.1	--	--
GREAT LAKES	GL536	23.1	--	--	205.8	--	--	2.5	--	--
*PIONEER	3527	23.3	26	--	224.9	205	--	0.5	0	--
*STINE	1077	23.3	--	--	209.8	--	--	2.1	--	--
CARGILL	4327	23.4	26	25	208.5	187	183	2.6	3	2
PROVICO	PRO751	23.5	27	--	199.6	178	--	2.7	3	--
PROVICO	PRO760X	23.5	--	--	196.7	--	--	1.8	--	--
CARGILL	37012	23.5	--	--	197.8	--	--	2.1	--	--
AMCORN	PSX5757	23.5	--	--	203.9	--	--	2.5	--	--
CARGILL	5157	23.6	26	25	197.1	183	180	2.1	3	2
*PIONEER	3475	23.7	26	24	222.4	198	184	1.0	1	2
*KING AGRO	K5574	24.0	27	26	214.1	192	183	5.7	5	4
DYNA-GRO	5351	24.1	26	--	169.6	156	--	1.5	2	--
ASGROW	RX578	24.2	26	25	190.2	170	165	1.8	2	2
CALLAHAN	27199X	24.2	--	--	185.9	--	--	1.9	--	--
GREAT LAKES	GL579	24.3	27	27	206.4	198	191	3.5	4	3
CROW'S	380	24.3	27	--	192.2	172	--	3.6	7	--
*BLANEY	B603	24.4	--	--	210.2	--	--	0.8	--	--
RUPP	XR1639	24.5	--	--	188.6	--	--	3.2	--	--
SUPER CROST	2989	24.6	--	--	185.4	--	--	3.0	--	--
COUNTRYMARK	C565X	24.6	--	--	191.7	--	--	3.0	--	--
GOLDEN HARVEST	H-2465	24.6	27	--	207.0	185	--	2.7	4	--
AMCORN	PSX7450	24.6	--	--	203.7	--	--	1.7	--	--
CALLAHAN	24448X	24.7	--	--	206.6	--	--	1.3	--	--
PROVICO	PRO811	24.9	27	--	190.4	171	--	1.5	4	--
PROVICO	PRO790	24.9	--	--	196.0	--	--	3.0	--	--
RENK	RK702	25.1	--	0	189.6	--	153	2.2	--	2
CALLAHAN	C748	25.3	--	--	188.7	--	--	0.8	--	--
BLANEY	B607wx	25.5	28	--	201.3	179	--	1.3	4	--
ASGROW	RX626	25.6	28	26	185.5	173	172	2.8	3	2
GOLDEN HARVEST	H-2485	25.7	--	--	205.5	--	--	1.1	--	--
GREAT LAKES	GL577	26.0	--	--	195.9	--	--	1.2	--	--
WOLVERINE	W167	26.0	--	--	200.8	--	--	1.4	--	--
GREAT LAKES	GL569	26.1	--	--	194.9	--	--	2.8	--	--
CALLAHAN	27188X	26.2	--	--	207.4	--	--	2.2	--	--
RENK	RK721	26.3	30	28	206.2	179	173	2.5	2	2

(continued below)

EARLY TRIAL (100 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
	1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
*GOLDEN HARVEST H-2349	21.1	--	--	207.0	--	--	1.9	--	--
CALLAHAN C743	21.1	23	22	198.5	178	174	3.9	5	3
CALLAHAN 27128X	21.1	--	--	183.7	--	--	2.9	--	--
*DAIRYLAND STEALTH-1201	21.2	--	--	211.0	--	--	1.3	--	--
CROW'S 179	21.2	--	--	179.7	--	--	2.8	--	--
*GREAT LAKES GL496	21.4	--	--	208.6	--	--	3.3	--	--
*PIONEER 3733	21.4	24	--	221.9	199	--	1.9	2	--
JUNG 2514	21.4	--	--	182.7	--	--	1.9	--	--
AMCORN PSX5555	21.4	24	23	199.1	177	178	2.7	4	4
GREAT LAKES GL482	21.7	23	22	187.9	173	165	2.1	3	3
GREAT LAKES GL468	21.8	--	--	178.2	--	--	1.6	--	--
PAYCO 687	21.8	--	--	199.6	--	--	4.0	--	--
*GREAT LAKES GL450	21.9	--	--	209.1	--	--	2.8	--	--
*ASGROW RX469	21.9	24	--	204.4	183	--	1.9	4	--
AMCORN PSX4343	21.9	--	--	163.7	--	--	2.1	--	--
*STINE 1021	22.0	--	--	203.9	--	--	1.3	--	--
*DEKALB DK485	22.1	24	24	209.1	194	182	2.4	4	3
PROVICO PRO630X	22.1	--	--	166.6	--	--	14.9	--	--
TOP FARM TFSx1101	22.3	24	--	200.2	183	--	2.8	5	--
RUPP XR1505	22.5	--	--	186.2	--	--	0.8	--	--
*ANDERSONS PSX290	22.6	25	25	211.3	190	184	1.8	2	2
KING AGRO GG955	22.7	25	23	197.6	178	174	2.3	2	2
*GOLDEN HARVEST H-2390	22.9	--	--	208.9	--	--	3.1	--	--
AVERAGE	20.4	22	21	193.4	176	173	2.5	4	3
RANGE	17.8	20	19	157.2	150	149	0.8	1	2
	22.9	25	25	228.6	202	188	14.9	9	5
LEAST SIGNIFICANT DIFFERENCE	.8			10.0					

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

LATE TRIAL (101 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHELS PER ACRE			% STALK LODGING		
	1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
GOLDEN HARVEST EX545	26.5	--	--	201.0	--	--	1.9	--	--
PROVICO PRO880	27.3	--	--	200.0	--	--	1.9	--	--
COUNTRYMARK C682X	29.2	--	--	199.8	--	--	0.3	--	--
AVERAGE	23.8	26	25	198.5	180	179	2.2	3	2
RANGE	19.9	24	22	169.6	156	165	0.3	0	2
	29.2	30	28	237.6	207	199	5.7	7	4
LEAST SIGNIFICANT DIFFERENCE	.5			10.7					

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

TABLE 13

NORTHERN MICHIGAN
ALPENA COUNTY TRIAL

ZONE 4

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
	1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
PAYCO 239	20.8	--	--	101.3	--	--	7.5	--	--
PICKSEED 2600	21.5	21	--	88.9	103	--	6.5	8	--
GREAT LAKES GL226	21.8	--	--	91.0	--	--	2.7	--	--
DEKALB DK352	22.1	--	--	92.9	--	--	2.2	--	--
PICKSEED 2700	22.1	21	--	94.3	103	--	10.2	11	--
PROVICO PRO510X	22.2	--	--	98.2	--	--	3.2	--	--
*PIONEER 3897	22.3	22	--	115.6	124	--	2.7	1	--
PROVICO PRO520X	22.4	--	--	111.1	--	--	1.1	--	--
NORTHUP KING X100	22.5	--	--	105.5	--	--	6.5	--	--
JACQUES 2750	23.8	22	--	96.5	93	--	2.7	6	--
PROVICO PRO500X	23.9	--	--	86.0	--	--	5.0	--	--
PICKSEED 2855	23.9	23	21	93.4	99	95	4.3	4	3
JUNG 2378	24.1	--	--	99.3	--	--	3.8	--	--
*UAPX 15011	24.3	--	--	114.0	--	--	3.8	--	--
*PIONEER 3921	24.8	--	--	111.4	--	--	4.3	--	--
NORTHUP KING N2001	25.0	23	22	103.0	107	97	10.2	11	8
JUNG 2365	25.1	23	--	93.6	104	--	11.3	8	--
PAYCO 248	25.4	--	--	93.0	--	--	3.8	--	--
STINE 860	25.5	--	--	90.1	--	--	8.6	--	--
GREAT LAKES GL306	25.7	--	--	86.8	--	--	3.8	--	--
CROW'S 167	25.7	23	--	100.2	100	--	4.3	7	--
JACQUES 3220	25.9	--	--	99.0	--	--	5.9	--	--
SUPER CROST 1548	26.2	23	23	80.5	93	86	8.1	7	6
BLANEY B106	26.8	23	23	86.2	100	94	5.4	7	4
GREAT LAKES GL350	26.8	24	--	83.2	89	--	9.1	6	--
*NORTHUP KING X279	26.9	--	--	111.9	--	--	7.0	--	--
STINE 900	27.0	--	--	96.9	--	--	9.7	--	--
JACQUES 4120	27.3	24	--	92.7	113	--	3.2	3	--
NORTHUP KING X209	27.3	--	--	96.7	--	--	5.9	--	--
PROVICO PRO540X	27.7	--	--	86.2	--	--	4.3	--	--
SUPER CROST 1594	27.8	24	24	96.8	110	110	3.8	4	3
DAIRYLAND DX-1190	27.9	25	--	92.9	106	--	10.2	8	--
UAPX 15010	28.3	--	--	103.4	--	--	5.9	--	--
DAIRYLAND DX-1192	28.8	25	--	87.4	105	--	3.2	4	--
*PIONEER 3779	28.9	25	24	116.5	109	93	2.2	2	2

(continued next column)

HYBRID (BRAND-VARIETY)	% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
	1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
PICKSEED 5545	29.8	28	--	89.3	99	--	2.7	8	--
JUNG 2444	29.9	26	--	91.4	106	--	4.3	3	--
*PIONEER 3733	30.1	28	--	121.3	125	--	1.1	1	--
CARGILL 2437	30.5	--	--	93.5	--	--	3.2	--	--
BLANEY B305	30.6	--	--	88.5	--	--	9.1	--	--
RUPP Exp. 1-198	31.8	--	--	80.1	--	--	3.8	--	--
CARGILL 2927	31.9	--	--	91.0	--	--	2.7	--	--
PICKSEED 5665	31.9	28	--	97.4	105	--	3.8	5	--
PIONEER X0215	32.6	--	--	103.6	--	--	1.6	--	--
*PIONEER 3751	32.7	29	27	118.8	113	111	3.8	4	3
*GREAT LAKES GL446	33.4	30	--	123.5	132	--	2.7	3	--
GREAT LAKES GL450	34.3	--	--	97.9	--	--	4.3	--	--
JUNG 2496	34.6	30	--	96.5	114	--	9.1	6	--
*GREAT LAKES GL438	34.7	--	--	114.0	--	--	1.6	--	--
PIONEER X9310	35.1	--	--	105.3	--	--	0.5	--	--
DAIRYLAND DX-1100	35.2	--	--	95.5	--	--	5.4	--	--
CROW'S 179	36.1	--	--	89.8	--	--	4.3	--	--
CARGILL 3427	38.4	32	--	108.9	125	--	4.8	4	--
AVERAGE	27.8	25	23	98.2	107	98	4.9	5	4
RANGE	20.8	21	21	80.1	89	86	0.5	1	2
	TO	TO	TO	TO	TO	TO	TO	TO	TO
	38.4	32	27	123.5	132	111	11.3	11	8
LEAST SIGNIFICANT DIFFERENCE	1.9			13.1					
COEFFICIENT OF VARIANCE	144								
*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991									

1991
PLANTED May 13
HARVESTED October 8
SOIL TYPE Selkirk Loam
PREVIOUS CROP Navy beans
POPULATION 24,500
ROW WIDTH 30"
FERTILIZER 12-48-48
SOIL TEST: pH 5.9
P 113 (very high)
K 224 (high)

1990
PLANTED May 18
HARVESTED November 16
SOIL TYPE Selkirk Loam
PREVIOUS CROP Navy beans
POPULATION 16,000
ROW WIDTH 30"
FERTILIZER 124-96-96
SOIL TEST: pH 7.1
P 50 (medium)
K 187 (medium)

1989
PLANTED May 19
HARVESTED November 3
SOIL TYPE Selkirk Loam
PREVIOUS CROP Kidney beans
POPULATION 17,600
ROW WIDTH 30"
FERTILIZER 98-72-72
SOIL TEST: pH 6.2
P 118 (very high)
K 168 (medium)

FARM COOPERATOR: Allen Schiellard, Hubbard Lake
COUNTY EXTENSION DIRECTOR: John Middleton, Alpena

TABLE 14 NORTHERN MICHIGAN ZONE 4
GRAND TRAVERSE COUNTY TRIAL
ONE, TWO, THREE YEAR AVERAGES-1991, 1990 **, 1989

HYBRID (BRAND-VARIETY)		% MOISTURE		BUSHEL PER ACRE		% STALK LODGING	
		1991	YR	1991	YR	1991	YR
*PROVICO	PRO510X	17.0	--	134.1	--	2.7	--
*DEKALB	DK352	17.1	--	133.2	--	2.2	--
GREAT LAKES	GL226	17.4	--	122.4	--	7.0	--
JACQUES	3220	17.5	--	113.0	--	9.7	--
NORTHRUP KING	X100	17.6	--	114.2	--	5.4	--
PAYCO	239	17.9	--	123.9	--	3.8	--
PICKSEED	2700	17.9	--	106.7	--	3.2	--
UAPX	15011	18.0	--	126.3	--	4.3	--
*PROVICO	PRO520X	18.0	--	132.7	--	4.3	--
PAYCO	248	18.0	17	124.8	112	5.9	10
PROVICO	PRO500X	18.2	--	131.2	--	3.4	--
JUNG	2365	18.2	--	110.2	--	5.4	--
NORTHRUP KING	N2001	18.3	18	103.2	99	4.8	10
PICKSEED	2855	18.4	22	116.3	92	7.5	23
*SUPER CROST	1594	18.6	18	133.3	126	3.8	13
GREAT LAKES	GL306	18.7	--	114.3	--	7.0	--
PIONEER	3779	18.8	--	128.2	--	4.8	--
JUNG	2378	18.8	--	118.8	--	7.5	--
PICKSEED	2600	18.8	--	117.4	--	3.2	--
SUPER CROST	1548	18.9	--	104.4	--	3.8	--
JACQUES	2750	18.9	--	116.4	--	4.8	--
STINE	860	18.9	--	112.6	--	4.3	--
BLANEY	B106	19.0	18	118.0	112	3.8	11
GREAT LAKES	GL350	19.0	--	123.6	--	2.7	--
JUNG	2444	19.1	--	125.1	--	5.9	--
DAIRYLAND	DX-1192	19.3	--	110.8	--	5.9	--
CROW'S	167	19.5	--	101.4	--	3.8	--
DAIRYLAND	DX-1190	19.9	20	119.4	110	5.4	5
JACQUES	4120	20.2	--	120.4	--	5.9	--
PIONEER	3921	20.2	--	101.6	--	0.5	--
STINE	900	20.2	--	129.6	--	3.8	--
PIONEER	3897	20.4	--	109.9	--	0.0	--
BLANEY	B305	20.8	21	114.2	104	5.4	7
*NORTHRUP KING	X209	20.9	--	133.8	--	4.8	--
CARGILL	2437	21.4	--	115.7	--	2.7	--

(continued next column)

HYBRID (BRAND-VARIETY)		% MOISTURE		BUSHEL PER ACRE		% STALK LODGING	
		1991	YR	1991	YR	1991	YR
PIONEER	3751	21.5	--	128.5	--	3.2	--
UAPX	15010	21.5	--	107.9	--	2.7	--
*PICKSEED	5665	21.5	20	132.4	115	3.8	4
PROVICO	PRO540X	21.6	--	131.9	--	1.1	--
CARGILL	2927	21.7	--	115.2	--	5.9	--
NORTHRUP KING	X279	21.8	--	118.2	--	7.0	--
RUPP	Exp.1-198	22.3	--	113.8	--	3.2	--
GREAT LAKES	GL438	22.4	--	111.8	--	4.3	--
CROW'S	179	22.9	--	100.3	--	3.2	--
PICKSEED	5545	22.9	21	128.6	112	5.4	9
GREAT LAKES	GL446	23.2	21	121.8	115	5.9	6
*JUNG	2496	23.3	--	134.4	--	5.9	--
CARGILL	3427	23.5	--	125.8	--	4.8	--
*PIONEER	X0215	23.8	--	153.3	--	3.2	--
DAIRYLAND	DX-1100	24.0	--	127.8	--	3.8	--
*PIONEER	3733	24.1	--	146.2	--	4.3	--
*PIONEER	X9310	24.3	--	134.6	--	4.3	--
GREAT LAKES	GL450	25.0	--	127.4	--	3.8	--
AVERAGE		20.2	20	121.2	110	4.4	10
		17.0	17	100.3	92	0.0	4
RANGE		TO	TO	TO	TO	TO	TO
		25.0	22	153.3	126	9.7	23
LEAST SIGNIFICANT DIFFERENCE		.9		10.9			
COEFFICIENT OF VARIANCE		9%					

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

1991
PLANTED May 11
HARVESTED October 8
SOIL TYPE Karlin Sandy Loam
PREVIOUS CROP Alfalfa Sod
POPULATION 24,500
ROW WIDTH 30"
FERTILIZER 76-76-76
SOIL TEST: pH 6.2
P 196 (very high)
K 192 (medium)

1990 **
No trial

1989
May 11
November 1-2
Coventry-Newaygo Loam
Corn
18,000
30"
84-24-66
6.5
656 (very high)
368 (very high)

FARM COOPERATORS: Richard Dennett (1991), George Svec (1989), Buckley
COUNTY EXTENSION DIRECTOR: Richard Strong, Traverse City
EXTENSION AGRICULTURAL AGENT: Erwin Elsner, Traverse City

TABLE 15

NORTHERN MICHIGAN
MENOMINEE COUNTY TRIAL

ZONE 4

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
PIONEER	3963	17.4	--	--	94.2	--	--	3.0	--	--
PICKSEED	2855	19.0	22	23	123.9	105	106	14.9	15	10
DEKALB	DK352	19.1	--	--	97.3	--	--	10.9	--	--
WOLF RIVER VALLEY	9080	19.2	--	--	100.4	--	--	4.0	--	--
PROVICO	PRO510X	19.2	--	--	103.6	--	--	10.0	--	--
PAYCO	239	19.2	--	--	123.0	--	--	16.2	--	--
GREAT LAKES	GL226	19.3	--	--	119.3	--	--	22.8	--	--
PIONEER	3897	19.8	24	--	125.7	96	--	7.4	12	--
PAYCO	248	20.0	--	--	113.2	--	--	20.1	--	--
WOLF RIVER VALLEY	9085	20.1	25	25	110.4	94	98	4.3	5	4
PROVICO	PRO520X	20.1	--	--	133.3	--	--	8.2	--	--
*UAPX	15011	20.2	--	--	148.0	--	--	6.3	--	--
PIONEER	3845	20.6	--	--	123.0	--	--	2.7	--	--
PICKSEED	2600	20.6	24	--	111.3	83	--	11.2	12	--
NORTHUP KING	X100	20.7	--	--	106.2	--	--	6.6	--	--
PICKSEED	2700	21.0	25	--	135.0	104	--	17.0	16	--
JACQUES	2750	21.1	26	25	116.9	102	105	9.9	11	9
JUNG	2378	21.1	--	--	108.6	--	--	3.6	--	--
GREAT LAKES	GL306	21.3	--	--	119.5	--	--	14.3	--	--
NORTHUP KING	N2001	21.4	25	25	134.1	108	114	23.6	18	13
BLANEY	B106	21.6	26	26	124.5	97	105	10.9	9	6
*JUNG	2365	21.8	27	27	137.7	110	110	23.0	16	11
PROVICO	PRO500X	21.9	--	--	101.4	--	--	5.4	--	--
STINE	860	21.9	--	--	122.0	--	--	16.1	--	--
CROW'S	167	21.9	27	--	125.2	99	--	8.0	6	--
SUPER CROST	1594	22.0	30	--	125.3	100	--	13.1	14	--
GREAT LAKES	GL350	22.0	26	--	123.8	98	--	13.9	17	--
*PIONEER	3779	22.0	28	29	144.6	112	111	5.0	3	2
*NORTHUP KING	X279	22.2	--	--	157.6	--	--	13.5	--	--
PROVICO	PRO540X	22.2	--	--	125.1	--	--	10.3	--	--
STINE	900	22.3	--	--	125.5	--	--	15.7	--	--
JACQUES	3220	22.4	--	--	132.0	--	--	9.0	--	--
UAPX	15010	22.4	--	--	110.8	--	--	14.0	--	--
NORTHUP KING	X209	22.6	--	--	131.2	--	--	11.5	--	--
PIONEER	3921	22.7	--	--	127.0	--	--	2.1	--	--

(continued next column)

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
DAIRYLAND	DX-1192	22.8	28	--	121.6	98	--	16.1	11	--
*PICKSEED	5545	22.8	33	--	145.5	106	--	13.3	12	--
SUPER CROST	1548	22.9	27	--	102.5	89	--	7.3	8	--
DAIRYLAND	DX-1190	23.0	28	--	121.8	97	--	15.0	11	--
CARGILL	2927	23.2	--	--	137.0	--	--	6.5	--	--
PICKSEED	5665	23.4	28	--	131.3	109	--	20.8	14	--
*JUNG	2444	23.5	29	31	150.2	114	106	5.8	8	5
JACQUES	4120	23.6	28	--	127.4	113	--	12.3	12	--
*PIONEER	3751	23.9	29	30	176.3	129	125	19.6	14	9
BLANEY	B305	24.3	--	--	137.0	--	--	16.8	--	--
CARGILL	2437	24.5	--	--	121.4	--	--	2.6	--	--
PIONEER	3733	24.6	34	--	123.3	105	--	3.6	4	--
*PIONEER	XO215	24.7	--	--	148.9	--	--	5.8	--	--
GREAT LAKES	GL438	25.6	--	--	114.3	--	--	11.8	--	--
CROW'S	179	25.6	--	--	113.4	--	--	13.8	--	--
RUPP	Exp. 1-198	25.8	--	--	115.7	--	--	2.1	--	--
*DAIRYLAND	DX-1100	27.0	--	--	150.5	--	--	5.2	--	--
*PIONEER	X9310	27.1	--	--	148.7	--	--	1.0	--	--
GREAT LAKES	GL450	27.5	--	--	132.8	--	--	10.9	--	--
GREAT LAKES	GL446	29.0	34	--	127.4	109	--	12.0	10	--
JUNG	2496	29.1	34	36	122.8	106	109	9.5	9	6
CARGILL	3427	29.2	34	--	130.4	110	--	3.9	9	--
AVERAGE		22.6	28	28	125.6	104	109	10.6	11	7
RANGE		17.4	22	23	94.2	83	98	1.0	3	2
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		29.2	34	36	176.3	129	125	23.6	18	13
LEAST SIGNIFICANT DIFFERENCE		1.1			12.0					
COEFFICIENT OF VARIANCE		10%								
*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991										

1991
PLANTED May 13
HARVESTED October 16-17
SOIL TYPE Onaway Loam
PREVIOUS CROP Corn
POPULATION 27,800
ROW WIDTH 34"
FERTILIZER 122-30-30
SOIL TEST: pH 7.3
P 97 (high)
K 168 (medium)

1990
PLANTED May 3
HARVESTED November 8
SOIL TYPE Onaway Loam
PREVIOUS CROP Corn
POPULATION 23,300
ROW WIDTH 34"
FERTILIZER 122-30-30+10 tons manure
SOIL TEST: pH 7.3
P 97 (high)
K 168 (medium)

1989
PLANTED May 9
HARVESTED October 11
SOIL TYPE Onaway Loam
PREVIOUS CROP Corn
POPULATION 19,800
ROW WIDTH 34"
FERTILIZER 124-30-66+10 ton manure
SOIL TEST: pH 7.3
P 97 (high)
K 168 (medium)

FARM COOPERATOR: Steve Berzsenyi, Stephenson
MSU COOPERATOR: Dr. Richard Leep, Dept. Crop & Soil Science, Marquette
COUNTY EXTENSION DIRECTOR: Michael Erdman, Stephenson

TABLE 16 NORTHERN MICHIGAN ZONE 4
AVERAGE OF ALPENA, GRAND TRAVERSE & MENOMINEE COUNTY TRIAL
ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
PAYCO	239	19.3	--	--	116.1	--	--	9.2	--	--
DEKALB	DK352	19.4	--	--	107.8	--	--	5.1	--	--
GREAT LAKES	GL226	19.5	--	--	110.9	--	--	10.8	--	--
PROVICO	PRO510X	19.5	--	--	112.0	--	--	5.3	--	--
*PROVICO	PRO520X	20.2	--	--	125.7	--	--	4.5	--	--
NORTHROP KING	X100	20.3	--	--	108.6	--	--	6.2	--	--
PICKSEED	2700	20.3	22	--	112.0	102	--	10.1	12	--
PICKSEED	2600	20.3	22	--	105.9	96	--	7.0	9	--
PICKSEED	2855	20.4	22	22	111.2	103	101	8.9	9	6
PIONEER	3897	20.8	23	--	117.1	108	--	3.4	6	--
*UAPX	15011	20.8	--	--	129.4	--	--	4.8	--	--
PAYCO	248	21.1	--	--	110.3	--	--	9.9	--	--
JACQUES	2750	21.3	23	23	109.9	99	103	5.8	8	7
PROVICO	PRO500X	21.3	--	--	106.2	--	--	4.6	--	--
JUNG	2378	21.3	--	--	108.9	--	--	5.0	--	--
NORTHROP KING	N2001	21.6	23	23	113.4	105	104	12.9	12	9
JUNG	2365	21.7	24	25	113.8	106	108	13.2	10	7
JACQUES	3220	21.9	--	--	114.7	--	--	8.2	--	--
GREAT LAKES	GL306	21.9	--	--	106.9	--	--	8.4	--	--
STINE	860	22.1	--	--	108.2	--	--	9.7	--	--
CROW'S	167	22.4	25	--	108.9	98	--	5.4	6	--
BLANEY	B106	22.5	24	24	109.6	101	101	6.7	7	5
GREAT LAKES	GL350	22.6	24	--	110.2	97	--	8.6	10	--
PIONEER	3921	22.6	--	--	113.3	--	--	2.3	--	--
SUPER CROST	1548	22.7	24	23	95.8	93	86	6.4	7	6
SUPER CROST	1594	22.8	26	25	118.5	108	109	6.9	8	6
*PIONEER	3779	23.2	25	26	129.8	110	102	4.0	3	2
STINE	900	23.2	--	--	117.3	--	--	9.7	--	--
NORTHROP KING	X209	23.6	--	--	120.6	--	--	7.4	--	--
*NORTHROP KING	X279	23.6	--	--	129.2	--	--	9.2	--	--
DAIRYLAND	DX-1192	23.6	25	--	106.6	103	--	8.4	7	--
DAIRYLAND	DX-1190	23.6	26	--	111.4	104	--	10.2	8	--
JACQUES	4120	23.7	25	--	113.5	115	--	7.1	7	--
PROVICO	PRO540X	23.8	--	--	114.4	--	--	5.2	--	--
UAPX	15010	24.1	--	--	107.4	--	--	7.5	--	--

(continued next column)

HYBRID (BRAND-VARIETY)		% MOISTURE			BUSHEL PER ACRE			% STALK LODGING		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
JUNG	2444	24.2	26	29	122.2	111	104	5.3	5	4
BLANEY	B305	25.2	--	--	113.2	--	--	10.4	--	--
PICKSEED	5545	25.2	30	--	121.1	104	--	7.1	9	--
CARGILL	2437	25.5	--	--	110.2	--	--	2.8	--	--
CARGILL	2927	25.6	--	--	114.4	--	--	5.0	--	--
PICKSEED	5665	25.6	27	--	120.4	110	--	9.5	8	--
*PIONEER	3751	26.0	28	28	141.2	118	116	8.9	8	5
*PIONEER	3733	26.3	31	--	130.3	119	--	3.0	3	--
RUPP	Exp. 1-198	26.6	--	--	103.2	--	--	3.0	--	--
*PIONEER	XO215	27.0	--	--	135.3	--	--	3.5	--	--
GREAT LAKES	GL438	27.6	--	--	113.4	--	--	5.9	--	--
CROW'S	179	28.2	--	--	101.2	--	--	7.1	--	--
*GREAT LAKES	GL446	28.5	30	--	124.2	120	--	6.9	7	--
*DAIRYLAND	DX-1100	28.7	--	--	124.6	--	--	4.8	--	--
*PIONEER	X9310	28.8	--	--	129.5	--	--	1.9	--	--
GREAT LAKES	GL450	28.9	--	--	119.4	--	--	6.3	--	--
JUNG	2496	29.0	31	34	117.9	114	115	8.2	7	5
CARGILL	3427	30.4	32	--	121.7	119	--	4.5	6	--
AVERAGE		23.6	26	25	115.5	107	104	6.8	8	6
RANGE		19.3	22	22	95.8	93	86	1.9	3	2
		TO	TO	TO	TO	TO	TO	TO	TO	TO
		30.4	32	34	141.2	120	116	13.2	12	9
LEAST SIGNIFICANT DIFFERENCE		.8			6.8					

*SIGNIFICANTLY BETTER THAN AVERAGE YIELD IN 1991

TABLE 17 SOUTH CENTRAL MICHIGAN ZONE 2
INGHAM COUNTY TRIAL - SILAGE
ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (105 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))									
HYBRID (BRAND-VARIETY)	DRY MATTER			GREEN WEIGHT			DRY WEIGHT		
	1991	2	3	1991	2	3	1991	2	3
	YR	YR	YR	YR	YR	YR	YR	YR	YR
GOLDEN HARVEST H-2349	49.9	--	--	13.7	--	--	6.8	--	--
RENK R680	47.8	--	--	13.1	--	--	6.3	--	--
GOLDEN HARVEST H-2331	47.7	--	--	14.1	--	--	6.7	--	--
CROW'S 179	45.5	--	--	11.2	--	--	5.1	--	--
DEKALB DK524	42.9	--	--	18.6	--	--	7.9	--	--
GREAT LAKES GL569	42.8	--	--	17.0	--	--	7.3	--	--
GREAT LAKES GL509	41.1	39.3	36.3	19.1	18.3	19.1	7.9	7.2	6.9
COUNTRYMARK C432X	41.0	--	--	17.9	--	--	7.3	--	--
PIONEER 3751	40.2	40.0	37.0	13.9	15.6	15.4	5.6	6.2	5.8
PIONEER X9310	40.2	--	--	20.6	--	--	8.3	--	--
GREAT LAKES GL496	39.6	--	--	19.4	--	--	7.7	--	--
SUPER CROST 2989	39.1	--	--	16.8	--	--	6.6	--	--
COUNTRYMARK C502X	38.8	--	--	17.8	--	--	6.9	--	--
PIONEER X0215	38.4	--	--	18.2	--	--	7.0	--	--
GREAT LAKES GL579	37.9	35.8	34.5	19.6	20.6	21.1	7.4	7.3	7.2
GARST 8777	37.7	--	--	17.1	--	--	6.5	--	--
PIONEER 3573	36.9	34.1	33.1	18.8	20.1	20.6	6.9	6.8	6.8
DEKALB DK550	36.1	--	--	21.8	--	--	7.9	--	--
AVERAGE	41.3	37.3	35.2	17.2	18.7	19.1	7.0	6.9	6.7
RANGE	36.1	34.1	33.1	11.2	15.6	15.4	5.1	6.2	5.8
	TO	TO	TO	TO	TO	TO	TO	TO	TO
	49.9	40.0	37.0	21.8	20.6	21.1	8.3	7.3	7.2

LATE TRIAL (106 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))									
HYBRID (BRAND-VARIETY)	DRY MATTER			GREEN WEIGHT			DRY WEIGHT		
	1991	2	3	1991	2	3	1991	2	3
	YR	YR	YR	YR	YR	YR	YR	YR	YR
CROW'S 380	53.4	42.7	38.9	14.3	16.8	18.1	7.6	6.9	6.7
BLANEY B607wx	51.2	--	--	14.6	--	--	7.5	--	--
GOLDEN HARVEST H-2532	49.6	--	--	18.7	--	--	9.3	--	--
GOLDEN HARVEST EX545	48.8	--	--	18.3	--	--	8.9	--	--
GREAT LAKES GL583	48.5	--	--	18.1	--	--	8.7	--	--
COUNTRYMARK C565X	48.3	--	--	15.4	--	--	7.4	--	--
CALLAHAN C764	47.9	--	--	17.3	--	--	8.3	--	--
PROVICO PRO880	47.2	35.6	--	18.0	22.3	--	8.4	7.4	--
CARGILL SK269	47.0	--	--	19.6	--	--	9.2	--	--
PROVICO PRO900	46.4	--	--	16.7	--	--	7.7	--	--
PIONEER 3357	46.1	--	--	18.9	--	--	8.7	--	--
GARST 8513	45.1	--	--	20.7	--	--	9.4	--	--
CALLAHAN C759	45.1	39.4	--	18.5	20.4	--	8.4	7.9	--
PAYCO 900	44.9	--	--	22.4	--	--	10.0	--	--
CALLAHAN C771	44.9	--	--	20.9	--	--	9.4	--	--
GREAT LAKES GL577	44.6	--	--	20.5	--	--	9.2	--	--
GOLDEN HARVEST H-2572	44.6	--	--	21.2	--	--	9.5	--	--
PIONEER 3527	44.3	36.6	--	18.0	21.6	--	8.0	7.6	--
CROW'S SL32	43.8	37.1	--	15.7	17.8	--	6.9	6.5	--
GREAT LAKES GL586	43.7	--	--	22.3	--	--	9.8	--	--
PIONEER 3394	43.6	--	--	18.3	--	--	8.0	--	--
RENK RK76	43.5	--	--	21.0	--	--	9.1	--	--
PROVICO PRO970	43.1	36.0	--	19.7	22.2	--	8.5	7.8	--
DEKALB DK636	43.0	--	--	22.5	--	--	9.7	--	--
RENK RK721	41.6	34.2	31.8	17.2	21.2	22.3	7.2	7.0	6.9
AMCORN PSX9292	40.9	38.6	--	18.8	21.7	--	7.8	8.4	--
PIONEER 3429	40.8	36.2	33.7	23.8	26.0	26.5	9.7	9.3	8.8
COUNTRYMARK C682X	40.6	--	--	22.7	--	--	9.2	--	--
AVERAGE	45.4	37.4	34.8	19.1	21.1	22.3	8.6	7.6	7.5
RANGE	40.6	34.2	31.8	14.3	16.8	18.1	6.9	6.5	6.7
	TO	TO	TO	TO	TO	TO	TO	TO	TO
	53.4	42.7	38.9	23.8	26.0	26.5	10.0	9.3	8.8

QUALITY ANALYSES

All analyses were determined by wet-chemical methods

HYBRID (BRAND-VARIETY)	DMD% AVG	FD% AVG	NDF% AVG	CP% AVG
CROW'S 179	74.6	53.2	54.3	7.52
COUNTRYMARK C432X	76.2	50.5	48.2	7.43
PIONEER 3751	76.1	49.1	47.0	8.90
PIONEER X9310	78.2	49.0	42.8	8.53
COUNTRYMARK C502X	77.2	53.1	48.6	7.39
PIONEER X0215	67.4	41.5	55.7	8.48
PIONEER 3573	75.8	48.4	47.0	7.29

DMD = Dry matter digestibility
FD = Fiber digestibility
NDF = Neutral detergent fiber
CP = Crude protein

QUALITY ANALYSES

All analyses were determined by wet-chemical methods

HYBRID (BRAND-VARIETY)	DMD% AVG	FD% AVG	NDF% AVG	CP% AVG
CROW'S 380	74.3	46.0	47.5	6.94
BLANEY B607wx	73.8	41.6	44.8	7.24
COUNTRYMARK C565X	75.5	43.2	43.1	7.11
PROVICO PRO880	77.2	49.3	45.0	6.67
PROVICO PRO900	77.6	46.7	42.1	6.73
PIONEER 3357	77.0	45.0	41.7	6.15
CALLAHAN C759	74.8	46.1	46.8	6.37
CALLAHAN C771	75.6	37.9	39.4	6.86
PIONEER 3527	74.5	44.4	45.9	6.59
CROW'S SL32	71.1	38.6	47.0	6.04
PIONEER 3394	74.9	44.0	44.8	6.56
AMCORN PSX9292	75.6	46.4	45.6	6.37
COUNTRYMARK C682X	74.7	44.2	45.3	6.59

	<u>1991</u>	<u>1990</u>	<u>1989</u>
PLANTED	May 5	May 8	April 27
HARVESTED	September 6,16	September 13	September 15
SOIL TYPE	Capac Loam	Capac Loam	Capac Loam
PREVIOUS CROP	Soybeans	Corn	Corn
POPULATION	24,900	20,200	19,400
ROW WIDTH	30"	30"	36"
FERTILIZER	165-50-50	165-50-50	165-50-50
SOIL TEST:pH	6.8	6.1	6.1
P	54 (medium)	93 (high)	156 (very high)
K	133 (low)	200 (medium)	228 (high)

FARM COOPERATOR: Michigan State University, East Lansing
 MSU COOPERATORS: Dr. Michael Allen and David Main, Animal Science Dept.
 COUNTY EXTENSION DIRECTOR: Marvin Preston, Mason
 EXTENSION AGRICULTURAL AGENTS: John Hayden and Laura Rhodes, Mason

TABLE 18

NORTH CENTRAL MICHIGAN
HURON COUNTY TRIAL - SILAGE

ZONE 3

ONE, TWO, THREE YEAR AVERAGES-1991, 1990, 1989

EARLY TRIAL (103 DAY RELATIVE MATURITY OR EARLIER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		DRY MATTER			GREEN WEIGHT			TONS PER ACRE			DRY WEIGHT		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
COUNTRYMARK	C323X	49.7	--	--	14.5	--	--	7.2	--	--	--	--	--
PICKSEED	5545	47.1	38.3	36.6	16.4	18.3	18.6	7.7	6.8	6.6	--	--	--
SUPER CROST	1900	46.9	--	--	16.8	--	--	7.9	--	--	--	--	--
GREAT LAKES	GL450	46.8	--	--	19.5	--	--	9.1	--	--	--	--	--
BLANEY	B405	46.7	39.9	37.6	17.8	20.1	20.7	8.3	7.8	7.6	--	--	--
PICKSEED	5665	46.2	38.0	38.2	18.7	21.0	21.0	8.6	7.7	7.8	--	--	--
PIONEER	3751	45.2	36.2	34.1	20.3	22.8	21.8	9.1	8.0	7.3	--	--	--
RENK	RK602	45.1	--	--	18.5	--	--	8.3	--	--	--	--	--
DEKALB	DK485	45.0	--	--	20.4	--	--	9.1	--	--	--	--	--
COUNTRYMARK	C432X	44.7	--	--	19.0	--	--	8.5	--	--	--	--	--
GOLDEN HARVEST	H-2349	44.5	--	--	16.9	--	--	7.5	--	--	--	--	--
PIONEER	X0215	44.1	--	--	17.7	--	--	7.8	--	--	--	--	--
DEKALB	DK401	43.8	--	--	16.5	--	--	7.2	--	--	--	--	--
GOLDEN HARVEST	H-2331	43.8	--	--	20.3	--	--	8.9	--	--	--	--	--
RENK	R138	43.3	35.8	34.8	17.7	21.0	21.2	7.7	7.3	7.2	--	--	--
PIONEER	3779	43.2	34.6	33.8	17.9	21.0	22.5	7.7	7.0	7.4	--	--	--
GARST	8777	43.0	--	--	18.2	--	--	7.8	--	--	--	--	--
GREAT LAKES	GL468	42.7	--	--	18.7	--	--	8.0	--	--	--	--	--
GREAT LAKES	GL496	42.7	--	--	21.9	--	--	9.3	--	--	--	--	--
TERRA	TR1020	42.1	36.1	--	18.0	20.4	--	7.6	7.2	--	--	--	--
CROW'S	179	41.7	--	--	19.5	--	--	8.1	--	--	--	--	--
PIONEER	3573	40.8	33.2	32.2	19.8	21.7	22.6	8.1	7.0	7.1	--	--	--
GREAT LAKES	GL509	39.9	--	--	21.7	--	--	8.6	--	--	--	--	--
PIONEER	X9310	39.4	--	--	21.6	--	--	8.6	--	--	--	--	--
COUNTRYMARK	C502X	38.0	--	--	20.3	--	--	7.7	--	--	--	--	--
AVERAGE		43.9	36.5	35.3	18.7	20.8	21.2	8.2	7.4	7.3	--	--	--
RANGE		38.0	33.2	32.2	14.5	18.3	18.6	7.2	6.8	6.6	--	--	--
		TO	TO	TO	TO	TO	TO	TO	TO	TO	--	--	--
		49.7	39.9	38.2	21.9	22.8	22.6	9.3	8.0	7.8	--	--	--

QUALITY ANALYSES

All analyses were determined by wet-chemical methods

HYBRID (BRAND-VARIETY)		DMD% AVG	FD% AVG	NDF% AVG	CP% AVG
COUNTRYMARK	C323X	77.2	54.1	49.6	6.38
PICKSEED	5545	77.1	48.6	44.5	6.41
GREAT LAKES	GL450	78.3	51.3	44.6	6.59
BLANEY	B405	78.6	52.2	44.8	6.71
PICKSEED	5665	74.3	46.3	47.9	7.24
PIONEER	3751	75.6	51.6	50.5	7.02
COUNTRYMARK	C432X	78.5	52.5	45.2	6.80
PIONEER	X0215	77.9	50.8	44.9	6.39
GREAT LAKES	GL468	75.5	47.7	46.8	6.26
GREAT LAKES	GL496	75.4	49.0	48.3	6.96
TERRA	TR1020	77.2	51.7	47.1	6.57
PIONEER	3573	76.8	49.9	46.4	6.54
GREAT LAKES	GL509	80.7	55.2	43.1	7.42
PIONEER	X9310	72.5	41.1	46.6	6.65
COUNTRYMARK	C502X	78.4	51.6	44.7	7.10

LATE TRIAL (104 DAY RELATIVE MATURITY OR LATER (BASED ON COMPANY RATING))

HYBRID (BRAND-VARIETY)		DRY MATTER			GREEN WEIGHT			TONS PER ACRE			DRY WEIGHT		
		1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR	1991	2 YR	3 YR
CROW'S	380	50.4	37.8	--	16.9	21.8	--	8.5	7.6	--	--	--	--
RENK	R680	49.5	--	--	13.3	--	--	6.6	--	--	--	--	--
AMCORN	PSX7450	48.9	35.3	33.6	19.7	25.5	26.1	9.6	8.2	8.2	--	--	--
GREAT LAKES	GL569	47.2	--	--	17.2	--	--	8.1	--	--	--	--	--
CARGILL	SX269	46.5	--	--	18.6	--	--	8.7	--	--	--	--	--
GOLDEN HARVEST	EX545	45.6	--	--	18.2	--	--	8.2	--	--	--	--	--
TERRA	TR1060	45.6	--	--	19.0	--	--	8.7	--	--	--	--	--
GREAT LAKES	GL579	45.3	36.9	34.6	17.5	22.2	22.5	7.9	7.8	7.5	--	--	--
CARGILL	4327	45.1	--	--	16.2	--	--	7.3	--	--	--	--	--
PAYCO	872	45.0	--	--	18.7	--	--	8.4	--	--	--	--	--
SUPER CROST	2989	44.7	--	--	17.3	--	--	7.7	--	--	--	--	--
PIONEER	3527	44.1	33.8	--	21.8	25.7	--	9.6	8.3	--	--	--	--
PIONEER	3429	44.0	33.3	31.8	20.7	25.1	25.5	9.1	7.9	7.8	--	--	--
GREAT LAKES	GL586	42.3	--	--	19.8	--	--	8.3	--	--	--	--	--
PROVICO	PRO880	42.3	31.5	--	20.3	23.8	--	8.6	7.1	--	--	--	--
RENK	RK76	42.3	32.7	30.3	21.0	25.9	28.1	8.9	8.0	8.1	--	--	--
PROVICO	PRO900	42.1	--	--	20.7	--	--	8.7	--	--	--	--	--
RENK	RK721	41.8	31.9	29.6	20.6	24.7	24.2	8.7	7.5	6.9	--	--	--
GREAT LAKES	GL583	41.4	--	--	23.4	--	--	9.7	--	--	--	--	--
COUNTRYMARK	C565X	40.4	--	--	19.1	--	--	7.7	--	--	--	--	--
GARST	8513	40.1	--	--	21.3	--	--	8.5	--	--	--	--	--
TERRA	TR1120	39.7	--	--	21.9	--	--	8.7	--	--	--	--	--
GREAT LAKES	GL577	39.4	--	--	18.4	--	--	7.2	--	--	--	--	--
PROVICO	PRO970	38.8	--	--	19.0	--	--	7.4	--	--	--	--	--
TERRA	TR59	36.2	30.5	28.5	23.8	27.3	28.3	8.6	8.1	7.9	--	--	--
COUNTRYMARK	C682X	33.5	--	--	23.2	--	--	7.7	--	--	--	--	--
AVERAGE		43.2	33.7	31.4	19.5	24.7	25.8	8.4	7.8	7.7	--	--	--
RANGE		33.5	30.5	28.5	13.3	21.8	22.5	6.6	7.1	6.9	--	--	--
		TO	TO	TO	TO	TO	TO	TO	TO	TO	--	--	--
		50.4	37.8	34.6	23.8	27.3	28.3	9.7	8.3	8.2	--	--	--

QUALITY ANALYSES

All analyses were determined by wet-chemical methods

HYBRID (BRAND-VARIETY)		DMD% AVG	FD% AVG	NDF% AVG	CP% AVG
AMCORN	PSX7450	75.4	46.0	45.6	7.14
GREAT LAKES	GL569	80.0	53.4	42.9	6.55
TERRA	TR1060	78.3	47.4	41.4	6.39
GREAT LAKES	GL579	80.5	53.1	41.7	7.22
PIONEER	3527	75.7	45.8	44.9	6.55
GREAT LAKES	GL586	79.3	48.9	40.6	7.29
GREAT LAKES	GL583	78.2	54.2	47.6	6.96
COUNTRYMARK	C565X	77.4	49.1	44.4	7.56
TERRA	TR1120	79.0	51.3	43.2	6.89
GREAT LAKES	GL577	78.0	48.3	42.5	7.79
TERRA	TR59	76.5	50.8	47.8	6.50
COUNTRYMARK	C682X	78.7	53.2	45.6	7.43

	<u>1991</u>	<u>1990</u>	<u>1989</u>
PLANTED	May 15	May 14	May 10
HARVESTED	September 10, 18	September 20	September 18
SOIL TYPE	Kilmanagh Loam	Kilmanagh Loam	Kilmanagh Loam
PREVIOUS CROP	Corn	Corn	Corn
POPULATION	28,000	24,800	21,200
ROW WIDTH	30"	30"	30"
FERTILIZER	160-141-6	163-57-98	193-49-97
SOIL TEST: pH	6.9	7.6	7.8
P	98 (high)	140 (very high)	104 (very high)
K	384 (very high)	187 (medium)	172 (medium)

FARM COOPERATOR: William McCrea, Bad Axe
MSU COOPERATORS: Dr. Michael Allen and David Main, Animal Science Dept
COUNTY EXTENSION DIRECTOR: Robert Johnson, Bad Axe
EXTENSION AGRICULTURAL AGENT: James LeCureux, Bad Axe

TABLE 19 NORTHERN MICHIGAN ZONE 4
MISSAUKEE COUNTY TRIAL - SILAGE
ONE, TWO, THREE YEAR AVERAGES-1991, 1990 **, 1989

HYBRID (BRAND-VARIETY)	DRY MATTER		GREEN WEIGHT		TONS PER ACRE		DRY WEIGHT	
	1991	YR	1991	YR	1991	YR	1991	YR
PICKSEED 2855	43.9	39.5	14.5	13.9			6.4	5.5
PROVICO PRO520X	43.5	--	13.6	--			5.9	--
GREAT LAKES GL350	43.1	--	15.5	--			6.7	--
CARGILL 2927	42.5	--	18.5	--			7.9	--
PROVICO PRO500X	42.1	--	13.3	--			5.6	--
PROVICO PRO540X	41.5	--	16.6	--			6.9	--
GREAT LAKES GL438	41.3	--	19.0	--			7.8	--
COUNTRYMARK C363X	40.2	--	17.9	--			7.2	--
AMCORN PSX3333	40.1	36.2	17.9	16.5			7.2	6.0
COUNTRYMARK C432X	39.6	--	18.9	--			7.5	--
GREAT LAKES GL446	39.5	--	16.2	--			6.4	--
GOLDEN HARVEST H-2349	39.5	--	18.8	--			7.4	--
PROVICO PRO510X	37.8	--	10.8	--			4.1	--
GOLDEN HARVEST H-2331	37.8	--	19.5	--			7.4	--
COUNTRYMARK C565X	36.6	--	22.6	--			8.3	--
PROVICO PRO630X	36.1	--	19.0	--			6.9	--
COUNTRYMARK C502X	36.0	--	21.3	--			7.7	--
COUNTRYMARK C682X	30.5	--	26.7	--			8.1	--
AVERAGE	39.5	37.9	17.8	15.2			7.0	5.8
RANGE	30.5	36.2	10.8	13.9			4.1	5.5
	TO	TO	TO	TO			TO	TO
	43.9	39.5	26.7	16.5			8.3	6.0

QUALITY ANALYSES
All analyses were determined by wet-chemical methods

HYBRID (BRAND-VARIETY)		DMD%	FD%	NDF%	CP%
		AVG	AVG	AVG	AVG
PICKSEED 2855		77.9	46.2	41.0	6.88
GREAT LAKES GL350		74.5	41.5	43.6	6.39
GREAT LAKES GL438		75.0	45.5	45.9	6.28
COUNTRYMARK C363X		75.8	46.9	45.5	6.43
AMCORN PSX3333		74.8	41.0	42.7	6.32
COUNTRYMARK C432X		77.6	48.3	43.3	6.56
GREAT LAKES GL446		77.2	47.5	43.5	6.56
COUNTRYMARK C565X		78.5	47.1	40.6	5.91
COUNTRYMARK C502X		79.0	52.0	43.6	6.46
COUNTRYMARK C682X		75.1	46.3	46.4	6.14

1991
PLANTED May 11
HARVESTED September 18
SOIL TYPE Nester Sandy Loam
PREVIOUS CROP Corn
POPULATION 24,500
ROW WIDTH 30"
FERTILIZER 100-46-46
SOIL TEST: pH 6.3
P 18 (very low)
K 216 (high)

1990 **
No trial

1989
May 22
September 29
Marlette Sandy Loam
Alfalfa Sod
20,800
30"
90-56-235
5.8
80 (high)
524 (very high)

FARM COOPERATORS: Doug Nielsen and George McGloughlin, Lake City Experiment Station
MSU COOPERATORS: Dr. Michael Allen and David Main, Animal Science Dept.
COUNTY EXTENSION DIRECTOR: Carl Stephens, Lake City

Table 20

Index for 311 hybrids from 38 seed companies entered in 1595 county tests in the 1991 Michigan Corn Performance Trials. Numbers within parentheses refer to table numbers in which the hybrid appears. Company names used in association with hybrid numbers refer to the brand and the numbers are the variety (hybrid) designation. (*) Asterisk signifies entries entered in the silage In-Vitro digestibility test for Quality Analyses.

Amcorn Hybrids, Inc.

Amcorn PSX 3333 (13,14,15,16,19*)
Amcorn PSX 4343 (13,14,15,16)
Amcorn PSX 5555 (13,14,15,16)
Amcorn PSX 5757 (1,2,3,4,5,6,7,8,9,
10,11,12)

The Andersons

Andersons PSX 250 (9,10,11,12)
Andersons PSX 290 (9,10,11,12)
Andersons PSX 345 (5,6,7,8)

Asgrow Seed Co.

Asgrow RX 406 (9,10,11,12)
Asgrow RX 409 (9,10,11,12)
Asgrow RX 469 (9,10,11,12)
Asgrow RX 578 (1,2,3,4,5,6,7,8,
9,10,11,12)

Beck's Superior Hybrids

Beck's 54XA (1,2,3,4)
Beck's 57X (1,2,3,4)
Beck's 58 (1,2,3,4)

Richard Blaney Seeds, Inc.

Blaney B106 (13,14,15,16)
Blaney B305 (13,14,15,16)
Blaney B405 (5,6,7,8,9,10,11,12,18*)
Blaney B505 (5,6,7,8,9,10,11,12)
Blaney B506 (1,2,3,4)

Callahan Enterprises, Inc.

Callahan C725 (9,10,11,12)
Callahan C729 (9,10,11,12)
Callahan C743 (9,10,11,12)
Callahan C748 (1,2,3,4,5,6,7,8,9,10,11,12)
Callahan C759 (1,2,3,4,5,6,7,8,17*)
Callahan C764 (1,2,3,4,5,6,7,8,17)
Callahan C771 (1,2,3,4,17*)

Cargill Hybrid Seeds

Cargill SX269 (1,2,3,4,5,6,7,8,17,18)
Cargill 2437 (9,10,11,12,13,14,15,16)
Cargill 2927 (9,10,11,12,13,14,15,16,19)
Cargill 3427 (5,6,7,8,9,10,11,12,13,14,
15,16)
Cargill 4327 (5,6,7,8,9,10,11,12,18)
Cargill 5157 (9,10,11,12)
Cargill 5327 (5,6,7,8)

Amcorn PSX 7450 (1,2,3,4,5,6,7,8,
9,10,11,12,18*)
Amcorn PSX 8181 (5,6,7,8)
Amcorn PSX 9009 (1,2,3,4,5,6,7,8)
Amcorn PSX 9292 (1,2,3,4,5,6,7,8,17*)

Andersons PSX 360 (5,6,7,8)
Andersons PSX 370 (1,2,3,4,5,6,7,8)
Andersons PSX 380 (1,2,3,4)

Asgrow RX 626 (5,6,7,8,9,10,11,12)
Asgrow RX 706 (1,2,3,4,5,6,7,8)
Asgrow RX 745 (1,2,3,4)

Beck's 63X (1,2,3,4)
Beck's 66X (1,2,3,4)
Beck's 74X (1,2,3,4)

Blaney B603 (1,2,3,4,5,6,7,8,9,10,11,12)
Blaney B607 wx (9,10,11,12,17*)
Blaney B608 (1,2,3,4,5,6,7,8)
Blaney B609 (1,2,3,4,5,6,7,8)
Blaney B702 wx (1,2,3,4)

Callahan 24448X (1,2,3,4,5,6,7,8,
9,10,11,12)
Callahan 24459X (1,2,3,4)
Callahan 27128X (5,6,7,8,9,10,11,12)
Callahan 27148X (1,2,3,4)
Callahan 27188X (1,2,3,4,5,6,7,8,
9,10,11,12)
Callahan 27199X (1,2,3,4,5,6,7,8,
9,10,11,12)

Cargill 6227 (1,2,3,4,5,6,7,8)
Cargill 7697 (1,2,3,4)
Cargill 7877 (1,2,3,4)
Cargill 7993 (1,2,3,4)
Cargill 7997 (1,2,3,4)
Cargill 8027 (1,2,3,4)
Cargill 37012 (9,10,11,12)

Countrymark Co-op, Inc.

Countrymark C323X (9,10,11,12,18*)
Countrymark C363X (19*)
Countrymark C432X (5,6,7,8,9,10,11,12,
17*,18*,19*)
Countrymark C502X (1,2,3,4,5,6,7,8,
9,10,11,12,17*,18*,19*)

Crow's Hybrid Corn Company

Crow's SL32 (17*)
Crow's 167 (9,10,11,12,13,14,15,16)
Crow's 179 (1,2,3,4,5,6,7,8,9,10,11,
12,13,14,15,16,17*,18)
Crow's 210 (1,2,3,4,5,6,7,8)
Crow's 227 (1,2,3,4,5,6,7,8,9,10,11,12)

Dairyland Seed Company, Inc.

Dairyland DX-1014 (1,2,3,4)
Dairyland DX-1015 (1,2,3,4)
Dairyland DX-1100 (5,6,7,8,9,10,11,12,
13,14,15,16)
Dairyland DX-1103 (5,6,7,8)
Dairyland DX-1107 (5,6,7,8)
Dairyland DX-1110 (1,2,3,4,5,6,7,8)
Dairyland Stealth-1112 (1,2,3,4,5,6,7,8)
Dairyland DX-1117 (1,2,3,4)

Dekalb Plant Genetics

Dekalb DK352 (13,14,15,16)
Dekalb DK401 (9,10,11,12,18)
Dekalb DK485 (5,6,7,8,9,10,11,12,18)
Dekalb DK524 (1,2,3,4,5,6,7,8,17)

UAP Seed Company

Dyna-Gro 5351 (5,6,7,8,9,10,11,12)
Dyna-Gro 5410 (1,2,3,4,5,6,7,8)
Dyna-Gro 5470 (1,2,3,4,5,6,7,8)
UAPX 15010 (13,14,15,16)

CIBA-GEIGY Seed Division

Funk's G Brand 4120 (9,10,11,12)
Funk's G Brand 4140 (9,10,11,12)
Funk's G Brand 4160 (9,10,11,12)
Funk's G Brand 4260 (5,6,7,8,9,10,11,12)
Funk's G Brand 4299 (5,6,7,8,9,10,11,12)
Funk's G Brand 4385 (1,2,3,4,5,6,7,8)
Funk's G Brand 4393 (1,2,3,4,5,6,7,8)

Garst Seed Company

Garst 8513 (17,18)

Gen-Tech Farm Seed, Inc.

Gen-tech 1070 (1,2,3,4)

Golden Acres Seed Company

Golden Acres GA4550 (1,2,3,4)
Golden Acres GA6839 (1,2,3,4)

Countrymark C565X (1,2,3,4,5,6,7,8,
9,10,11,12,17*,18*,19*)
Countrymark C660X (1,2,3,4)
Countrymark C682X (1,2,3,4,5,6,7,8,
9,10,11,12,17*,18*,19*)

Crow's 237 (1,2,3,4,5,6,7,8)
Crow's 380 (9,10,11,12,17*,18)
Crow's 414 (1,2,3,4,9,10,11,12)
Crow's 449 (1,2,3,4,5,6,7,8)
Crow's 488 (1,2,3,4)
Crow's 498 (1,2,3,4,5,6,7,8)

Dairyland DX-1190 (13,14,15,16)
Dairyland DX-1192 (13,14,15,16)
Dairyland Stealth-1198 (5,6,7,8,9,10,11,12)
Dairyland Stealth-1201 (5,6,7,8,9,10,11,12)
Dairyland Stealth-1203 (5,6,7,8)
Dairyland Stealth-1206 (1,2,3,4,5,6,7,8)

Dekalb DK535 (1,2,3,4,5,6,7,8)
Dekalb DK550 (1,2,3,4,17)
Dekalb DK636 (1,2,3,4,17)

UAPX 15011 (9,10,11,12,13,14,15,16)
UAPX 15012 (9,10,11,12)
UAPX 15013 (1,2,3,4,5,6,7,8,9,10,11,12)
UAPX 15014 (1,2,3,4,5,6,7,8)

Funk's G Brand 4472 (1,2,3,4)
Funk's G Brand 4282 (exp. 2078X) (5,6,7,
8,9,10,11,12)
Funk's G Brand 4372 (exp. 3112X) (1,2,3,
4,5,6,7,8)
Funk's G Brand 4432 (exp. 4145X) (1,2,3,
4)

Garst 8777 (17,18)

Gen-tech 1101 (1,2,3,4)

Golden Acres GA7141 (1,2,3,4)
Golden Acres GA7149 (1,2,3,4)

(continued next column)

(continued on next page)

Sommers Bros. Seed Company

Golden Harvest EX447 (1,2,3,4)
 Golden Harvest EX545 (1,2,3,4,5,6,7,8,
 9,10,11,12,17,18)
 Golden Harvest H-2331 (1,2,3,4,5,6,7,8,
 9,10,11,12,17,18,19)
 Golden Harvest H-2349 (1,2,3,4,5,6,7,8,
 9,10,11,12,17,18,19)

Great Lakes Hybrids, Inc.

Great Lakes GL226 (13,14,15,16)
 Great Lakes GL306 (13,14,15,16)
 Great Lakes GL350 (13,14,15,16,19*)
 Great Lakes GL438 (9,10,11,12,13,14,
 15,16,19*)
 Great Lakes GL446 (5,6,7,8,9,10,11,12,
 13,14,15,16,19*)
 Great Lakes GL450 (1,2,3,4,5,6,7,8,9,10,
 11,12,13,14,15,16,18*)
 Great Lakes GL459 (5,6,7,8,9,10,11,12)
 Great Lakes GL468 (1,2,3,4,5,6,7,8,9,10,
 11,12,18*)
 Great Lakes GL482 (5,6,7,8,9,10,11,12)
 Great Lakes GL496 (5,6,7,8,9,10,11,
 12,17,18*)

Gries Seed Farms, Inc.

Gries GSF-635 (1,2,3,4,5,6,7,8)
 Gries GSF-4103 (1,2,3,4,5,6,7,8)

Fred Gutwein & Sons, Inc.

Gutwein 2100 (5,6,7,8)
 Gutwein 2191 (5,6,7,8)
 Gutwein 2390 (1,2,3,4,5,6,7,8)

Jacques Seed Company

Jacques 2750 (13,14,15,16)
 Jacques 3220 (13,14,15,16)
 Jacques 4120 (9,10,11,12,13,14,15,16)

Jung Farms, Inc.

Jung 2365 (13,14,15,16)
 Jung 2378 (13,14,15,16)
 Jung 2444 (13,14,15,16)

King Agro, Inc.

King Agro K402 (5,6,7,8,9,10,11,12)
 King Agro K416 (5,6,7,8,9,10,11,12)
 King Agro K451 (5,6,7,8,9,10,11,12)
 King Agro K647 (1,2,3,4)

Northrup King Company

Northrup King N2001 (13,14,15,16)
 Northrup King N3624 (5,6,7,8,9,10,11,12)
 Northrup King N3808 (5,6,7,8,9,10,11,12)
 Northrup King N4242 (5,6,7,8,9,10,11,12)
 Northrup King N4428 (5,6,7,8)
 Northrup King N4545 (5,6,7,8)

Golden Harvest H-2390 (5,6,7,8,9,10,
 11,12)
 Golden Harvest H-2465 (1,2,3,4,5,6,7,8,
 9,10,11,12)
 Golden Harvest H-2485 (1,2,3,4,5,6,7,8,
 9,10,11,12)
 Golden Harvest H-2532 (1,2,3,4,17)
 Golden Harvest H-2572 (17)

Great Lakes GL499 (1,2,3,4,5,6,7,8,
 9,10,11,12)
 Great Lakes GL509 (17,18*)
 Great Lakes GL536 (1,2,3,4,5,6,7,8,
 9,10,11,12)
 Great Lakes GL569 (5,6,7,8,9,10,11,12,
 17,18*)
 Great Lakes GL577 (1,2,3,4,5,6,7,8,
 9,10,11,12,17,18*)
 Great Lakes GL579 (5,6,7,8,9,10,11,12,
 17,18*)
 Great Lakes GL583 (1,2,3,4,5,6,7,8,
 17,18*)
 Great Lakes GL586 (1,2,3,4,17,18*)

Gries GSF-6110 (1,2,3,4,5,6,7,8)

Gutwein 2484 (1,2,3,4)
 Gutwein 2650 (1,2,3,4)

Jacques 4770 (1,2,3,4,5,6,7,8,9,10,11,12)
 Jacques 5170 (5,6,7,8)
 Jacques 7970 (1,2,3,4)

Jung 2496 (9,10,11,12,13,14,15,16)
 Jung 2514 (9,10,11,12)
 Jung 2696 (9,10,11,12)

King Agro K2204 (9,10,11,12)
 King Agro K5574 (5,6,7,8,9,10,11,12)
 King Agro GG955 (9,10,11,12)
 King Agro GG1008A (1,2,3,4,5,6,7,8)

Northrup King N5728 (5,6,7,8)
 Northrup King N6330 (1,2,3,4)
 Northrup King X100 (13,14,15,16)
 Northrup King X209 (13,14,15,16)
 Northrup King X279 (13,14,15,16)
 Northrup King X728 (1,2,3,4)

Rupp Seeds, Inc.

Rupp XR1505 (5,6,7,8,9,10,11,12)
 Rupp XR1639 (5,6,7,8,9,10,11,12)
 Rupp XR1739 (1,2,3,4,5,6,7,8)
 Rupp XR1774 (1,2,3,4,5,6,7,8)
 Rupp XR1808 (1,2,3,4)

Stine Seeds

Stine 860 (9,10,11,12,13,14,15,16)
 Stine 900 (5,6,7,8,9,10,11,12,13,14,15,16)
 Stine 1015 (1,2,3,4,5,6,7,8,9,10,11,12)

Garst Seed Company

SuperCrost 1548 (13,14,15,16)
 SuperCrost 1594 (13,14,15,16)
 SuperCrost 1900 (5,6,7,8,9,10,11,12,18)
 SuperCrost 1999 (5,6,7,8,9,10,11,12)
 SuperCrost 2000 (5,6,7,8,9,10,11,12)

Terra International, Inc.

Terra TR59 (18*)
 Terra TR940 (9,10,11,12)
 Terra TR1010 (5,6,7,8,9,10,11,12)
 Terra TR1020 (5,6,7,8,9,10,11,12,18*)
 Terra TR1040 (1,2,3,4,5,6,7,8)

Top Farm Hybrids

Top Farm TFSx1097A (9,10,11,12)
 Top Farm TFSx1101 (5,6,7,8,9,10,11,12)
 Top Farm TFSx1104 (1,2,3,4,5,6,7,8)

Wolf River Valley Seeds

Wolf River Valley 9080 (15)

Michigan Hybrid Seed Company, Inc.

Wolverine W133 (9,10,11,12)
 Wolverine W156 (5,6,7,8,9,10,11,12)
 Wolverine W158 (5,6,7,8)

Rupp XR1884 (1,2,3,4)
 Rupp Exp. 1-190 (1,2,3,4)
 Rupp Exp. 1-191 (9,10,11,12)
 Rupp Exp. 1-198 (13,14,15,16)

Stine 1021 (1,2,3,4,5,6,7,8,9,10,11,12)
 Stine 1077 (1,2,3,4,5,6,7,8,9,10,11,12)
 Stine 1116 (1,2,3,4,5,6,7,8)
 Stine 1128 (1,2,3,4)

SuperCrost 2989 (1,2,3,4,5,6,7,8,
 9,10,11,12,17,18)
 SuperCrost 4366 (1,2,3,4)
 SuperCrost 5460 (1,2,3,4)

Terra TR1060 (1,2,3,4,5,6,7,8,18*)
 Terra TR1090 (1,2,3,4,5,6,7,8)
 Terra TR1120 (1,2,3,4,18*)
 Terra TR1125 (1,2,3,4)
 Terra Exp. 190 (9,10,11,12)

Top Farm TFSx1107 (1,2,3,4,5,6,7,8)
 Top Farm TFSx1195A (9,10,11,12)

Wolf River Valley 9085 (15)

Wolverine W167 (1,2,3,4,5,6,7,8,
 9,10,11,12)

Roy W. Parker & Son, Inc.

Parker 63 (1,2,3,4)

Payco Seed Company

Payco 239 (13,14,15,16)

Payco 248 (13,14,15,16)

Payco 648 (5,6,7,8,9,10,11,12)

Payco 687 (5,6,7,8,9,10,11,12)

Payco 711 (5,6,7,8)

Pickseed Canada, Inc.

Pickseed 2600 (13,14,15,16)

Pickseed 2700 (13,14,15,16)

Pickseed 2855 (13,14,15,16,19*)

Pickseed 5545 (9,10,11,12,13,14,
15,16,18*)**Pioneer Hi-Bred International, Inc.**

Pioneer 3241 (1,2,3,4)

Pioneer 3293 (1,2,3,4)

Pioneer 3357 (1,2,3,4,5,6,7,8,17*)

Pioneer 3379 (1,2,3,4)

Pioneer 3394 (1,2,3,4,5,6,7,8,17*)

Pioneer 3417 (1,2,3,4)

Pioneer 3429 (17,18)

Pioneer 3475 (1,2,3,4,5,6,7,8,9,10,11,12)

Pioneer 3527 (1,2,3,4,5,6,7,8,
9,10,11,12,17*,18*)Pioneer 3573 (1,2,3,4,5,6,7,8,
9,10,11,12,17*,18*)**Prairie Stream Farms, Inc.**

Prairie Stream SX420 (1,2,3,4)

Pro-Seed

Pro-Seed XS1002 (5,6,7,8)

Pro-Seed XS1043 (1,2,3,4,5,6,7,8)

Provico Seeds

Provico Pro 751 (9,10,11,12)

Provico Pro 790 (5,6,7,8,9,10,11,12)

Provico Pro 811 (1,2,3,4,5,6,7,8,
9,10,11,12)Provico Pro 880 (1,2,3,4,5,6,7,8,
9,10,11,12,17*,18)

Provico Pro 900 (1,2,3,4,5,6,7,8,17*,18)

Provico Pro 920 (1,2,3,4,5,6,7,8)

Renk Seed Company

Renk RK76 (1,2,3,4,17,18)

Renk RK138 (18)

Renk RK430 (9,10,11,12)

Renk RK505 (9,10,11,12)

Renk RK534 (9,10,11,12)

Renk RK602 (5,6,7,8,9,10,11,12,18)

Renk RK646 (5,6,7,8,9,10,11,12)

Parker 350 (1,2,3,4)

Payco 811 (1,2,3,4)

Payco 829 (1,2,3,4)

Payco 872 (5,6,7,8,18)

Payco 900 (17)

Pickseed 5665 (9,10,11,12,13,14,15,
16,18*)

Pickseed 8833 (5,6,7,8)

Pickseed 83-280 (5,6,7,8,9,10,11,12)

Pickseed 83-282 (5,6,7,8,9,10,11,12)

Pioneer 3733 (1,2,3,4,5,6,7,8,9,10,11,
12,13,14,15,16)Pioneer 3751 (1,2,3,4,5,6,7,8,9,10,11,
12,13,14,15,16,17*,18*)

Pioneer 3779 (13,14,15,16,18)

Pioneer 3845 (15)

Pioneer 3897 (13,14,15,16)

Pioneer 3921 (13,14,15,16)

Pioneer 3963 (15)

Pioneer X0215 (1,2,3,4,5,6,7,8,9,10,11,
12,13,14,15,16,17*,18*)Pioneer X9310 (1,2,3,4,5,6,7,8,9,10,11,
12,13,14,15,16,17*,18*)

Prairie Stream SX475 (1,2,3,4)

Pro-Seed XS1062 (1,2,3,4)

Pro-Seed XS1091 (1,2,3,4)

Provico Pro 970 (1,2,3,4,17,18)

Provico Pro 500X (13,14,15,16,19)

Provico Pro 510X (13,14,15,16,19)

Provico Pro 520X (13,14,15,16,19)

Provico Pro 540X (9,10,11,12,13,14,15,
16,19)

Provico Pro 630X (5,6,7,8,9,10,11,12,19)

Provico Pro 760X (5,6,7,8,9,10,11,12)

Renk RK680 (17,18)

Renk RK702 (1,2,3,4,5,6,7,8,9,10,11,12)

Renk RK721 (1,2,3,4,5,6,7,8,
9,10,11,12,17,18)

Renk RK803 (1,2,3,4)

Renk RK873 (1,2,3,4)

(continued top right)

COMPANIES WITH HYBRIDS ENTERED IN 1991 TRIALS

<u>BRAND</u>	<u>COMPANY NAME AND ADDRESS</u>
AMCORN	Amcorn Hybrids, Inc., 1093 129th Avenue, Box 6 Bradley, MI 49311
ANDERSONS	The Andersons, P.O. Box 119 Maumee, OH 43537
ASGROW	Asgrow Seed Company, 7000 Portage Road Kalamazoo, MI 49001
BECK'S	Beck's Superior Hybrids, 6767 East 276th Street Atlanta, IN 46031
BLANEY	Richard Blaney Seeds, Inc., 5292 East Lacy Road Madison, WI 53711
CALLAHAN	Callahan Enterprises, Inc., 1122 East 169th Street Westfield, IN 46074
CARGILL	Cargill Hybrid Seeds, Box 5645 Minneapolis, MN 55440-5645
COUNTRYMARK	Countrymark Co-op, Inc., 4565 Columbus Pike, Box 1206 Delaware, OH 43015
CROW'S	Crow's Hybrid Corn Company, Box 306 Milford, IL 60953
DAIRYLAND	Dairyland Seed Company, Inc., P. O. Box 958, 3570 Hwy. H West Bend, WI 53095-0958
DEKALB	Dekalb Plant Genetics, 3100 Sycamore Road Dekalb, IL 60115
DYNA-GRO	UAP Seed Company, 4415 66th Street, Suite 111 Lubbock, TX 79414
FUNK'S G-BRAND	CIBA-GEIGY Seed Division, 12275 South Sherman Lake Drive Augusta, MI 49012
GARST	Garst Seed Company, P. O. Box 67 Kentland, IN 47951
GEN-TECH	Gen-tech Farm Seed, Inc., 15740 Old 31 Argos, IN 46501
GOLDEN ACRES	Golden Acres Seed Company, 888 Parsons Road, P.O. Box 226 Crofta, OH 43013
GOLDEN HARVEST	Sommer Bros. Seed Company, P.O. Box 248 Pekin, IL 61554
GREAT LAKES	Great Lakes Hybrids, Inc., 9915 West M-21 Ovid, MI 48866
GRIES	Gries Seed Farms, Inc., 2348 North Fifth Street Fremont, OH 43420
GUTWEIN	Fred Gutwein & Sons, Route 1, Box 40 Francesville, IN 47946

<u>BRAND</u>	<u>COMPANY NAME AND ADDRESS</u>
JACQUES	Jacques Seed Company, 720 St. Croix Street Prescott, WI 54021
JUNG	Jung Farms, Inc., 335 South High Street Randolph, WI 53957
KING AGRO	King Agro, Inc., 8687 East US 223, P.O. Box 69 Blissfield, MI 49228
NORTHROP KING	Northrup King Company, P. O. Box 959 Minneapolis, MN 55440
PARKER	Roy W. Parker & Son, Inc., P. O. Box 125 Kimmell, IN 46760
PAYCO	Payco Seed Company, P.O. Box 458 Grand Ledge, MI 48837
PICKSEED	Pickseed Canada, Inc., Box 126 Richmond Hill, Ontario, Canada L4C 4X9
PIONEER	Pioneer Hi-Bred International, Inc., 1000 West Jefferson Street Tipton, IN 46072
PRAIRIE STREAM	Prairie Stream Farms, Inc., Route 3, Box 333 Frankfort, IN 46041
PRO-SEEDS	Pro-Seed, 236 Sugar Street Blissfield, MI 49228
PROVICO	Provico Seeds, Box 579, 104 South Sycamore Street Botkins, OH 45306
RENK	Renk Seed Company, 6700 Wilburn Road Sun Prairie, WI 53590
RUPP	Rupp Seeds, Inc., 17919 County Road B Wauseon, OH 43567
STINE	Stine Seeds, RR 3 Box 204 Adel, IA 50003
SUPERCROST	Garst Seed Company, P. O. Box 67, 601 Funk Parkway Kentland, IN 47951
TERRA	Terra International, Terra Centre, 600 Fourth Street Sioux City, IA 51101
TOP FARM	Top Farm Hybrids, Inc., P. O. Box 850 Lubbock, TX 79414
UAPX	UAP Seed Company, 4415 66th Street, Suite 111 Lubbock, TX 79414
WOLF RIVER VALLEY	Wolf River Valley Seeds, N. 2976 Hwy. M White Lake, WI 54491
WOLVERINE	Michigan Hybrid Seed Company, Inc., 206 Park Street, P.O. Box 343 Mason, MI 48854

MICHIGAN STATE UNIVERSITY

 MSU is an affirmative-action equal-opportunity institution. Cooperative Extension Service programs and materials are open to all without regard to race, color, national origin, sex, handicap, age or religion.

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

This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by the Cooperative Extension Service or bias against those not mentioned. This bulletin becomes public property upon publication and may be reprinted verbatim with credit to MSU. Reprinting cannot be used to endorse or advertise a commercial product or company.

Major Revision-1:92-4M-KMF-HR, price 75 cents, for sale only
DESTROY PREVIOUS EDITIONS
File 22.1 (Field Crops-Corn)

 Printed on recycled paper using vegetable-based inks.