

2014 MICHIGAN CORN HYBRIDS COMPARED

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UNIVERSITY

Research conducted by Michigan State University.

Results of the 2014 Growing Season.

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EXTENSION BULLETIN E-431 DECEMBER 2014

COMPANY INDEX

BRAND	CONTACT	BRAND	CONTACT	BRAND	CONTACT
AGRIGOLD	AgriGold Hybrids 5381 Akin Rd St. Francisville, IL 62460 www.agrigold.com	LEGACY SEEDS	Legacy Seeds, Inc. P.O. Box 68 - 290 Depot St. Scandinavia, WI 54799 www.legacyseeds.com	SEED CONSULTANTS	Seed Consultants, Inc. 648 Miami Trace Rd. SW Washington C. H., OH 43160 www.seedconsultants.co
BECK	Beck's Hybrids 6767 E. 276th Street Atlanta, IN 46031 www.beckshybrids.com	LEGEND	Legend Seeds P.O. Box 241 DeSmet, SD 57231 www.legendseeds.com	SELECT	Select Seeds 277 West State Rd. 218 Camden, IN 46917 www.selectseed.com
CHANNEL	Monsanto Company 800 N. Lindbergh Blvd. St. Louis, MO 63167 www.channel.com	M & W	M & W Seeds Inc. 8443 Wilcox Road Eaton Rapids, MI 48827 www.mwseeds.com	SPECIALTY	Specialty Hybrids 306 N Main Street Monticello, IN 47960 www.specialtyhybrids.com
CROPLAN	Croplan Genetics P.O. Box 64281, MS 5735 St Paul, MN 55164 www.croplan.com	MASTERS CHOICE	Masters Choice, Inc. 3010 State Route 146 E. Anna, IL 62906 www.seedcorn.com	SPECTRUM	Spectrum Seed Solutions 220 S. Main St. P.O. Box 7 Linden, IN 47955 www.spectrumseed.com
DAIRYLAND	Dairyland Seed P.O. Box 958 West Bend, IL 62535 www.dairylandseed.com	MYCOGEN	Mycogen Seeds 9330 Zionsville Road Indianapolis, IN 46268 www.mycogen.com	STEYER	Steyer Seeds 6145 N. County Road 33 Tiffin, OH 44883 www.steyerseeds.com
DEKALB	Monsanto Company 800 N. Lindbergh Blvd. St. Louis, MO 63167 www.asgrowanddekalb.com	NK Brand	Syngenta Seeds, Inc. 11055 Wayzata Blvd. Minnetonka, MN 55440 www.syngenta.com	T.A. SEEDS	T.A Seeds 39 Seeds Lane Jersey Shore, PA 17740 www.taseeds.com
DYNA-GRO	Dyna-Gro Seed 4648 S. Garfield Road Auburn, MI 48611 www.dyna-groseed.com	NuTech	NuTech Seed, LLC 2321 N. Loop Dr., Suite 230 Ames, IA 50010 www.nutechseed.com	WELLMAN	Wellman Seeds, Inc. 23778 Delphos Jennings Rd. Delphos, OH 45833 www.wellmanseeds.com
GOLDEN HARVEST	Syngenta Seed 11055 Wayzata Blvd. Minnetonka, MN 55440 www.syngenta.com	NuTech/ G2 GENETICS	NuTech Seed, LLC 2321 N. Loop Dr., Suite 230 Ames, IA 50010 www.nutechseed.com	WOLF RIVER	Wolf River Vally Seeds N 2976 County M White Lake, WI 54491 www.wolfrivervallyseeds.com
GREAT LAKES	Great Lakes Hybrids 9915 West M21 Ovid, MI 48866 www.greatlakeshybrids.com	PIONEER	DuPont Pioneer 59 Greif Pkwy, West Suite 200 Delaware, OH 43015 www.pioneer.com	UNITY	Unity Seeds 3589 Sagamore Pkwy Layfayette, IN 47904 www.unityseeds.com
HYLAND SEEDS	Hyland Seeds #5 Hyland Drive P.O. Box 1090 Blenheim, ON N0P1A0 www.hylandseeds.com	RENK	Renk Seed Company 6809 Wilburn Road Sun Prairie, WI 53590 www.renkseed.com		
KEY	AGRA Solutions, LLC 23778 Delphos Jennings Road Delphos, OH 45833 www.agrasolutions.com	RUPP	Rupp Seeds, Inc. 17919 Co. Rd. B Wauseon, OH 43567 www.ruppseeds.com		

2014

MICHIGAN CORN PERFORMANCE TRIALS

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Introduction

The Michigan State University Department of Crop, Soil and Microbial Sciences conduct hybrid corn trials each year in cooperation with Michigan State University AgBio Research stations, seed corn companies, and farmers to determine performance.

Entries

Seed companies are invited to enter hybrids in the trials; a fee is charged to cover expenses incurred while conducting the trials. Separate indexes for grain and silage provide a list of all hybrids entered in the 2014 trials (pg. 28 and 33, respectively). Fourteen grain and 11 silage locations were planted. A total of 364 hybrids from 31 seed companies (34 brand names) make up the 581 entries; that translates into 7,669 separate county plots planted. Company names used in association with hybrid numbers refer to the brand. The hybrid numbers are the companies' designations.

Hybrids that have a seed-applied insecticide that may enhance yield are listed in the table column TRT (Treatment). The "TRAIT" column uses code numbers, listing the hybrid traits provided by the company. Treatment and Trait codes are listed in the tables on page 23.

How to Use This Bulletin

Tables list hybrids alphabetically and contain yield results for each location, plus zone averages. Complete one and two-year yield results are listed in tables for each zone where data is available. One-year single-site results are less reliable than multiple year and multiple location averages, and should be interpreted with more caution. Confidence in corn performance data increases as the number of years and the number of testing locations increase. Results for corn grain and corn silage trials are also listed on our Web site.

<http://www.varietytrials.msu.edu>

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The results shown are the average of four replications grown in close proximity to one another. 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 were two methods employed to reduce this variation. Because these methods do not eliminate all variables, the magnitude of difference necessary for statistical significance has been calculated for yield, moisture content, and test weight. The value calculated as the least significant difference (LSD) is the amount an individual hybrid would have to differ from another hybrid in the same test to be considered significantly different from that hybrid. The coefficient of variability, (CV) is indicative of a trial's precision. Trials with low levels of error variation have lower CV values.

The highest-yielding hybrid in each trial is indicated with a double asterisk (**) in each table, hybrids that are not significantly different from the highest-yielding hybrid are indicated with an asterisk (*). Other agronomic information relative to each trial is given in tables B and C (pages 5 and 32). Fertilizer amounts are shown as total pounds per acre of nitrogen, phosphorus, and potassium applied during the season.

Season in Summary: 2014

Entry forms for participating companies were due March 15. By the end of March we began receiving the seeds that made up our trials. After a lot of paper work, printing of labels and placing labels on packets, our students began counting the seeds and filling the packets. The counting process was made easier with an Agriculex ESC-1 seed counter. Packets were sorted by trial and location and placed in a computer-generated randomized planting order. Some of our seed comes from winter production in South America. We are usually receiving seed up to the morning we leave the barn for the first day of planting.

Planting began in Cass County on Sunday May 11th, 2014, and over the next five weeks planting went well. The only gap between plantings were the eight days between Cass County, (first planted), and Branch County, (second planted).

Stand counts went off without a hitch, all plots were counted and thinned at the V5 stage. Most locations were planted at a population of 36,000 and then thinned to a target number in order to achieve a relatively even population for all plots. The two exceptions were Grand Traverse County and Wood County, OH. Grand Traverse County was planted at the standard 36,000 and then thinned to a population of 29,305. Wood County, OH was planted at 36,500 and had a target of 35,640.

Weed control applications were coordinated with cooperators to match their rotational restrictions. Fertilizer applications followed recommended rates for the field.

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2014

GROWING SEASON WEATHER SUMMARY

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Among the most important weather influences on the 2014 growing season was the severe winter that preceded it. A deep upper-air troughing pattern developed across eastern North America during late November and with only a few temporary breaks continued into early March. This pattern led to the passage of a series of arctic-origin air masses through the state and region, the coldest November through March period in over 100 years and the most extensive ice cover on the Great Lakes since the winter of 1978/1979. Extreme minimum temperatures during the winter ranged from -35°F or less in the western UP to just below 0°F at a few locations along the lake shore in western Lower Michigan.

Snowfall during the winter was heavier than normal in most areas, ranging from about 40 inches in some central and southern sections to more than 250 inches in the Upper Peninsula's lake-effect snow belts. The prolonged cold temperatures allowed the development of an unusually deep snow pack across the state, with depths by the beginning of March ranging from about 4 inches at a few locations in the eastern Lower Peninsula to more than 4 feet across snowbelt areas of Upper Michigan. The snow pack also contained very high levels of water equivalent, ranging from about 2 inches in the SE corner of the state to 3-6 inches across much of Lower MI to 6-10 inches or more in lake-effect snowbelt areas of NW Lower and northern Upper MI. For some areas (e.g. central and southern Lower MI), these values were near records levels. Given the deep snow cover, soil temperatures remained at warmer-than-normal levels across the state during the winter and much of the water in the snow pack infiltrated into the soil following an extended thaw in late March. By the beginning of April, all of the state was categorized by the Palmer Drought Severity Index as 'Unusually Moist' to 'Extremely Moist'.

The spring of 2014 was challenging for most agricultural activities. Mean temperatures for the month of April ranged from more than 6°F below normal across central and western sections of Upper Michigan to near normal in southeastern sections of the Lower Peninsula. Precipitation totals ranged from less than 2" across southern sections of the state to more than 6" across central and northern sections of the Lower Peninsula. The cool, wet weather slowed development of overwintering perennial and annual crops and severely hampered spring planting and other fieldwork activities. A period of warm, dry conditions developed during the second half of May and continued into early June, finally allowing spring planting and associated fieldwork to progress at a rapid rate across Michigan.

A persistent frontal boundary oscillating north and south across the Upper Midwest during late June combined with an abundance of Gulf of Mexico-origin moisture led to wetter than normal conditions and several rounds of severe weather across much of the region including portions of Michigan. Total June rainfall ranged from less than 2" across some eastern

sections of the state to more than 6" in the southwestern Lower Peninsula. Widespread heavy rainfall late in the month reversed earlier drier-than-normal conditions that had slowed vegetative crop growth in some southwestern sections of the state. Mean temperatures for the month were above long-term normals at most locations, ranging from near to slightly below-normal levels across central and western sections of Upper Michigan to 1-3°F above normal elsewhere. The warmer-than-normal weather led to a noticeable acceleration of crop growth and development. By the end of June, seasonal growing degree day totals had increased to levels near to slightly ahead of normal across most southern and central sections of the state. In contrast, seasonal totals across western and central sections of Upper Michigan continued to lag from 7-10 days behind normal.

During early July, an upper-air troughing pattern developed across central North America and persisted into mid August, resulting in a return of cooler-than-normal weather across much of the Great Lakes region. Mean temperatures for the July through mid August period generally remained from 2-5°F below the long-term normals. As of late August, seasonal growing degree day accumulations fell back to well-behind normal rates over most of the state, with greatest departures across northern and western sections of the state where the totals were more than 2 calendar weeks behind normal. The northwesterly upper air pattern led to a highly variable pattern of rainfall across the state during the mid-summer period, with totals ranging from below-normal levels across western and northern sections of the state to above-normal levels across far eastern sections of Lower Michigan. An outbreak of 'training' thunderstorms (thunderstorms which repeatedly form and move over the same area) across much of eastern Lower Michigan led to rainfall totals from 2" to more than 6" in a 12 hour period on the 11th, causing widespread flooding across much of the Detroit Metro area. In contrast, dryness continued and intensified across many western sections of the state. As a result, central sections of Upper Michigan and northwestern South Central Lower Michigan were categorized as 'Abnormally Dry' by the U.S. Drought Monitor as of late August.

A progressive, west-to-east jet stream flow led to the development of more variable weather conditions across Michigan in early September. The passage of a Canadian-origin air mass across the region accompanied by clear, calm nighttime conditions brought the first freezing temperatures of the fall season to western and central sections of the Upper Peninsula on the 12th and 13th of September, and to interior sections of northern Lower Michigan on the 13th and 14th. The passage of a series of frontal boundaries and low pressure systems brought heavy precipitation to much of the state during

- Weather Continued On Page 6.

TABLE A. GROWING SEASON SUMMARY - TEMPERATURE, PRECIPITATION AND GROWING-DEGREE-DAY ACCUMULATIONS

COUNTY	MAY			JUNE			JULY			AUGUST			SEPTEMBER			SEASON			
	OBS	NORM	DEV	OBS	NORM	DEV	OBS	NORM	DEV	OBS	NORM	DEV	OBS	NORM	DEV	OBS	NORM	DEV	
Zone 1	BRANCH & CASS (Coldwater)	58.4	59.2	-0.8	67.3	68.4	-1.1	64.5	71.9	-7.4	67.6	70.1	-2.5	58.2	63.3	-5.2	63.2	66.6	-3.4
	PPT	2.46	3.12	-0.66	5.40	3.95	1.45	1.73	3.79	-2.06	3.18	3.16	0.02	3.03	3.01	0.02	15.80	17.03	-1.23
	GDD	370	381	-11	537	564	-27	478	670	-192	561	628	-67	335	454	-119	2281	2697	-416
Zone 2	LENAWEE	59.0	58.3	0.7	69.0	67.8	1.2	67.5	71.7	-4.2	70.0	69.9	0.1	60.8	62.6	-1.9	65.3	66.1	-0.8
	& WASHTENAW	2.80	3.04	-0.24	4.22	3.30	0.92	0.69	3.73	-3.04	0.26	3.20	-2.94	1.25	2.62	-1.37	9.22	15.89	-6.67
	(Hudson)	380	353	27	582	542	40	556	658	-102	629	616	13	404	432	-28	2551	2601	-50
Zone 3	WOOD (OH) (Bowling Green)	60.5	60.1	0.4	70.3	69.8	0.5	69.1	73.4	-4.3	70.8	70.9	-0.1	62.5	64.1	-1.6	66.6	67.7	-1.0
	PPT	1.69	3.58	-1.89	4.13	3.56	0.57	0.22	3.57	-3.35	0.75	3.36	-2.61	2.55	2.63	-0.08	9.34	16.70	-7.36
	GDD	391	360	31	613	551	62	598	682	-84	654	628	26	431	430	1	2687	2651	36
Zone 4	ALLEGAN	57.2	57.4	-0.2	67.3	67.1	0.2	65.0	71.2	-6.2	69.0	69.5	-0.5	60.1	61.9	-1.8	63.7	65.4	-1.7
	(Wayland)	2.31	2.86	-0.55	3.63	3.68	-0.05	1.60	2.95	-1.35	4.42	3.14	1.28	2.69	3.24	-0.55	14.65	15.87	-1.22
	GDD	326	335	-9	539	530	9	477	654	-177	597	610	-13	369	412	-43	2308	2541	-233
Zone 5	INGHAM (MSU)	58.3	57.5	0.8	67.9	67.0	0.9	65.8	70.7	-4.9	68.4	69.0	-0.6	59.5	62.0	-2.5	64.0	65.2	-1.3
	PPT	3.14	2.73	0.41	5.25	3.54	1.71	2.07	3.02	-0.95	3.85	3.12	0.73	2.83	2.50	0.33	17.14	14.91	2.23
	GDD	351	338	13	553	530	23	507	640	-133	582	598	-16	358	418	-60	2351	2524	-173
Zone 6	SAGINAW	59.3	58.6	0.7	69.9	68.2	1.7	68.7	72.1	-3.4	69.4	70.2	-0.8	61.9	62.9	-1.0	65.8	66.4	-0.6
	(Saginaw)	3.18	2.49	0.69	2.45	3.09	-0.64	3.43	2.83	0.60	4.73	3.29	1.44	3.69	2.76	0.93	17.48	14.46	3.02
	GDD	355	367	-12	601	555	46	586	670	-84	608	623	-15	405	438	-33	2555	2653	-98
Zone 7	HURON (Pigeon)	56.9	55.2	1.7	66.8	64.9	1.9	66.1	69.3	-3.2	66.2	67.8	-1.6	59.0	61.0	-2.0	63.0	63.6	-0.6
	PPT	1.59	2.58	-0.99	1.96	2.88	-0.92	2.17	2.93	-0.76	1.91	3.01	-1.10	3.09	2.67	0.42	10.72	14.07	-3.35
	GDD	297	298	-1	516	479	37	508	602	-94	517	569	-52	339	387	-48	2177	2335	-158
Zone 8	MASON (Ludington)	57.9	54.4	3.5	68.2	63.6	4.6	66.4	68.5	-2.1	69.2	67.2	2.0	60.2	60.2	0.0	64.4	62.8	1.6
	PPT	3.18	2.48	0.70	7.03	2.93	4.10	2.35	2.18	0.17	2.14	3.79	-1.65	2.55	3.25	-0.70	17.25	14.63	2.62
	GDD	329	273	56	562	450	112	518	587	-69	615	552	63	393	365	28	2417	2227	190
Zone 9	MONTCALM (Entrican)	57.0	57.7	-0.7	67.1	67.1	0.0	65.2	71.0	-5.8	67.6	69.3	-1.7	58.9	61.6	-2.7	63.2	65.3	-2.2
	PPT	5.57	2.88	2.69	3.38	3.43	-0.05	3.68	2.50	1.18	1.92	3.84	-1.92	2.11	3.12	-1.01	16.66	15.77	0.89
	GDD	327	351	-24	533	536	-3	488	646	-158	563	603	-40	352	414	-62	2263	2550	-287
Zone 10	GRAND TRAVERSE (NWMHS)	55.5	53.5	2.0	65.8	63.7	2.1	65.4	68.8	-3.4	68.0	67.3	0.7	59.7	59.3	0.4	62.9	62.5	0.4
	PPT	2.66	2.48	0.18	2.19	3.15	-0.96	1.33	2.88	-1.55	3.19	2.93	0.26	5.64	3.60	2.04	15.01	15.04	-0.03
	GDD	281	273	8	490	454	36	488	587	-99	565	552	13	325	348	-23	2149	2214	-65
Zone 11	IOSCO (Standish)	57.0	54.1	2.9	67.1	64.1	3.0	67.4	68.4	-1.0	61.3	66.3	-5.0	59.0	59.0	0.0	62.3	62.4	0.0
	PPT	3.16	3.32	-0.16	2.72	3.43	-0.71	4.09	2.81	1.28	3.97	3.40	0.57	3.24	3.24	0.00	17.18	16.20	0.98
	GDD	303	181	122	525	431	94	546	576	-30	396	489	-93	374	279	95	2144	1956	188
Zone 12	MENOMINEE (Stephenson)	53.8	53.6	0.2	63.6	62.7	0.9	64.8	67.4	-2.6	65.5	65.5	0.0	57.2	57.0	0.2	61.0	61.2	-0.3
	PPT	2.78	3.57	-0.79	1.96	3.72	-1.76	1.69	3.63	-1.94	3.76	3.86	-0.10	2.44	3.60	-1.16	12.63	18.38	-5.75
	GDD	275	285	-10	448	438	10	497	559	-62	508	513	-5	331	319	12	2059	2114	-55
Zone 13	DELTA (Escanaba)	51.4	52.6	-1.2	61.4	62.3	-0.9	63.1	65.7	-2.6	63.6	65.2	-1.6	56.5	57.7	-1.2	59.2	60.7	-1.5
	PPT	2.13	2.85	-0.72	3.04	3.06	-0.02	3.21	3.57	-0.36	4.59	3.08	1.51	4.85	3.69	1.16	17.82	16.25	1.57
	GDD	244	263	-19	398	419	-21	446	499	-53	458	492	-34	299	311	-12	1845	1984	-139

OBS = Totals observed in 2014
 NORM = Normals calculated over 30 year period (1981-2010)
 DEV = Deviation of observed from normal
 Table courtesy of MSU Agricultural Weather Office (517-355-0231)

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early September with monthly totals ranging from less than 3" across southern sections of Lower Michigan to more than 6" across some northwestern sections of the Lower Peninsula. By month's end, the fraction of the state in the U.S. Drought Monitor's 'Abnormally Dry' category fell back to about 6 percent, mostly across far south central portions of the Lower Peninsula.

The development of an upper ridge across the region during late September led to abnormally warm and dry weather during much of the last week of the month, advancing late-maturing crops and accelerating grain drydown rates. Still, as of the end of September, seasonal growing degree day accumulations lagged well behind normal in most areas, ranging from a few days behind in a few eastern Lower Michigan locations to 1-2 weeks or more behind normal elsewhere. Unfortunately, the ridging pattern was replaced by a deep upper-air trough and cool, wet weather in early October. That was followed by the incursion of a Canadian-origin air mass across the region that led to a series of frost/freezing events on the 10th, 11th, and 12th of October, and again on the 19th that ended the growing season for many crops.

While the first freezes were close to the climatic average dates in many cases, they came before a portion of the state's corn crop delayed by late planting and an abnormally cool July had reached maturity. According to USDA's National Agricultural Statistics Service, only 51 percent of the state's corn had reached maturity by the 5th of October and 62 percent by the 12th (normal averages for those dates are 68 percent and 81 percent respectively). Low grain test weights and high moisture content were a challenge for some growers.

The winter season made an early appearance across the Midwestern USA in early November as a major winter storm crossed the region bringing strong winds, heavy snow, and major disruptions in travel to northern and western sections of Michigan on the 10th-12th. Several rounds of lake effect snowfall followed across the region through the third week of the month, slowing vegetative development of fall-planted crops and bringing harvest operations to a halt in most areas.

In summary, the 2014 growing season was characterized by a prolonged cool, wet spring which delayed spring planting and an unusually cool July (climatologically the warmest month of the year), which combined to slow crop growth and development rates. For the April through September period, temperatures averaged from near-normal in a few western locations to below-normal elsewhere across the state. Precipitation totals for the same period varied greatly by location, ranging from well below normal levels (more than 6" below normal in some cases) across western and southern areas of the state to more than 3" above-normal in the east and north. Finally, given a tendency for above normal temperatures in recent years, it is also worth noting the recent string of cooler-than-normal weather back through the preceding winter in a historical context. Mean temperatures for the 9-month November, 2013 through July, 2014 period averaged across the state were 36.2°F, which was 2.8°F below normal and the coolest such period since 1925/1926.

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Table A (pg. 5) presents 2014 accumulations of temperature, rainfall, and heat units, plus their deviation from 30-year norms. Data is obtained from Michigan State University weather stations located closest to each location. Actual accumulation at each location may vary slightly.

GDU's, or rather the lack of, seemed to affect much of the timely maturity of corn throughout the state, and our plots were no exception. We began harvesting silage plots on Sept. 16 in Wood County, Ohio and finished on Oct. 29 with our Delta County location. We completed our first six locations in 13 days, however, as everyone knows, the weather cooperated for some and was a disappointment for others. It took us an additional 30 days to complete our last five locations.

Unfortunately, we were unable to harvest two of our silage locations. Menominee County received an unusual amount of rain and early frost damage leading up to harvest, leaving the field in an unharvestable condition. Alger County received frost and also suffered from severe wildlife damage. Our Ingham County and Branch County locations had the early and late silage trials harvested on separate dates due to the slow-maturing rate of the late silage plots. Sub-samples were brought back to Michigan State University for final analysis. Our student, Emily DeVooght, was very instrumental in the quick processing of our sub-samples.

Grain harvest began on Nov. 10 in Allegan County, and we finished in Grand Traverse County on Dec. 5. The Grand Traverse County location was harvested late due to heavy snow accumulation, fortunately the snow melted, allowing us to return to the field for harvest. However, after data analysis it was decided that the information would not be entered in the bulletin. Menominee, Delta, Grand Traverse, and Montcalm Counties were not harvested due to early frost and a lack of maturity.



2014 GRAIN PERFORMANCE TRIALS

Introduction

The grain index (pg. 28) contains a list of all hybrids planted in the 2014 grain trials.

County results are reported in the following tables:

Tables 1E/1L Zone 1 - Branch, Cass and Washtenaw

Tables 2E/2L Zone 2 – Allegan, Ingham and Saginaw

Tables 3E/3L Zone 3 - Huron, Mason and Montcalm (dropped 2014)

Table 4 Zone 4 –Grand Traverse (dropped 2014), Iosco and Menominee (dropped 2014)

Table 5 Zone 5 – Delta (dropped 2014) and Menominee (dropped 2014)

Table's 6E/6L Conventional Trial – Huron (Zone 3), Montcalm (Zone 3, dropped 2014), and Saginaw (Zone 2)

The map of Michigan (below) shows each zone and the locations where the trials were located.

Methods

Three trial locations were planted in each of four maturity zones, zone 5 had two locations. These zones were based on available growing degree-day units established from long-term weather records. Hybrids entered in a zone were tested in each of the three designated locations. Entries for zone 1, zone 2, and zone 3 were divided into two maturity groups, (early and late), on the basis of relative maturity (RM) provided by the seed companies. In zone 4 and zone 5, all hybrids were tested in one group.

Four-row plots were used at all grain locations. The two center rows were harvested for yield. Plots were 22 feet long with 30-inch row spacing.

Experimental design, data acquisition, analysis of variance and data summarization were facilitated in part by AGROBASE Generation II™ SQL (Agronomix Software, Inc., Winnipeg, Canada). The experimental layout was a four-replication, randomized complete block design. Hybrid performance is reported as the adjusted mean averaged together from four replicated plots.

Variety trials were conducted on farmers' fields and Michigan State University AgBio Research Stations. All hybrids in a location were managed uniformly with the same fertilizers, population, date of planting, and other management practices. In the field, hybrids were identified only by a plot number to assure unbiased comparisons. Trials in Branch, Cass, Mason, and Montcalm (dropped 2014), counties were irrigated.

Stand counts were recorded in June. Plots with stand counts higher than the desired population were thinned at that time. Average trial population plus the desired population rates are listed with other important agronomic information in Table B (pg. 25). Lodging measurements were made during harvest. All plants broken below the ear and/or leaning more than 45 degrees were counted. Plots were harvested mechanically. Moisture content and field weight were measured by a Harvest Master™ single plot high capacity GrainGage™ System mounted on a

Massey Ferguson 8XP plot combine. Grain yield is reported at the standard 15.5 percent moisture. Grain test weight is reported at harvest moisture. Automated test weight equipment loses some accuracy as harvest moistures increase. Test weight values should be used to determine relative rank and not as a precise weight.

Results

The tables report the following information about the hybrids tested:

1. Moisture content at harvest (%H₂O).
2. Yield (in bushels per acre) of shelled corn corrected to 15.5 percent moisture (Bu/A)
3. Test weight at harvest moisture (Twt).
4. Percent of stalk lodging (plants broken below the ear and/or 45 degrees off vertical at harvest) (%SL).
5. Percent stand of target population (%Std).

2014 Grain Trial Locations

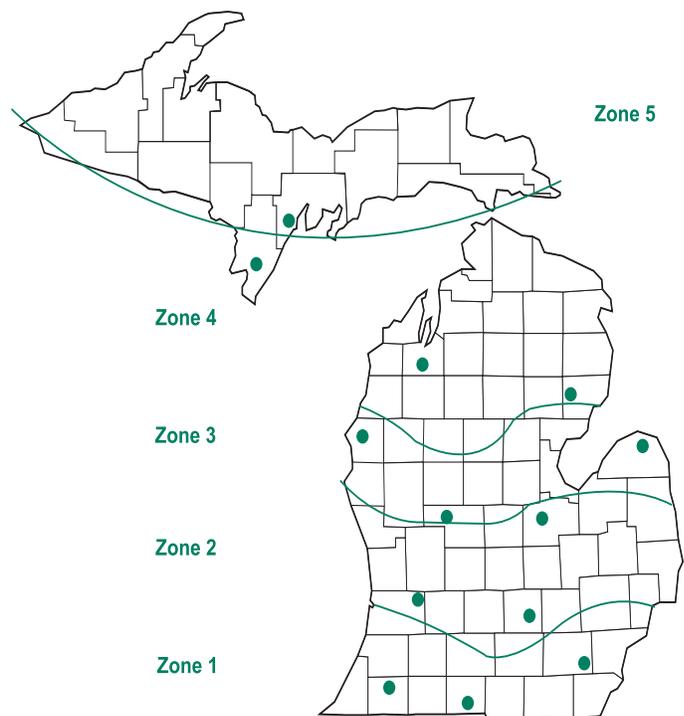


TABLE 1E.

BRANCH, CASS & WASHTENAW COUNTY GRAIN TRIALS - EARLY (107 Day and Earlier)

ZONE 1

2014		Early - TRIAL AVERAGE						Branch - Early			Cass - Early			Washtenaw - Early				
BRAND /HYBRID	RM	TRT	TRAIT	%H2O	BUJA	Twt	%SL	%Sd	%H2O	BUJA	Twt	%SL	%Sd	%H2O	BUJA	Twt	%SL	%Sd
AGRIGOLD A6408VT3PRIB	107	P500	1,2,3	24.7	206.0	51.8	10.7	100	17.9	231.7	53.3	0.0	100	24.1	209.0	52.4	0.0	100
AGRIGOLD A6416STXRIB	107	P500	1,2,3,4,6	25.6	212.7	53.1	5.3	100	20.3	251.8	54.2	0.0	99	24.8	201.7	53.0	0.0	99
BECK 5131AM™	105	ESC	1,2,4	23.8	204.4	54.2	3.4	100	20.2	215.7	55.1	0.0	99	23.8	200.6	54.3	0.0	100
BECK 5140HR™	105	ESC	1,2,4	24.5	216.1	54.2	3.1	99	19.4	231.4	55.6	0.0	94	23.8	216.2	55.2	0.0	100
CHANNEL 202-32STXRIB	104	PV500	1,2,3,4,6	24.0	219.4	52.3	3.0	99	19.3	234.2	53.8	0.0	96	23.1	218.6*	52.9	0.0	100
CHANNEL 202-64STXRIB	102	PV500	1,2,3,4,6	21.4	204.7	55.5	3.7	99	16.8	222.4	56.3	0.0	98	20.5	203.6	55.0	0.0	99
DAIRYLAND SEED DS-6805	105	C250	1	21.6	203.3	52.9	7.6	99	18.0	229.9	54.3	0.0	100	19.7	204.6	53.5	0.0	100
DAIRYLAND SEED DS-6905	105	C250	1	26.6	190.5	51.6	2.2	98	21.3	215.6	51.9	0.0	100	25.7	185.1	53.8	0.0	94
DAIRYLAND SEED DS-9305RA	105	C250	1,2,3,4,6	24.6	204.0	52.9	3.3	100	19.1	212.9	53.6	0.6	100	23.7	198.2	53.8	0.0	99
DAIRYLAND SEED DS-9307SSX	107	C250	1,2,3,4,6	22.7	211.1	54.3	5.1	95	18.8	236.9	55.6	0.7	94	20.7	203.3	54.4	0.0	92
DAIRYLAND SEED HI DF-3702-9	104	C250	1,2,3,4	22.6	188.7	51.1	9.0	98	17.4	176.6	51.7	2.8	96	21.7	204.9	52.2	0.0	97
DEKALB DKC52-84 GENSSRIB	102	P500	1,2,3,4,6	19.7	216.2	53.7	0.9	100	16.9	232.5	54.5	0.0	100	19.1	209.1	53.7	0.0	100
DEKALB DKC53-56 GENSSRIB	103	P500	1,2,3,4,6	22.2	215.7	55.0	0.2	98	18.4	234.4	56.4	0.0	95	20.2	215.1	55.1	0.0	100
DEKALB DKC54-38 GENSSRIB	104	P500	1,2,3,4,6	22.6	206.1	54.4	0.5	100	17.9	207.9	56.0	0.0	100	20.2	205.9	55.3	0.0	100
DEKALB DKC55-20 GENSSRIB	105	P500	1,2,3,4,6	21.8	225.2*	53.9	0.4	99	18.1	260.0*	55.4	0.0	98	21.6	213.3	53.5	0.0	99
DEKALB DKC57-75 GENSSRIB	107	P500	1,2,3,4,6	24.7	206.7	52.8	1.0	99	18.8	230.2	54.7	0.0	98	24.3	199.6	52.8	0.0	99
DEKALB DKC57-92 GENSSRIB	107	P500	1,2,3,4,6	25.2	193.9	53.8	5.4	100	20.2	226.7	55.8	0.0	99	25.1	175.1	53.5	0.0	100
DYNAGRO D43VC50	103	P500	1,2	19.9	223.5	54.7	2.4	100	16.1	247.5	54.7	0.0	100	18.3	228.9*	55.9	0.0	100
DYNAGRO D46SS46	106	P500	1,2,3,4,6	24.3	201.6	54.5	2.5	99	20.0	217.1	54.7	0.0	98	23.1	201.0	56.6	0.0	100
GOLDEN HARVEST G05T82-3122	105	C500	1,2,3,4,6	24.8	213.6	54.1	2.0	96	20.8	222.8	55.9	1.7	93	23.1	220.4*	54.7	0.0	97
GOLDEN HARVEST G07F23-3111	107	C500	1,2,3,4,6	25.7	211.6	52.6	5.9	100	20.0	242.4	54.8	0.0	100	25.9	209.2	52.6	0.0	99
GOLDEN HARVEST G07V88-3000GT	107	C500	1,2,3,4,6	22.9	215.3	52.1	7.8	98	17.4	217.3	54.2	0.0	99	23.9	228.0*	52.6	0.0	97
GREAT LAKES 5283STXRIB	102	P500	1,2,3,6	22.3	220.9	53.7	2.1	97	18.1	246.7	54.5	0.0	97	20.6	213.9	54.7	0.0	96
GREAT LAKES 5428STXRIB	104	P500	1,2,3,6	22.1	201.1	55.3	0.6	98	19.6	215.6	56.1	0.0	94	20.3	192.0	56.3	0.0	99
GREAT LAKES 5566GSTX	105	P500	1,2,3,6	23.1	206.8	55.6	1.2	100	19.9	221.5	56.9	0.0	100	21.2	192.6	56.4	0.0	100
GREAT LAKES 5688STXRIB	106	P500	1,2,3,6	25.1	199.7	54.1	6.9	97	21.4	216.2	55.1	1.4	92	23.9	198.7	54.9	0.0	100
GREAT LAKES 5755STXRIB	107	P500	1,2,3,6	25.5	223.1	53.0	10.0	99	20.6	263.7*	54.4	0.0	99	24.6	218.6*	53.5	0.0	100
HYLAND SEEDS 5597	105	C250	1,2,4,6	25.9	204.7	51.5	2.8	99	22.0	232.7	53.5	0.0	97	24.5	218.2*	51.6	0.0	99
HYLAND SEEDS 8598RA	106	P250	1,2,3,4,6	28.8	203.5	51.3	0.6	99	22.6	244.6	52.3	0.0	97	27.0	183.5	51.3	0.0	99
KEY 305G	105	ENC	1	23.4	199.2	50.1	13.1	99	18.7	211.5	51.5	0.0	97	21.8	212.8	50.8	0.0	98
M&W SEEDS 45A38	101	C250	1,2,3,4,6	19.8	227.2*	55.2	1.6	99	17.1	246.8	56.1	0.0	99	19.0	218.8*	55.4	0.0	99
M&W SEEDS 45J99	104	A250	1,2	22.2	208.7	55.5	1.8	96	18.8	219.5	56.6	0.0	94	20.9	208.7	56.2	0.0	95
M&W SEEDS 45M80	102	P500	1,2,3,4,6	22.0	197.4	53.8	1.0	96	17.9	207.0	54.9	0.0	91	21.0	201.4	54.1	0.0	96
M&W SEEDS 47J66	103	A250	1,2	18.1	200.8	55.2	1.8	99	15.9	209.7	55.1	0.0	98	16.7	191.6	56.1	0.0	99
NK Brand N61P-3000GT Brand	107	C500	1,2,3,4	23.8	206.9	51.4	5.3	99	18.5	213.5	53.6	0.9	90	25.4	213.4	51.5	0.0	97
NK Brand N58S-3111	106	C500	1,2,3,4,6	26.1	212.6	52.6	2.9	99	21.5	233.2	53.8	0.0	98	24.1	216.0	52.0	0.0	100
NuTech/G2 GENETICS 5F-805™	105	P500	1,2,4	24.3	207.2	54.0	0.9	94	19.9	227.9	55.9	0.0	93	22.6	211.1	54.2	0.0	94
NuTech/G2 GENETICS 5H-806™	106	P500	1,2,4	23.9	234.3**	54.6	2.1	95	19.3	274.6**	56.3	0.0	95	22.4	225.4*	55.7	0.0	92
NuTech/G2 GENETICS 5H-905™	105	P500	1,2,4	21.7	207.4	53.1	1.9	99	17.3	225.4	53.7	0.9	100	20.3	200.7	53.9	0.0	99
NuTech/G2 GENETICS 5Z-707™	107	P1250	1,2,4	24.2	218.0	53.3	0.9	88	20.0	245.6	54.2	0.0	86	21.3	216.2	54.9	0.0	91
PIONEER P0157AM	101	P1250	1,2,3,4,6	20.9	209.5	55.3	3.3	98	17.9	222.5	55.1	0.0	99	20.2	209.4	56.5	0.0	97
PIONEER P0216AM	102	P1250	1,2,3,4,6	21.2	219.0	54.7	1.5	97	17.3	256.1*	55.6	0.0	98	20.4	205.8	56.6	0.0	96
PIONEER P0419AMX	104	C250	1,2,3,4,6	23.8	214.8	56.0	0.1	98	21.1	250.8	56.8	0.0	98	22.4	199.0	56.3	0.0	99
PIONEER P0506AM	105	P1250	1,2,3,4,6	24.0	226.8*	54.5	2.3	99	19.3	252.6	55.5	0.0	98	22.0	232.2*	55.7	0.0	100
PIONEER P0604AM	106	P1250	1,2,3,4,6	21.8	207.8	55.5	3.4	100	18.7	213.5	56.6	3.1	99	20.1	214.1	56.1	0.0	99

RENK RK699SSTX	105	P500	1,2,3,4,6	24.1	207.0	53.6	1.1	97	20.4	217.5	54.6	0.0	96	22.3	207.0	53.8	0.0	95	29.7	196.5	52.4	3.4	99
RENK RK712SSTX	106	P500	1,2,3,4,6	24.9	197.2	54.2	2.4	100	19.5	231.8	54.9	0.0	100	24.3	190.6	55.0	2.8	99	31.0	169.1	52.9	4.5	100
RENK RK752SSTX	105	P500	1,2,3,4,6	25.4	210.2	54.4	7.2	98	19.5	233.4	55.9	0.0	97	26.0	193.3	54.1	0.0	97	30.7	203.9*	53.2	21.6	100
RENK RK776SSTX	107	P500	1,2,3,4,6	26.0	216.4	54.0	1.9	99	21.3	254.2	55.1	0.0	99	25.6	200.5	54.4	0.0	98	31.0	194.7	52.4	5.6	100
RUPP XR8034	105	C250	1,2,3	24.0	205.3	52.6	3.8	100	19.4	230.1	54.3	0.3	100	23.0	197.4	52.9	0.0	99	29.6	188.4	50.5	11.0	100
RUPP XR8239	103	C250	1,2,3	19.7	218.0	54.6	10.5	95	15.7	236.8	55.4	0.0	98	18.9	218.8*	55.3	0.0	93	24.6	198.4	53.0	31.4	95
RUPP XRD05-04	105	P250	1,2	22.4	216.1	54.3	13.4	100	17.7	242.2	55.5	0.9	100	20.8	210.5	54.4	0.0	100	28.7	195.6	53.0	39.4	100
RUPP XRJ03-31	103	C250	1,2,3,4,6	21.7	198.7	54.0	1.9	99	17.8	215.8	55.5	0.0	100	21.3	195.2	54.1	0.0	96	26.2	185.1	52.4	5.6	100
RUPP XRJ07-20	107	P250	1,2,3,4,6	24.7	208.9	54.2	8.7	99	19.8	234.3	55.6	1.8	97	24.3	202.2	54.6	0.0	99	30.2	190.2	52.5	24.3	100
SEED CONSULTANTS SCS 10HQ34™	103	C250	1,2,3,4	24.1	207.9	54.2	1.3	100	20.2	232.7	55.4	0.0	100	23.0	205.4	54.8	0.0	100	29.1	185.6	52.3	3.9	100
SEED CONSULTANTS SCS 10HR43™	104	P1250	1,2,4	24.5	232.3*	54.0	3.4	99	19.6	261.5*	55.3	0.0	97	22.5	233.8**	54.8	0.0	100	31.4	201.6	51.9	10.2	99
SELECT 3829 VP RIB	103	P250		21.9	213.3	55.0	1.7	99	18.4	234.4	55.9	0.0	99	21.7	204.6	55.1	0.0	97	25.6	200.8	54.1	5.0	100
SELECT 4746 DP RIB	107	P250		25.2	222.4	53.9	1.8	99	19.4	248.4	55.7	0.0	99	24.5	220.5*	54.3	0.0	99	31.8	198.2	51.8	5.4	100
SPECIALTY 32A323	102	P500	1,2,3,4,6	20.4	211.4	54.2	1.1	99	17.0	231.5	55.3	0.0	97	19.9	207.9	54.2	0.0	100	24.2	194.8	53.1	3.4	100
SPECIALTY 34A413	104	P500	1,2,3,4,6	22.2	210.2	54.7	3.0	100	17.8	227.5	55.7	0.0	100	21.6	205.9	55.1	0.0	100	27.2	197.2	53.5	9.0	100
SPECIALTY 36A794	106	P500	1,2,3,4,6	23.3	219.3	53.2	0.8	97	20.0	247.5	54.1	0.0	93	21.2	215.6	54.0	0.0	99	28.7	194.6	51.5	2.3	99
STEYER 10102 VT2PRORIBC	101	C250	1,2,14	19.7	217.1	54.5	2.9	99	16.9	236.2	55.1	0.0	99	18.5	208.5	54.7	0.0	97	23.8	206.5*	53.8	8.7	100
UNITY SEEDS 7505 3122	105	C250	1,2,3,4	24.4	204.2	53.7	2.3	97	19.8	224.3	55.5	0.0	95	23.7	204.5	54.6	0.0	97	29.8	183.9	51.1	6.8	99
WELLMAN W2307DP	107	ENC	1,2	25.8	218.4	53.1	4.9	99	21.2	244.1	54.6	1.7	97	24.6	211.8	53.3	0.0	99	31.6	199.2	51.3	12.9	100
WELLMAN W2401DP	101	ENC	1,2	19.7	211.0	54.6	1.5	98	16.0	230.1	55.7	0.0	95	18.0	203.2	55.9	0.0	100	25.2	199.8	52.3	4.5	99
WELLMAN W2404DP	104	ENC	1,2	21.9	206.1	55.3	1.8	99	18.6	218.1	56.8	0.0	99	21.0	200.6	55.7	0.0	100	26.0	199.5	53.3	5.3	97
AVERAGE				23.3	210.6	53.8	3.5	98	19.0	231.4	55.0	0.3	97	22.2	207.3	54.3	0.0	98	28.6	193.1	52.1	10.2	99
HIGHEST				28.8	234.3	56.0	13.4	100	22.6	274.6	56.9	3.1	100	27.0	233.8	56.6	2.8	100	36.9	216.2	55.2	39.4	100
LOWEST				18.1	188.7	50.1	0.1	88	15.7	176.6	51.5	0.0	86	16.7	175.1	50.8	0.0	91	21.8	169.1	48.1	0.3	87
CV (%)				6.2	6.6	2.0	182.1	3.0	5.3	6.9	1.8	516.5	5.0	4.9	6.6	2.1	1625.0	3.0	7.0	6.0	2.1	107.2	2.0
LSD (5%)				1.0	9.4	0.7	4.3	2.0	1.2	18.7	1.2	1.5	5.0	1.3	15.9	1.3	0.8	4.0	2.4	13.4	1.3	12.8	2.0

UNITY SEEDS 5608 SS-RIB	108	P500	26.8	184.9	53.8	2.6	100	23.4	202.0	54.5	0.0	100	24.8	183.5	55.2	0.0	99	32.2	169.4	51.7	7.9	100
UNITY SEEDS 7811 3000GT	111	C250	27.1	204.7	50.6	3.3	100	22.2	228.5	51.4	0.6	100	26.2	201.9	51.3	0.0	100	32.9	183.8	49.2	9.3	100
WELLMAN W2409S	109	ENC	26.4	209.0	53.4	1.3	97	22.5	222.3	54.4	0.0	96	23.7	218.0 *	54.4	0.0	96	32.9	186.7	51.4	3.9	100
AVERAGE			27.9	205.2	52.7	3.2	98	23.8	228.5	53.9	0.3	97	26.2	201.9	53.5	0.0	98	33.9	185.2	50.7	9.2	99
HIGHEST			34.5	220.6	55.3	12.0	100	31.4	252.2	56.3	4.0	100	33.4	229.3	55.9	0.0	100	41.2	207.9	54.7	36.0	100
LOWEST			24.3	184.9	50.2	0.2	94	21.4	202.0	51.1	0.0	85	22.6	183.0	51.2	0.0	92	28.0	167.3	47.8	0.6	95
CV (%)			5.8	6.9	1.9	197.9	4.0	5.0	6.5	1.5	338.2	6.0	5.9	8.1	2.2	0.0	4.0	6.0	5.7	2.1	117.3	2.0
LSD (5%)			1.1	9.5	0.7	4.2	3.0	1.4	17.3	0.9	1.1	7.0	1.8	19.0	1.4	0.0	5.0	2.4	12.4	1.3	12.6	2.0

2 Year Averages 2014 - 2013

BRAND /HYBRID	RM	TRT	Late - TRIAL AVERAGE						Branch - Late						Cass - Late						Washtenaw - Late					
			%H2O	BUJA	Twt	%SL	%Sd	%H2O	BUJA	Twt	%SL	%Sd	%H2O	BUJA	Twt	%SL	%Sd	%H2O	BUJA	Twt	%SL	%Sd				
BECK 5475AM™*	108	ESC	22.8	223.0 *	57.1	0.4	99	21.8	245.9 *	57.1	0.1	100	21.0	240.0 **	59.0	0.0	98	25.5	183.1	55.2	1.2	98				
BECK 5828AM™*	110	ESC	25.7	207.3	54.1	2.2	100	24.1	226.0	53.6	0.3	99	23.5	217.1	55.7	0.0	100	29.4	178.7	52.8	6.5	100				
DEKALB DKC60-67 GENSSRIB	110	P500	23.6	225.7 **	56.6	0.9	99	22.0	246.6 **	56.9	0.3	98	21.3	236.9 *	58.5	0.0	99	27.4	193.5 *	54.6	2.5	100				
DEKALB DKC62-08 GENSSRIB	112	P500	28.1	214.7	54.6	0.1	98	25.9	238.0 *	54.8	0.1	99	26.5	220.1	56.3	0.0	97	32.0	186.0	52.8	0.3	98				
GOLDEN HARVEST G09E98-3000GT	109	C500	25.0	217.3	55.7	3.2	98	23.3	223.5	56.2	0.3	98	22.8	228.6 *	56.9	0.0	98	28.8	199.8 *	54.0	9.4	99				
HYLAND SEEDS 4687	110	C250	25.5	212.0	53.0	0.4	98	23.0	227.3	53.2	0.0	97	24.2	222.3	54.9	0.0	96	29.4	186.4	51.0	1.3	100				
HYLAND SEEDS 8695RA	110	P250	25.8	219.8 *	53.0	2.5	99	24.8	238.8 *	53.6	0.7	99	24.4	223.4	53.9	0.0	99	28.3	197.3 *	51.5	6.7	100				
MYCOGEN 2V709	110	C250	25.2	215.3	54.9	1.9	100	23.1	236.3 *	55.1	0.7	100	24.3	216.7	55.9	0.0	100	28.3	192.9 *	53.5	5.1	100				
NuTect/G2 GENETICS 5F-008™	108	P500	23.3	219.8 *	57.0	0.6	96	22.4	234.7	57.4	0.0	95	21.4	221.0	57.7	0.0	95	26.1	203.7 *	56.0	1.7	99				
RENK RK791SSTX	109	P500	23.2	220.7 *	55.1	2.6	97	21.2	235.3	55.0	0.6	98	20.6	228.2 *	56.6	0.0	97	27.9	198.6 *	53.8	7.3	98				
RUPP XRJ10-91	110	C250	25.1	214.8	55.1	0.7	98	24.2	233.9	55.0	0.9	99	23.0	220.4	56.8	0.0	98	28.1	190.2 *	53.4	1.2	97				
SPECIALTY 38A573	108	P500	23.9	221.1 *	54.7	1.0	98	22.5	236.0 *	54.8	0.2	97	21.8	221.9	55.6	0.0	98	27.5	205.3 **	53.5	2.8	99				
WELLMAN W2409S	109	ENC	24.2	224.6 *	55.3	0.7	96	23.1	230.9	55.5	0.0	96	21.5	239.0 *	56.5	0.0	94	27.9	203.8 *	53.9	2.0	100				
AVERAGE			24.7	218.2	55.1	1.3	98	23.2	234.9	55.3	0.3	98	22.8	225.8	56.5	0.0	98	28.2	193.8	53.5	3.7	99				
HIGHEST			28.1	225.7	57.1	3.2	100	25.9	246.6	57.4	0.9	100	26.5	240.0	59.0	0.0	100	32.0	205.3	56.0	9.4	100				
LOWEST			22.8	207.3	53.0	0.1	96	21.2	223.5	53.2	0.0	95	20.6	216.7	53.9	0.0	94	25.5	178.7	51.0	0.3	97				
CV (%)			5.2	6.6	1.8	26010	4.0	4.5	5.9	1.4	409.9	5.0	5.2	7.3	2.1	0.0	4.0	5.1	9.7	1.9	105.5	2.0				
LSD (5%)			0.7	7.4	0.5	2.6	2.0	0.9	11.2	0.6	1.0	4.0	1.1	12.8	0.9	0.0	3.0	1.3	15.1	0.8	6.3	2.0				

** Highest Yielding Hybrid

* Not Significantly Different from Highest Yielding Hybrid

NK Brand N45P-3011A	101	C500	1,2,3,4,A	23.6	203.9	53.9	0.5	98	22.5	214.7	54.5	0.0	97	20.5	228.7	56.2	1.5	98	27.9	168.3	51.0	0.0	100
NK Brand N37R-3110	97	C500	1,2,4,6	23.9	194.1	53.2	0.9	99	21.8	196.2	53.8	0.3	100	20.9	219.0	55.9	2.3	97	29.0	167.2	49.9	0.0	100
NuTech/G2 GENETICS 5F-198™	98	P500	1,2,4	22.5	195.5	50.7	0.0	100	20.3	218.2	51.7	0.0	100	18.8	211.2	52.9	0.0	99	28.3	157.1	47.6	0.0	100
NuTech/G2 GENETICS 5F-200™	100	P500	1,2,4	24.1	201.7	52.8	1.3	100	22.6	214.4	53.0	0.3	99	21.2	221.9	55.6	3.7	100	28.3	168.9	49.9	0.0	100
NuTech/G2 GENETICS 5F-399™	99	P500	1,2,4	24.1	190.7	52.1	1.5	98	22.5	200.5	55.0	0.0	99	20.3	211.4	53.6	4.6	96	29.6	160.3	47.8	0.0	99
NuTech/G2 GENETICS 5X-698™	98	P500	1,2,3,4	22.3	198.6	54.2	0.6	100	19.3	204.9	54.5	0.0	100	20.2	222.1	56.4	1.7	100	27.5	168.7	51.7	0.0	100
NuTech/G2 GENETICS 5Z-0106™	101	P1250	1,2,4	25.7	207.2	50.8	0.1	97	22.9	216.8	50.5	0.0	97	24.7	231.6	53.1	0.3	94	29.6	173.3	49.0	0.0	99
PIONEER P0157AM	101	P1250	1,2,3,4,6	25.6	212.4*	54.1	0.0	100	24.4	217.0	54.3	0.0	100	23.5	245.2*	56.2	0.0	100	28.7	175.1	51.9	0.0	100
PIONEER P9807AM	98	P1250	1,2,3,4,6	23.5	197.6	52.9	0.4	97	21.4	208.6	53.9	0.0	99	21.4	226.2	55.3	1.2	95	27.6	157.9	49.4	0.0	98
RENK RK581SSTX	100	P500	1,2,3,4,6	25.3	188.5	53.3	0.5	96	25.2	197.3	54.1	0.0	98	22.5	213.8	55.0	1.6	95	28.4	154.5	50.7	0.0	96
RENK RK596SSTX	98	P500	1,2,3,4,6	23.7	207.0	53.2	0.0	100	22.3	214.2	53.6	0.0	100	20.1	229.6	55.7	0.0	100	28.6	177.3	50.3	0.0	100
RENK RK605SSTX	100	P500	1,2,3,4,6	24.2	206.2	52.9	0.2	100	22.0	230.0**	53.4	0.0	100	20.5	226.6	55.5	0.6	99	30.1	161.8	49.8	0.0	100
RUPP XR8414	100	P250	1,2,3,4,6	24.6	205.2	51.9	0.1	100	24.2	217.5	51.3	0.0	100	21.5	226.9	54.0	0.3	100	28.1	171.3	50.5	0.0	100
RUPP XRD97-56	97	C250	1,2,3	23.2	191.0	53.1	0.1	100	21.8	190.3	53.0	0.0	100	20.0	219.0	55.3	0.3	99	27.7	163.5	51.0	0.0	100
RUPP XRD99-30	99	P250	1,2	23.8	202.9	52.6	0.1	100	22.6	205.8	52.8	0.0	100	20.5	231.4	55.5	0.3	99	28.4	171.5	49.6	0.0	100
RUPP XR197-17	97	C250	1,2,3,4,6	24.1	194.1	52.9	1.0	99	22.8	209.7	53.4	0.0	98	21.1	217.4	55.4	2.9	99	28.2	155.4	49.9	0.0	99
RUPP XRT94-06	94	P250	1,2,3	24.0	195.3	53.4	0.0	100	22.4	198.7	54.0	0.0	100	20.9	226.6	56.4	0.0	100	28.6	160.5	49.9	0.0	99
SPECIALTY 24A104	94	P500	1,2,3,4,6	23.5	203.4	52.7	0.0	99	22.2	210.0	53.2	0.0	100	20.3	235.1*	55.5	0.0	99	28.1	165.0	49.4	0.0	99
SPECIALTY 29A263	99	P500	1,2,3,4,6	24.3	200.3	52.7	0.5	100	22.7	204.4	51.2	0.8	100	21.1	235.8*	55.1	0.6	100	29.1	160.7	51.7	0.0	100
SPECIALTY 42R32GENVT3P	96	P500	1,2,3	22.2	205.4	52.9	0.8	100	19.7	208.2	53.9	0.0	100	19.5	226.6	55.7	2.5	100	27.5	181.3	49.1	0.0	100
STEYER 10102 VT2PRORIBC	101	C250	1,2,14	24.2	211.3*	53.3	0.9	98	23.3	219.5*	53.1	0.0	100	21.0	235.8*	56.0	2.8	93	28.2	178.7	50.7	0.0	100
STEYER 9203 VT2PRORIBC	92	C250	1,2,14	23.3	200.6	53.4	0.0	100	22.0	201.4	53.4	0.0	99	20.1	227.8	55.8	0.0	101	27.8	172.5	51.0	0.0	100
STEYER 9603 VT2PRORIBC	96	C250	1,2,14	22.6	191.9	56.0	0.0	99	20.7	202.4	57.0	0.0	98	20.0	215.5	59.1	0.0	99	27.0	157.9	51.9	0.0	100
UNITY SEEDS 5601 SS-RIB	101	P500		24.5	207.9*	54.4	0.2	99	23.5	211.8	56.3	0.0	100	21.7	241.7*	56.1	0.6	100	28.4	170.1	50.8	0.0	98
AVERAGE				24.1	201.2	52.8	0.6	99	22.6	208.4	53.2	0.1	99	21.3	226.0	55.1	1.7	98	28.4	169.3	50.1	0.0	100
HIGHEST				28.5	214.7	56.1	7.2	100	28.8	230.0**	57.5	3.1	100	27.1	245.3**	59.1	21.5	102	30.3	204.2**	52.8	3.1	100
LOWEST				20.6	164.9	49.6	0.0	96	17.8	169.9	50.0	0.0	94	17.6	157.9	50.7	0.0	89	26.0	148.6	47.3	0.0	96
CV (%)				4.4	5.2	2.4	403.7	2.0	5.4	4.7	3.0	850.2	2.0	5.2	4.8	1.4	243.8	3.0	2.8	6.0	2.6	1661.0	1.0
LSD (5%)				0.7	7.0	0.9	1.7	2.0	1.4	11.6	1.9	0.9	2.0	1.3	12.6	0.9	4.9	4.0	0.9	11.9	1.5	0.9	2.0

TABLE 2E - Continued from page 9. BRANCH, CASS & WASHTENAW COUNTY GRAIN TRIALS - EARLY (107 Day and Earlier) ZONE 1

2 Year Averages 2014 - 2013		Early - TRIAL AVERAGE				Branch - Early				Cass - Early				Washtenaw - Early				
BRAND / HYBRID	RM	TRT	TRAIT	%H2O	BUJA	Twt	%SL	%Scd	%H2O	BUJA	Twt	%SL	%Scd	%H2O	BUJA	Twt	%SL	%Scd
AGRIGOLD A6408VT3PRIB	107	P500	1,2,3	22.7	219.8	53.7	5.4	100	19.8	233.6	54.2	0.0	100	21.4	232.8	54.8	0.0	99
BECK 5131AM™*	105	ESC	1,2,4	21.3	221.2	56.3	1.8	99	20.1	227.9	56.1	0.4	100	20.6	223.6	56.9	0.0	98
BECK 5140HR™*	105	ESC	1,2,4	22.3	228.3	56.3	1.5	96	20.5	233.6	56.4	0.0	92	21.2	234.6	57.3	0.0	97
CHANNEL 202-32STXRIB	104	PV500	1,2,3,4,6	21.8	227.4	54.6	1.7	99	20.2	234.0	54.9	0.0	98	20.8	234.2	55.2	0.1	99
DAIRYLAND SEED HI DF-3702-9	104	C250	1,2,3,4	21.3	210.7	54.2	4.6	97	19.1	198.3	54.2	1.7	97	20.0	229.4	54.8	0.0	97
DEKALB DKC53-56 GENSSRIB	103	P500	1,2,3,4,6	21.3	227.4	55.9	0.1	99	20.2	231.7	55.9	0.0	97	19.8	229.5	56.4	0.0	99
DEKALB DKC54-38 GENSSRIB	104	P500	1,2,3,4,6	21.2	216.4	56.1	0.4	99	19.7	217.5	56.4	0.0	99	19.3	226.2	56.9	0.1	99
DEKALB DKC57-75 GENSSRIB	107	P500	1,2,3,4,6	22.4	223.9	54.5	0.7	99	20.2	232.8	55.0	0.0	99	21.7	226.7	54.8	0.5	98
DYNAGRO D46SS46	106	P500	1,2,3,4,6	22.1	218.0	56.2	1.9	99	20.5	229.1	56.1	0.7	98	20.5	222.0	58.1	1.1	99
GOLDEN HARVEST G07F23-3111	107	C500	1,2,3,4,6	23.7	220.2	54.1	3.0	98	21.9	233.6	54.6	0.0	100	22.6	225.0	54.5	0.0	94
GOLDEN HARVEST G07V88-3000GT	107	C500	1,2,3,4,6	22.3	228.3	53.9	3.9	98	20.2	228.6	54.5	0.2	97	21.6	243.8*	54.7	0.0	97
GREAT LAKES 5283STXRIB	102	P500	1,2,3,6	20.8	229.5	55.5	1.4	98	19.2	234.7	55.6	0.0	97	19.3	235.5	56.5	0.4	96
HYLAND SEEDS 8598RA	106	P250	1,2,3,4,6	24.8	221.6	54.6	1.7	99	22.8	242.4	54.2	2.8	99	22.8	220.9	55.5	1.2	99
NuTech/G2 GENETICS 5H-806™	106	P500	1,2,4	21.9	241.5*	56.4	1.1	95	20.2	260.1**	56.6	0.0	95	20.6	239.6*	57.8	0.1	92
NuTech/G2 GENETICS 5H-905™	105	P500	1,2,4	20.5	223.8	54.9	0.9	100	19.0	227.0	54.8	0.4	99	19.0	233.0	55.6	0.0	99
PIONEER P0216AM	102	P1250	1,2,3,4,6	20.4	225.4	56.0	1.0	98	19.0	239.6	55.9	0.0	97	19.4	230.1	57.5	0.7	97
RENK RK7525STX	105	P1250	1,2,3,4,6	22.9	215.1	56.3	3.8	97	21.0	225.4	56.7	0.0	96	22.4	214.1	56.6	0.3	95
RUPP XR8034	105	C250	1,2,3	22.4	219.4	54.0	2.0	99	21.2	235.6	54.5	0.1	99	20.9	219.4	54.6	0.0	97
RUPP XRJ07-20	107	P250	1,2,3,4,6	22.7	220.8	56.3	4.4	99	20.8	237.3	56.6	1.0	99	21.6	222.3	57.1	0.0	98
SEED CONSULTANTS SCS 10HR43™	104	P1250	1,2,4	22.3	244.9**	56.3	1.7	98	20.2	257.9*	56.2	0.0	96	20.7	250.4**	57.4	0.0	99
SPECIALTY 34A413	104	P500	1,2,3,4,6	20.9	225.5	56.4	1.5	99	19.7	234.6	56.4	0.0	100	19.9	230.0	57.0	0.0	98
WELLMAN W2307DP	107	ENC	1,2	23.4	231.2	55.2	2.6	98	22.3	239.5	55.6	1.1	97	22.4	242.9*	55.6	0.1	98
WELLMAN W2401DP	101	ENC	1,2	18.5	221.7	56.3	1.2	99	17.3	224.3	56.2	0.7	97	17.0	228.5	57.4	0.3	100
WELLMAN W2404DP	104	ENC	1,2	20.2	212.5	56.8	0.9	98	19.5	226.4	57.4	0.0	97	19.0	216.1	57.3	0.0	97
AVERAGE				21.8	223.9	55.4	2.1	98	20.2	232.7	55.6	0.4	98	20.6	229.6	56.3	0.2	98
HIGHEST				24.8	244.9	56.8	5.4	100	22.8	260.1	57.4	2.8	100	22.8	250.4	58.1	1.2	100
LOWEST				18.5	210.7	53.7	0.1	95	17.3	198.3	54.2	0.0	92	17.0	214.1	54.5	0.0	92
CV (%)				5.3	6.7	1.7	172.3	4.0	4.9	6.4	1.6	423.8	4.0	4.7	6.3	1.7	891.2	4.0
LSD (5%)				0.6	6.9	0.4	2.2	2.0	0.8	12.3	0.8	1.1	3.0	0.8	11.4	0.8	1.0	3.0

** Highest Yielding Hybrid
* Not Significantly Different from Highest Yielding Hybrid

TABLE 2E - Continued from page 13. ALLEGAN, INGHAM & SAGINAW COUNTY GRAIN TRIALS - EARLY (101 Day and Earlier) ZONE 2

2 Year Averages 2014 - 2013		Early - TRIAL AVERAGE				Allegan - Early				Ingham - Early				Saginaw - Early			
BRAND /HYBRID	RM TRT	TRAIT	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd
AGRIGOLD A6252STXRIB	100 P500	1,2,3,4,6	21.9	217.4	55.5	0.9	99	22.5	220.0	54.9	1.6	98	19.4	229.1	57.1	1.1	100
AGRIGOLD A6257STXRIB	100 P500	1,2,3,4,6	22.8	222.2	54.6	2.8	100	23.3	227.3*	54.1	0.1	100	20.8	235.1	56.3	8.2	99
CHANNEL 197-68STXRIB	97 PV500	1,2,3,4,6	22.7	224.6*	55.2	1.3	99	23.5	225.1*	55.0	0.3	100	20.4	246.5*	56.9	3.2	97
CROPLAN 4099SS/RIB	99		22.8	228.9**	54.9	1.6	100	23.1	230.5*	54.8	0.3	100	21.4	243.9*	55.8	4.4	99
DEKALB DKC46-20 GENVT3PRIB	96 P500	1,2,3	20.7	223.2*	58.0	2.0	100	20.6	227.6*	58.0	0.4	99	18.8	241.2*	59.0	5.5	100
DEKALB DKC48-12 GENSSRIB	98 P500	1,2,3,4,6	21.0	214.2	54.1	0.9	99	20.8	210.9	53.5	0.3	99	18.9	229.3	55.1	2.3	98
DYNAGRO D39VP14	99 P500	1,2,3	21.6	221.3	56.3	0.6	98	21.9	227.1*	55.8	0.0	97	19.5	239.1	57.3	1.8	100
GOLDEN HARVEST G01P52-3011A	101 C500	1,2,3,4,A	22.4	221.5	56.4	1.7	100	23.6	232.3*	55.6	0.0	100	19.6	235.4	57.8	4.9	99
GREAT LAKES 4879STXRIB	98 P500	1,2,3,6	22.4	226.7*	54.8	3.1	99	22.8	232.7**	54.4	0.0	99	20.8	241.0*	56.2	9.4	99
GREAT LAKES 5015STXRIB	100 P500	1,2,3,6	22.5	218.3	55.2	0.7	100	23.7	220.1	54.6	0.7	99	19.8	236.5	56.6	1.1	100
HYLAND SEEDS 8450RA	100 P250	1,2,3,4,6	24.6	206.4	54.5	0.7	100	25.7	219.9	53.9	0.0	99	23.2	217.8	56.1	2.2	100
HYLAND SEEDS 8505RA	101 P250	1,2,3,4,6	23.7	223.2*	54.6	1.6	100	24.9	225.0*	53.7	0.0	100	21.0	233.4	55.9	4.8	99
NK Brand N45P-3011A	101 C500	1,2,3,4,A	21.5	220.4	56.5	0.7	99	21.8	227.8*	56.2	0.3	98	19.4	236.3	57.9	1.6	99
RUPP XRJ97-17	97 C250	1,2,3,4,6	22.1	210.1	55.7	0.5	99	22.6	219.4	55.3	0.0	98	19.9	221.0	57.2	1.5	100
RUPP XRT94-06	94 P250	1,2,3	21.3	212.0	56.7	0.7	100	21.3	215.0	56.2	0.0	100	19.3	227.3	57.9	2.0	100
SPECIALTY 29A263	99 P500	1,2,3,4,6	22.0	228.7*	55.2	0.7	100	22.5	228.7*	53.7	0.4	100	19.6	251.0**	56.9	1.5	100
SPECIALTY 42R32GENVT3P	96 P500	1,2,3	20.0	215.9	55.8	0.6	100	19.2	221.9	55.7	0.1	100	18.5	219.4	57.0	1.7	100
STEYER 9203 VT2PRORIBC	92 C250	1,2,14	20.8	216.9	56.6	0.4	100	21.1	215.8	55.8	0.0	99	18.7	233.1	58.3	1.3	100
STEYER 9603 VT2PRORIBC	96 C250	1,2,14	20.7	203.6	57.7	4.7	99	21.0	218.2*	57.4	0.0	99	18.9	207.6	59.1	13.9	99
AVERAGE			22.0	218.8	55.7	1.4	99	22.4	223.4*	55.2	0.2	99	19.9	232.8	57.1	3.8	99
HIGHEST			24.6	228.9	58.0	4.7	100	25.7	232.7**	58.0	1.6	100	23.2	251.0**	59.1	13.9	100
LOWEST			20.0	203.6	54.1	0.4	98	19.2	210.9	53.5	0.0	97	18.5	207.6	55.1	1.1	97
CV (%)			4.4	5.9	2.1	463.1	2.0	5.6	5.6	2.4	687.0	2.0	4.4	5.7	1.4	250.4	3.0
LSD (5%)			0.5	5.8	0.5	2.2	1.0	1.0	9.8	1.1	0.7	2.0	0.8	10.8	0.7	5.8	3.0

** Highest Yielding Hybrid
* Not Significantly Different from Highest Yielding Hybrid

		2 Year Averages 2014 - 2013																					
BRAND / HYBRID	RM	TRT	TRAIT	Late - TRIAL AVERAGE				Alleghan - Late				Ingham - Late				Saginaw - Late							
				%H2O	BUJA	Twt	%SL %Sd	%H2O	BUJA	Twt	%SL %Sd	%H2O	BUJA	Twt	%SL %Sd	%H2O	BUJA	Twt	%SL %Sd				
RENK RK66SSSTX	102	P500	1,2,3,4,6	25.6	196.6	52.4	0.0	100	22.5	206.2	51.7	0.0	100	23.7	210.9	53.4	0.0	100	30.5	172.7	52.3	0.0	100
RENK RK69SSSTX	105	P500	1,2,3,4,6	27.9	203.3	51.4	0.2	99	27.5	216.0	50.3	0.0	100	26.3	221.2	53.2	0.6	97	29.6	172.6	50.8	0.0	100
RENK RK712SSSTX	106	P500	1,2,3,4,6	27.8	200.8	52.7	0.0	100	28.1	222.9	53.0	0.0	100	25.3	208.5	53.7	0.0	99	30.4	170.9	51.6	0.0	100
RENK RK752SSSTX	105	P500	1,2,3,4,6	28.6	204.4	52.8	0.6	100	29.5	211.7	52.3	0.0	100	25.5	224.2	53.4	1.7	99	30.9	177.2	52.7	0.0	100
RUPP XRJ03-31	103	C250	1,2,3,4,6	25.6	194.0	51.2	0.0	99	23.6	201.9	51.6	0.0	99	23.0	210.1	52.7	0.0	97	30.1	169.9	49.3	0.0	100
SPECIALTY 32A323	102	P500	1,2,3,4,6	25.7	205.4	52.0	0.2	100	24.2	211.6	52.4	0.0	100	23.5	235.9*	53.5	0.6	100	29.3	168.8	50.2	0.0	100
SPECIALTY 34A413	104	P500	1,2,3,4,6	26.4	202.7	52.8	0.4	99	25.6	220.5	53.0	0.0	100	23.5	225.5	53.6	1.2	97	30.3	162.1	51.7	0.0	100
SPECIALTY 36A794	106	P500	1,2,3,4,6	25.6	205.6	51.9	0.1	98	24.0	220.1	52.5	0.0	96	23.0	227.3*	52.5	0.3	98	29.6	169.4	50.7	0.0	100
UNITY SEEDS 5608 SS-RIB	108	P500	1,2,3,4,6	28.7	189.5	52.7	0.0	100	28.9	187.6	52.1	0.0	100	27.1	207.7	53.2	0.0	100	30.2	173.3	52.7	0.0	100
UNITY SEEDS 7505 3122	105	C250	1,2,3,4	27.7	193.5	52.0	0.0	96	27.2	216.6	51.6	0.0	98	24.8	217.5	53.6	0.0	94	31.1	146.4	50.7	0.0	97
AVERAGE				26.8	202.6	52.3	1.0	99	25.9	212.7	52.1	0.5	99	24.3	222.1	53.5	2.4	99	30.3	172.9	51.3	0.1	99
HIGHEST				31.2	220.5	54.7	12.3	100	33.1	240.7	54.8	25.0	100	29.3	239.5	56.5	35.1	100	32.0	194.8	53.1	3.1	100
LOWEST				23.8	184.3	49.1	0.0	96	21.6	187.6	48.2	0.0	96	20.3	200.0	49.7	0.0	94	28.6	146.4	48.0	0.0	94
CV (%)				3.9	5.3	2.2	465.0	2.0	5.4	4.7	3.0	1342.0	2.0	4.3	5.0	1.7	275.5	3.0	2.0	6.3	1.7	1483.0	2.0
LSD (5%)				0.7	7.2	0.8	2.3	1.0	1.6	11.6	1.8	7.9	2.0	1.2	12.9	1.1	7.7	3.0	0.7	12.7	1.0	1.0	2.0

		2 Year Averages 2014 - 2013																					
BRAND / HYBRID	RM	TRT	TRAIT	Late - TRIAL AVERAGE				Alleghan - Late				Ingham - Late				Saginaw - Late							
				%H2O	BUJA	Twt	%SL %Sd	%H2O	BUJA	Twt	%SL %Sd	%H2O	BUJA	Twt	%SL %Sd	%H2O	BUJA	Twt	%SL %Sd				
CROPLAN 4975VT3P	102			23.2	221.1	55.8	6.0	100	24.3	237.1	55.4	0.4	100	19.9	227.2	57.0	17.5	99	25.3	198.9	54.9	0.0	100
DAIRYLAND SEED HI DF-3702-9	104	C250	1,2,3,4	24.6	208.0	52.9	4.5	100	25.5	227.7	52.0	0.4	100	21.2	214.8	54.7	11.6	100	27.2	181.4	52.2	1.6	99
DEKALB DKC53-56 GENSSRIB	103	P500	1,2,3,4,6	24.5	222.1	54.4	0.2	99	25.6	228.3	53.6	0.0	100	21.8	237.5*	56.0	0.7	100	26.1	200.6*	53.6	0.0	99
DEKALB DKC54-38 GENSSRIB	104	P500	1,2,3,4,6	25.2	217.1	55.5	4.5	100	26.5	227.7	55.3	0.0	99	22.5	224.4	56.0	13.3	100	26.5	199.1*	55.2	0.3	100
DYNAGRO D42SS42	102	P500	1,2,3,4,6	24.7	215.8	55.1	0.6	99	26.0	225.3	53.9	0.0	98	21.8	223.1	57.1	1.0	99	26.5	198.9	54.2	0.7	100
DYNAGRO D46SS46	106	P500	1,2,3,4,6	25.5	220.3	54.7	0.5	100	27.0	231.5	54.1	0.0	99	22.3	232.5*	55.8	1.6	100	27.3	196.8	54.1	0.0	100
GREAT LAKES 5283STXRIB	102	P500	1,2,3,6	24.7	219.4	54.4	0.8	99	25.4	234.5	54.4	0.4	100	22.2	233.5*	55.8	2.1	98	26.5	190.0	53.2	0.0	100
HYLAND SEEDS 8598RA	106	P250	1,2,3,4,6	26.8	215.4	53.7	16.3	99	28.0	220.2	52.2	0.0	99	24.5	225.8	55.3	43.1	99	28.1	200.1*	53.6	5.8	100
NK Brand N53W-3122	105	C500	1,2,3,4,6	25.7	207.8	54.4	4.0	98	27.7	220.7	53.7	0.6	98	21.9	224.2	56.2	6.9	98	27.5	178.4	53.2	4.4	99
NuTechG2 GENETICS 5H-502™	102	P500	1,2,4	23.2	218.4	55.4	1.1	98	23.2	229.8	55.2	0.0	97	20.8	231.8*	56.4	3.4	99	25.6	193.6	54.7	0.0	98
NuTechG2 GENETICS 5H-806™	106	P500	1,2,4	24.1	230.0**	55.6	0.7	97	23.8	246.9**	55.1	0.0	97	21.5	234.3*	56.9	2.0	98	27.0	208.9**	54.8	0.0	96
NuTechG2 GENETICS 5H-905™	105	P500	1,2,4	23.9	229.9*	54.2	4.2	100	25.0	245.2*	53.0	0.3	100	21.2	239.6**	55.9	12.4	99	25.4	204.9*	53.5	0.0	100
PIONEER P0216AM	102	P1250	1,2,3,4,6	23.7	225.5*	54.8	0.5	99	24.2	239.9*	54.3	0.0	100	20.7	239.6**	56.2	1.5	97	26.2	196.9	53.7	0.1	100
RENK RK66SSSTX	102	P500	1,2,3,4,6	23.5	214.8	54.4	0.2	100	23.8	224.3	53.5	0.1	100	20.9	217.8	55.3	0.0	100	25.7	202.3*	54.3	0.4	100
RENK RK69SSSTX	105	P500	1,2,3,4,6	26.0	219.2	54.0	1.0	97	27.0	228.6	53.2	0.6	98	23.1	233.2*	55.7	2.3	97	27.9	195.9	53.1	0.1	97
RENK RK752SSSTX	105	P500	1,2,3,4,6	26.4	217.8	55.3	2.4	99	29.4	227.1	54.2	0.0	99	22.5	233.3*	56.7	7.2	99	27.3	193.2	55.0	0.0	100
RUPP XRJ03-31	103	C250	1,2,3,4,6	23.8	211.4	54.3	0.9	99	24.8	222.8	54.1	0.0	99	20.6	217.5	55.8	2.8	98	26.0	193.9	52.9	0.0	100
SPECIALTY 34A413	104	P500	1,2,3,4,6	24.2	215.2	55.1	2.7	99	25.8	230.3	54.6	0.2	99	21.1	224.1	56.3	7.4	98	25.8	191.3	54.6	0.6	100
UNITY SEEDS 7505 3122	105	C250	1,2,3,4	25.2	201.4	54.3	1.0	97	26.5	217.5	53.9	0.0	97	22.0	212.5	55.8	3.1	97	27.3	174.2	53.2	0.0	98
AVERAGE				24.7	217.4	54.6	2.7	99	25.8	229.8	54.0	0.2	99	21.7	227.7	56.1	7.4	99	26.6	194.7	53.9	0.7	99
HIGHEST				26.8	230.0	55.8	16.3	100	29.4	246.9	55.4	0.6	100	24.5	239.6	57.1	43.1	100	28.1	208.9	55.2	5.8	100
LOWEST				23.2	201.4	52.9	0.2	97	23.2	217.5	52.0	0.0	97	19.9	212.5	54.7	0.0	97	25.3	174.2	52.2	0.0	96
CV (%)				4.6	5.8	2.0	0.0	2.0	5.7	5.2	2.3	1070.0	2.0	4.3	5.8	1.7	243.8	2.0	3.8	6.5	1.9	666.1	2.0
LSD (5%)				0.6	5.8	0.5	0.5	1.0	1.2	9.5	1.0	4.0	2.0	0.8	10.7	0.8	10.1	2.0	0.9	9.9	0.8	2.3	2.0

** Highest Yielding Hybrid
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RENK RK557SSTX	95	P500	1,2,3,4,6	29.8	171.6	49.2	0.0	100	25.5	170.8	49.5	0.0	100	34.1	172.5	48.9	0.0	100
RENK RK568VT3P	95	P250	1,2,3	30.5	175.3	49.2	0.0	100	25.5	183.6	49.2	0.0	100	35.6	167.1	49.2	0.0	100
RUPP XRD90-64	90	C250	1,2,4,6	27.4	178.2	50.1	0.4	97	25.8	175.2	49.8	0.0	96	29.1	181.2	50.5	0.9	97
RUPP XRD97-56	97	C250	1,2,3	28.3	185.9	50.2	0.0	100	25.8	184.5	50.9	0.0	100	30.8	187.4	49.5	0.0	100
RUPP XRJ97-17	97	C250	1,2,3,4,6	33.2	171.1	48.4	0.3	97	27.0	182.1	48.6	0.0	97	39.4	160.0	48.1	0.6	97
RUPP XRT194-06	94	P250	1,2,3	30.0	166.8	49.2	0.0	100	26.4	159.1	49.0	0.0	99	33.5	174.4	49.5	0.0	100
STEYER 9203 VT2PRORIBC	92	C250	1,2,1,4	30.9	169.7	49.9	0.0	100	26.3	181.2	50.3	0.0	100	35.5	158.2	49.5	0.0	99
STEYER 9603 VT2PRORIBC	96	C250	1,2,1,4	28.7	181.1	51.1	0.0	97	26.4	185.0	50.7	0.0	97	31.0	177.1	51.5	0.0	97
AVERAGE				29.1	180.4	49.7	0.1	99	26.1	178.6	50.0	0.0	99	32.1	182.2	49.5	0.1	99
HIGHEST				34.0	198.0	51.3	2.0	100	27.6	201.9	51.7	0.9	100	41.7	216.8	52.5	4.0	100
LOWEST				24.7	166.8	48.4	0.0	86	24.1	158.6	48.4	0.0	86	25.3	158.2	47.6	0.0	86
CV (%)				6.0	6.6	2.7	783.9	3.0	5.0	5.7	3.3	830.9	3.0	6.5	7.3	1.9	650.4	3.0
LSD (5%)				1.4	9.8	1.1	0.6	3.0	1.5	12.0	1.9	0.3	4.0	2.4	15.6	1.1	1.1	4.0

2 Year Averages 2014 - 2013																									
BRAND /HYBRID		RM	TRT	TRAIT	Early - TRIAL AVERAGE				Huron - Early				Mason - Early				Montcalm - Early								
					%H2O	BUJA	Twt	%SL	%Sd	%H2O	BUJA	Twt	%SL	%Sd	%H2O	BUJA	Twt	%SL	%Sd	%H2O	BUJA	Twt	%SL	%Sd	
CHANNEL 197-68STXRIB		97	PV500	1,2,3,4,6	28.9	221.9 *	52.8	0.6	100	23.6	231.7 **	53.9	0.6	100	34.3	212.1 *	51.6	0.6	100						
DAIRYLAND SEED DS-9487RA		87	C250	1,2,3,4,6	24.8	195.5	52.4	0.6	100	22.0	195.3	52.5	1.3	100	27.6	195.6	52.4	0.0	100						
DAIRYLAND SEED DS-9791RA		91	C250	1,2,3,4,6	25.5	202.0	53.4	0.4	100	22.1	195.6	54.0	0.7	100	29.0	208.4	52.9	0.0	99						
DEKALB DKC43-10 GENVT2PRIB		93	P500	1,2	24.1	219.3 *	53.7	0.3	100	22.5	214.5	53.7	0.4	100	25.7	224.2 **	53.8	0.1	100						
DEKALB DKC46-20 GENVT3PRIB		96	P500	1,2,3	24.5	225.1 **	54.7	0.1	97	21.9	227.0 *	55.8	0.0	95	27.0	223.1 *	53.7	0.1	100						
DYNAGRO D34VP52		94	P500	1,2,3	26.2	211.6	53.8	0.3	100	22.9	211.9	54.6	0.0	100	29.6	211.2 *	53.1	0.6	100						
GOLDEN HARVEST G92T43-3111		92	C500	1,2,3,4,6	22.6	208.3	54.3	1.4	100	21.2	205.3	54.1	0.7	100	24.0	211.3 *	54.4	2.1	100						
HYLAND SEEDS 4398		96	P250	1,2,3,4	24.0	202.8	53.7	0.9	100	21.9	203.2	54.0	0.0	100	26.2	202.5	53.5	1.7	100						
HYLAND SEEDS 8315RA		92	P250	1,2,3,4,6	26.1	196.2	53.0	6.9	99	22.9	204.2	53.3	0.0	100	29.3	188.2	52.7	13.9	99						
NK Brand N29T-3111 Brand		92	C500	1,2,3,4,6	23.0	206.8	53.6	0.5	98	21.1	209.2	53.4	1.0	100	25.0	204.4	53.8	0.0	96						
NutTech/G2 GENETICS 5X-894™		94	P500	1,2,3,4	23.7	211.7	53.8	1.2	99	22.0	208.5	53.6	0.3	99	25.3	214.9 *	54.0	2.1	99						
RENK RK557SSTX		95	P500	1,2,3,4,6	26.4	205.5	53.1	0.1	100	22.6	207.1	53.9	0.3	100	30.2	203.9	52.3	0.0	99						
RENK RK568VT3P		95	P250	1,2,3	25.7	210.2	53.8	0.1	100	22.2	215.6	54.4	0.0	100	29.1	204.8	53.2	0.3	100						
RUPP XRD90-64		90	C250	1,2,4,6	23.7	210.3	53.9	0.7	98	21.9	208.6	53.8	0.7	98	25.5	212.0 *	54.0	0.7	98						
RUPP XRD97-56		97	C250	1,2,3	24.4	215.6	53.8	0.8	100	22.3	216.7	54.2	0.3	100	26.6	214.6 *	53.4	1.3	100						
RUPP XRJ97-17		97	C250	1,2,3,4,6	28.1	201.1	52.6	0.9	97	24.0	216.1	53.0	1.1	98	32.3	186.1	52.2	0.7	96						
RUPP XRT194-06		94	P250	1,2,3	26.5	197.7	53.4	0.6	99	22.7	196.3	54.1	0.4	100	30.2	199.0	52.6	0.7	99						
STEYER 9203 VT2PRORIBC		92	C250	1,2,1,4	26.0	203.4	53.8	0.1	100	22.5	211.0	54.5	0.0	100	29.6	195.9	53.2	0.1	100						
STEYER 9603 VT2PRORIBC		96	C250	1,2,1,4	24.7	207.5	55.0	0.9	98	22.2	213.4	55.8	1.4	98	27.3	201.5	54.1	0.4	98						
AVERAGE					25.2	208.0	53.6	0.9	99	22.3	210.1	54.0	0.5	99	28.1	206.0	53.2	1.3	99						
HIGHEST					28.9	225.1	55.0	6.9	100	24.0	231.7	55.8	1.4	100	34.3	224.2	54.4	13.9	100						
LOWEST					22.6	195.5	52.4	0.1	97	21.1	195.3	52.5	0.0	95	24.0	186.1	51.6	0.0	96						
CV (%)					5.6	7.1	2.1	1104.0	3.0	4.5	6.2	2.5	516.2	4.0	7.3	9.6	1.7	1052.0	3.0						
LSD (5%)					0.9	8.1	0.6	3.2	2.0	0.9	9.9	1.1	1.2	3.0	1.8	15.4	0.7	6.4	2.0						

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TABLE 3L. HURON, MASON & MONTCALM COUNTY GRAIN TRIALS - LATE (98 Day and Later) ZONE 3

2014		Late - TRIAL AVERAGE				Huron - Late				Mason - Late				Montcalm - Late				
BRAND / HYBRID	RM	TRT	TRAIT	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd
CROPLAN 4099SSRIB	99			34.3	167.0	48.4	0.0	100	28.9	165.0	49.7	0.0	100	39.7	169.0	47.1	0.0	100
CROPLAN 4276SSRIB	102			36.3	159.0	49.3	0.0	97	28.4	164.7	50.4	0.0	98	44.2	153.4	48.2	0.0	95
CROPLAN 4822VT2PRIB	103			33.5	167.8	48.8	0.0	98	28.5	161.3	48.7	0.0	96	38.6	174.4	48.8	0.0	100
CROPLAN 4975VT3P	102			34.9	160.3	49.6	0.0	99	28.6	162.5	49.9	0.0	100	41.1	158.1	49.4	0.0	99
CROPLAN 5369SSRIB	104			40.3	159.4	50.4	0.0	100	29.1	165.7	51.5	0.0	99	51.5	153.0	49.3	0.0	100
DAIRYLAND SEED DS-9900SSX	100	C250	1,2,3,4,6	35.0	162.9	47.2	0.0	100	28.6	166.8	48.5	0.0	100	41.4	159.0	45.9	0.0	100
DAIRYLAND SEED HI DF-3702-9	104	C250	1,2,3,4	34.1	170.9	48.0	0.4	100	27.8	159.9	48.5	0.0	100	40.5	182.0*	47.4	0.9	100
DEKALB DKC48-12 GENSSRIB	98	P500	1,2,3,4,6	32.7	161.1	48.6	0.1	99	28.0	159.3	50.2	0.3	99	37.5	163.0	47.1	0.0	99
DEKALB DKC49-72 GENSSRIB	99	P500	1,2,3,4,6	31.3	174.6*	49.5	0.0	99	27.5	167.4	50.8	0.0	98	35.1	181.9*	48.1	0.0	99
DEKALB DKC50-84 GENVT2PRIB	100	P500	1,2	33.6	164.4	48.5	0.0	100	29.2	164.5	49.1	0.0	100	38.1	164.3	48.0	0.0	100
DEKALB DKC52-84 GENSSRIB	102	P500	1,2,3,4,6	31.3	180.1*	49.7	0.0	99	28.3	166.5	50.7	0.0	100	34.4	193.8*	48.8	0.0	99
DYNAGRO D38SS50	98	P500	1,2,3,4,6	31.6	166.8	49.8	0.0	100	27.9	168.1	52.3	0.0	100	35.3	165.5	47.3	0.0	100
DYNAGRO D39VP14	99	P500	1,2,3	32.8	168.7	50.3	0.0	99	28.2	176.5*	49.8	0.0	100	37.5	160.9	50.7	0.0	97
DYNAGRO D40SS48	100	P500	1,2,3,4,6	38.0	161.2	51.1	0.1	98	29.8	161.9	52.1	0.3	97	46.2	160.5	50.1	0.0	99
DYNAGRO D41SS71	101	P500	1,2,3,4,6	34.9	163.2	49.3	0.3	100	29.4	153.5	50.1	0.0	100	40.3	172.9	48.5	0.6	100
DYNAGRO D42SS42	102	P500	1,2,3,4,6	33.2	150.7	49.8	0.0	100	28.5	134.7	50.4	0.0	100	37.8	166.8	49.3	0.0	100
DYNAGRO D43VC50	103	P500	1,2	32.8	160.1	49.3	0.0	99	28.1	148.6	50.8	0.0	100	37.4	171.6	47.9	0.0	98
GREAT LAKES 4879STXRIB	98	P500	1,2,3,6	33.1	180.6*	49.2	0.0	97	28.4	185.3*	50.9	0.0	99	37.9	176.0	47.4	0.0	96
GREAT LAKES 5015STXRIB	100	P500	1,2,3,6	30.8	178.6*	48.8	0.0	100	27.4	177.9*	49.4	0.0	100	34.2	179.4	48.1	0.0	100
GREAT LAKES 5283STXRIB	102	P500	1,2,3,6	34.4	177.1*	49.2	0.0	99	27.6	175.3*	49.9	0.0	99	41.2	179.0	48.6	0.0	99
HYLAND SEEDS 4425	98	C250	1,2,3,4	32.5	165.7	49.5	0.9	95	28.2	163.7	50.5	0.0	98	36.8	167.8	48.5	1.8	92
HYLAND SEEDS 5510	101	C250	1,2,4,6	35.1	182.0**	50.6	0.0	100	28.3	180.3*	50.9	0.0	100	42.0	183.7*	50.3	0.0	100
HYLAND SEEDS 8445RA	99	C250	1,2,3,4,6	34.3	160.2	48.5	0.0	95	28.4	163.4	51.1	0.0	90	40.2	157.1	45.9	0.0	100
HYLAND SEEDS 8505RA	101	P250	1,2,3,4,6	38.2	168.6	49.1	0.0	100	28.5	178.2*	50.7	0.0	100	47.8	159.1	47.6	0.0	100
LEGACY SEEDS L-3844 GENSS	98	P500	1,2,3,4,6	34.1	164.3	48.5	0.0	100	28.8	168.7	49.5	0.0	100	39.4	159.8	47.5	0.0	100
LEGACY SEEDS L-4343 GENSS RI	101	P500	1,2,3,4,6	32.0	178.3*	50.7	0.3	100	27.9	187.7**	52.4	0.6	99	36.1	168.9	49.1	0.0	100
MYCOGEN 2Y479	98	C250	1,2,3,4,6	33.7	168.1	49.6	0.0	100	28.2	174.3*	50.3	0.0	100	39.3	161.8	48.9	0.0	100
MYCOGEN X14402S3	99	C250	1,2,3,4,6	34.2	157.4	47.9	0.0	100	28.2	152.7	49.5	0.0	100	40.1	162.2	46.3	0.0	100
NuTech/G2 GENETICS 5F-198™	98	P500	1,2,4	30.6	175.7*	48.3	0.0	100	28.3	156.5	50.3	0.0	100	32.9	195.0**	46.3	0.0	99
NuTech/G2 GENETICS 5F-200™	100	P500	1,2,4	30.9	179.4*	49.6	0.0	98	28.1	163.8	49.4	0.0	98	33.7	195.0**	49.7	0.0	98
NuTech/G2 GENETICS 5F-399™	99	P500	1,2,4	34.8	175.5*	48.2	0.0	98	27.9	177.0*	48.7	0.0	99	41.6	174.1	47.6	0.0	97
NuTech/G2 GENETICS 5H-502™	102	P500	1,2,4	33.4	179.6*	49.6	0.0	99	28.7	178.1*	50.6	0.0	100	38.2	181.1*	48.6	0.0	99
NuTech/G2 GENETICS 5L-802™	102	P500	1,2,3,4	37.3	161.6	48.8	0.0	99	28.7	155.7	49.6	0.0	99	45.9	167.5	48.0	0.0	99
NuTech/G2 GENETICS 5X-698™	98	P500	1,2,3,4	31.0	167.6	49.1	0.0	100	27.2	175.8*	50.7	0.0	100	34.8	159.5	47.6	0.0	100
NuTech/G2 GENETICS 5Z-002™	102	PT250	1,2,4	35.0	164.0	49.0	0.0	100	28.3	167.4	50.2	0.0	99	41.8	160.6	47.8	0.0	100
NuTech/G2 GENETICS 5Z-0106™	101	PT250	1,2,4	36.1	161.3	48.7	0.0	94	28.6	158.4	50.0	0.0	91	43.7	164.2	47.5	0.0	97
PIONEER P0157AM	101	PT250	1,2,3,4,6	36.1	166.3	50.3	0.0	99	27.3	158.0	50.8	0.0	100	45.0	174.7	49.8	0.0	98
PIONEER P0216AM	102	PT250	1,2,3,4,6	33.7	173.3*	48.7	0.0	99	28.3	171.4	50.3	0.0	98	39.2	175.3	47.1	0.0	99
PIONEER P9807AM	98	PT250	1,2,3,4,6	31.2	174.7*	50.0	0.0	96	27.6	161.7	51.2	0.0	96	34.7	187.7*	48.9	0.0	96
RENK RK596SSTX	98	P500	1,2,3,4,6	31.0	170.9	49.9	0.0	99	27.3	166.0	51.4	0.0	100	34.7	175.8	48.4	0.0	99
AVERAGE				33.8	168.2	49.2	0.1	99	28.3	166.1	50.3	0.0	99	39.4	170.4	48.2	0.1	99
HIGHEST				40.3	182.0	51.1	0.9	100	29.8	187.7	52.4	0.6	100	51.5	195.0	50.7	1.8	100
LOWEST				30.6	150.7	47.2	0.0	94	27.2	134.7	48.5	0.0	90	32.9	153.0	45.9	0.0	92
CV (%)				6.1	7.7	3.1	691.2	3.0	3.4	7.4	3.8	764.1	4.0	7.0	7.4	2.3	604.1	2.0
LSD (5%)				1.7	10.7	1.3	0.3	3.0	1.1	14.5	2.2	0.3	5.0	3.2	14.8	1.3	0.6	3.0

2 Year Averages 2014 - 2013

BRAND / HYBRID	RM	TRT	TRAIT	Late- TRIAL AVERAGE				Huron - Late				Mason - Late				Montcalm - Late						
				%H2O	BU/A	Twt	%SL %Sd	%H2O	BU/A	Twt	%SL %Sd	%H2O	BU/A	Twt	%SL %Sd	%H2O	BU/A	Twt	%SL %Sd			
CROPLAN 409SSRIB	99			29.1	205.8 *	52.3	0.8	100	25.5	197.7	53.2	0.0	100	32.8	213.8 *	51.5	1.5	100				
CROPLAN 4975VT3P	102			28.6	193.2	53.4	9.2	100	24.5	199.6	54.0	2.3	100	32.8	186.9	52.8	16.1	99				
DAIRYLAND SEED HI DF-3702-9	104	C250	1,2,3,4	29.2	196.5	51.8	8.4	100	25.5	190.1	52.0	0.8	100	32.9	203.0	51.6	16.0	100				
DEKALB DKC48-12 GENSSRIB	98	P500	1,2,3,4,6	26.5	198.7	52.8	0.7	100	23.3	195.7	53.8	0.4	99	29.7	201.7	51.9	1.0	100				
DYNAGRO D39VP14	99	P500	1,2,3	27.1	205.8 *	53.9	0.1	98	23.9	208.7 *	54.1	0.3	99	30.4	202.8	53.7	0.0	98				
DYNAGRO D41SS71	101	P500	1,2,3,4,6	29.0	205.7 *	53.0	1.1	100	25.3	196.3	53.8	0.0	99	32.7	215.0 *	52.2	2.1	100				
DYNAGRO D42SS42	102	P500	1,2,3,4,6	28.8	190.4	53.1	0.2	101	25.4	182.6	54.0	0.4	101	32.3	198.2	52.3	0.0	100				
GREAT LAKES 4879STXRIB	98	P500	1,2,3,6	28.5	212.0 *	52.7	0.5	98	24.8	208.3 *	53.9	0.0	97	32.3	215.6 **	51.5	1.0	98				
GREAT LAKES 5015STXRIB	100	P500	1,2,3,6	26.2	207.6 *	52.9	0.3	100	23.9	204.7	53.3	0.0	100	28.5	210.6 *	52.5	0.6	100				
GREAT LAKES 5283STXRIB	102	P500	1,2,3,6	29.2	212.5 *	52.6	0.4	99	25.4	211.1 *	52.9	0.0	99	33.0	213.9 *	52.2	0.7	99				
HYLAND SEEDS 8505GRA	101	P250	1,2,3,4,6	31.8	199.6	52.6	1.1	100	26.0	208.4 *	53.9	0.7	100	37.7	190.7	51.4	1.4	100				
MYCOGEN 2Y479	98	C250	1,2,3,4,6	28.6	190.3	52.8	2.2	100	25.1	189.3	53.0	3.0	100	32.2	191.3	52.6	1.4	100				
NuTech/G2 GENETICS 5H-502™	102	P500	1,2,4	28.6	211.5 *	53.2	1.0	98	24.4	216.2 **	54.4	0.0	100	32.9	206.8 *	52.0	2.0	97				
NuTech/G2 GENETICS 5X-698™	98	P500	1,2,3,4	25.8	194.6	53.4	0.0	98	22.7	202.1	54.6	0.0	99	29.0	187.0	52.2	0.0	97				
PIONEER P0216AM	102	P1250	1,2,3,4,6	28.7	212.7 **	52.5	1.5	99	25.1	210.8 *	53.5	0.0	99	32.3	214.6 *	51.4	3.1	99				
AVERAGE				28.4	202.5	52.9	1.8	99	24.7	201.5	53.6	0.5	100	32.1	203.5	52.1	3.1	99				
HIGHEST				31.8	212.7	53.9	9.2	101	26.0	216.2	54.6	3.0	101	37.7	215.6	53.7	16.1	100				
LOWEST				25.8	190.3	51.8	0.0	98	22.7	182.6	52.0	0.0	97	28.5	186.9	51.4	0.0	97				
CV (%)				5.7	7.4	2.3	623.0	3.0	3.8	7.3	2.8	541.1	4.0	6.5	7.2	1.7	508.3	2.0				
LSD (5%)				1.0	8.1	0.7	3.7	2.0	0.8	11.2	1.2	1.3	3.0	1.9	11.2	0.7	7.3	2.0				

** Highest Yielding Hybrid

* Not Significantly Different from Highest Yielding Hybrid

TABLE 4. GRAND TRAVERSE, IOSCO & MENOMINEE (LATE) COUNTY GRAIN TRIALS (96 Day and Earlier)

2014			Grand Traverse - Early			Iosco - Early			Menominee - Late				
BRAND / HYBRID	RM	TRT	TRAIT	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd
DAIRYLAND SEED DS-9487RA	87	C250	1,2,3,4,6						23.5	214.0	51.5	0.0	99
DAIRYLAND SEED DS-9694RA	94	C250	1,2,3,4,6						24.4	191.7	50.1	0.0	99
DAIRYLAND SEED DS-9791RA	91	C250	1,2,3,4,6						24.3	200.5	50.5	0.0	100
DEKALB DKC38-03 GENVT2PRIB	88	P500	1,2						23.8	220.7 *	52.5	0.0	100
DEKALB DKC39-07 GENVT2PRIB	89	P500	1,2						23.4	222.0 *	51.2	0.0	100
DEKALB DKC41-32 GENSSRIB	91	P500	1,2,3,4,6						24.4	206.0	52.0	0.0	98
DEKALB DKC43-10 GENVT2PRIB	93	P500	1,2						24.5	214.9	51.0	0.0	100
DEKALB DKC44-13 GENSSRIB	94	P500	1,2,3,4,6						23.4	213.7	52.5	0.0	100
DYNAGRO D25VC45	85	P500	1,2						23.4	221.2 *	52.4	0.0	99
DYNAGRO D29VC30	89	P500	1,2						23.2	207.4	51.7	0.0	100
DYNAGRO D32VC56	92	P500	1,2						23.9	218.0 *	52.8	0.0	100
GREAT LAKES 3847VT2RIB	88	P500	1,2						22.7	214.4	52.7	0.0	99
GREAT LAKES 4006VT2RIB	90	P500	1,2						23.2	213.3	52.9	0.0	100
GREAT LAKES 4250STX	92	P500	1,2,3,6						23.5	228.4 *	50.7	0.0	100
GREAT LAKES 4699VT3PRIB	96	P500	1,2,3						24.5	225.7 *	52.3	0.0	99
HYLAND SEEDS 8105RA	80	C250	1,2,3,4,6						23.4	185.4	52.8	0.0	100
HYLAND SEEDS 8201RA	84	P250	1,2,3,4,6						23.3	207.0	52.6	0.0	100
HYLAND SEEDS 8202RA	89	P250	1,2,3,4,6						23.1	209.8	51.4	0.0	100
HYLAND SEEDS 8305RA	90	C250	1,2,3,4,6						25.2	200.6	51.6	0.0	99
LEGACY SEEDS L-3022 GENSS RII	92	P500	1,2,3,4,6						23.8	230.8 *	52.9	0.0	100
LEGACY SEEDS L-3423 GENSS RII	94	P500	1,2,3,4,6						24.0	226.8 *	51.6	0.0	97
LEGEND 9492 VT2 Pro RIB	92	C250	1,2						23.9	218.8 *	53.7	0.0	100
LEGEND 95A89 GTCBLL	89	C250	1,2,4						24.1	230.9 **	52.6	0.0	100
MYCOGEN 21238	86	C250	1,2,3,4,6						23.7	219.1 *	51.6	0.0	100
MYCOGEN 2V357	93	C250	1,2,3,4,6						24.5	219.8 *	51.6	0.0	100
NuTech 5V-195™	95	C500	1,2,3,4						23.7	221.4 *	50.5	0.0	100
NuTech/G2 GENETICS 5F-295™	95	P500	1,2,4						22.7	210.9	52.1	0.0	100
NuTech/G2 GENETICS 5X-894™	94	P500	1,2,3,4						24.9	202.3	51.4	0.0	99
NuTech/G2 GENETICS 5Y-196™	96	P1250	1,2,3,4						24.8	220.7 *	49.8	0.6	100
AVERAGE									23.8	214.3	51.8	0.0	100
HIGHEST									25.2	230.9	53.7	0.6	100
LOWEST									22.7	185.4	49.8	0.0	97
CV (%)									3.1	54	1.7	1077.0	1.0
LSD (5%)									0.9	13.6	1.1	0.2	2.0

2 Year Averages 2014 - 2013			Grand Traverse - Early			Iosco - Early			Menominee - Late				
BRAND / HYBRID	RM	TRT	TRAIT	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd
DAIRYLAND SEED DS-9487RA	87	C250	1,2,3,4,6						22.0	199.4	53.1	0.3	100
DAIRYLAND SEED DS-9791RA	91	C250	1,2,3,4,6						24.0	190.7	52.4	0.0	98
DEKALB DKC41-32 GENSSRIB	91	P500	1,2,3,4,6						22.9	205.1 *	54.4	0.2	98
DEKALB DKC43-10 GENVT2PRIB	93	P500	1,2						22.5	207.1 *	52.5	0.3	99
GREAT LAKES 4006VT2RIB	80	P500	1,2						23.1	205.2 *	53.6	0.0	96
HYLAND SEEDS 8201RA	84	P250	1,2,3,4,6						21.0	196.4	54.6	0.1	99
HYLAND SEEDS 8202RA	89	P250	1,2,3,4,6						22.6	201.0 *	52.9	0.3	98

MYCOGEN 21238	86	C250	1,2,3,4,6		
NuTech/G2 GENETICS 5X-894™	94	P500	1,2,3,4		
AVERAGE	22.6	206.4 *	52.6	0.0	99
HIGHEST	22.5	208.4 **	52.9	0.7	97
LOWEST	22.6	202.2	53.2	0.2	98
CV (%)	24.0	208.4	54.6	0.7	100
LSD (5%)	21.0	190.7	52.4	0.0	96
	3.8	4.8	1.6	1058.0	4.0
	0.7	8.2	0.7	1.0	3.0

** Highest Yielding Hybrid
* Not Significantly Different from Highest Yielding Hybrid

CODES NUMBERS FOR HYBRID TRAITS

Code Num.	Traits & Resistant Events
1	Glyphosate
2	European Corn Borer
3	Corn Rootworm
4	Liberty Link
5	Clearfield, IMI, IT, IR
6	Western Bean Cutworm
7	Brown Mid Rib
8	Leafy
9	High Oil
10	Waxy
11	HTF High Total Fermentable
12	HAE High Available Energy
13	HES High Extractable Starch
14	Other

TREATMENT CODES FOR SEED APPLIED INSECTICIDES

TRT	Seed Treatment	Chemical Rate
	No Seed Insecticide Applied	
C125	Cruiser® 125	0.125 mg Thiamethoxan per kernal
C250	Cruiser® 250	0.250 mg Thiamethoxan per kernal
C1250	Cruiser® 1250	1.25 mg Thiamethoxan per kernal
P250	Poncho® 250	0.25 mg Clothianidian per kernal
P1250	Poncho® 1250	1.25 mg Clothianidian per kernal
Cruiser® is a registered trademark of Syngenta Group Company Poncho® is a registered trademark of Gustafson LLC		



2014

FUNGICIDE EFFECTS ON MICHIGAN CORN PERFORMANCE

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Plots were established at two Michigan sites: Coleman, Midland County and East Lansing, Ingham County. Experimental design was a randomized complete block. All plots were planted at 30 in. row spacing and were four rows wide; plot length was 50 ft in Coleman and 40 ft in East Lansing. At Coleman, corn variety DKC38-04RIB was planted on 27 May, with seven treatments and six replicates; fungicides were applied on 27 June (V7) and 30 July (VT). At East Lansing, corn variety NuTech 5V197 was planted on 29 May, with 17 treatments and five replicates; fungicides were applied on 27 June (V6), 9 July (V8), and 6 Aug. (VT). Fungicides were applied with a hand-held spray boom pressurized with CO₂ at 40 psi. The boom consisted of six nozzles (Teejet 11001VS) spaced 20 in. apart and was calibrated to apply 15 gal/A. Common rust, gray leaf spot, and northern leaf blight severities were assessed by estimating the percent leaf area with lesions on the ear leaves from 20 plants/plot; ratings were conducted on 25-26 Sept. (East Lansing) and 29 Sept. (Coleman). A disease index (DIX) that accounted for both severity (DS) and incidence (DI) was calculated for each

disease: $DIX = DI \cdot (DS/100)$. All assessment and harvest data were collected from the center two rows of each plot. Plots were harvested on 26 Oct (Coleman) and 12 & 14 Oct (East Lansing). Yields were adjusted to 15.5 percent moisture. Data were analyzed using SAS 9.3 PROC MIXED method (SAS Institute, Cary, NC).

Overall disease incidence was low at both sites. Significant reduction of gray leaf spot disease index was noted at both sites, when compared to the untreated controls. In general, the VT applications provided the greatest disease reduction. At East Lansing, Priaxor, Fortix, Headline AMP, and Domark 203 ME all at VT, as well as Priaxor at V6+VT, all significantly reduced gray leaf spot index, as compared to the untreated control. At Coleman, most treatments significantly lowered rust and northern leaf blight DIX values, compared to the untreated, but no significant reductions were noted in East Lansing. No significant yield differences were found at either site and no phytotoxicity of the tested products was noted.

Treatment, rate/A	Plant Stage	East Lansing				Coleman ²			
		DIX values			Yield (bu/A)	DIX values			Yield (bu/A)
		Rust	GLS	NLB		Rust	GLS	NLB	
Untreated		0.36	0.84 abc ^y	1.21 bcde	177.957	0.83 a	0.90 a	1.27 a	130.131
Priaxor, 8 fl oz	V6	0.16	0.84 ab	2.37 a	168.657	0.52 b	0.53 cd	0.13 d	163.528
Priaxor, 8 fl oz	VT	0.29	0.42 g	0.91 bcde	174.079	0.34 bc	0.47 d	0.20 cd	144.531
Priaxor, 8 fl oz	V6 & VT	0.21	0.43 g	1.04 bcde	164.428	0.94 a	0.92 a	1.35 a	120.430
Stratego YLD, 5 fl oz	V6	0.32	0.81 abcd	1.50 abc	171.725	0.28 bc	0.70 bc	0.29 c	152.511
Stratego YLD, 5 fl oz	VT	0.11	0.72 bcdef	1.36 abcd	177.272	0.16 c	0.75 ab	0.31 cd	161.912
Stratego YLD, 5 fl oz	V6 & VT	0.06	0.75 abcde	1.14 bcde	153.692	0.88 a	0.89 a	0.67 b	130.966
Fortix, 5 fl oz + Glyfos X-tra, 32 fl oz ^x	V6	0.15	0.85 abc	1.80 ab	163.077				
Headline AMP, 10 fl oz + Glyfos X-tra, 32 fl oz ^x	V6	0.20	0.88 a	1.57 abc	173.394				
Fortix, 5 fl oz ^x	V8	0.21	0.65 def	0.77 cde	180.830				
Headline AMP, 10 fl oz ^x	V8	0.15	0.83 abc	1.45 abc	169.454				
Fortix, 4 fl oz ^x	VT	0.14	0.60 fg	0.27 e	155.543				
Fortix, 5 fl oz ^x	VT	0.16	0.63 efg	0.38 de	187.246				
Headline AMP, 10 fl oz ^x	VT	0.24	0.66 ef	0.40 de	170.223				
Glyfos X-tra, 32 fl oz ^x	V6	0.20	0.85 ab	1.36 abcd	181.518				
Affiance, 10 fl oz	VT	0.21	0.70 cdef	0.93 bcde	177.914				
Domark 230 ME, 4 fl oz	VT	0.19	0.63 efg	0.66 cde	168.657				
P-value		0.2099	<0.0001	0.0106	0.3338	<0.0001	<0.0001	<0.0001	0.1713

² V6 applications were made at V7, not V6.

^y Column numbers followed by the different letters are significantly different at P=0.05, as determined by least square means comparison.

^x Treatments applied with Induce at 0.25% v/v.

TABLE B.

AGRONOMIC TABLE FOR GRAIN TRIAL LOCATIONS

COUNTY		PLANTING DATES	HARVEST DATES	PREVIOUS CROP	100 % STAND	AVERAGE STAND	FERTILIZER N - P - K
Zone 1	WASHTENAW	May 30	Nov 26	Wheat	35,244	35,068	176-9-3
	BRANCH	May 19	Nov 16	Corn	35,244	34,187	217-9-3
	CASS	May 11	Nov 12	Corn	35,244	34,539	281-9-3
Zone 2	ALLEGAN	May 23	Nov 10	Soybeans	35,244	34,891	124-9-3 + chicken manure
	INGHAM	May 26	Nov 17	Soybeans	35,244	34,715	186-9-3
	INGHAM CONV.	May 27	Nov 15	Soybeans	35,244	33,689	155-9-3
	SAGINAW & CONV.	June 9	Nov 19	Soybeans	35,244	35,068 35,421 Conv	154-9-3
Zone 3	HURON & Conv.	May 29	Nov 20	Corn	35,244	34,891	124-9-3
	MONTCALM & CONV.	June 10	Dropped	Frost	Maturity	GDU -287	Not harvestable
	MASON	May 25	Nov 30	Corn	35,244	34,891	21-9-3 + pig manure
	IOSCO	May 28	Nov 21	Corn	35,244	35,244	159-9-3
Zone 4	GRAND TRAVERSE	May 28	Dropped				
	MENOMINEE	June 6	Dropped	Frost			Not harvestable
Z5	DELTA	June 5	Dropped	Frost			Not harvestable

COUNTY		SOIL TYPE	SOIL TEST	FARM COOPERATOR	LOCATION
Zone 1	WASHTENAW	Morley loam 2-6% slopes	pH6.7, P41.5, K150.5	Mathew Talladay	Milan
	BRANCH	Elmdale fine sandy loam 2-6% slopes	pH7.05, P73, K70.5	Kyle Huff	Coldwater
	CASS	Kalamazoo loam 0-2% slopes	pH6.3, P27.5, K228.5	George Brossman	Vandalia
Zone 2	ALLEGAN	Ockley loam 1-6% slopes	pH6.3,P85, K185.5	Jim & John Schipper	Martin
	INGHAM	Capac loam 0-3% slopes	pH5.85,P64, K212	Jorgensen Farms Jerry Jorgensen & Mike Turner	Williamston
	INGHAM CONV.	Capac loam 0-6% slopes	pH6.4, P81.5 K126	Crop, Soil & Microbial Sciences Research Facility, MSU	Lansing
	SAGINAW & Conv.	Parkhill loam 0-3% slopes	pH6.65, P62, K124	Fred Gross Farms Peggy Gross & Dick Birchmeier	New Lothrop
Zone 3	HURON & Conv.	Kilmanagh loam	pH6.35,P95.5 K138.5	Wil-Le Farms Ron & Ed McCrea	Bad Axe
	MONTCALM	Dropped 2014 Not harvestable	Frost Maturity	Sackett Farms Larry Sackett	Stanton
	MASON	Fine Marlette Complex 0-6% slopes	pH6.35,P133. 5, K227.5	Robert Oshe Jacob Zwagerman	Scottville
Zone 4	IOSCO	Kawkawlin sany loam 0-4% slopes	pH62,P32.5, K92	Jeremy Beebe	Whittemore
	GRAND TRAVERSE	Karlin sandy loam 2-12% slopes	pH5.9, P56.5 K184.5	Ed Breitmeyer	Buckley
	MENOMINEE	Dropped 2014 Not harvestable	Snow	Johnson Dairy Farm Dave Johnson	Daggett
Z5	DELTA	Dropped 2014 Not harvestable	Snow	VanDrese Farms	Cornell

TABLE 6E. INGHAM, MONTCALM & SAGINAW COUNTY CONVENTIONAL GRAIN TRIALS - EARLY (101 Day and Earlier) ZONE 2 - 3

2014		Early - TRIAL AVERAGE						Ingham - Early						Montcalm - Early						Saginaw - Early					
BRAND / HYBRID	RM	TRT	TRAIT	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd		
GREAT LAKES 4006	90	P500	Conv.	21.5	182.7	66.1	0.0	97	17.6	195.1	82.4	0.0	94	25.5	170.4	49.8	0.0	100	25.5	170.4	49.8	0.0	100		
GREAT LAKES 4699	96	P500	Conv.	22.6	195.8*	51.8	0.0	97	19.2	203.5	54.2	0.0	95	25.9	188.0	49.4	0.0	100	25.9	188.0	49.4	0.0	100		
GREAT LAKES 4879	98	P500	Conv.	23.3	196.0*	51.4	0.4	99	19.5	214.2*	54.7	0.8	98	27.1	177.8	48.0	0.0	100	27.1	177.8	48.0	0.0	100		
M&W SEEDS 45A37	100	C250	Conv.	23.6	202.7**	52.8	0.0	90	21.6	211.7*	54.5	0.0	83	25.5	193.7*	51.1	0.0	97	25.5	193.7*	51.1	0.0	97		
M&W SEEDS 46G54	98	C250	Conv.	25.1	180.0	51.5	0.7	96	23.0	192.1	53.7	1.4	91	27.1	168.0	49.3	0.0	100	27.1	168.0	49.3	0.0	100		
RUPP XRA00-14	100	C250	Conv.	23.3	202.7**	51.7	0.2	97	21.8	221.4**	53.6	0.3	94	24.7	184.1	49.8	0.0	100	24.7	184.1	49.8	0.0	100		
RUPP XRA94-16	94	C250	Conv.	21.6	195.6*	51.8	0.0	97	17.4	204.6	54.5	0.0	95	25.8	186.6	49.2	0.0	99	25.8	186.6	49.2	0.0	99		
RUPP XRA98-58	98	C250	Conv.	24.5	184.0	51.1	0.0	97	22.2	188.5	53.2	0.0	94	26.8	179.5	49.0	0.0	100	26.8	179.5	49.0	0.0	100		
SPECTRUM 4655	96	Conv.	Conv.	23.7	191.2	51.3	0.0	96	21.0	191.1	52.7	0.0	92	26.5	191.3*	49.9	0.0	100	26.5	191.3*	49.9	0.0	100		
STEYER 9801	98	C250	Conv.	23.5	194.4*	51.3	0.0	96	22.3	190.5	52.1	0.0	92	24.7	198.3**	50.5	0.0	100	24.7	198.3**	50.5	0.0	100		
STEYER 9802	98	C250	Conv.	24.8	189.2	50.5	0.0	95	22.6	190.8	51.7	0.0	89	27.1	187.6	49.3	0.0	100	27.1	187.6	49.3	0.0	100		
AVERAGE				23.4	192.2	52.8	0.1	96	20.7	200.3	56.1	0.2	92	26.1	184.1	49.6	0.0	100	26.1	184.1	49.6	0.0	100		
HIGHEST				25.1	202.7	66.1	0.7	99	23.0	221.4	82.4	1.4	98	27.1	198.3	51.1	0.0	100	27.1	198.3	51.1	0.0	100		
LOWEST				21.5	180.0	50.5	0.0	90	17.4	188.5	51.7	0.0	83	24.7	168.0	48.0	0.0	97	24.7	168.0	48.0	0.0	97		
CV (%)				4.7	5.2	3.2	627.1	3.0	6.0	5.9	5.4	443.4	4.0	3.5	4.3	1.3	0.0	1.0	3.5	4.3	1.3	0.0	1.0		
LSD (5%)				0.9	8.3	1.4	0.6	2.0	1.5	14.2	3.6	1.2	5.0	1.1	9.5	0.8	0.0	1.0	1.1	9.5	0.8	0.0	1.0		

2 Year Averages 2014 - 2013		Early - TRIAL AVERAGE						Ingham - Early						Montcalm - Early						Saginaw - Early					
BRAND / HYBRID	RM	TRT	TRAIT	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd		
RUPP XRA98-58	98	C250	Conv.	22.8	209.2	54.5	11.3	97	22.1	213.3	55.3	22.7	95	23.5	205.0	53.7	0.0	100	23.5	205.0	53.7	0.0	100		

** Highest Yielding Hybrid

* Not Significantly Different from Highest Yielding Hybrid

TABLE 6L. INGHAM, MONTCALM & SAGINAW COUNTY CONVENTIONAL GRAIN TRIALS - LATE (102 Day and Later) ZONE 2 - 3

2014		Late - TRIAL AVERAGE						Ingham - Late						Montcalm - Late						Saginaw - Late					
BRAND / HYBRID	RM	TRT	TRAIT	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd		
GREAT LAKES 5283	102	P500	Conv.	23.9	211.4	51.0	2.1	95	22.0	227.1 *	51.8	4.2	90	25.7	195.6	50.2	0.0	100	27.1	185.0	49.4	0.0	99		
GREAT LAKES 5785	107	P500	Conv.	27.9	183.8	49.4	9.3	96	28.6	182.7	49.5	18.6	92	Not Harvested											
KEY 305	105	ENC	Conv.	26.8	172.3	48.9	55.7	85	27.1	170.2	50.3	111.4	71	Due to frost											
KEY 401	101	ENC	Conv.	24.1	196.0	53.9	0.0	97	21.9	211.2	57.1	0.0	95	-287 GDU											
M&W SEEDS 44G44	105	C250	Conv.	25.7	191.6	51.9	0.3	95	25.7	204.8	53.0	0.6	91												
M&W SEEDS 45M79	102	C250	Conv.	22.4	187.8	51.0	0.0	96	18.8	188.9	53.1	0.0	92												
SPECTRUM 5285	102	Conv.		23.9	189.7	50.6	0.2	96	21.8	195.7	52.3	0.3	92												
STEYER 10102	101	C250	Conv.	23.9	192.2	53.1	0.0	91	21.4	196.6	54.8	0.0	88												
WELLMAN W2408	108	ENC	Conv.	25.3	222.8 **	52.9	3.4	96	25.6	232.5 **	54.2	6.8	94												
AVERAGE				24.9	194.2	51.4	7.9	94	23.7	201.1	52.9	15.8	89												
HIGHEST				27.9	222.8	53.9	55.7	97	28.6	232.5	57.1	111.4	95												
LOWEST				22.4	172.3	48.9	0.0	85	18.8	170.2	49.5	0.0	71												
CV (%)				5.2	6.2	3.0	537.9	10.0	6.8	6.7	4.0	380.4	14.0												
LSD (5%)				1.1	10.0	1.3	35.6	8.0	1.9	16.6	2.5	72.5	15.0												

2 Year Averages 2014 - 2013		Late - TRIAL AVERAGE						Ingham - Late						Montcalm - Late						Saginaw - Late					
BRAND / HYBRID	RM	TRT	TRAIT	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd	%H2O	BU/A	Twt	%SL	%Sd		
GREAT LAKES 5283	102	P500	Conv.	22.5	223.8 *	55.9	1.6	97	22.2	233.1 *	54.5	3.2	95	22.8	214.6 *	57.3	0.0	100	23.5	218.9 **	55.7	0.0	100		
WELLMAN W2408	108	ENC	Conv.	24.1	228.3 **	55.5	1.7	98	24.7	237.8 **	55.4	3.4	97												
AVERAGE				23.3	226.1	55.7	1.7	98	23.5	219.3	54.9	25.0	96												
CV (%)				5.0	6.6	2.9	465.3	7.0	5.3	7.1	2.8	305.6	10.0												
LSD (5%)				0.7	7.7	0.9	17.9	4.0	1.1	12.5	1.3	36.1	8.0												

** Highest Yielding Hybrid
 * Not Significantly Different from Highest Yielding Hybrid

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B BRAND / HYBRID AGRIGOLD

BRAND / HYBRID	RM	TABLE
A6252STXRIB	100	2E
A6257STXRIB	100	2E
A6267STXRIB	102	2L
A6351STX	105	2L
~ A6408VT3PRIB	107	1E
~ A6416STXRIB	107	1E
A6472VT3PRIB	110	1L
A6499STXRIB	112	1L

BECK

XL 4721AM™*	97	2E
XL 4321AM™*	99	2E
XL 5234AMX™*	102	2L
5131AM™*	105	1E,2L
5140HR™*	105	1E,2L
5475AM™*	108	1L
5852D2	108	1L
XL EX1420CYXR™*	109	1L
5828AM™*	110	1L

CHANNEL

197-68STXRIB	97	2E,3E
202-64STXRIB	102	1E
~ 202-32STXRIB	104	1E

CROPLAN

3399SS/RIB	93	2E,3E
3499VT3P	94	2E,3E
3611SS/RIB	96	2E,3E
3899VT2P	96	2E,3E
3533 VP2PRIB	97	2E,3E
~ 4099SS/RIB	99	2E,3L
4975VT3P	102	2L,3L
4276SS/RIB	102	2L,3L
4822VT2P/RIB	103	2L,3L
~ 5369SS/RIB	104	2L,3L

DAIRYLAND SEED

DS-9487RA	87	3E,4
DS-9791RA	91	3E,4
DS-9694RA	94	3E,4
DS-9900SSX	100	2E,3L
~ Hi DF-3702-9	104	1E,2L,3L
DS-6805	105	1E,2L
DS-6905	105	1E,2L
DS-9305RA	105	1E,2L
DS-9307SSX	107	1E
DS-6409	109	1L

DEKALB

DKC36-30 GENVT2PRIB	86	5
DKC38-03 GENVT2PRIB	88	4,5
DKC39-07 GENVT2PRIB	89	4,5
DKC41-32 GENSSRIB	91	4,5
DKC43-10 GENVT2PRIB	93	3E,4,5
DKC44-13 GENSSRIB	94	3E,4
DKC45-65 GENSSRIB	95	2E,3E
DKC46-20 GENVT3PRIB	96	2E,3E

BRAND / HYBRID DEKALB Continued

DKC46-36 GENSSRIB	96	2E,3E
DKC47-35 GENSSRIB	97	2E,3E
DKC48-12 GENSSRIB	98	2E,3L
DKC49-72 GENSSRIB	99	2E,3L
DKC50-84 GENVT2PRIB	100	2E,3L
DKC52-84 GENSSRIB	102	1E,2L,3L
DKC53-56 GENSSRIB	103	1E,2L
DKC54-38 GENSSRIB	104	1E,2L
DKC55-20 GENSSRIB	105	1E
DKC57-75 GENSSRIB	107	1E
DKC57-92 GENSSRIB	107	1E
DKC60-67 GENSSRIB	110	1L
DKC62-08 GENSSRIB	112	1L
DKC62-77 GENSSRIB	112	1L

DYNAGRO

D25VC45	85	4,5
D29VC30	89	2E,3E,4,5
D32VC56	92	3E,4
D34VP52	94	3E
D37SS60	97	2E,3E
D38SS50	98	3L
D39VP14	99	2E,3L
~ D40SS48	100	2E,3L
D41SS71	101	3L
D42SS42	102	2L,3L
D43VC50	103	1E,2L,3L
~ D46SS46	106	1E,2L
D48SS38	108	1L,2L
~ D50SS43	110	1L

GOLDEN HARVEST

G88M78-3011A	88	3E
~ G92T43-3111	92	3E
G95D32-3110	95	3E
G96A69-3220	96	2E
G99Z33-3111A	99	2E
~ SI4282-3110	100	2E
~ G01P52-3011A	101	2E
~ G05T82-3122	105	1E
G07F23-3111	107	1E
~ G07V88-3000GT	107	1E
~ G09E98-3000GT	109	1L
~ G12J11-3011A	112	1L

GREAT LAKES

3510VT2RIB	85	5
3847VT2RIB	88	4,5
4006VT2RIB	90	4,5
4006	90	6E
~ 4250STX	92	3E,4,5
4699	96	6E
4699VT3PRIB	96	3E,4
~ 4879STXRIB	98	2E,3L
4879	98	6E

BRAND / HYBRID GREAT LAKES Continued

~ 5015STXRIB	100	2E,3L
~ 5283STXRIB	102	1E,2L,3L
5283	102	6L
5428STXRIB	104	1E,2L
~ 5566STX	105	1E,2L
5688STXRIB	106	1E,2L
~ 5755STXRIB	107	1E,2L
5785	107	6L
~ 5918STX	109	1L
~ 6068STXRIB	110	1L

HYLAND SEEDS

8105RA	80	4,5
8201RA	84	4,5
8202RA	89	3E,4,5
8305RA	90	3E,4
8315RA	92	3E
4398	96	3E
4425	98	2E,3L
8445RA	99	2E,3L
8450RA	100	2E
~ 8505RA	101	2E,3L
5510	101	2E,3L
5597	105	1E,2L
8598RA	106	1E,2L
~ 8695RA	110	1L
8680	110	1L
~ 4687	110	1L

KEY

401	101	6L
305	105	6L
305G	105	1E
509G	109	1L

LEGACY SEEDS

L-3043 VT2P RIB	92	3E
L-3022 GENSS RIB	92	4
L-3423 GENSS RIB	94	3E,4
L-3612 VT3P	96	2E,3E
L-3813 GENSS RIB	97	2E
L-3844 GENSS	98	2E,3L
L-4343 GENSS RIB	101	2E,3L
L-5522 VT3P RIB	104	2L
L-6913 GENSS RIB	108	1L
L-6943 GENSS RIB	109	1L

LEGEND

X83 RR	83	5
JSC 40J185 GT	85	5
9386 VT3 Pro RIB	86	5
95A89 GTCBLL	89	4,5
9090 VIP 3110	92	5
9492 VT2 Pro RIB	92	4,5
9495 VT3 Pro RIB	95	3E

BRAND / HYBRID RM TABLE**LEGEND Continued**

9497 GENSS RIB	97 3E
94A01 GTA	101 2E
40J01 RR	101 2E
9402 GENSS RIB	103 2L

M&W SEEDS

47M34	92 3E
47J66	92 1E,2L
47R91	95 2E,3E
46T80	96 2E
46J11	96 2E
46G54	98 6E
45A37	100 6E
45A38	101 1E,2E
45M80	102 1E,2L
45M79	102 6L
45J99	104 1E,2L
44G44	105 6L
44D82	108 1L

MYCOGEN

2J238	86 4,5
X12302XR	88 5
2V357	93 4
2Y479	98 3L
X14402S3	99 3L
X13526VX	103 2L
2G581	105 2L
X12546S2	108 1L
2V709	110 1L

NK Brand

N23M-3011A	88 3E
~ N29T-3111 Brand	92 3E
N36A-3220	96 3E
N37R-3110	97 2E
N42Z-3111A	99 2E
~ N45P-3011A	101 2E
~ N53W-3122	105 2L
N58S-3111	106 1E
~ N61P-3000GT Brand	107 1E
N60F-3111	107 2L
~ N63R-3000GT Brand	109 1L
~ N70J-3011A	112 1L

NuTech

~ 5B-290™	90 5
~ 5V-195™	95 3E,4

NuTech/G2 GENETICS

5F-091™	91 5
~ 5X-894™	94 3E,4,5
5F-295™	95 3E,4
~ 5Y-196™	96 3E,4
5X-698™	98 2E,3L
~ 5F-198™	98 2E,3L
~ 5F-399™	99 2E,3L
5F-200™	100 2E,3L
5Z-0106™	101 2E,3L
~ 5H-502™	102 2L,3L
~ 5L-802™	102 2L,3L
5Z-002™	102 2L,3L
~ 5H-905™	105 1E,2L
~ 5F-805™	105 1E,2L
~ 5H-806™	106 1E,2L

BRAND / HYBRID RM TABLE**NuTech/G2 GENETICS Continued**

5Z-707™	107 1E
5F-008™	108 1L
~ 5Z-0801™	108 1L
~ 5F-709™	109 1L
~ 5D-109™	109 1L
5Z-0906™	109 1L

PIONEER

P9188AMX	91 5
P9329AM	93 5
~ P9789AMXT	97 3E,5
P9807AM	98 2E,3L
P0157AM	101 1E,2E,3L
P0216AM	102 1E,2L,3L
P0419AMX	104 1E,2L
~ P0506AM	105 1E,2L
P0604AM	106 1E
P0909AM	109 1L

RENK

RK299VT2P	89 3E
RK522SSTX	94 3E
RK568VT3P	95 3E
RK557SSTX	95 3E
RK596SSTX	98 2E,3L
RK581SSTX	100 2E
RK605SSTX	100 2E
RK666SSTX	102 2L
RK699SSTX	105 1E,2L
RK752SSTX	105 1E,2L
~ RK712SSTX	106 1E,2L
RK776SSTX	107 1E
RK791SSTX	109 1L
RK834SSTX	110 1L

RUPP

XRD90-64	90 3E
XRT94-06	94 2E,3E
XRA94-16	94 6E
XRD97-56	97 2E,3E
XRJ97-17	97 2E,3E
XRA98-58	98 6E
XRD99-30	99 2E
XR8414	100 2E
XRA00-14	100 6E
XRJ03-31	103 1E,2L
XR8239	103 1E
XR8034	105 1E
XRD05-04	105 1E
XRJ07-20	107 1E
XRJ10-91	110 1L
XRD11-13	111 1L

SEED CONSULTANTS

SCS 10HQ34™	103 1E
SCS 10HR43™	104 1E
SCS 1074AMX-R™	108 1L
SCS 1094AM-R™	109 1L

BRAND / HYBRID RM TABLE**SELECT**

3829 VP RIB	103 1E
4746 DP RIB	107 1E
4823 SM RIB	108 1L
4995 SM RIB	110 1L
5186 SM RIB	111 1L

SPECIALTY

24A104	94 2E
42R32GENVT3P	96 2E
29A263	99 2E
32A323	102 1E,2L
~ 34A413	104 1E,2L
~ 36A794	106 1E,2L
38A573	108 1L

SPECTRUM

~ 4655	96 6E
5285	102 6L

STEYER

9203 VT2PRORIBC	92 2E,3E
9603 VT2PRORIBC	96 2E,3E
9802	98 6E
9801	98 6E
~ 10102 VT2PRORIBC	101 1E,2E
10102	101 6L
11004 VT2PRORIBC	110 1L

UNITY SEEDS

5601 SS-RIB	101 2E
7505 3122	105 1E,2L
5608 SS-RIB	108 1L,2L
7811 3000GT	111 1L
5512 SS-RIB	112 1L

WELLMAN

W2401DP	101 1E
W2404DP	104 1E
W2307DP	107 1E
W2408	108 6L
W2409S	109 1L

~ Denotes hybrids that were entered into the Grain and Silage Trials.

2014 SILAGE PERFORMANCE TRIALS

Introduction

The silage index (pg. 33) contains a list of all hybrids planted in the 2014 silage trials.

County results are reported in the following tables:

Tables 7E/7L Zone 1 - Branch, Lenawee and Wood, OH

Tables 8E/8L Zone 2/3 – Ottawa, Huron (Zone 3) and Ingham

Table 9 Zone 4 – Iosco, Menominee (dropped 2014), and Osceola

Table 10 Zone 5 – Alger (dropped 2014), Delta and Menominee (dropped 2014)

The map of Michigan (pg. 31) shows each zone and the locations where the trials were located.

Methods

Testing procedures (randomization, replication, planting rates, etc.) for silage evaluation are the same as those utilized for the grain trials. For silage Agronomic information refer to Table C (pg. 32)

Zones 1 and zone 2/3 were divided into two maturity groups (designated early and late) on the basis of the relative maturity (RM) submitted by the companies with results listed in separate tables. Zones 1 and zone 2/3 have two maturity groups “E” or “L” based on company RM. In cooperation with The Ohio State University, the Wood County, OH location is planted and managed by OSU while MSU handles harvest, quality and data analysis.

Silage plots were harvested with a two-row self-propelled forage harvester. Electronic scales mounted on the chopper measured plot weights. Total plot weight was applied to calculate green tons per acre (**GT/A**). Sub samples of fodder including grain were collected, weighed, oven dried until weight loss was zero, then weighed again to determine the percent dry matter (**%DM**). Dry tons per acre (**DT/A**) is calculated mathematically by multiplying **GT/A** by **%DM**. The samples were ground using a 1.0 mm screen before conducting quality analysis using Near Infrared Reflectance (NIR) to predict quality components.

Silage Analysis

Tables 7E, 7L, 8E, 8L, 9 and 10 provide silage quality data as determined by NIR analysis on freshly dried & ground samples. Data is provided for individual locations and also averaged over multiple locations. Near infrared spectral analysis involves irradiating the sample with light in the near infrared spectrum (1,100 to 2,500 nm). The illuminated sample absorbs light proportional to specific chemical and physical properties. The reflected energy is measured and was correlated statistically with the updated 2014 Near-infrared Spectroscopy (NIRS), equation established for silage quality levels. A discription of the the six quality traits that are presented in the silage tables are listed below:

- 1. IVD= (in vitro) digestible dry matter-48hr.** IVD is a measure of forage digestibility. Higher IVD is desirable.
- 2. ADF=acid detergent fiber.** ADF represents the less digestible portion of the corn forage, containing cellulose, lignin, and heat-damaged protein. ADF is closely related to the digestibility of forages. Lower ADF implies the forage is more digestible. More mature plant material will contain higher ADF concentrations. A low concentration of ADF is desirable.
- 3. NDF=neutral detergent fiber.** NDF is a measure of the fiber content of the corn forage. It is less digestible than non-fiber constituents of the forage. Forages with high NDF levels have lower energy. NDF is also a measure of potential forage intake. High NDF levels decrease the potential forage intake. Low NDF content is desirable.
- 4. NDFD=neutral detergent fiber digestibility-48hr.** NDFD is the portion of neutral detergent fiber digested by animals at a specified level of feed intake. High NDFD is desirable.
- 5. CP=crude protein.** Forages are generally supplemented with high-protein concentrates such as soybean meal to increase the protein content of ruminant diets. Corn hybrids with high protein levels require less supplementation and therefore result in lower feed costs. High protein content is desirable.
- 6. STRCH=starch.** Starch from the grain, along with the digestible component of the fiber, accounts for the majority of the energy in corn silage.

Silage quality traits are reported on a dry matter basis (100 percent DM). Quality traits in these tables are intended for use in hybrid selection only. Analysis for the balancing of feed rations should be analyzed from hybrids grown on each individual farm.

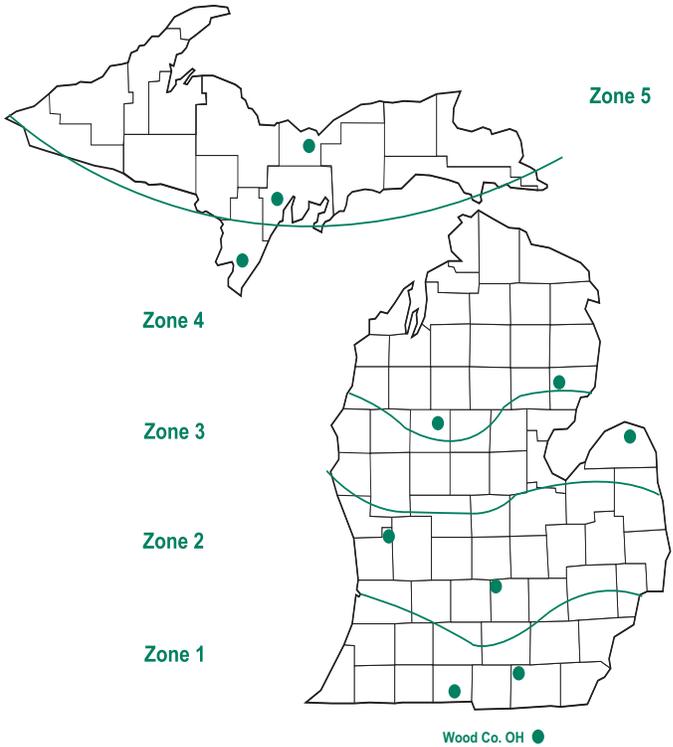


MILK2006

An updated calculation using the MILK2006 equation (UW-Madison Dairy Science Department) was used to estimate MK/T (milk per ton) and MK/A (milk per acre). MILK2006 estimates the dry matter intake using the NDF and CWD (cell wall digestibility) parameters of the sample. The updated equation utilizes CP, fat, and sugar as well as the organic acid fractions along with their total-tract digestibility coefficients to estimate energy. Whole plant dry matter was calculated to 34 percent for all hybrids and digestibility coefficients used for the fat and sugars as well as the organic acid fractions were held constant. MILK2006 also assumes the weight of the cow is 1,350 lbs. and that it consumes a 30 percent NDF diet. Using National Research Council (NRC, 2001) energy requirements, the estimated intake of energy from corn silage is converted to milk per ton. Milk per acre is then calculated using the estimated values for milk per ton and dry matter yield per acre. For more information on the utility of MILK2006 please see:

www.uwex.edu/ces/crops/uwforage/Milk2006silage.html

2014 Silage Trial Locations



Notes

TABLE C.

AGRONOMIC TABLE FOR SILAGE TRIAL LOCATIONS

COUNTY		PLANTING DATES	HARVEST DATES	PREVIOUS CROP	100 % STAND	AVERAGE STAND	FERTILIZER N - P - K
Zone 1	BRANCH	May 19	Sep 18 & Sep 24	Corn	35,244	34,998	217-9-3
	LENAWEE	May 30	Sept 19	Soybeans	35,244	34,719	240-9-3
	WOOD (OHIO)	May20	Sept 16	Soybeans	36,500	35,640	215-34-0
Zone 2	OTTAWA	May 23	Sep 29	Alfalfa	35,244	34,715	21-9-3 + manure
	INGHAM	May 26 & May 27	Sep 26 & Oct 7	Soybeans	35,244	34,715	155-9-3
	HURON	May 29	Oct 9 & 10	Corn	35,244	34,891	124-9-3
Zone 4	IOSCO	May 28	Oct 19	Corn	35,244	34,539	159-9-3
	OSCEOLA	June 2	Oct 22	Alfalfa	35,244	33,834	155-9-3 + manure
	MENOMINEE	June 6	Dropped	Frost/rain			Not harvestable
Z5	ALGER	June 5	Dropped	Frost			Not harvestable
	DELTA	June 5	Oct 29	Sod	35,244	34,574	157-9-3

COUNTY		SOIL TYPE	SOIL TEST	FARM COOPERATOR	LOCATION
Zone 1	BRANCH	Elmdale fine sandy loam 2-6% Slopes	pH7.05, P73, K70.5	Kyle Huff	Coldwater
	LENAWEE	Blount loam 3-7% Slopes	pH7.2, P65 K110	Bakerland Farms Blaine Baker	Clayton
	WOOD (OHIO)	Hoytville clay loam	pH5.8 , P114, K435	OARDC Matt Davis	Hoytville, Ohio
Zone 2	OTTAWA	Ubyly sandy loam 2-6% Slopes	pH 6.7, P85.5, K198	Eadie Farms Arden Eadie	Conklin
	INGHAM	Capac loam 0-3%	pH6.75, P58.5, K166	Crop & Soil Sciences Research Facility, MSU	East Lansing
	HURON	Kilmanagh loam	pH6.65, P95.5, K 138.5	Wil-Le Farms Ron & Ed McCrea	Bad Axe
Zone 4	IOSCO	Kawkawlin sandy loam 0-4% Slopes	pH6.2, P32.5, K92	Jeremy Beebe	Whittemore
	OSCEOLA	Montcalm loamy sand 0-6% Slopes	pH6.6, P55, K113	Robert E. Lee	Marion
	MENOMINEE	Dropped 2014	Excessive Rain Poor field conditions	Johnson Dairy Farm Dave Johnson	Daggett
Zone 5	ALGER	Dropped 2014	Frost	AgBio Research Station Chris Kapp	Chatham
	DELTA	Trenary fine sandy loam 2-6% Slopes	pH6.75, P20.5, K 57.5	VanDrese Farms	Cornell

SILAGE HYBRID INDEX

ZONE 1 - Tables 7E/7L

Branch
Wood (Ohio)
Trial Average

BRAND / HYBRID	RM	TABLE
AGRIGOLD		
~ A6408VT3PRIB	107	8L
~ A6416STXRIB	107	8L
A6442STXRIB	109	8L
A6458VT3PRIB	110	7E
A6533VT3PRIB	113	7L
A6559STXRIB	113	7L
CHANNEL		
~ 202-32STXRIB	104	8E
207-13VT3PRIB	107	8L
CROPLAN		
~ 4099SS/RIB	99	8E
4819AS3000/GT	103	8E
5415SS/RIB	104	8E
~ 5369SS/RIB	104	8E
5887VT3P/RIB	107	8L
DAIRYLAND SEED		
Hi DF-3188RA	88	9
Hi DF-3290-9	90	9
Hi DF-3197-7	97	8E,9
EXP-10006	100	8E,9
~ Hi DF-3702-9	104	8E,9
EXP-10509	105	7E,8L
Hi DF-3108RA	108	7E,8L
Hi DF-3510SSX	110	7E,8L
DS-9713RA	111	7L
DYNAGRO		
D35VC95	95	9
~ D40SS48	100	8E
~ D46SS46	106	8L
~ D50SS43	110	7E,8L
GOLDEN HARVEST		
~ G92T43-3111	92	9
~ S14282-3110	100	9
~ G01P52-3011A	101	9
~ G05T82-3122	105	8L
~ G07V88-3000GT	107	8L
G08X83-3110	108	8L
~ G09E98-3000GT	109	7E,8L
~ G12J11-3011A	112	7L
GREAT LAKES		
~ 4250STX	92	10
~ 4879STXRIB	98	9,10
~ 5015STXRIB	100	8E,9,10
~ 5283STXRIB	102	8E,9
5368VT3PRIB	103	8E,9
~ 5566STX	105	7E,8L
~ 5755STXRIB	107	7E,8L
~ 5918STX	109	7E,8L
~ 6068STXRIB	110	7E,8L
6261STX	112	7L
6462STXRIB	114	7L
HYLAND SEEDS		
HLS8477	98	9
~ 8505RA	101	8E
8652RA	108	8L
~ 8695RA	110	7E
~ 4687	110	8L

ZONE 2 - Tables 8E/8L

Huron - Zone 3
Ingham
Ottawa
Trial Average

BRAND / HYBRID	RM	TABLE
LEGACY SEEDS		
L-4433 3011A	102	8E
L-5350 3122 E-Z REFUGE	104	8E
L-5810 3000GT	106	8L
LEGEND		
9507 GTCBLL	107	8L
MASTERS CHOICE		
MCT-4884	98	8E,9
MCT-5375	103	8E
MCT-527 VIP	105	9
MCT-5663	106	7E,8L
MCT-6153	111	7L
MYCOGEN		
TMF2R196	86	10
TMF2Q413	96	9,10
X12421S3	98	8E
TMF2H706	109	7E
TMF2H747	113	7L
NK Brand		
~ N29T-3111 Brand	92	9
N35T-3110	95	9
~ N45P-3011A	101	9
~ N53W-3122	105	8L
~ N61P-3000GT Brand	107	8L
N61X-3110	108	8L
~ N63R-3000GT Brand	109	7E,8L
~ N70J-3011A	112	7L
NuTech		
~ 5B-290 TM	90	10
~ 5V-195 TM	95	10
3A-496 TM	96	9,10
5N-803 TM	101	9
5N-0302 TM	103	9
5V-0508 TM	105	8L
3A-306 TM	106	8L
NuTech/G2 GENETICS		
~ 5X-894 TM	94	10
~ 5Y-196 TM	96	10
~ 5F-198 TM	98	10
~ 5F-399 TM	99	10
~ 5H-502 TM	102	9
~ 5L-802 TM	102	9
~ 5H-905 TM	105	8L
~ 5F-805 TM	105	8L
~ 5H-806 TM	106	8L
~ 5Z-0801 TM	108	8L
~ 5F-709 TM	109	8L
~ 5D-109 TM	109	8L
5Z-510 TM	110	7E
5F-811 TM	110	7E
5Z-111 TM	111	7L
3F-814 TM	111	7L
5F-612 TM	112	7L
5Z-713 TM	113	7L
3F-515 TM	115	7L
3F-515 TM OH	115	7L
5H-216 TM	116	7L
5H-216 TM OH	116	7L

ZONE 4 - Table 9

Iosco
Menominee - Late
Osceola
Trial Average

BRAND / HYBRID	RM	TABLE
PIONEER		
~ P9789AMXT	97	9,10
P0255AMXT	102	8E,9
P0238XR	102	9,10
~ P0506AM	105	8L
P0783XR	107	8L
P1180XR	111	7L,8L
P0970AMXT	112	7L,8L
P1449XR	113	7L
P1197AM	114	7L
RENK		
RK565GTCBLLRWBL	99	8E
RK629VT3P	102	8E
~ RK712SSSTX	106	7E,8L
RK743VT3PNDS	107	7E
RK809GTCBLLRW	110	7E
RK858VT3P	112	7L
SEED CONSULTANTS		
SCS 11HR21 TM	113	7L
SCS 11HR63 TM	116	7L
SPECIALTY		
~ 34A413	104	8E
~ 36A794	106	8L
46R02GENVT2P	109	8L
SPECTRUM		
~ 4655	96	9,10
5045	100	9,10
STEYER		
~ 10102 VT2PRORIBC	101	8E
10901 GENSS	109	7E
11407VT3PRO	114	7L
T. A. SEEDS		
TA477-31	97	8E
TA545-20	104	8E
TA583-22DPRIB	108	7E,8L
TA108-18	108	7E,8L
TA625-31	110	7E,8L
TA683-13VPRIB	112	7L
TA765-30	115	7L
TA774-22 DPRIB	116	7L
TA780-13VPRIB	116	7L
WELLMAN		
W2513DP	110	7E
WOLF RIVER VALLEY		
3396FLRR	95	9
27020LRR	100	9

~ Denotes hybrids that were entered into the Grain and Silage Trials.

		Late - TRIAL AVERAGE										Huron - Late																
		YIELD					% QUALITY					YIELD					% QUALITY											
		%DM	GT/A	DT/A	%STD	IVD	ADF	NDF	NDFF	CP	STR	MILK 2006	MK/T	MK/A	%DM	GT/A	DT/A	%STD	IVD	ADF	NDF	NDFF	CP	STR	MILK 2006	MK/T	MK/A	
2 Year Averages 2014 - 2013																												
BRAND / HYBRID	RM	TRT	TRAIT																									
AVERAGE																												
HIGHEST																												
LOWEST																												
CV (%)																												
LSD (5%)																												
AGRI GOLD A6408VT3PRIB	107	P500	1,2,3	38.7	26.5	10.2	99	81.5	20.1	38.3	51.6	7.1	39.9	3290	33631	36.0	27.3	9.8	100	80.7	21.7	40.3	52.0	7.0	37.9	3227	31528	
CHANNEL 207-13VT3PRIB	107	PV500	1,2,3,4,6	37.2	29.5	11.0*	96	82.4	18.2	36.8	52.2	7.2	39.7	3353	36581	37.4	27.8	10.4**	97	82.6	17.7	36.0	51.7	7.1	40.9	3373	35880	
DAIRYLAND SEED HI DF-3108RA	108	C250	1,2,3,4,6	33.4	30.7	10.4	100	81.4	21.0	40.2	53.7	6.8	35.2	3266	35098	31.1	30.1	9.6	100	81.0	21.9	41.4	54.0	6.7	33.9	3233	33166	
DAIRYLAND SEED HI DF-3510SSX	110	C250	1,2,3,4,6	31.8	33.7	10.7*	99	81.3	21.6	40.6	54.0	6.9	35.1	3232	34676	31.5	31.9	10.0*	99	81.2	22.4	41.5	54.7	6.7	33.2	3197	32149	
DYNAGRO D50SS43	110	P500	1,2,3,4,6	36.9	29.1	10.7*	100	81.1	20.4	39.9	52.7	7.1	36.6	3255	35679	34.7	27.3	9.3	100	79.8	22.1	42.7	52.6	7.0	33.5	3152	30864	
GOLDEN HARVEST G05T82-3122	105	C500	1,2,3,4,6	38.4	27.8	10.7*	98	83.3	18.0	36.2	53.7	7.1	41.0	3411	37346	37.1	26.4	9.8	97	82.6	19.0	37.3	53.3	7.0	39.9	3363	33723	
GOLDEN HARVEST G08X83-3110	108	C250	1,2,4,6	35.2	30.5	10.7*	100	81.5	19.8	39.5	53.0	7.7	37.0	3275	35068	33.8	29.8	10.1*	100	80.5	21.0	41.5	52.8	7.5	35.3	3201	32222	
GOLDEN HARVEST G09E98-3000GT	109	C500	1,2,3,4	37.3	29.7	11.1**	98	84.0	17.4	35.5	55.1	7.1	39.9	3460	38872	36.1	28.8	10.4**	98	83.6	18.2	36.9	55.6	6.9	38.4	3426	36471	
HYLAND SEEDS 4687	110	C250	1,2,3,4	37.6	27.3	10.3	98	82.6	20.1	39.0	55.3	6.8	38.8	3349	34465	36.3	26.5	9.6	100	81.6	22.2	41.9	56.1	6.5	36.4	3265	31364	
LEGACY SEEDS L-5810 3000GT	106	C250	1,2,3,4	38.1	27.6	10.5	96	83.6	18.3	36.5	55.0	7.0	40.9	3427	36849	36.8	27.4	10.1*	97	83.4	18.6	37.1	55.4	6.8	40.3	3414	36183	
MASTERS CHOICE MCT-5663	106	C250	1,2,3,4	36.8	28.1	10.4	96	82.9	20.0	38.5	55.5	6.9	38.5	3370	34915	34.7	27.6	9.6	99	81.8	20.9	40.0	54.5	6.6	37.3	3295	31497	
NK Brand N53W-3122	105	C500	1,2,3,4,6	37.9	27.9	10.6	99	81.9	19.4	38.4	52.7	7.2	38.6	3311	35392	37.5	26.0	9.7	99	81.9	19.1	38.5	53.0	6.9	39.0	3316	32716	
NK Brand N61X-3110	108	C500	1,2,4,6	35.3	30.2	10.7*	99	82.0	19.8	39.3	54.1	7.3	37.2	3306	35403	33.5	28.9	9.7	100	81.2	21.1	41.3	54.2	7.1	35.7	3243	31376	
NuTech 3A-306™	106	C500	1	36.7	27.1	10.0	98	80.6	21.3	41.5	53.2	6.9	35.0	3209	31925	34.9	27.2	9.5	100	80.2	22.7	43.2	54.1	7.0	33.6	3170	29991	
NuTech/G2 GENETICS 5H-806™	106	P500	1,2,4	38.1	26.6	10.1	97	83.7	18.4	36.7	55.6	7.2	40.7	3432	34359	37.6	26.4	9.8	99	83.2	19.1	38.0	55.7	6.9	39.8	3390	33362	
AVERAGE				36.6	28.8	10.5	98	82.3	19.6	38.4	53.8	7.1	38.3	3330	35351	35.3	28.0	9.8	99	81.7	20.5	39.8	54.0	6.9	37.0	3284	32833	
HIGHEST				38.7	33.7	11.1	100	84.0	21.6	41.5	55.6	7.7	41.0	3460	38872	37.6	31.9	10.4	100	83.6	22.7	43.2	56.1	7.5	40.9	3426	36471	
LOWEST				31.8	26.5	10.0	96	80.6	17.4	35.5	51.6	6.8	35.0	3209	31925	31.1	26.0	9.3	97	79.8	17.7	36.0	51.7	6.5	33.2	3152	29991	
CV (%)				5.3	6.3	7.0	3	1.8	8.0	6.1	4.4	5.2	6.9	3	6	5.1	5.6	6.3	2	2.1	7.5	6.3	4.9	6.1	7.2	4	7	
LSD (5%)				1.0	1.0	0.4	1	0.8	0.8	1.3	1.3	0.2	1.4	54	1197	1.5	1.3	0.5	2	1.4	1.3	2.1	3.1	0.3	2.2	97	1769	

- Table 8L Continued On Page 42.

		2 Year Averages 2014 - 2013										Ingham - Late										Ottawa - Late										
AVERAGE	HIGHEST	LOWEST	CV (%)	LSD (5%)	RM	TRT	TRAIT	YIELD			%QUALITY			MILK 2006			YIELD			%QUALITY			MILK 2006									
								%DM	GT/A	DT/A	%STD	IVD	ADF	NDF	NDFFD	CP	STR	STR	CP	STR	IVD	ADF	NDF	NDFFD	CP	STR	STR	CP	STR	IVD	ADF	NDF
								39.0	29.7	11.5	98	83.1	19.0	37.7	55.1	6.9	40.2	3395	39062	32.0	33.5	10.7	99	82.7	19.9	38.4	54.8	6.9	38.3	3362	35756	
								48.5	36.5	12.8	100	88.4	22.1	41.9	65.7	7.9	45.7	3731	45454	35.1	40.3	12.6	100	86.8	24.3	44.6	65.9	7.7	44.7	3595	42181	
								32.3	21.0	9.7	89	78.1	14.8	32.6	47.7	6.1	36.6	3074	34592	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								5.6	5.8	6.5	4	1.6	9.2	5.8	4.2	4.3	7.5	3	6	5.2	8.1	9.1	2	1.8	8.7	6.1	5.0	5.4	6.6	3	7	
								2.6	2.0	0.9	4	1.6	2.1	2.6	3.9	0.4	3.6	107	2680	2.0	3.2	1.1	3	1.8	2.0	2.7	4.6	0.4	3.0	117	2825	
		Ingham - Late										Ottawa - Late																				
AVERAGE	HIGHEST	LOWEST	CV (%)	LSD (5%)	RM	TRT	TRAIT	YIELD			%QUALITY			MILK 2006			YIELD			%QUALITY			MILK 2006									
								%DM	GT/A	DT/A	%STD	IVD	ADF	NDF	NDFFD	CP	STR	STR	CP	STR	IVD	ADF	NDF	NDFFD	CP	STR	STR	CP	STR	IVD	ADF	NDF
								39.2	30.8	12.1	**	100	82.5	18.8	37.1	52.9	7.3	39.6	3358	40493	32.0	33.5	10.7	99	82.7	19.9	38.4	54.8	6.9	38.3	3362	35756
								39.7	29.1	11.6	*	98	84.0	17.0	35.0	54.0	7.2	42.2	3459	40969	35.1	40.3	12.6	100	86.8	24.3	44.6	65.9	7.7	44.7	3595	42181
								36.6	31.1	11.3	100	82.5	18.6	37.4	53.1	7.9	38.8	3349	37914	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								38.5	30.6	11.8	*	98	84.5	16.6	34.2	54.5	7.4	41.5	3495	41272	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192
								38.9	28.1	10.9	97	83.6	17.9	36.0	54.5	7.1	41.3	3432	37566	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								39.3	27.8	10.9	96	83.8	18.0	35.8	54.7	7.2	41.4	3441	37515	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								38.8	28.7	11.1	94	84.0	19.2	37.0	56.6	7.1	39.7	3445	38332	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								38.3	29.8	11.5	*	99	81.8	19.7	38.3	52.5	7.4	38.3	3306	38067	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192
								37.0	31.4	11.7	*	99	82.8	18.5	37.4	53.9	7.6	38.7	3369	39430	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192
								38.5	27.1	10.4	97	81.0	19.9	39.7	52.3	6.9	36.4	3248	33859	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								38.6	26.8	10.4	95	84.3	17.8	35.3	55.4	7.5	41.7	3474	35357	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								38.0	29.7	11.2	98	82.8	18.7	37.1	53.7	7.3	39.6	3375	37868	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								41.4	35.5	12.1	100	84.5	20.7	39.8	56.6	7.9	42.2	3495	41272	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								32.0	25.8	10.4	94	81.0	16.6	34.2	51.3	6.9	36.4	3248	33859	27.7	24.9	7.9	94	79.8	16.2	33.5	50.8	6.4	32.6	3156	28192	
								5.3	5.7	6.1	3	1.5	8.2	5.7	3.6	4.2	6.7	3	6	5.2	8.1	9.1	2	1.8	8.7	6.1	5.0	5.4	6.6	3	7	
								1.7	1.4	0.6	3	1.0	1.3	1.8	2.3	0.3	2.2	72	1959	2.0	3.2	1.1	3	1.8	2.0	2.7	4.6	0.4	3.0	117	2825	

** Highest Yielding Hybrid

* Not Significantly Different from Highest Yielding Hybrid

TABLE 10. ALGER, DELTA & MENOMINEE (EARLY) COUNTY SILAGE TRIALS (102 Day and Earlier) ZONE 5

2014			Alger					Delta					Menominee - Early															
BRAND / HYBRID	RM	TRT	YIELD		% QUALITY			YIELD		% QUALITY			YIELD		% QUALITY													
			%DM	G/TA	DT/A	%STD	IND	ADF	NDF	NDFD	CP	STR	MMK/T	IK/A	%DM	G/TA	DT/A	%STD	IND	ADF	NDF	NDFD	CP	STR	MMK/T	IK/A		
GREAT LAKES 4250STX	92	P500	1,23.6	28.4	21.7	6.2*	100	76.8	28.1	54.0	57.1	10.0	16.0	2910	17995													
GREAT LAKES 4879STXRIB	98	P500	1,23.6	24.9	21.9	5.5	98	76.0	31.3	59.9	59.9	10.1	7.4	2662	15257											Not Harvested		
GREAT LAKES 5015STXRIB	100	P500	1,23.6	25.2	22.1	5.9*	100	74.8	32.7	60.3	58.2	9.4	5.7	2460	14447											Early Frost		
MYCOGEN TME20413	96	C250	1,24.6	27.7	22.6	6.3**	100	75.3	32.3	58.5	57.7	9.2	9.1	2606	16366											Late Water Damage		
MYCOGEN TME2R196	86	C250	1,23.4,6	28.7	19.9	5.7	94	77.8	29.0	54.6	59.4	9.4	14.5	2832	17016													
NuTech 3A-496™	96	C500	1	24.0	21.2	5.1	85	73.9	34.4	62.5	58.3	8.7	3.5	2342	11834													
NuTech 5B-290™	90	C500	1,2.4	25.7	22.8	5.9*	100	73.3	31.8	58.9	54.7	9.4	9.6	2564	15000													
NuTech 5V-195™	95	C500	1,23.4	26.4	20.9	5.5	100	77.0	29.4	56.4	59.3	9.8	8.8	2592	14302													
NuTech/G2 GENETICS 5F-196™	98	P500	1,2.4	29.0	21.0	6.1*	100	75.8	30.7	56.3	57.1	8.9	15.4	2837	17257													
NuTech/G2 GENETICS 5F-399™	99	P500	1,2.4	27.5	21.2	5.8*	98	75.7	31.7	58.0	58.2	9.2	11.2	2740	15156													
NuTech/G2 GENETICS 5X-894™	94	P500	1,23.4	28.5	19.8	5.6	98	76.4	29.1	54.4	56.8	9.7	19.6	2885	16943													
NuTech/G2 GENETICS 5Y-196™	96	P1250	1,23.4	27.7	20.1	5.6	99	72.2	33.2	59.0	53.0	8.8	12.9	2617	15343													
PIONEER P0238XR	102	C250	1,23.4,6,7	23.0	20.7	4.8	100	81.6	29.0	55.7	66.9	10.5	6.6	2657	12614													
PIONEER P9789AMXT	97	C250	1,23.4,6	27.9	18.0	5.0	81	74.3	31.6	57.3	55.3	10.3	15.1	2743	12812													
SPECTRUM 4655	96	Conv.		26.2	19.5	5.1	96	72.2	33.2	61.5	54.7	9.1	6.9	2471	12598													
SPECTRUM 5045	100	C250		29.3	20.3	6.0*	96	73.5	33.1	59.4	55.5	8.7	12.8	2658	14844													
AVERAGE				26.9	20.8	5.6	96.5	75.4	31.3	57.9	57.6	9.4	10.9	2661	14980													
HIGHEST				29.3	22.8	6.3	100.0	81.6	34.4	62.5	66.9	10.5	19.6	2910	17895													
LOWEST				23.0	18.0	4.8	80.6	72.2	28.1	54.0	53.0	8.7	3.5	2342	11834													
CV (%)				4.9	5.6	8.1	3.1	3.0	7.2	5.5	3.7	6.8	22.0	5	8													
LSD (5%)				1.6	1.4	0.5	3.5	2.7	2.7	3.8	3.6	0.8	2.9	146	1419													

2 Year Averages 2014 - 2013			Alger					Delta					Menominee - Early															
BRAND / HYBRID	RM	TRT	YIELD		% QUALITY			YIELD		% QUALITY			YIELD		% QUALITY													
			%DM	G/TA	DT/A	%STD	IND	ADF	NDF	NDFD	CP	STR	MMK/T	IK/A	%DM	G/TA	DT/A	%STD	IND	ADF	NDF	NDFD	CP	STR	MMK/T	IK/A		
GREAT LAKES 4879STXRIB	98	P500	1,23.6	26.6	23.4	6.3*	99	77.9	27.2	51.8	56.8	9.2	20.2	2891	18705													
GREAT LAKES 5015STXRIB	100	P500	1,23.6	27.1	22.3	6.1	99	77.0	28.3	52.3	55.5	8.8	19.5	2771	17078													
MYCOGEN TME20413	96	C250	1,24.6	29.1	22.4	6.5*	100	77.1	27.9	51.0	54.6	8.7	21.8	2841	18382													
NuTech 3A-496™	96	C500	1	25.5	23.5	6.0	92	75.8	30.2	55.9	56.5	8.5	14.2	2640	16162													
NuTech 5B-290™	90	C500	1,2.4	29.4	22.5	6.6**	100	77.3	25.9	48.2	52.5	8.9	25.3	2916	20218													
AVERAGE				27.6	22.8	6.3	98.1	77.0	27.9	51.8	55.2	8.8	20.2	2812	18109													
HIGHEST				29.4	23.5	6.6	100.0	77.9	30.2	55.9	56.8	9.2	25.3	2916	20218													
LOWEST				25.5	22.3	6.0	92.4	75.8	25.9	48.2	52.5	8.5	14.2	2640	16162													
CV (%)				5.2	5.6	7.9	3.1	2.8	6.6	5.1	4.8	6.1	14.3	4	8													
LSD (5%)				1.2	1.0	0.4	2.5	1.8	1.6	2.3	3.2	0.5	2.0	102	1147													

** Highest Yielding Hybrid
 * Not Significantly Different from Highest Yielding Hybrid

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THANK YOU TO OUR FARM COOPERATORS:

ZONE 1

Baker-Ladd Farms, Blaine Baker, Clayton
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Kyle Huff, Coldwater
OSU NW Experiment Station, Richard Minyo
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Mathew Talladay, Milan

ZONE 2

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Jorgensens Farm Elevator
Jerry Jorgensen & Mike Turner, Williamston
Eadie Farms
Arden Eadie, Conklin
MSU Agronomy Farm, Brian Graff, East Lansing
Jim & John Schipper, Martin

ZONE 3

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ZONE 4/5

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