

# Michigan State Wheat Performance Trials: 2008

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## Comments on the 2008 Wheat Crop

This year's crop came out of the winter with a period of heavy rains and freezing temperatures which contributed some stand loss. For MSU, these conditions resulted in our loss of data from two of our yield trial sites (Huron and Lenawee counties). Cool spring temperatures slightly delayed crop development throughout the year compared with last year. Throughout much of the growing season the wheat crop was disease free. Diseases such as powdery mildew, leaf and stripe rusts arrived late, and though they progressed during and after flowering they did not appear to have a large impact on yield loss. Fusarium Head Blight was not significant factor again this year. Armyworms were reported in pockets throughout the state. This year, stem rust was observed at the Ingham and Tuscola county trial locations. Rains near harvest raised concerns about pre-harvest sprouting risks in some areas.

The USDA/NASS office reported on July 1 a state wide average yield projection of 69 bushels per acre. This would be an increase of four bushels from 2007

## Multi-Year Performance Summary (Tables 1 - 4)

Tables 1 through 4 summarize performance of 76 varieties and experimental lines from 13 organizations including the Michigan State University wheat breeding program. Attached to this narrative is a list of the names and contact information for those organizations. Each line in these tables has data for a single entry. The columns contain averages for a given trait and time period. Data for all of the entries in this trial are not presented here. However, the averages and statistical parameters in this report are based on the entire set of evaluated materials. **Comparisons among entries are only valid within a column.** Tables 1 through 4 are sorted first by entry grain color, and then in descending order on yield for 2008. In some instances (e.g. yield), data columns to the right of the 2008 data columns are multi-year averages. Only data for entries included in all of the relevant years' tests are found here. Not all entries have been tested in all years so the tables have several blank cells. See the section titled 'Experimental' for details on how the trials were conducted and for more detail on what the data in each column represents.

At the bottom of most columns in both tables is the average (mean), LSD (least significant difference), and CV (coefficient of variation) for data in that column. LSD values vary among traits and data sets (combinations of sites and years). Differences between the means for two entries that are greater than the LSD for that column are very likely to reflect a genuine difference between the two varieties. If the difference between two means is smaller than the LSD for that column, one should conclude that there is **no evidence that those entries are different for that trait** in the years and sites considered. The CV is indicative of a trial's precision. Trials with low levels of error variation have lower CV values. Traits for which scores on a 0-9 scale are employed generally have very high CV values.

## Single Site Yield Performance Summary (Table 5)

Table 5 contains yield, test weight, and harvest moisture data from each of the four sites harvested for yield in 2008 (Lenawee and Huron county sites are not included). Each row in the table represents a single entry in the test. It is recommended that single site / single year data should not be used to make variety choice decisions. Table 5 is sorted first by organization and then by variety or brand name.

## Choosing Varieties

Growers should be aware that the grain of varieties with equal yield and test weight are not necessarily of equal value when delivered for sale. DON content and shriveled grain can result in significant discounts at the point of sale. This report provides across site and single site data for test weight which gives some indication of the degree to which a variety avoided shriveled grain. It is, however, possible for two varieties to have identical and acceptable test weight but differ in degree of grain shriveling.

Although wheat producers are always interested in how varieties perform in a given year and location, performance in a single year and location should never be used in selecting a variety to plant. It is best to select a variety on the basis of data from at least three years of testing. Varieties selected with such comparisons are more likely to perform well under a wide range of conditions. In any given year or at any given site, several varieties will usually fall into the group of 'highest yielding' varieties. The composition of that group, and the identity of the absolute "winner", can and does change from location to location and year to year. This means that the single best variety cannot be determined in advance for a specific site. However, you can identify a group of varieties that is likely to contain the winners in the upcoming season. We recommend that you plant two or more varieties, and where possible, choose varieties which will flower at different times in order to reduce the risk of scab infection which is most likely to occur when rain coincides with flowering.

**Disclaimer: MSU makes no endorsement of any wheat variety or brand.**

## Experimental

The 2008 State Wheat Performance Trial entries were planted at seven sites in 6 counties: Huron, Lenawee, Tuscola, Sanilac, Saginaw, and Ingham (2). Appendix A (below) presents information on each of these sites. Due to substantial winter ice/water damage at Huron and Lenawee county sites, data from these two sites are not included in the report this year. Plots were 12 feet long and had 6 rows at 7.5" row spacing. The trial was designed and executed as four replication alpha-lattice (19 blocks of 4 plots each) at all sites except the scab screening nursery, in which three replications were planted. All seed was treated, but the chemicals and rates used varied according to the preferences of the originating organization. Seeding rates per linear foot of row were standardized to the rate that would equate with a stand of 2.0 million seeds per acre in a solid stand planted in 7.5" rows. Fall fertilizer application varied with cooperator practice. Spring nitrogen was applied as urea (90 lbs/acre actual N) at green-up. No foliar fungicides were applied at any site. Weeds were chemically controlled as needed. The Saginaw and Ingham sites were sprayed with an insecticide for armyworms. All plots at a site were harvested on a single day, except for Sanilac, which was harvested on two separate days (five days apart) due to rain. Analyses of Sanilac data, with and without harvest date factored into the analyses, revealed that the separation of days between harvest did not negatively impact the data set. For all sites, yield was calculated using the entire area of the plot including the wheel tracks between plots. This approach tends to underestimate yield. Data reported as scores are based on a 0-9 scale, where 0 is the best possible score.

Table 1 contains data for yield, test weight, grain moisture, and lodging. Yield, test weight, and grain moisture data were acquired electronically on the plot combine at the time of harvest. Yield data is standardized to 13% moisture. Lodging did not occur this year so data presented here is from the 2006 growing year and earlier.

Table 2 contains data for flowering date, plant height, winter injury, leaf rust, stripe rust, powdery mildew, barley yellow dwarf virus, and leaf blotch. The flowering date indicates the average number of days past January 1st that a given entry reached the point where ½ of its heads were

flowering. Plant height is reported as the distance in inches from the ground to the tip of average heads in a plot. Winter injury is reported as 0 = no injury, to 9 = complete stand loss. Leaf rust, stripe rust, powdery mildew, barley yellow dwarf virus, and leaf blotch scores are recorded as "0 = no visual symptoms of disease present". Leaf and stripe rust scores are based on infection observations of primarily the flag leaf. Stripe rust reported is from the 2007 crop year. Powdery mildew scores are based on observations of the entire plant including the flag leaf. Barley Yellow Dwarf Virus (BYDV) is transmitted through aphids and is enhanced with cool temperatures and rain. Barley Yellow Dwarf scores, 2007, published here may not be reflective of actual resistance because some cultivars may have had seed treated with insecticides prior to planting. Early infestations (fall 2006) of aphids may have been controlled using certain seed treatments, masking BYDV susceptibility. The causal organism(s) of the leaf blotching were not identified, but were likely a combination of *Stagonospora tritici*, (formerly known as *Septoria tritici*), and *S. nordorum*.

Table 3 contains data for, Sprouting, Black Point, and Fusarium Head Blight. Sprouting data is based on a greenhouse evaluation of 5 heads from each plot from Saginaw and Tuscola counties. Heads were collected within 6 hours of harvest. Following harvest, heads were dried for 3 and 5 days, from Saginaw and Tuscola, respectively.. Scores were taken after the heads were subjected to near-continuous misting for 3 to 4 days. A score of zero indicates that sprouting was not present. A score of 9 indicates many shoots and roots observed in the heads during scoring. Black point is the discoloration of the embryo (germ) end and surrounding areas of the wheat kernel. The embryo tip shows a black to brown discoloration that may extend into the crease of the kernel. Visual observations consisted of 500 seed lots from one rep at each location observed. The data presented is the average percent of kernels discolored. Data on Fusarium head blight (scab) were obtained from the Ingham misted/inoculated scab screening nursery. The Ingham scab nursery was inoculated (from lab-produced infected grain spread onto the field), and artificial misting was employed throughout the entire flowering period. Each wheat head (i.e., 'spike') is comprised of roughly 14-22 "spikelets", which bear the developing seed. Spikelets that prematurely die because of scab infection are called "scabby" spikelets. Field symptom data reported here are based on: 1) the percent of spikes showing any scabby spikelets (incidence); 2) the percent of scabby spikelets within infected spikes (severity); and 3) the percent of scabby spikelets considering all spikes (scab index). The scab index is derived from multiplying the incidence and severity, and is a measure of the extent of damage to entire plots due to scab infection. Deoxynivalenol (DON) data is from harvested grain in the inoculated, mist irrigated, scab screening nursery. DON data in table 3 is presented in parts per million (ppm). The grain was analyzed for DON in 2007 and 2006 at the University of Minnesota using gas chromatography mass spectrometry, and in 2005 at Michigan State University using an ELISA kit (Veratox® for DON5/5, Product #8331) from Neogen®. DON data is from the 2007 crop year and earlier.

Table 4 contains data for milling quality. All data in table 4 is from the 2007 harvest season and prior. The milling and baking quality data were generated by the USDA Eastern Soft Wheat Quality Laboratory in Wooster, Ohio, and are based on grain harvested from the State Variety trial each year. Flour yield is the ratio of the weight of extractable flour to the weight of milled grain, expressed as a percentage. Lactic Acid Retention is used by some soft wheat processors as a measure of protein strength. Higher "softness equivalent percents" indicate softer grained wheat's.

Six of our experimental sites are on private farmland. We are extremely grateful to those growers for accommodating our work and all of the associated inconveniences. Questions and comments regarding the research reported here should be directed to Janet Lewis (517-355-0271 ext. 1185). This information, along with results from previous years, may also be accessed through the Web at [http://www.css.msu.edu/varietytrials/wheat/Variety\\_Results.html](http://www.css.msu.edu/varietytrials/wheat/Variety_Results.html).

## 2008 Michigan State University Wheat Performance Trials

Appendix A. Trial Site Descriptions for 2008 MSU Wheat Performance Trials.

	HURON COUNTY	INGHAM COUNTY		LENAWEE COUNTY	SAGINAW COUNTY	SANILAC COUNTY	TUSCOLA COUNTY
		YIELD TRIAL	SCAB NURSERY				
COOPERATOR	DARWIN SNELLER	TIM DIETZ	MICHIGAN STATE UNIVERSITY	WOODS SEED FARM	FRED SILER	STOUGHTENBURG FARMS	STUART BIERLEIN
NEAREST CITY	SEBEWAING	WILLIAMSTON	EAST LANSING	DEERFIELD	MERRILL	SANDUSKY	RICHVILLE
PLANTING DATE	OCT. 9, 2007	OCT. 12, 2007	OCT. 30, 2007	OCT. 9, 2007	SEPT. 27, 2007	OCT. 5, 2007	OCT. 8, 2007
HARVEST DATE	N / A	July 17, 2008	N / A	N / A	July 15, 2008	July 19 & 24, 2008	July 16, 2008
PRE-PLANT FERTILIZER	200# 7-17-37	200# 6-24-24	150# 6-24-24	300# 9-23-30	250# 6-15-36	190# 8-15-30 +3.7% S	250# 9-23-30
COMMENTS	Abandoned Due to Severe Ice and Water Damage in Spring	Winter Injury / Armyworms / Stem Rust Observed	Inoculated / Misted Scab Screening Nursery	Abandoned Due to Severe Ice and Water Damage in Spring	Armyworms / Light Leaf & Stripe Rust	Late Powdery Mildew, Leaf Rust, & Leaf Blotch / Two Harvest Dates	Winter Injury / Stem Rust Observed
AVERAGE YIELD (BUSHEL / ACRE)	N / A	75.3	N / A	N / A	90.5	96.6	86.9
AVERAGE TEST WEIGHT (LBS. / BUSHEL)	N / A	58.9	N / A	N / A	62.6	58.2	63.2
AVERAGE PERCENT GRAIN MOISTURE	N / A	16.9	N / A	N / A	13.8	15.7	12.3
2008 DATA RECORDED (NUMBER OF REPS)		FD (4); PM (3); W_INJ (4)	FHBI% (3); FHBS% (3); FHBX (3); FD (3)		FD (4); PL_HT (4); SPROUT (4)	LRUST (3); PM (3); SEPT (3)	LRUST (3); PL_HT (4); SPROUT (4); W_INJ (4)

\*OTHER DATA: **FD** – Flowering Date (Days Past Jan. 01), **PL\_HT** - Plant Height in Inches, **SPROUT** - In-Head Pre-Harvest Sprouting Score (0-9), **LRUST** - Leaf Rust Score (0-9), **PM** - Powdery Mildew Score (0-9), **W\_INJ** - Winter Injury/Kill Scores (0-9), **SEPT** - Septoria Leaf Blotch Complex Scores (0-9), **FHBI%** - Fusarium Head Blight Incidence Percent (0-100%), **FHBS%** - Fusarium Head Blight Severity Percent (0-100%), **FHBX** - Fusarium Head Blight Severity Index

\*\* SCORING INFORMATION: Score of 0 = Best Rating - Score of 9 = Poor Rating

**ORGANIZATIONS ENTERING VARIETIES IN THE  
2008 MICHIGAN WHEAT PERFORMANCE TRIALS**

AgriPro COKER  
P.O. Box 411, 520 E. 1050 South  
Brookston, IN 47923  
Phone: 765-563-3111

Michigan Crop Improvement  
Association  
P.O. Box 21008  
Lansing, MI 48909  
Phone: 517-332-3546

BioPlant Research  
116 E. State  
Camp Point, IL 62320  
Phone: 800-593-7708

Pioneer – Hi-Bred Limited  
P.O. Box 730  
Chatham, ON N7M 5L1  
Phone: 519-352-6350

D.F. Seeds, Inc.  
P.O. Box 159, 905 S. Jackson  
Dansville, MI 48819  
Phone: 517-623-6161

Crop Production Services  
443 Allenby Drive  
Marysville, OH 43040  
Phone: 937- 644-9467

Platinum Genetics LLC  
P.O. Box 21085  
Lansing, MI 48911  
Phone: 517-887-1620

Rupp Seeds, Inc.  
17919 Co Rd. B  
Wauseon, OH 43567  
Phone: 419-337-1841

Harrington Seeds, Inc.  
2586 Bradleyville Road  
Reese, MI 48757  
Phone: 989-868-4750

Cooperative Elevator Company  
7403 Michigan Ave.  
Pigeon, MI 48755  
800.968.0601

Hyland Seeds  
2 Hyland Drive  
Blenheim, Ontario  
N0PIA0 CANADA  
Phone: 519-676-7056

Farmers Cooperative Grain Company  
338 Main Street  
Kinde, MI 48445  
989.874.4200

Virginia Polytechnic Institute and State University / Virginia Crop  
Improvement Association / Eastern Virginia Agricultural Research &  
Extension Center  
2229 Menokin Road  
Warsaw, VA 22572  
Phone: 804-333-3485

## 2008 Michigan State University Wheat Performance Trials

Multi-year data are the most informative.

**Table 1 : Multi-Year Performance Summary (Note: Tables sorted by 2008 Yield, red wheats grouped before white)**

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Chaff Color	Awns	Yield: Bushels/Acre (Adjusted to 13% Moisture)				Test Weight: lbs/Bushel				Percent Grain Moisture at Harvest				Lodging Score (0-9); (0=none)		
				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				2006 HARVEST	Multi-Year Averages	
				2008	2 YR 07-08	3 YR 06-08	4 YR 05-08	2008	2 YR 07-08	3 YR 06-08	4 YR 05-08	2008	2 YR 07-08	3 YR 06-08	4 YR 05-08		2 YR 05-06	3 YR 04-06
Genesis R045	RED	WHITE	NO	94.4	94.3	94.2	90.4	61.6	60.1	59.5	59.3	15.6	14.4	14.8	14.7	4.8	4.5	5.3
Trevor	RED	WHITE	NO	93.9	93.3	-----	-----	59.3	58.2	-----	-----	14.4	13.5	-----	-----	-----	-----	-----
Pioneer Brand 25R47	RED	WHITE	YES	93.0	94.1	96.1	94.4	60.6	59.1	58.3	58.4	15.0	14.3	14.7	14.5	4.0	3.3	3.5
Genesis R075	RED	WHITE	NO	92.8	-----	-----	-----	61.4	-----	-----	-----	15.1	-----	-----	-----	-----	-----	-----
Genesis R065	RED	WHITE	NO	92.4	-----	-----	-----	61.9	-----	-----	-----	15.1	-----	-----	-----	-----	-----	-----
Pioneer Brand 25R62	RED	WHITE	YES	91.9	-----	-----	-----	59.4	-----	-----	-----	13.2	-----	-----	-----	-----	-----	-----
RS 908	RED	WHITE	NO	91.9	91.4	-----	-----	61.7	59.8	-----	-----	14.9	13.8	-----	-----	-----	-----	-----
Red Ruby	RED	WHITE	YES	91.4	92.1	94.2	91.6	62.2	60.9	59.9	59.9	14.8	14.1	14.6	14.4	3.0	2.5	2.7
Hopewell	RED	BRONZE	NO	91.2	91.9	92.6	90.7	60.5	59.7	58.9	58.9	14.4	13.7	14.3	14.2	2.1	2.0	4.3
Arena	RED	WHITE	NO	91.0	91.2	-----	-----	60.6	59.4	-----	-----	14.7	14.0	-----	-----	-----	-----	-----
Vigoro V9723	RED	WHITE	NO	90.8	-----	-----	-----	60.4	-----	-----	-----	14.2	-----	-----	-----	-----	-----	-----
RS 978	RED	WHITE	NO	90.8	-----	-----	-----	60.3	-----	-----	-----	14.0	-----	-----	-----	-----	-----	-----
MCIA Oasis	RED	WHITE	NO	90.2	92.2	93.8	90.8	60.6	59.0	58.4	58.4	15.1	14.0	14.5	14.4	3.4	3.1	4.1
Emmit	RED	WHITE	NO	89.6	90.0	92.0	90.0	60.6	59.8	59.0	59.0	14.9	14.3	14.9	14.7	3.5	2.9	3.9
Pioneer Brand 25R56	RED	WHITE	NO	89.2	90.0	-----	-----	59.6	58.5	-----	-----	13.8	13.1	-----	-----	-----	-----	-----
Excel 423	RED	WHITE	YES	89.0	-----	-----	-----	61.9	-----	-----	-----	14.5	-----	-----	-----	-----	-----	-----
MSU Line D8006R	RED	WHITE	YES	88.4	90.0	91.8	88.9	61.1	59.7	58.9	58.9	14.8	14.1	14.5	14.4	5.1	3.6	3.7
RS 953	RED	WHITE	NO	87.9	88.0	90.4	-----	61.6	60.9	60.4	-----	14.9	14.0	14.5	-----	3.1	-----	-----
AgriPro W1377	RED	WHITE	NO	87.4	-----	-----	-----	62.4	-----	-----	-----	15.5	-----	-----	-----	-----	-----	-----
VA01W-205	RED	WHITE	NO	87.4	-----	-----	-----	61.9	-----	-----	-----	14.6	-----	-----	-----	-----	-----	-----
AgriPro BRANSON	RED	WHITE	NO	87.3	89.0	91.5	-----	60.5	59.3	58.6	-----	14.3	13.8	14.3	-----	4.5	-----	-----
VA03W-409	RED	WHITE	YES	87.1	-----	-----	-----	59.9	-----	-----	-----	15.4	-----	-----	-----	-----	-----	-----
DF101	RED	WHITE	NO	86.9	88.3	90.4	88.8	61.5	60.7	60.2	60.1	14.7	13.9	14.3	14.2	2.9	3.2	-----
Pioneer Brand 25R51	RED	WHITE	YES	86.9	88.6	89.2	-----	60.5	59.4	58.5	-----	14.6	14.0	14.4	-----	4.0	-----	-----
Sunburst	RED	WHITE	NO	86.0	88.3	-----	-----	62.3	61.2	-----	-----	15.8	14.8	-----	-----	-----	-----	-----
Excel 343	RED	WHITE	NO	85.4	-----	-----	-----	61.3	-----	-----	-----	14.1	-----	-----	-----	-----	-----	-----
Bravo	RED	WHITE	NO	85.1	83.9	85.3	84.7	61.1	60.1	59.6	59.6	14.2	13.7	14.3	14.1	2.7	3.0	3.6
Genesis R085	RED	WHITE	NO	85.1	-----	-----	-----	61.7	-----	-----	-----	16.1	-----	-----	-----	-----	-----	-----
Genesis R055	RED	WHITE	NO	83.4	87.2	91.0	89.4	61.1	59.8	59.2	59.2	15.7	14.4	14.7	14.5	2.3	2.3	-----
Roane	RED	WHITE	NO	82.5	83.5	83.8	82.1	62.3	61.4	60.9	60.8	15.7	14.8	15.3	15.1	3.4	3.9	3.9
Vigoro Tribute	RED	WHITE	NO	82.2	87.6	89.7	87.7	61.7	61.6	61.1	61.1	16.0	15.2	15.7	15.5	4.6	4.2	4.1
VA03W-434	RED	WHITE	YES	81.0	-----	-----	-----	60.2	-----	-----	-----	15.3	-----	-----	-----	-----	-----	-----
McCormick	RED	WHITE	NO	77.2	76.7	78.5	78.3	62.2	60.6	60.2	60.3	15.4	14.2	14.8	14.7	6.5	5.1	5.0

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Name	Grain Color	Chaff Color	Awns	Yield: Bushels/Acre (Adjusted to 13% Moisture)				Test Weight: lbs/Bushel				Percent Grain Moisture at Harvest				Lodging Score (0-9); (0=none)					
				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				2006	Multi-Year Averages				
				2 YR	3 YR	4 YR	2008	2 YR	3 YR	4 YR	2008	2 YR	3 YR	4 YR	2008	07-08	06-08	05-08	HARVEST	05-06	04-06
				07-08	06-08	05-08	2008	07-08	06-08	05-08	2008	07-08	06-08	05-08	2008	07-08	06-08	05-08			
MSU Line E5011-B	WHITE	BRONZE	NO	94.3	-----	-----	-----	60.7	-----	-----	-----	14.4	-----	-----	-----	-----	-----	-----			
Ambassador (MSU Line E0028)	WHITE	WHITE	NO	90.7	92.4	94.7	91.6	58.9	58.1	57.5	57.5	13.4	12.9	13.4	13.2	3.1	2.8	3.5			
MSU Line E5011-A	WHITE	BRONZE	NO	90.5	-----	-----	-----	60.9	-----	-----	-----	14.5	-----	-----	-----	-----	-----	-----			
AgriPro W1062	WHITE	WHITE	NO	90.4	90.3	-----	-----	60.4	58.9	-----	-----	15.3	14.6	-----	-----	-----	-----	-----			
Ava	WHITE	WHITE	NO	90.2	-----	-----	-----	60.5	-----	-----	-----	15.0	-----	-----	-----	-----	-----	-----			
Crystal	WHITE	WHITE	YES	89.7	91.5	93.4	90.6	60.1	59.1	58.1	57.9	13.4	12.8	13.0	12.8	3.5	2.7	2.5			
MSU D8006	WHITE	WHITE	YES	89.6	92.1	94.0	90.7	60.8	59.5	58.3	58.2	14.3	13.4	13.7	13.6	4.6	4.0	4.0			
MSU Line E5038	WHITE	WHITE	YES	89.6	-----	-----	-----	60.6	-----	-----	-----	14.6	-----	-----	-----	-----	-----	-----			
MSU D6234	WHITE	WHITE	NO	88.6	87.8	88.7	86.6	60.9	60.2	59.5	59.4	15.1	14.2	14.6	14.4	4.5	3.6	4.4			
MSU Line E5024	WHITE	WHITE	YES	88.3	-----	-----	-----	60.8	-----	-----	-----	14.7	-----	-----	-----	-----	-----	-----			
Pioneer Brand 25W36	WHITE	WHITE	NO	88.3	-----	-----	-----	60.3	-----	-----	-----	14.1	-----	-----	-----	-----	-----	-----			
MSU Line E5017	WHITE	WHITE	YES	88.1	-----	-----	-----	60.9	-----	-----	-----	15.6	-----	-----	-----	-----	-----	-----			
Jewel	WHITE	WHITE	YES	87.6	89.5	91.2	88.5	60.7	59.9	59.0	59.1	13.9	13.6	14.0	13.9	2.8	2.5	3.0			
Pioneer Brand 25W41	WHITE	WHITE	YES	87.4	87.9	89.7	87.1	60.9	60.1	59.2	59.4	14.5	13.9	14.1	14.0	4.3	3.9	3.6			
Pioneer Brand 25W43	WHITE	WHITE	NO	87.4	-----	-----	-----	60.0	-----	-----	-----	14.8	-----	-----	-----	-----	-----	-----			
MSU Line E2017	WHITE	BRONZE	NO	87.2	88.6	90.9	88.7	60.6	59.7	58.8	58.9	14.8	14.3	14.7	14.5	4.8	3.8	-----			
AC Mountain	WHITE	WHITE	NO	86.7	86.1	88.7	86.5	60.0	58.7	58.0	57.9	13.8	13.3	13.7	13.5	5.1	3.9	3.9			
Envoy (MSU Line E1009)	WHITE	WHITE	YES	86.7	88.2	89.0	-----	61.5	60.7	59.8	-----	14.1	13.7	14.2	-----	3.1	-----	-----			
Aubrey	WHITE	WHITE	NO	86.4	87.2	87.4	86.3	61.3	60.4	59.9	59.9	14.7	14.0	14.5	14.4	2.1	2.1	2.7			
MSU Line E3023	WHITE	WHITE	NO	86.0	86.5	-----	-----	59.1	57.4	-----	-----	14.8	14.3	-----	-----	-----	-----	-----			
MSU Line E3003	WHITE	WHITE	NO	85.7	86.6	-----	-----	59.6	58.1	-----	-----	16.1	16.0	-----	-----	-----	-----	-----			
MSU Line E5028	WHITE	WHITE	YES	85.3	-----	-----	-----	60.1	-----	-----	-----	14.3	-----	-----	-----	-----	-----	-----			
Augusta	WHITE	WHITE	NO	85.2	84.1	-----	-----	59.7	58.2	-----	-----	14.5	14.3	-----	-----	-----	-----	-----			
MSU Line E3004-B	WHITE	WHITE	NO	84.8	83.9	-----	-----	61.0	59.8	-----	-----	15.8	15.6	-----	-----	-----	-----	-----			
Genesis 12 Exp	WHITE	WHITE	NO	84.5	-----	-----	-----	59.8	-----	-----	-----	14.4	-----	-----	-----	-----	-----	-----			
Lowell	WHITE	WHITE	NO	83.2	83.6	-----	-----	59.4	57.9	-----	-----	13.8	12.9	-----	-----	-----	-----	-----			
Jensen	WHITE	BRONZE	NO	83.1	82.9	-----	-----	60.4	59.5	-----	-----	14.3	13.9	-----	-----	-----	-----	-----			
Caledonia	WHITE	WHITE	NO	82.9	83.0	86.9	85.1	60.9	59.2	58.2	58.3	14.2	13.6	14.0	13.8	2.8	2.4	3.6			
MSU Line E2043	WHITE	WHITE	YES	81.4	84.6	87.9	86.9	60.6	58.9	58.5	58.8	15.2	15.5	15.6	15.1	2.2	2.1	-----			
Frankenmuth	WHITE	BRONZE	NO	79.9	78.2	-----	-----	60.6	59.7	-----	-----	14.3	14.1	-----	-----	-----	-----	-----			
<b>Trial Mean (2008=76 Entries)</b>				<b>87.3</b>	<b>87.7</b>	<b>90.3</b>	<b>88.2</b>	<b>60.7</b>	<b>59.6</b>	<b>59.2</b>	<b>59.1</b>	<b>14.7</b>	<b>14.0</b>	<b>14.4</b>	<b>14.3</b>	<b>4.3</b>	<b>3.5</b>	<b>4.1</b>			
<b>LSD (0.05)</b>				<b>4.6</b>	<b>4.3</b>	<b>3.6</b>	<b>3.6</b>	<b>1.0</b>	<b>1.1</b>	<b>0.9</b>	<b>0.7</b>	<b>0.9</b>	<b>0.9</b>	<b>0.6</b>	<b>0.5</b>	<b>1.6</b>	<b>1.8</b>	<b>1.9</b>			
<b>CV (%)</b>				<b>3.8</b>	<b>2.4</b>	<b>2.5</b>	<b>2.9</b>	<b>1.2</b>	<b>0.9</b>	<b>0.9</b>	<b>0.8</b>	<b>4.2</b>	<b>3.2</b>	<b>2.6</b>	<b>2.5</b>	<b>26.6</b>	<b>25.5</b>	<b>28.6</b>			

## 2008 Michigan State University Wheat Performance Trials

Multi-year data are the most informative.

Table 2 : Multi-Year Performance Summary (Note: Tables sorted by 2008 Yield, red wheats grouped before white)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Flowering Date (Days Past Jan. 1)			Plant Height (Inches)			Leaf Rust Score (0-9)			Powdery Mildew Score (0-9)			Leaf Blotch Score (0-9) 2008	Winter Injury Score (0-9) 2008	Barley Yellow Dwarf Virus Score (0-9) 2007	Stripe Rust Score (0-9) 2007
		Multi-Year Averages			Multi-Year Averages			Multi-Year Averages			Multi-Year Averages						
		2 YR	3 YR		2 YR	3 YR		2 YR	3 YR		2 YR	3 YR					
		2008	07-08	06-08	2008	07-08	06-08	2008	07-08	06-08	2008	07-08	06-08				
Genesis R045	RED	155.0	153.3	151.9	32.6	32.5	34.8	4.5	3.8	3.2	5.3	4.2	3.4	2.7	0.1	1.1	3.0
Trevor	RED	156.2	154.0	-----	30.0	30.2	-----	6.0	5.0	-----	1.9	2.0	-----	3.0	0.5	2.1	0.0
Pioneer Brand 25R47	RED	154.9	153.4	152.1	31.2	31.0	33.3	3.5	2.8	2.9	4.5	4.5	3.7	3.3	0.2	0.6	0.0
Genesis R075	RED	155.0	-----	-----	32.4	-----	-----	4.0	-----	-----	5.3	-----	-----	2.6	0.0	-----	-----
Genesis R065	RED	155.0	-----	-----	32.8	-----	-----	4.5	-----	-----	5.5	-----	-----	3.0	0.2	-----	-----
Pioneer Brand 25R62	RED	156.4	-----	-----	31.9	-----	-----	5.0	-----	-----	3.4	-----	-----	3.6	0.2	-----	-----
RS 908	RED	154.4	152.8	-----	31.5	32.3	-----	4.0	3.0	-----	3.2	3.5	-----	2.6	0.0	0.0	0.0
Red Ruby	RED	155.8	154.2	153.1	33.5	32.9	35.7	5.5	4.0	3.8	2.3	2.9	2.9	2.5	0.1	0.4	3.0
Hopewell	RED	156.0	153.6	152.4	34.1	34.5	36.7	7.0	5.0	5.2	3.3	3.4	3.2	3.3	0.1	1.5	0.0
Arena	RED	155.9	153.6	-----	33.3	33.4	-----	6.5	4.8	-----	2.7	3.1	-----	2.0	0.4	2.6	0.0
Vigoro V9723	RED	154.5	-----	-----	35.8	-----	-----	4.5	-----	-----	3.7	-----	-----	2.1	0.3	-----	-----
RS 978	RED	154.3	-----	-----	36.1	-----	-----	5.5	-----	-----	3.8	-----	-----	2.3	0.2	-----	-----
MCIA Oasis	RED	155.6	153.5	152.2	36.9	37.2	39.4	1.0	1.0	0.8	1.6	1.7	1.5	1.3	0.1	2.9	0.7
Emmit	RED	156.2	154.4	153.0	33.2	33.8	36.1	5.5	4.0	4.6	3.8	4.1	3.8	2.2	0.5	4.5	4.3
Pioneer Brand 25R56	RED	156.8	154.4	-----	31.4	31.1	-----	5.0	3.8	-----	4.1	4.2	-----	2.8	0.0	1.4	0.0
Excel 423	RED	155.3	-----	-----	34.4	-----	-----	4.5	-----	-----	2.1	-----	-----	2.0	0.3	-----	-----
MSU Line D8006R	RED	156.8	154.4	152.9	34.9	35.3	37.3	4.5	3.5	3.3	1.5	1.6	1.3	4.2	0.2	1.0	0.0
RS 953	RED	154.3	152.5	151.3	31.5	31.9	34.2	4.5	3.5	3.2	1.2	1.3	1.3	1.7	0.0	1.4	0.0
AgriPro W1377	RED	154.8	-----	-----	35.2	-----	-----	5.0	-----	-----	6.0	-----	-----	2.7	0.2	-----	-----
VA01W-205	RED	154.9	-----	-----	26.8	-----	-----	1.0	-----	-----	1.8	-----	-----	2.5	1.6	-----	-----
AgriPro BRANSON	RED	155.2	152.8	151.6	32.0	31.7	33.7	3.5	3.3	2.7	2.1	1.8	1.5	2.7	0.8	1.6	0.3
VA03W-409	RED	156.6	-----	-----	29.8	-----	-----	0.0	-----	-----	0.0	-----	-----	1.1	0.6	-----	-----
DF101	RED	154.3	152.3	151.2	31.4	32.9	35.0	5.0	4.0	3.5	1.1	1.4	1.2	2.4	0.2	2.2	0.3
Pioneer Brand 25R51	RED	155.2	153.3	151.8	32.9	32.9	34.9	4.0	3.3	3.5	4.6	5.0	4.9	1.9	0.3	1.8	0.0
Sunburst	RED	156.3	154.3	-----	29.5	29.3	-----	2.0	3.3	-----	0.3	0.4	-----	2.0	0.1	1.5	0.0
Excel 343	RED	155.1	-----	-----	33.9	-----	-----	4.5	-----	-----	5.7	-----	-----	2.9	0.0	-----	-----
Bravo	RED	153.9	151.7	150.9	35.1	35.9	37.9	6.5	5.5	5.8	5.3	5.0	5.0	2.6	0.2	3.2	0.0
Genesis R085	RED	155.6	-----	-----	35.8	-----	-----	3.5	-----	-----	2.9	-----	-----	2.7	0.0	-----	-----
Genesis R055	RED	155.6	153.5	152.0	31.7	31.9	33.9	3.0	2.5	3.5	1.9	2.0	2.6	3.0	0.1	1.1	0.7
Roane	RED	155.0	152.9	151.6	31.1	31.5	33.2	5.0	3.5	3.2	2.1	3.5	3.4	3.1	0.2	0.8	0.3
Vigoro Tribute	RED	154.2	152.4	151.2	30.1	30.3	33.1	0.0	0.0	0.2	0.1	0.4	0.3	2.4	0.1	1.6	2.7
VA03W-434	RED	156.2	-----	-----	26.4	-----	-----	1.5	-----	-----	0.3	-----	-----	2.0	0.7	-----	-----
McCormick	RED	154.7	152.9	151.6	28.5	28.6	31.4	6.5	7.3	6.7	0.7	0.5	0.5	2.3	0.7	1.0	0.0



## 2008 Michigan State University Wheat Performance Trials

Multi-year data are the most informative.

Table 2 : Multi-Year Performance Summary (Note: Tables sorted by 2008 Yield, red wheats grouped before white)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Flowering Date (Days Past Jan. 1)			Plant Height (Inches )			Leaf Rust Score (0-9)			Powdery Mildew Score (0-9)			Leaf Blotch Score (0-9) 2008	Winter Injury Score (0-9) 2008	Barley Yellow Dwarf Virus Score (0-9) 2007	Stripe Rust Score (0-9) 2007
		Multi-Year Averages			Multi-Year Averages			Multi-Year Averages			Multi-Year Averages						
		2008	2 YR 07-08	3 YR 06-08	2008	2 YR 07-08	3 YR 06-08	2008	2 YR 07-08	3 YR 06-08	2008	2 YR 07-08	3 YR 06-08				
MSU Line E5011-B	WHITE	156.2	-----	-----	31.4	-----	-----	6.5	-----	-----	2.7	-----	-----	3.0	0.1	-----	-----
Ambassador (MSU Line E0028)	WHITE	155.8	153.8	152.3	32.5	33.2	36.2	6.5	4.8	5.2	3.0	2.8	2.8	4.0	0.1	4.0	1.7
MSU Line E5011-A	WHITE	156.3	-----	-----	31.8	-----	-----	6.0	-----	-----	4.6	-----	-----	3.6	0.0	-----	-----
AgriPro W1062	WHITE	156.2	154.4	-----	33.8	33.5	-----	4.0	3.0	-----	4.0	4.5	-----	2.8	0.6	3.7	0.0
Ava	WHITE	156.7	-----	-----	35.0	-----	-----	5.5	-----	-----	4.0	-----	-----	2.7	0.2	-----	-----
Crystal	WHITE	156.2	154.5	153.3	31.8	32.9	35.2	5.0	3.8	3.6	2.2	2.6	2.0	3.6	0.1	1.0	5.0
MSU D8006	WHITE	155.1	153.3	152.0	32.9	33.5	36.3	5.5	4.0	4.4	2.4	2.4	2.1	3.2	0.0	0.6	0.7
MSU Line E5038	WHITE	156.8	-----	-----	34.0	-----	-----	1.0	-----	-----	0.8	-----	-----	2.4	0.2	-----	-----
MSU D6234	WHITE	156.5	154.6	153.1	34.0	34.1	37.2	4.0	3.3	3.3	2.5	2.8	2.7	2.0	0.2	0.7	3.3
MSU Line E5024	WHITE	157.0	-----	-----	30.1	-----	-----	4.0	-----	-----	0.6	-----	-----	2.3	0.4	-----	-----
Pioneer Brand 25W36	WHITE	155.9	-----	-----	33.4	-----	-----	5.0	-----	-----	2.8	-----	-----	2.8	0.6	-----	-----
MSU Line E5017	WHITE	156.9	-----	-----	30.5	-----	-----	4.0	-----	-----	4.8	-----	-----	3.3	0.3	-----	-----
Jewel	WHITE	155.8	153.8	152.4	34.0	34.1	36.4	5.5	3.8	4.0	4.3	3.7	3.5	2.4	0.0	0.6	2.0
Pioneer Brand 25W41	WHITE	155.9	153.6	152.4	31.8	32.2	34.4	5.5	3.5	3.3	3.9	4.8	4.6	3.0	0.7	1.9	0.0
Pioneer Brand 25W43	WHITE	155.4	-----	-----	33.1	-----	-----	4.5	-----	-----	4.1	-----	-----	3.6	0.3	-----	-----
MSU Line E2017	WHITE	157.4	155.1	153.6	34.0	35.0	38.1	4.5	3.5	3.7	4.6	4.4	4.4	3.4	0.1	2.1	3.7
AC Mountain	WHITE	156.3	154.4	152.9	37.1	37.5	39.9	6.0	4.8	4.9	3.2	3.3	3.3	2.2	0.0	2.9	1.0
Envoy (MSU Line E1009)	WHITE	155.5	153.9	152.8	32.5	31.6	34.4	5.5	4.3	4.3	1.4	2.1	1.8	2.8	0.0	4.4	1.3
Aubrey	WHITE	154.6	153.0	151.7	31.8	33.3	36.0	6.0	4.8	4.5	1.9	2.0	1.6	2.6	0.3	1.8	0.3
MSU Line E3023	WHITE	159.1	156.9	-----	34.2	34.0	-----	6.0	5.3	-----	4.1	4.0	-----	2.5	0.0	1.3	0.0
MSU Line E3003	WHITE	160.7	158.2	-----	31.3	31.6	-----	5.0	4.3	-----	1.2	1.6	-----	4.0	0.0	1.7	0.3
MSU Line E5028	WHITE	156.5	-----	-----	30.9	-----	-----	4.0	-----	-----	3.2	-----	-----	2.8	0.6	-----	-----
Augusta	WHITE	157.4	155.7	-----	38.5	39.7	-----	5.5	4.0	-----	4.2	4.5	-----	2.2	0.2	3.0	1.3
MSU Line E3004-B	WHITE	158.2	-----	-----	32.9	32.4	-----	5.5	-----	-----	2.6	-----	-----	2.7	0.0	5.3	1.7
Genesis 12 Exp	WHITE	156.4	-----	-----	33.1	-----	-----	6.0	-----	-----	6.2	-----	-----	3.0	0.2	-----	-----
Lowell	WHITE	155.6	153.7	-----	37.5	37.8	-----	6.5	5.8	-----	4.8	4.5	-----	3.6	0.0	1.5	0.0
Jensen	WHITE	157.8	156.1	-----	34.9	35.2	-----	5.5	4.5	-----	3.5	3.3	-----	4.0	0.1	1.3	1.3
Caledonia	WHITE	156.2	154.3	152.7	32.1	32.0	34.4	6.0	5.0	5.1	3.7	3.9	3.8	3.6	0.6	2.3	1.0
MSU Line E2043	WHITE	157.7	156.3	154.8	34.1	34.7	37.4	5.5	3.8	3.9	1.4	1.9	1.7	2.9	0.4	4.3	1.3
Frankenmuth	WHITE	157.4	155.9	-----	41.3	41.8	-----	5.5	4.5	-----	3.7	3.8	-----	2.9	0.2	3.5	1.7
<b>Trial Mean (2008=76 Entries)</b>		<b>155.9</b>	<b>153.9</b>	<b>152.3</b>	<b>33.0</b>	<b>33.5</b>	<b>35.6</b>	<b>4.7</b>	<b>3.8</b>	<b>3.8</b>	<b>3.0</b>	<b>3.0</b>	<b>2.7</b>	<b>2.8</b>	<b>0.2</b>	<b>2.1</b>	<b>0.9</b>
<b>LSD (0.05)</b>		<b>1.0</b>	<b>1.1</b>	<b>0.7</b>	<b>1.4</b>	<b>1.6</b>	<b>1.4</b>	<b>1.4</b>	<b>1.9</b>	<b>1.5</b>	<b>1.6</b>	<b>1.3</b>	<b>1.1</b>	<b>1.0</b>	<b>0.6</b>	<b>1.7</b>	<b>1.5</b>
<b>CV (%)</b>		<b>1.1</b>	<b>1.0</b>	<b>0.8</b>	<b>2.1</b>	<b>2.4</b>	<b>2.4</b>	<b>14.9</b>	<b>24.8</b>	<b>23.7</b>	<b>26.9</b>	<b>20.7</b>	<b>24.5</b>	<b>21.4</b>	<b>140.9</b>	<b>56.2</b>	<b>103.0</b>

## 2008 Michigan State University Wheat Performance Trials

Multi-year data are the most informative.

**Table 3 : Multi-Year Performance Summary (Note: Tables sorted by 2008 Yield, red wheats grouped before white)**

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Name	Grain Color	In Head Sprouting Score (0-9)			Black Point Percent			Fusarium Head Blight (Scab) Data : Field Observation Symptoms									DON (ppm) in grain		
		Multi-Year Averages			2007 HARVEST	Multi-Year Averages		Incidence (% of spikes)			Severity (% within spikes)			Index (% overall infection)			2007 HARVEST	Multi-Year Averages	
		2 YR	3 YR	06-08		2 YR	3 YR	2 YR	3 YR	2 YR	3 YR	2 YR	3 YR	2 YR	3 YR	2 YR		3 YR	
		2008	07-08	06-08	06-07	05-07	2008	07-08	06-08	2008	07-08	06-08	2008	07-08	06-08	2008	07-08	06-08	06-07
Genesis R045	RED	1.0	3.3	4.6	68.0	42.2	34.3	87.8	70.2	61.8	27.6	33.4	35.6	24.5	23.8	22.0	5.7	3.6	2.9
Trevor	RED	1.5	3.6	-----	16.0	-----	-----	95.4	83.7	-----	53.5	59.8	-----	50.8	49.0	-----	12.8	-----	-----
Pioneer Brand 25R47	RED	3.8	5.3	5.0	42.0	26.2	21.7	76.7	75.4	71.9	22.3	38.8	39.2	17.4	29.6	28.4	5.9	3.6	3.1
Genesis R075	RED	1.0	-----	-----	-----	-----	-----	70.0	-----	-----	26.6	-----	-----	18.9	-----	-----	-----	-----	-----
Genesis R065	RED	0.7	-----	-----	-----	-----	-----	73.9	-----	-----	31.7	-----	-----	23.5	-----	-----	-----	-----	-----
Pioneer Brand 25R62	RED	3.5	-----	-----	-----	-----	-----	91.9	-----	-----	30.2	-----	-----	27.5	-----	-----	-----	-----	-----
RS 908	RED	1.6	2.0	-----	17.5	-----	-----	91.4	76.0	-----	46.0	50.8	-----	42.3	38.0	-----	6.6	-----	-----
Red Ruby	RED	1.6	4.2	3.9	15.5	11.7	11.7	93.2	79.5	63.0	45.7	52.5	43.3	43.4	42.8	31.0	6.8	4.1	3.8
Hopewell	RED	0.5	1.7	2.1	9.0	6.1	5.0	87.8	77.4	71.6	38.6	49.2	46.1	34.4	38.8	33.8	6.8	4.3	4.1
Arena	RED	2.1	4.4	-----	32.0	-----	-----	92.5	80.2	-----	43.8	42.7	-----	41.6	34.9	-----	7.2	-----	-----
Vigoro V9723	RED	3.3	-----	-----	-----	-----	-----	70.8	-----	-----	40.9	-----	-----	29.3	-----	-----	-----	-----	-----
RS 978	RED	4.1	-----	-----	-----	-----	-----	75.5	-----	-----	39.8	-----	-----	29.0	-----	-----	-----	-----	-----
MCIA Oasis	RED	1.2	2.0	2.0	108.0	70.3	-----	94.2	76.4	60.9	43.7	44.3	42.8	41.6	34.0	26.6	4.2	2.7	2.5
Emmit	RED	1.5	4.3	5.0	51.5	37.5	36.3	71.7	59.8	51.5	34.0	40.6	42.1	25.3	24.2	21.4	4.4	2.7	2.3
Pioneer Brand 25R56	RED	0.9	2.0	-----	5.5	-----	-----	81.9	71.7	-----	32.9	38.0	-----	27.1	26.5	-----	4.1	-----	-----
Excel 423	RED	1.3	-----	-----	-----	-----	-----	84.8	-----	-----	30.6	-----	-----	26.5	-----	-----	-----	-----	-----
MSU Line D8006R	RED	0.6	2.9	3.3	36.0	22.2	20.0	89.9	76.4	60.9	53.3	54.6	53.1	48.8	41.5	32.3	7.8	4.8	4.1
RS 953	RED	1.8	2.3	2.2	24.0	14.2	-----	69.7	70.8	63.8	22.5	29.3	31.2	15.9	20.5	19.7	4.0	2.4	-----
AgriPro W1377	RED	1.5	-----	-----	-----	-----	-----	89.4	-----	-----	19.7	-----	-----	17.5	-----	-----	-----	-----	-----
VA01W-205	RED	3.2	-----	-----	-----	-----	-----	83.9	-----	-----	25.4	-----	-----	22.4	-----	-----	-----	-----	-----
AgriPro BRANSON	RED	0.6	2.1	2.2	21.5	14.0	-----	85.5	70.1	53.4	34.3	34.5	33.0	29.2	25.1	18.7	4.8	2.9	-----
VA03W-409	RED	0.4	-----	-----	-----	-----	-----	89.0	-----	-----	41.7	-----	-----	37.9	-----	-----	-----	-----	-----
DF101	RED	1.1	2.8	2.9	19.5	12.4	12.5	89.9	78.4	68.9	23.9	30.3	31.8	21.4	23.1	21.2	5.6	3.3	2.6
Pioneer Brand 25R51	RED	1.8	3.8	3.7	59.5	32.5	-----	65.6	55.3	50.2	10.0	19.4	22.9	7.3	10.8	11.5	3.9	2.3	-----
Sunburst	RED	0.4	1.4	-----	16.5	-----	-----	96.5	79.2	-----	34.0	42.2	-----	32.3	31.7	-----	4.2	-----	-----
Excel 343	RED	2.2	-----	-----	-----	-----	-----	88.9	-----	-----	23.5	-----	-----	21.3	-----	-----	-----	-----	-----
Bravo	RED	0.7	2.7	2.6	15.5	12.4	11.3	81.0	74.8	69.9	24.9	37.3	39.8	20.5	28.0	28.6	6.0	3.8	3.1
Genesis R085	RED	1.9	-----	-----	-----	-----	-----	88.3	-----	-----	38.8	-----	-----	34.2	-----	-----	-----	-----	-----
Genesis R055	RED	3.0	5.4	4.6	41.0	31.8	34.2	84.2	73.1	60.4	26.6	37.5	38.3	22.7	26.1	22.6	4.2	2.8	2.2
Roane	RED	0.6	4.1	3.8	7.5	6.8	5.3	70.9	66.5	61.0	15.3	28.6	32.4	11.1	19.0	19.3	3.8	2.3	1.8
Vigoro Tribute	RED	0.7	3.1	3.0	51.0	36.5	31.3	67.1	56.0	50.7	21.2	26.1	30.7	14.8	14.7	15.1	4.7	2.9	2.8
VA03W-434	RED	0.5	-----	-----	-----	-----	-----	94.5	-----	-----	43.2	-----	-----	41.1	-----	-----	-----	-----	-----
McCormick	RED	0.0	1.5	1.5	26.8	22.2	20.9	78.5	66.5	57.6	11.9	22.7	28.5	9.1	13.5	14.3	3.4	1.9	1.3

## 2008 Michigan State University Wheat Performance Trials

Multi-year data are the most informative.

**Table 3 : Multi-Year Performance Summary (Note: Tables sorted by 2008 Yield, red wheats grouped before white)**

MSU makes no endorsement of any variety or brand.

Name	Grain Color	In Head Sprouting Score (0-9)			Black Point Percent			Fusarium Head Blight (Scab) Data : Field Observation Symptoms									DON (ppm) in grain		
		Multi-Year Averages			Multi-Year Averages			Incidence (% of spikes)			Severity (% within spikes)			Index (% overall infection)			Multi-Year Averages		
		2 YR	3 YR	3 YR	2007	2 YR	3 YR	2 YR	3 YR	3 YR	2 YR	3 YR	3 YR	2 YR	3 YR	3 YR	2007	2 YR	3 YR
		2008	07-08	06-08	HARVEST	06-07	05-07	2008	07-08	06-08	2008	07-08	06-08	2008	07-08	06-08	HARVEST	06-07	05-07
MSU Line E5011-B	WHITE	7.2	-----	-----	-----	-----	-----	-----	90.4	-----	-----	47.6	-----	-----	43.8	-----	-----	-----	-----
Ambassador (MSU Line E0028)	WHITE	6.7	7.7	7.9	22.0	12.3	11.7	90.5	74.9	69.9	61.9	53.9	55.9	56.9	42.1	40.0	11.6	8.6	7.1
MSU Line E5011-A	WHITE	6.8	-----	-----	-----	-----	-----	87.0	-----	-----	44.6	-----	-----	39.6	-----	-----	-----	-----	-----
AgriPro W1062	WHITE	3.7	5.1	-----	33.5	-----	-----	92.8	69.1	-----	57.4	51.4	-----	52.5	36.8	-----	4.5	-----	-----
Ava	WHITE	6.1	-----	-----	-----	-----	-----	82.9	-----	-----	26.5	-----	-----	22.5	-----	-----	-----	-----	-----
Crystal	WHITE	7.0	7.7	7.8	2.5	1.9	3.1	99.3	71.3	59.2	48.2	57.8	51.8	45.8	38.3	30.2	14.0	9.3	9.0
MSU D8006	WHITE	4.9	6.0	6.3	31.0	28.6	27.5	94.2	78.5	72.3	50.4	51.5	51.0	47.9	41.8	37.8	9.6	7.4	8.4
MSU Line E5038	WHITE	3.7	-----	-----	-----	-----	-----	94.0	-----	-----	74.6	-----	-----	70.8	-----	-----	-----	-----	-----
MSU D6234	WHITE	5.4	7.0	7.6	79.0	50.3	40.2	93.6	78.0	67.0	35.8	49.0	51.0	34.0	36.5	32.3	4.0	3.7	3.3
MSU Line E5024	WHITE	3.2	-----	-----	-----	-----	-----	84.1	-----	-----	27.9	-----	-----	23.7	-----	-----	-----	-----	-----
Pioneer Brand 25W36	WHITE	6.9	-----	-----	-----	-----	-----	94.3	-----	-----	53.0	-----	-----	50.4	-----	-----	-----	-----	-----
MSU Line E5017	WHITE	7.2	-----	-----	-----	-----	-----	93.3	-----	-----	24.8	-----	-----	22.6	-----	-----	-----	-----	-----
Jewel	WHITE	6.1	7.2	7.4	14.0	8.6	8.4	84.0	77.4	74.9	35.5	46.7	46.1	31.4	36.2	34.6	5.9	6.2	6.8
Pioneer Brand 25W41	WHITE	5.4	6.0	6.0	77.5	47.2	37.5	93.4	79.8	66.5	38.7	37.5	38.3	35.7	30.1	25.4	7.0	5.1	6.4
Pioneer Brand 25W43	WHITE	4.8	-----	-----	-----	-----	-----	75.6	-----	-----	20.3	-----	-----	17.2	-----	-----	-----	-----	-----
MSU Line E2017	WHITE	6.2	7.3	7.8	21.5	13.9	14.5	88.1	62.5	51.6	43.4	37.7	36.8	38.1	26.2	20.8	2.9	3.2	3.1
AC Mountain	WHITE	7.8	8.4	8.3	31.0	22.0	18.3	82.0	60.6	52.1	48.4	53.7	50.8	39.7	32.2	26.8	3.6	3.2	3.1
Envoy (MSU Line E1009)	WHITE	3.0	5.3	5.6	21.0	13.0	-----	72.4	72.2	64.8	23.4	41.4	39.3	18.3	30.6	26.2	9.2	6.1	-----
Aubrey	WHITE	7.7	8.1	8.3	12.0	9.8	10.0	81.5	70.3	63.5	24.4	30.0	35.0	20.0	21.2	21.8	3.5	3.3	3.8
MSU Line E3023	WHITE	4.8	6.5	-----	22.0	13.3	15.5	97.3	64.3	-----	49.3	39.2	-----	46.8	28.6	-----	2.3	-----	-----
MSU Line E3003	WHITE	5.2	6.2	-----	30.5	21.4	18.3	95.4	68.7	-----	46.0	45.6	-----	43.7	30.4	-----	1.8	-----	-----
MSU Line E5028	WHITE	6.3	-----	-----	-----	-----	-----	91.4	-----	-----	36.3	-----	-----	34.5	-----	-----	-----	-----	-----
Augusta	WHITE	4.6	6.4	-----	23.5	-----	-----	82.3	62.8	-----	55.1	42.6	-----	44.5	29.2	-----	2.4	-----	-----
MSU Line E3004-B	WHITE	5.9	7.2	-----	44.0	26.0	21.8	95.3	59.2	-----	25.3	28.6	-----	24.0	16.2	-----	1.6	-----	-----
Genesis 12 Exp	WHITE	5.9	-----	-----	-----	-----	-----	92.6	-----	-----	40.9	-----	-----	36.7	-----	-----	-----	-----	-----
Lowell	WHITE	7.8	8.2	-----	7.0	-----	-----	85.3	73.3	-----	58.2	44.9	-----	49.5	34.9	-----	5.2	-----	-----
Jensen	WHITE	5.0	6.4	-----	13.5	-----	-----	95.2	-----	-----	41.1	-----	-----	39.1	-----	-----	3.1	-----	-----
Caledonia	WHITE	4.7	6.7	7.3	19.5	12.3	10.2	94.5	75.4	66.9	58.9	57.4	59.9	56.0	44.5	42.0	6.7	5.0	5.1
MSU Line E2043	WHITE	2.1	3.7	4.8	25.5	16.6	14.4	94.5	65.3	56.9	50.3	44.0	42.6	48.1	30.4	25.6	3.8	3.8	4.6
Frankenmuth	WHITE	6.2	7.5	-----	27.0	-----	-----	75.2	55.5	-----	46.3	40.3	-----	33.2	23.7	-----	2.1	-----	-----
<b>Trial Mean (2008=76 Entries)</b>		<b>3.2</b>	<b>4.7</b>	<b>4.9</b>	<b>30.2</b>	<b>21.5</b>	<b>17.6</b>	<b>85.1</b>	<b>70.7</b>	<b>62.3</b>	<b>36.1</b>	<b>41.3</b>	<b>41.0</b>	<b>31.7</b>	<b>30.1</b>	<b>26.1</b>	<b>5.1</b>	<b>3.9</b>	<b>3.8</b>
<b>LSD (0.05)</b>		<b>1.9</b>	<b>2.2</b>	<b>1.8</b>	<b>26.9</b>	<b>26.5</b>	<b>15.2</b>	<b>16.3</b>	<b>26.6</b>	<b>16.7</b>	<b>11.7</b>	<b>24.0</b>	<b>14.4</b>	<b>11.5</b>	<b>23.4</b>	<b>15.6</b>	<b>2.6</b>	<b>3.1</b>	<b>2.0</b>
<b>CV (%)</b>		<b>29.1</b>	<b>23.2</b>	<b>22.1</b>	<b>44.2</b>	<b>61.1</b>	<b>53.0</b>	<b>11.0</b>	<b>18.7</b>	<b>16.3</b>	<b>19.3</b>	<b>28.9</b>	<b>21.5</b>	<b>21.7</b>	<b>38.6</b>	<b>36.6</b>	<b>22.7</b>	<b>39.0</b>	<b>39.5</b>

## 2008 Michigan State University Wheat Performance Trials

Multi-year data are the most informative.

**Table 4 : Multi-Year Performance Summary (Note: Tables sorted by 2008 Yield, red wheats grouped before white)**

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Milling and Baking Properties (2007 Crop and Earlier)														
		Percent Flour Yield			Percent Protein In Flour			Lactic Acid Retention			Softness Equivalent Percent			Quality Lab Test Weight		
		Multi-Year Averages			Multi-Year Averages			Multi-Year Averages			Multi-Year Averages			Multi-Year Averages		
		2007 HARVEST	2 YR 06-07	3 YR 05-07	2007 HARVEST	2 YR 06-07	3 YR 05-07	2007 HARVEST	2 YR 06-07	3 YR 05-07	2007 HARVEST	2 YR 06-07	3 YR 05-07	2007 HARVEST	2 YR 06-07	3 YR 05-07
Genesis R045	RED	72.1	72.1	72.4	8.2	7.7	8.1	95.6	102.5	101.6	61.8	61.3	59.3	63.7	62.0	62.5
Trevor	RED	69.2	-----	-----	8.3	-----	-----	118.2	-----	-----	60.4	-----	-----	61.2	-----	-----
Pioneer Brand 25R47	RED	72.6	72.4	72.7	7.8	7.2	7.4	110.4	109.8	107.0	63.9	65.7	64.1	61.0	60.1	60.9
Genesis R075	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Genesis R065	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pioneer Brand 25R62	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
RS 908	RED	71.8	-----	-----	8.3	-----	-----	116.7	-----	-----	61.9	-----	-----	62.5	-----	-----
Red Ruby	RED	70.8	70.9	71.2	8.6	7.8	8.0	121.7	117.0	112.9	62.3	63.0	61.3	63.5	62.3	63.0
Hopewell	RED	70.0	69.3	69.4	8.4	7.8	8.1	125.9	122.9	117.6	61.6	62.3	60.7	62.0	61.4	62.2
Arena	RED	69.6	-----	-----	8.5	-----	-----	131.4	-----	-----	58.0	-----	-----	62.7	-----	-----
Vigoro V9723	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
RS 978	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MCIA Oasis	RED	72.8	72.6	72.7	8.6	8.0	8.1	122.1	114.1	108.8	60.3	61.0	59.5	61.4	61.1	61.6
Emmit	RED	72.5	72.2	72.7	8.7	7.8	8.1	94.6	90.8	86.6	56.5	59.0	57.0	62.6	61.8	62.6
Pioneer Brand 25R56	RED	70.2	-----	-----	8.3	-----	-----	100.3	-----	-----	57.4	-----	-----	61.8	-----	-----
Excel 423	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MSU Line D8006R	RED	71.2	71.4	71.9	8.7	8.1	8.7	116.2	112.9	109.2	57.1	58.5	56.6	62.1	61.1	62.0
RS 953	RED	69.0	69.0	-----	8.5	8.0	-----	120.6	117.2	-----	51.5	52.6	-----	64.1	63.2	-----
AgriPro W1377	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
VA01W-205	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
AgriPro BRANSON	RED	70.0	70.6	-----	9.0	8.2	-----	124.1	121.5	-----	63.7	64.4	-----	61.8	61.0	-----
VA03W-409	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
DF101	RED	68.5	68.8	69.4	9.0	8.7	8.7	121.6	117.9	116.3	52.0	52.4	51.4	63.5	63.0	63.6
Pioneer Brand 25R51	RED	68.2	68.1	-----	8.2	7.6	-----	104.5	105.2	-----	59.2	61.3	-----	61.8	60.3	-----
Sunburst	RED	67.1	-----	-----	8.5	-----	-----	118.6	-----	-----	53.8	-----	-----	64.6	-----	-----
Excel 343	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bravo	RED	70.2	70.3	70.6	9.0	8.4	8.6	102.9	96.7	94.5	55.9	56.7	55.3	63.1	62.4	62.9
Genesis R085	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Genesis R055	RED	72.0	71.8	72.4	8.4	7.6	7.9	113.4	106.1	98.2	56.7	61.0	60.3	63.0	62.4	63.4
Roane	RED	68.3	68.0	68.5	8.6	8.0	8.3	120.1	117.3	114.9	59.6	59.8	58.8	64.4	63.9	64.6
Vigoro Tribute	RED	70.2	70.1	70.5	8.4	8.0	8.3	126.6	119.6	117.5	55.5	55.7	54.4	65.0	64.2	64.7
VA03W-434	RED	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
McCormick	RED	69.6	69.8	70.4	8.7	8.2	8.6	118.5	116.4	112.7	62.2	61.8	60.4	63.8	63.2	64.0

## 2008 Michigan State University Wheat Performance Trials

Multi-year data are the most informative.

**Table 4 : Multi-Year Performance Summary (Note: Tables sorted by 2008 Yield, red wheats grouped before white)**

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Milling and Baking Properties (2007 Crop and Earlier)														
		Percent Flour Yield			Percent Protein In Flour			Lactic Acid Retention			Softness Equivalent Percent			Quality Lab Test Weight		
		Multi-Year Averages			Multi-Year Averages			Multi-Year Averages			Multi-Year Averages			Multi-Year Averages		
		2007 HARVEST	2 YR 06-07	3 YR 05-07	2007 HARVEST	2 YR 06-07	3 YR 05-07	2007 HARVEST	2 YR 06-07	3 YR 05-07	2007 HARVEST	2 YR 06-07	3 YR 05-07	2007 HARVEST	2 YR 06-07	3 YR 05-07
MSU Line E5011-B	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Ambassador (MSU Line E0028)	WHITE	73.9	73.3	73.5	8.1	7.4	7.9	103.0	99.3	96.7	60.8	61.0	58.9	61.2	60.1	61.2
MSU Line E5011-A	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
AgriPro W1062	WHITE	73.0	-----	-----	8.3	-----	-----	119.3	-----	-----	63.6	-----	-----	62.4	-----	-----
Ava	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Crystal	WHITE	73.5	72.9	73.0	8.1	7.4	7.8	103.7	103.6	101.9	60.0	61.4	59.3	61.4	60.5	61.3
MSU D8006	WHITE	73.4	73.1	73.3	8.4	7.7	8.2	120.6	116.9	115.3	63.0	63.3	60.8	62.1	60.7	61.5
MSU Line E5038	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
MSU D6234	WHITE	69.9	69.7	70.2	8.7	8.0	8.3	88.9	87.0	84.2	56.4	58.2	56.7	62.9	61.9	62.6
MSU Line E5024	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Pioneer Brand 25W36	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
MSU Line E5017	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Jewel	WHITE	71.5	71.7	71.8	8.3	7.7	8.1	118.7	113.9	110.7	59.3	60.1	57.9	62.4	61.2	62.0
Pioneer Brand 25W41	WHITE	70.2	70.4	70.7	7.9	7.3	7.7	111.6	105.4	100.0	64.8	65.6	63.6	62.5	61.3	62.4
Pioneer Brand 25W43	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
MSU Line E2017	WHITE	72.0	72.0	72.2	8.4	7.5	7.9	114.4	109.3	104.0	60.4	62.8	60.5	63.2	61.5	62.3
AC Mountain	WHITE	70.8	71.4	72.0	8.6	7.7	8.0	103.2	97.4	95.7	57.9	60.5	58.5	61.0	59.7	60.7
Envoy (MSU Line E1009)	WHITE	71.7	71.7	-----	8.6	7.8	-----	117.6	114.1	-----	57.2	57.7	-----	62.9	61.7	-----
Aubrey	WHITE	70.5	70.6	71.3	8.5	8.3	8.5	119.7	111.7	108.9	62.2	60.5	59.7	63.0	62.3	62.9
MSU Line E3023	WHITE	72.2	-----	-----	8.1	-----	-----	107.8	-----	-----	58.8	-----	-----	60.7	-----	-----
MSU Line E3003	WHITE	70.7	-----	-----	8.5	-----	-----	85.7	-----	-----	56.5	-----	-----	62.7	-----	-----
MSU Line E5028	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Augusta	WHITE	71.1	-----	-----	8.5	-----	-----	101.2	-----	-----	57.3	-----	-----	60.0	-----	-----
MSU Line E3004-B	WHITE	71.1	-----	-----	8.5	-----	-----	90.4	-----	-----	60.2	-----	-----	63.6	-----	-----
Genesis 12 Exp	WHITE	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Lowell	WHITE	71.6	-----	-----	8.3	-----	-----	119.0	-----	-----	63.1	-----	-----	59.8	-----	-----
Jensen	WHITE	71.7	-----	-----	8.7	-----	-----	88.2	-----	-----	58.1	-----	-----	61.9	-----	-----
Caledonia	WHITE	71.9	71.9	72.2	8.6	7.7	8.1	116.7	109.2	103.9	59.8	62.3	60.0	62.3	60.9	61.7
MSU Line E2043	WHITE	72.5	72.8	72.9	8.6	7.8	8.2	118.3	113.1	109.8	58.8	60.3	58.2	63.1	61.7	62.4
Frankenmuth	WHITE	70.7	-----	-----	8.5	-----	-----	96.7	-----	-----	54.8	-----	-----	63.1	-----	-----
<b>Trial Mean (2008=76 Entries)</b>		<b>70.7</b>	<b>70.6</b>	<b>71.3</b>	<b>8.5</b>	<b>7.9</b>	<b>8.2</b>	<b>111.6</b>	<b>109.4</b>	<b>105.5</b>	<b>58.9</b>	<b>60.3</b>	<b>58.9</b>	<b>62.5</b>	<b>61.6</b>	<b>62.5</b>
<b>LSD (0.05)</b>		-----	<b>1.2</b>	<b>0.8</b>	-----	<b>0.5</b>	<b>0.5</b>	-----	<b>8.9</b>	<b>7.1</b>	-----	<b>4.1</b>	<b>2.4</b>	-----	<b>1.1</b>	<b>0.8</b>
<b>CV (%)</b>		-----	<b>0.8</b>	<b>0.7</b>	-----	<b>3.5</b>	<b>3.4</b>	-----	<b>4.0</b>	<b>4.1</b>	-----	<b>3.3</b>	<b>2.5</b>	-----	<b>0.9</b>	<b>0.8</b>

Table 5 : Single Site: Yield, Test Weight and Moisture Performance Summary (Note: Tables sorted alphabetically by organization)

Name	Grain Color													Organization
		INGHAM			SAGINAW			SANILAC			TUSCOLA			
		Yield bu/acre	Test Weight	Moist.	Yield bu/acre	Test Weight	Moist.	Yield bu/acre	Test Weight	Moist.	Yield bu/acre	Test Weight	Moist.	
AgriPro BRANSON	RED	75.8	58.9	16.8	86.8	61.8	13.8	100.9	58.4	14.5	85.8	63.0	12.0	AgriPro COKER
AgriPro W1377	RED	75.1	61.4	17.3	91.6	63.6	14.2	96.1	59.7	17.6	86.6	64.9	13.0	AgriPro COKER
AgriPro W1062	WHITE	79.6	58.9	17.8	99.4	63.3	14.7	91.9	55.4	15.7	90.5	63.8	12.9	AgriPro COKER
Excel 343	RED	77.0	59.9	15.9	89.9	62.7	13.3	94.4	59.2	14.7	80.1	63.4	12.3	Bio Plant Research
Excel 423	RED	82.2	59.9	15.7	85.2	63.9	14.0	102.6	59.4	15.7	86.1	64.3	12.7	Bio Plant Research
Aubrey	WHITE	74.1	60.3	17.0	88.3	62.2	14.4	94.5	59.8	15.3	88.5	62.9	12.2	Co-op Elev. Co., Farm Co-op Grain Elev., & D.F. Seed
Ambassador (MSU Line E0028)	WHITE	75.1	56.9	15.3	93.3	60.4	12.9	103.0	57.6	13.9	91.3	60.7	11.5	Cooperative Elevator Co. and D.F. Seeds, Inc.
Envoy (MSU Line E1009)	WHITE	74.7	59.5	16.3	88.2	63.4	13.6	99.8	59.3	14.7	84.2	63.8	11.9	Cooperative Elevator Co. and D.F. Seeds, Inc.
Vigoro Tribute	RED	71.6	60.1	18.5	87.6	62.4	13.4	90.5	60.0	19.4	79.1	64.1	12.7	Crop Production Services
Vigoro V9723	RED	82.8	58.6	16.2	91.3	62.3	13.7	100.8	58.2	14.7	88.2	62.6	12.0	Crop Production Services
DF101	RED	76.0	59.8	16.6	87.2	62.8	13.9	96.9	59.8	16.3	87.4	63.6	12.1	D.F. Seeds, Inc.
Genesis R045	RED	87.6	60.2	18.0	93.9	63.0	14.2	103.1	58.8	17.3	93.1	64.2	12.7	D.F. Seeds, Inc.
Genesis R055	RED	76.2	59.1	18.7	81.1	63.3	14.5	96.4	59.1	16.7	79.8	63.0	12.8	D.F. Seeds, Inc.
Caledonia	WHITE	73.1	58.7	16.5	83.3	63.7	13.4	91.5	57.8	14.8	83.8	63.2	12.1	Harrington Seeds, Inc.
Jensen	WHITE	69.2	58.6	16.2	89.8	62.1	13.8	90.8	57.9	15.2	82.7	63.0	11.9	Harrington Seeds, Inc.
Ava	WHITE	77.5	58.0	17.5	90.0	63.1	14.2	100.8	57.5	15.9	92.4	63.3	12.5	Hyland Seeds
Emmit	RED	76.4	59.0	18.3	90.7	62.1	13.0	102.5	58.4	15.7	88.8	63.0	12.7	Hyland Seeds
AC Mountain	WHITE	75.7	58.1	15.5	85.9	63.2	13.6	98.4	57.1	14.2	86.9	61.5	11.8	Michigan Crop Improvement Association
Arena	RED	79.5	59.0	17.4	93.4	63.1	14.0	99.7	57.5	15.0	91.3	62.9	12.5	Michigan Crop Improvement Association
Bravo	RED	69.1	58.7	16.6	96.1	62.9	13.2	91.8	59.4	14.9	83.2	63.5	12.2	Michigan Crop Improvement Association
Crystal	WHITE	78.7	58.5	15.4	90.4	61.9	13.1	99.8	57.4	13.6	89.8	62.5	11.6	Michigan Crop Improvement Association
Hopewell	RED	83.7	58.6	16.4	90.4	62.4	13.4	102.7	57.8	15.4	88.0	63.2	12.3	Michigan Crop Improvement Association
Jewel	WHITE	81.6	59.2	15.9	85.1	61.8	13.0	99.3	59.0	15.1	84.4	62.8	11.7	Michigan Crop Improvement Association
MCIA Oasis	RED	79.0	58.9	17.4	91.5	62.4	13.7	100.5	57.8	16.7	89.7	63.2	12.5	Michigan Crop Improvement Association
MSU D6234	WHITE	73.4	58.8	17.4	93.6	62.3	13.5	98.4	58.3	17.0	88.8	64.0	12.3	Michigan Crop Improvement Association
MSU D8006	WHITE	81.4	59.5	16.5	92.0	62.2	13.6	95.6	58.5	15.1	89.4	62.8	11.8	Michigan Crop Improvement Association
Red Ruby	RED	80.2	59.9	17.1	92.9	62.8	13.5	104.4	58.4	16.3	87.9	67.7	12.2	Michigan Crop Improvement Association
Roane	RED	71.8	60.7	18.4	83.5	64.0	15.0	92.7	60.3	16.7	82.1	64.2	12.7	Michigan Crop Improvement Association
Sunburst	RED	75.9	60.5	18.6	85.0	63.5	13.7	96.0	60.1	18.1	87.1	64.9	12.7	Michigan Crop Improvement Association
Trevor	RED	83.9	56.7	16.8	99.1	61.9	13.9	104.7	56.7	15.0	87.7	61.7	11.9	Michigan Crop Improvement Association
Augusta	WHITE	74.6	57.8	16.7	90.5	61.7	14.0	92.6	56.6	15.2	83.1	62.6	12.1	Michigan State University
Frankenmuth	WHITE	66.5	58.4	16.8	88.6	62.4	13.7	86.4	58.8	15.1	78.2	62.8	11.7	Michigan State University
Lowell	WHITE	65.7	57.1	15.7	87.6	61.8	13.6	90.1	57.2	14.1	89.4	61.3	11.8	Michigan State University

Multi-year data are the most informative.

Table 5 : Single Site: Yield, Test Weight and Moisture Performance Summary (Note: Tables sorted alphabetically by organization)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	INGHAM			SAGINAW			SANILAC			TUSCOLA			Organization
		Yield bu/acre	Test Weight	Moist.	Yield bu/acre	Test Weight	Moist.	Yield bu/acre	Test Weight	Moist.	Yield bu/acre	Test Weight	Moist.	
MSU Line D8006R	RED	77.9	58.9	17.4	88.4	62.7	14.4	100.6	58.7	15.0	86.7	64.2	12.4	Michigan State University
MSU Line E2017	WHITE	73.6	58.4	17.0	93.1	62.8	14.3	92.9	57.5	15.6	89.1	63.6	12.3	Michigan State University
MSU Line E2043	WHITE	67.5	59.4	16.9	85.2	62.4	13.9	92.1	57.4	16.9	80.6	63.0	13.2	Michigan State University
MSU Line E3003	WHITE	69.4	57.2	17.9	92.8	62.9	14.4	91.9	54.3	19.3	88.7	63.8	12.8	Michigan State University
MSU Line E3004-B	WHITE	69.9	59.3	17.4	86.9	63.4	13.6	92.1	56.6	19.1	90.3	64.7	12.9	Michigan State University
MSU Line E3023	WHITE	72.2	57.0	16.7	92.5	61.3	14.0	93.5	56.1	16.4	85.6	61.8	11.9	Michigan State University
MSU Line E5011-A	WHITE	79.5	59.4	16.8	89.4	61.7	13.9	97.3	58.4	15.0	95.8	63.9	12.3	Michigan State University
MSU Line E5011-B	WHITE	77.9	58.7	16.5	97.6	62.9	13.9	104.5	57.9	15.0	97.2	63.4	12.0	Michigan State University
MSU Line E5017	WHITE	77.6	58.7	18.5	94.3	62.8	13.7	93.8	58.1	17.2	86.6	63.8	13.0	Michigan State University
MSU Line E5024	WHITE	74.0	58.6	16.7	89.6	63.2	13.8	101.0	57.9	15.8	88.5	63.6	12.4	Michigan State University
MSU Line E5028	WHITE	68.9	57.7	16.2	88.4	62.7	13.2	95.2	57.1	15.7	88.5	62.8	12.2	Michigan State University
MSU Line E5038	WHITE	74.3	58.5	16.4	94.2	62.9	13.7	100.3	57.1	16.3	89.6	63.8	12.1	Michigan State University
Pioneer Brand 25R47	RED	81.2	58.8	17.6	90.8	63.0	13.8	104.3	58.1	16.1	95.5	62.4	12.3	Pioneer Hi-Bred Limited
Pioneer Brand 25R51	RED	73.4	58.9	17.2	90.1	62.6	13.5	96.1	57.8	15.3	88.0	62.7	12.2	Pioneer Hi-Bred Limited
Pioneer Brand 25R56	RED	77.4	57.4	16.0	94.5	61.5	13.3	99.7	57.7	14.1	85.3	61.9	11.7	Pioneer Hi-Bred Limited
Pioneer Brand 25R62	RED	77.3	58.1	14.7	97.7	60.9	12.8	101.9	56.5	13.4	90.5	62.1	11.7	Pioneer Hi-Bred Limited
Pioneer Brand 25W36	WHITE	76.0	58.8	16.5	90.0	61.3	13.4	95.0	57.9	14.2	92.1	63.1	12.3	Pioneer Hi-Bred Limited
Pioneer Brand 25W41	WHITE	76.9	59.2	16.9	92.3	62.7	13.8	93.5	58.7	14.9	86.8	63.0	12.2	Pioneer Hi-Bred Limited
Pioneer Brand 25W43	WHITE	73.0	57.8	17.8	91.4	62.3	14.1	93.8	57.2	14.8	91.3	62.6	12.4	Pioneer Hi-Bred Limited
Genesis 12 Exp	WHITE	68.3	57.4	16.8	97.2	62.1	13.6	88.3	56.3	15.2	84.2	63.2	11.9	Platinum Genetics LLC
Genesis R065	RED	81.8	59.6	17.7	95.0	63.8	13.9	102.1	59.6	16.1	90.5	64.5	12.7	Platinum Genetics LLC
Genesis R075	RED	86.3	59.8	17.9	93.9	63.2	14.2	101.5	59.1	15.7	89.4	63.3	12.5	Platinum Genetics LLC
Genesis R085	RED	75.8	59.8	19.5	83.5	62.9	14.3	97.1	60.1	17.6	84.1	64.1	12.9	Platinum Genetics LLC
RS 908	RED	82.4	59.6	17.3	92.9	63.6	14.2	100.8	59.7	15.5	91.3	63.9	12.4	Rupp Seeds, Inc.
RS 953	RED	80.6	59.9	16.8	86.6	63.4	14.2	97.8	59.8	15.9	86.5	63.4	12.6	Rupp Seeds, Inc.
RS 978	RED	77.5	58.3	16.2	91.7	62.2	13.3	101.4	58.6	14.6	92.5	62.1	11.7	Rupp Seeds, Inc.
McCormick	RED	64.4	60.4	17.9	86.2	62.8	13.5	84.0	60.5	17.4	74.0	65.2	12.8	Virginia Tech/Virginia Crop Improvement Association
VA01W-205	RED	75.1	60.8	16.6	95.7	62.6	13.4	95.4	60.1	15.9	83.4	64.2	12.3	Virginia Tech/Virginia Crop Improvement Association
VA03W-409	RED	76.9	58.4	17.1	88.8	62.1	14.3	97.7	57.1	17.8	84.9	62.1	12.4	Virginia Tech/Virginia Crop Improvement Association
VA03W-434	RED	67.5	58.7	17.7	82.6	63.7	14.1	89.5	56.6	17.0	84.3	61.9	12.5	Virginia Tech/Virginia Crop Improvement Association
<b>Trial Mean (2008=76 Entries)</b>		<b>75.3</b>	<b>58.9</b>	<b>0.2</b>	<b>90.5</b>	<b>62.6</b>	<b>13.8</b>	<b>96.6</b>	<b>58.2</b>	<b>15.7</b>	<b>86.9</b>	<b>63.2</b>	<b>12.3</b>	
<b>LSD (0.05)</b>		<b>7.3</b>	<b>0.8</b>	<b>0.6</b>	<b>9.4</b>	<b>1.4</b>	<b>0.9</b>	<b>5.6</b>	<b>1.1</b>	<b>1.2</b>	<b>5.9</b>	<b>1.6</b>	<b>0.4</b>	
<b>CV (%)</b>		<b>6.5</b>	<b>1.0</b>	<b>2.0</b>	<b>6.2</b>	<b>1.3</b>	<b>3.6</b>	<b>3.8</b>	<b>1.2</b>	<b>4.8</b>	<b>4.4</b>	<b>1.8</b>	<b>2.0</b>	