

2016 Michigan State Wheat Performance Trials

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Favorable weather conditions in fall, 2015, allowed farmers to harvest soybeans early which enabled early wheat planting. Most wheat fields had at least 2-4 tillers last fall, with some as high as 6. Winter temperatures were warmer than last year and allowed for wheat to survive the winter in good shape. Flowering took place approximately one week earlier than average. Early season moisture got the crop off to a great start, but was followed by an extended period of dry weather after flowering. The grain fill period was shortened somewhat by warm, dry conditions but overall yields and test weight were high. Periodic rain showers extended the 2016 harvest to as long as three weeks. Quality was very good with high falling numbers and low to non-existent DON levels.

Although overall disease pressure was low, several diseases were present in 2016. Powdery Mildew, Septoria and Stagonospora were active early in the growing season. The major disease affecting the Michigan wheat crop was Stripe Rust which became active in May. Some fields planted in susceptible varieties had very high infection levels. Farmers reported that susceptible varieties experienced yield losses of approximately 20%. The high level of infection allowed for rating of genetic resistance to Stripe Rust. This report contains accurate ratings that classify varieties as resistant (R), moderately resistant (MR), moderately susceptible (MS) and susceptible (S). Percent leaf area infected by Stripe Rust is also presented. These ratings will be useful in selecting varieties to plant as well as making fungicide management decisions.

Fusarium head blight infections were very low to non-existent in grower's fields. However, accurate ratings of Fhb severity, incidence and index are available in this report. It is important to note that the severity and index rating were conducted in an inoculated and misted disease nursery where disease pressure is intentionally high. Disease levels in this trial will always be higher than commercial fields.

Choosing Varieties

Variety selection is best made using at least three years of data. Varieties selected using data across all locations will likely perform well under a wide range of conditions. Although, performance of a given variety will vary based on testing location. In selecting varieties for a specific location, it is important to identify varieties that perform well near the location where the variety will be grown. Table 4 provides information on which varieties are top performers in each of the five trial locations in 2013 through 2016. Selection and planting of two or more varieties is recommended. As an example, planting varieties that differ in flowering date can allow for staggering of management applications, specifically, fungicides to control Fusarium head blight. When selecting varieties, look at disease resistance as well as yield potential.

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

Experimental

The 2016 State Wheat Performance Trial entries were planted at six sites in 5 counties: Huron, Ingham (2), Lenawee, Sanilac, and Tuscola. Appendix A (below) presents information on each of these sites. Each plot contained 6 rows with 7.5" row spacing and was planted to a length of 18 feet. Plots were trimmed to a length of 12 feet long in the spring for harvesting purposes. Sites were designed as an Alpha Lattice with three replications. 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 cooperators practice. Spring nitrogen was applied as urea (90 lbs/acre actual N) at green-up and Affinity BroadSpec was used for weed control at all sites.

All sites were coordinated under high management with the exception of two conventionally managed trials at Ingham and Tuscola counties. Under high management, an additional 30 pounds of nitrogen was applied using streamer bars and 28% N. Quilt Xcel was applied at Feekes 8.5 - 9 to control lower-canopy and early-season diseases. Prosaro was applied to control late season fungal diseases. The timing of the Prosaro application coincided with the average flowering date of the trial location.

All plots within a location were harvested on a single day. Yield was calculated using the entire area of the plot including the wheel tracks between plots leading to a highly conservative estimate of yield. For data reported on a 0-9 scale 0 is the best possible score.

Four 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. Funding for the high-management trial inputs was provided by the Michigan Wheat Program. Questions regarding the research reported here should be directed to Eric Olson at eolson@msu.edu or (517) 353-0142. This report and previous reports, may also be accessed through the Web at <http://www.varietytrials.msu.edu/wheat>.

Multi-Year Performance Summary

Tables 1 through 8 summarize performance of the trial. The full trial included 90 entries (26 of which were experimental lines) from 15 organizations, including Michigan State University, and data analyses were conducted using all of these entries. For ease of viewing, two versions of the report are available. The “commercial only” version (available online and in the “Michigan Farm News” publication) includes the data of 64 commercially available varieties from 14 organizations only. The “including experimentals” version (online only) includes all commercial and experimental lines. Attached to this narrative is a list of the names and contact information for those organizations. Each row 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, 2, 3, 7 and 8 are sorted first by entry grain color, and then in descending order by yield for 2016. In some instances (e.g. yield), data columns to the right of the 2016 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 the tables is the trial 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.

Table 1 contains data for yield, and test weight. This data was acquired electronically on the plot combine at the time of harvest. Yield data is standardized to 13.5% moisture. The 2016 yield data contains the multi-site yield averages of only the high management sites and does not include the conventionally managed yield data from Ingham and Tuscola County. The conventional managed single site data can be found on tables 5 and 6 under the “Ingham conventionally managed” and the “Tuscola conventionally managed” columns. Table 1 also contains grain color, chaff color, and degree of awnedness. For degree of awnedness, “Awnless” indicates no awns or awns only present at the tip of the spike, “Awnletted” (short awns on the spike), or “Awned” (long awns on the entire spike).

Table 1 also contains data on resistance to Fusarium Head Blight (FHB, scab). 2015 deoxynivalenol (DON, VOM) numbers are reported in Table 1 as well. Scab data were obtained from heavy disease pressure in an inoculated scab screening nursery. FHB infected grain is spread to provide inoculum and artificial misting provides disease-promoting conditions throughout the entire flowering period. 2016 grain samples will be submitted for DON analysis and will be reported later.

FHB Resistance Traits

Severity: The average percent of infected spikelets in each head.

Incidence: The percent of all spikes in a plot showing infection.

FHB index: The overall infection considering severity and incidence.

DON: Levels of mycotoxin (ppm) present in grain. DON data is from the 2015 and prior crop years.

Levels of DON mycotoxin and severity are the most reliable traits for selecting FHB-resistant varieties.

Table 2 contains data for visual sprout, lodging, flowering date, plant height, percent moisture at harvest and stripe rust evaluations.

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. Lodging is scored on 0 – 9 scale, where 0 represents all plants fully erect and 9 indicates the entire plot is lodged completely on the ground. Winter injury scores are from the 2014 growing season. The data on Pre-Harvest Sprouting (PHS) were generated experimentally. Spikes from two trial replicates were harvested at physiological maturity, after-ripened in the greenhouse for five days, periodically misted for three days to simulate rainfall, and placed at 100% humidity for three days. Three spikes were rated for visual sprouting. PHS is reported as extent of visual sprouting on a 0 to 9 scale with 0 indicating no sprouting and 9 indicating extensive sprouting of all spikelets.

Table 3 contains data for powdery mildew, leaf rust, winter injury scores, leaf blotch, cephalosporium stripe, wheat streak mosaic virus, barley yellow dwarf virus, and percent black point (tip) on the grain.

Disease scores are recorded as “0 = no visual symptoms of disease present” and “9 = severe visual symptoms of the disease”. Powdery mildew scores are based on observations of the entire plant including the flag leaf. The causal organism(s) of the leaf blotching were not identified, but were likely a combination of *Septoria tritici* and *Stagonospora nodorum*. Cephalosporium stripe is caused by *Cephalosporium gramineum* and causes distinct yellow stripes that may contain thin, brown streaks on leaf blades, sheaths and stems. Cephalosporium scores are based on observations of the entire plant including the flag leaf. Leaf rust, leaf blotch, cephalosporium stripe scores and the percent black point are data from 2015 and earlier. Winter injury and wheat streak mosaic virus scores were data collected in the 2014 growing season and barley yellow dwarf scores are from the 2013 growing season. Leaf rust scores are based on infection observations on the flag leaf. Black point is reported on a percentage basis (percent of seeds with visible black point).

Single Site Yield Performance Summary

Table 4 contains 2016 yield (adjusted to 13.5% moisture), as well as multi-year means, for entries in each of the five sites harvested for yield in 2016. Data on performance across multiple years is provided where available. Each row in the table represents a single entry in the test. It is recommended that multiple years of data in each location be used in variety selection decisions. Table 4 is sorted first by organization and then by variety.

High Management vs. Conventional Management Performance

Tables 5 & 6 provides a comparison of variety performance under intensive management and conventional management practices. Data on yield, test weight, grain moisture at harvest and lodging are provided from conventional management and high management trials at Ingham and Tuscola counties.

Milling and Baking Quality

Tables 7 & 8 contains data for milling and baking quality. Quality data are from the 2014 harvest season and prior. Data were generated by the USDA Eastern Soft Wheat Quality Laboratory in Wooster, Ohio on grain harvested from the Michigan 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. Percent protein in flour is adjusted at 14% moisture. Softness equivalent percent is the softness of the flour, with higher values indicating softer grained wheat. For cookie diameter, a larger diameter is better. Whole grain protein (%) and whole grain hardness are being reported with 0-100, and higher values indicating harder wheat. The quality lab test weight is not identical to the test weight at harvest due to grain drying and grain cleaning prior to quality laboratory test weight evaluation. Solvent Retention Capacity (SRC) can be conducted on flour using several different solvents and reflects different characteristics of flour quality. Water SRC is correlated to and intended to predict Farinograph water absorption. Sucrose SRC is a measure of pentosan content, which can strongly affect water absorption in baked products. Soft wheat flour for cookies typically have a target of 95% or less when used by the US baking industry for biscuits and crackers. Sodium carbonate SRC increases as starch damage due to milling increases. Normal values for good milling soft varieties are 68% or less. Lactic acid measures gluten strength with “weak” soft varieties having values below 85% and strong gluten soft varieties having values, typically, above 105% or 110%.

2016 Michigan State University Wheat Performance Trials

Appendix A. Trial Site Descriptions for 2016 MSU Wheat Performance Trials.

	FUSARIUM HEAD BLIGHT NURSERY	HURON COUNTY	INGHAM COUNTY		LENAWEE COUNTY	SANILAC COUNTY	TUSCOLA COUNTY	
			CONV. MANAGED	HIGH MANAGED			CONV. MANAGED	HIGH MANAGED
COOPERATOR	Michigan State University	Darwin Sneller	Charles Dietz		Woods Seed Farm	JGDM Farms	Stuart Bierlein	
NEAREST CITY	Lansing	Owenedale	Webberville		Britton	Sandusky	Reese	
PLANTING DATE	Oct. 7, 2015	Oct. 13, 2015	Sept. 30, 2015		Oct. 2, 2015	Oct. 1, 2015	Sept. 28, 2015	
HARVEST DATE	N/A	July 13, 2016	July 19, 2016		July 5, 2016	July 18, 2016	July 12, 2016	
SOIL TYPE	Capac loam, 0 to 4 percent slopes & Colwood-Brookston loams	Shebeon loam, 0 to 2 percent slopes	Capac loam, 0 to 4 percent slopes		Lenawee silty clay loam, 0 to 1 percent slopes	Parkhill loam and clay loam, 0 to 2 percent slopes	Tappan-Londo loams, 0 to 2 percent slopes	
PRE-PLANT FERTILIZER	None	150 lbs. MAP + 50 lbs. Potash + 50 lbs. AMS	300# 6-24-24		300# 9-23-30	225 lbs. 9-16-24 + 8.8% S	300# 13-8-24 +7% S + 0.83% Zn + 0.47% Mn + 0.13% Cu +0.13% B	
COMMENTS	Inoculated / Misted Fusarium Head Blight Screening Nursery.	Additional 30 lbs. Nitrogen And Fungicides Were Applied.	90 lbs. Nitrogen and No Fungicides Were Applied.	Additional 30 lbs. Nitrogen And Fungicides Were Applied.	Additional 30 lbs. Nitrogen And Fungicides Were Applied.	Additional 30 lbs. Nitrogen And Fungicides Were Applied.	90 lbs. Nitrogen and No Fungicides Were Applied.	Additional 30 lbs. Nitrogen And Fungicides Were Applied.
AVERAGE YIELD (BUSHELS / ACRE)	N/A	97.0	110.8	116.9	103.7	134.3	111.0	115.0
AVERAGE TEST WEIGHT (LBS. / BUSHEL)	N/A	58.4	58.0	58.4	59.1	60.2	58.6	58.7
AVERAGE PERCENT GRAIN MOISTURE AT HARVEST	N/A	12.5	12.5	12.3	13.9	13.2	12.6	13.0
2014 DATA RECORDED (NUMBER OF REPS)	%INC.(4); %SEV.(4); INDEX (4)		JDF (3); PLHT (3); S_Rust (3)	JDF (3); PLHT (3)	PM (3)		JDF (3); PLHT (3); S_Rust (3)	JDF (3); PLHT (3)

*DATA: **FD** – Flowering Date (Days Past Jan. 01), **PL_HT** - Plant Height in Inches, **LEAF_B** - Leaf Blotch Score (0-9), **CEPH** - Cephalosporium Stripe Score (0-9), **LODGE** - Lodging Score (0-9), **LRUST** - Leaf Rust Score (0-9), **PM** - Powdery Mildew Score (0-9), **%INC** - Percent Incidence of FHB, **%SEV** - Percent of Severity of FHB, **INDEX** - Product of the Incidence X Severity / 100

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

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.

Table 1 : Multi-Year Performance Summary (Note: Tables sorted by 2016 Yield, red wheat's grouped before white)

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Name				Yield: Bushels/Acre (Adjusted to 13.5% Moisture)				Test Weight: lbs/Bushel				Incidence (% of spikes)				FHB (Scab) : Field Observation											
				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Severity (% within spikes)				Index (% overall)				DON (ppm) in grain			
				2 YR		3 YR		4 YR		2 YR		3 YR		4 YR		2 YR		3 YR		4 YR		2 YR		3 YR		4 YR	
				2016	2015-16	2014-16	2013-16	2016	2015-16	2014-16	2013-16	2016	2015-16	2014-16	2013-16	2016	2015-16	2014-16	2013-16	2016	2015-16	2014-16	2013-16	2015	2014-15	2013-15	2012-15
SC 1315-15™	Red	Awned	White	112.9	----	----	----	60.5	----	----	----	28.3	----	----	----	25.0	----	----	----	6.7	----	----	----	----	----	----	
W 202	Red	Awned	White	112.8	----	----	----	60.3	----	----	----	28.3	----	----	----	29.4	----	----	----	8.4	----	----	----	----	----	----	
AgriMAXX 444	Red	Awned	White	112.7	108.0	----	----	58.2	58.3	----	----	18.3	50.4	----	----	30.4	26.0	----	----	5.6	11.7	----	----	2.7	----	----	----
RS 911	Red	Awned	White	112.5	104.7	----	----	58.6	58.8	----	----	30.0	63.2	----	----	33.3	24.7	----	----	10.0	12.7	----	----	4.9	----	----	----
VA12W-72	Red	Awned	White	112.1	----	----	----	58.6	----	----	----	41.7	----	----	----	33.3	----	----	----	14.6	----	----	----	----	----	----	
Sunburst	Red	Awnless	White	112.1	106.9	98.8	104.1	60.1	60.2	60.3	61.1	33.3	65.4	71.1	66.8	33.5	30.7	28.2	30.8	11.5	19.4	19.8	20.3	4.7	5.8	8.9	6.7
MCIA Red Dragon	Red	Awnless	White	111.8	106.3	101.9	107.3	58.6	58.6	58.7	58.9	26.7	57.1	63.1	50.7	18.5	22.8	28.8	33.2	5.4	14.6	20.1	17.3	4.1	4.1	7.4	5.6
Red Ruby	Red	Awned	White	111.7	102.5	97.0	99.8	60.2	59.4	59.5	59.7	35.0	66.9	74.6	67.7	40.5	36.7	37.7	40.9	16.0	24.3	28.3	27.2	9.6	9.7	15.0	11.3
MCIA Whale	Red	Awnless	White	111.5	107.1	101.7	106.9	58.7	58.3	58.1	58.9	30.0	60.0	61.9	55.7	33.3	37.5	36.3	36.9	10.8	24.7	24.4	22.7	6.6	11.4	14.1	----
SY 483	Red	Awnless	White	111.3	106.9	102.3	105.5	57.6	57.6	58.0	58.6	35.0	63.8	72.5	60.2	31.9	36.2	38.1	37.0	7.6	22.3	27.6	23.1	14.2	11.8	13.7	----
VA11W-106	Red	Awned	White	111.3	103.6	----	----	58.7	59.2	----	----	45.0	66.9	----	----	37.5	32.8	----	----	16.3	20.8	----	----	6.2	----	----	----
AgriMAXX 454	Red	Awned	White	111.2	----	----	----	58.4	----	----	----	38.3	----	----	----	32.1	----	----	----	12.6	----	----	----	----	----	----	----
Diener 496W	Red	Awnless	White	110.9	----	----	----	58.0	----	----	----	38.3	----	----	----	22.2	----	----	----	8.0	----	----	----	----	----	----	----
MCIA Harpoon	Red	Awnless	White	110.6	106.2	----	----	57.7	58.0	----	----	31.7	62.8	----	----	25.3	23.3	----	----	8.4	14.2	----	----	3.9	----	----	----
AgriMAXX 463	Red	Awnless	White	110.3	----	----	----	57.1	----	----	----	18.3	----	----	----	22.2	----	----	----	4.1	----	----	----	----	----	----	----
F1026R	Red	Awnletted	White	109.5	104.1	----	----	59.1	59.0	----	----	48.3	71.1	----	----	42.6	39.3	----	----	20.8	27.4	----	----	6.5	----	----	----
DF EX R J-15	Red	Awnless	White	109.2	----	----	----	57.5	----	----	----	18.3	----	----	----	21.5	----	----	----	3.9	----	----	----	----	----	----	----
Dyna-Gro WX16771	Red	Awned	White	108.2	----	----	----	59.0	----	----	----	50.0	----	----	----	22.6	----	----	----	11.4	----	----	----	----	----	----	----
Hopewell	Red	Awnletted	Bronze	107.0	101.4	96.3	100.4	58.9	58.7	58.9	59.4	48.3	69.2	70.3	59.7	44.4	41.8	41.9	41.7	21.9	28.3	29.4	24.7	8.3	7.4	11.1	8.5
L-241	Red	Awnletted	White	106.4	102.2	98.1	----	59.6	60.2	60.5	----	20.0	42.5	48.3	----	37.5	28.6	24.4	----	7.1	9.9	10.2	----	2.3	2.0	----	----
L 11528	Red	Awned	White	97.5	----	----	----	59.1	----	----	----	28.3	----	----	----	29.2	----	----	----	8.8	----	----	----	----	----	----	----
Jupiter	White	Awnletted	Bronze	119.9	111.2	103.4	107.8	58.1	57.9	58.0	58.4	50.0	73.8	70.8	62.2	48.1	40.8	39.0	38.1	24.3	28.5	26.6	22.5	8.7	7.9	9.2	7.1
DF EX W 25	White	Awnletted	White	116.6	----	----	----	59.5	----	----	----	46.7	----	----	----	33.3	----	----	----	17.6	----	----	----	----	----	----	----
Ambassador	White	Awnletted	White	114.5	107.5	101.5	106.3	58.5	57.1	57.1	57.4	36.7	66.5	75.2	65.5	54.8	52.6	54.7	56.2	19.9	34.1	41.0	36.7	14.5	14.1	20.1	15.2
Target	White	Awnless	White	113.8	----	----	----	59.3	----	----	----	60.0	----	----	----	48.1	----	----	----	28.7	----	----	----	----	----	----	----
Dyna-Gro 9242W	White	Awnletted	White	113.0	107.6	101.3	105.0	59.6	59.1	59.1	59.5	33.3	62.9	67.8	50.8	14.8	18.4	22.9	20.7	5.4	13.1	16.8	12.6	5.2	7.1	7.8	5.9
AC Mountain	White	Awnletted	White	113.0	104.8	100.1	102.5	58.1	57.5	58.1	58.2	41.7	69.0	74.3	60.7	44.8	46.9	47.2	46.3	18.6	32.9	35.1	28.9	8.9	11.0	12.9	9.8
Aubrey	White	Awnletted	White	111.9	105.3	98.2	101.1	59.9	59.9	59.9	60.0	33.3	56.1	59.9	52.2	40.7	33.5	34.3	37.8	14.6	17.8	19.9	17.8	11.1	9.7	11.9	8.9
MSU 6012	White	Awned	White	111.8	103.5	97.1	100.2	59.3	58.2	58.3	58.7	50.0	68.2	72.9	60.2	36.6	38.5	38.1	38.1	19.9	27.5	28.6	23.1	9.8	9.4	8.2	6.2
MCIA Venus	White	Awned	White	111.2	103.4	96.4	97.8	56.6	56.9	57.4	57.7	51.7	70.3	74.3	67.7	34.3	34.9	35.1	38.1	17.7	24.6	26.2	24.8	9.1	10.5	14.5	11.0
Francis	White	Awnletted	White	109.6	----	----	----	59.9	----	----	----	43.3	----	----	----	44.0	----	----	----	20.0	----	----	----	----	----	----	----
Skeet	White	Awnletted	White	108.6	104.1	----	----	59.2	58.2	----	----	43.3	63.6	----	----	33.3	40.4	----	----	14.8	27.2	----	----	10.0	----	----	----
HS EX15	White	Awned	White	108.5	----	----	----	59.6	----	----	----	38.3	----	----	----	25.0	----	----	----	9.8	----	----	----	----	----	----	----
Glacier	White	Awnletted	White	107.4	101.4	96.2	----	58.4	57.9	58.6	----	46.7	67.8	66.8	----	43.0	33.8	35.6	----	19.9	21.1	23.4	----	5.8	4.3	----	----
F1027	White	Awnless	White	105.4	101.2	----	----	60.8	59.9	----	----	65.0	77.5	----	----	37.5	33.2	----	----	24.2	25.2	----	----	7.0	----	----	----
Dyna-Gro 9491W	White	Awned	White	105.0	99.2	92.3	----	58.7	57.6	57.9	----	45.0	70.7	77.1	----	37.5	31.3	31.6	----	16.3	20.2	23.6	----	10.8	13.2	----	----
AgriMAXX EXP 1696W	White	Awnless	White	101.5	----	----	----	58.9	----	----	----	45.0	----	----	----	26.2	----	----	----	12.5	----	----	----	----	----	----	----
F2016	White	Awnletted	White	100.5	99.1	----	----	55.9	56.0	----	----	28.3	59.8	----	----	28.2	30.2	----	----	8.2	18.4	----	----	6.0	----	----	----
MEAN (2016 90 Entries)				113.4	106.5	101.2	104.8	58.9	58.5	58.7	58.9	39.0	63.7	67.9	59.3	33.8	31.5	32.5	34.6	13.7	19.5	22.2	20.7	6.6	7.5	10.6	8.3
LSD (0.05)				3.5	5.6	4.0	4.9	0.9	1.6	1.1	0.9	22.8	16.4	13.4	15.0	15.5	13.6	10.3	9.5	11.5	12.6	10.0	9.5	3.8	3.0	2.7	2.0
CV (%)				4.3	5.8	5.3	3.3	2.2	3.2	2.7	1.0	0.3	12.8	12.1	18.0	0.2	21.5	19.5	19.5	0.4	32.3	27.7	32.5	47.9	51.4	40.5	40.6

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

ir data are the most informative.

Table 2 : Multi-Year Performance Summary (Note: Tables sorted by 2016 Yield, red wheat's grouped before white)

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Name	Grain Color	Visual Sprout Score (0-9)	Lodging Score (0-9) (0=none)				Flowering Date (Days Past Jan. 1)				Plant Height (Inches)			Percent Grain Moisture at Harvest				Stripe Rust Evaluation		
		Multi-Yr Avg.	Multi-Year Averages				Multi-Year Averages				Multi-Year Avg.			Multi-Year Averages				Infection Type 2016	Percent Infection 2016	Class 2016
			3 YR	2 YR	3 YR	4 YR	2 YR	3 YR	4 YR	2016	2 YR	3 YR	4 YR	2016	2 YR	3 YR	4 YR			
			2014-16	2015-16	2014-16	2013-16	2015-16	2014-16	2013-16	2016	2015-16	2014-16	2013-16	2016	2015-16	2014-16	2013-16			
SY 100	Red	-----	4.0	-----	-----	-----	150.4	-----	-----	-----	36.5	-----	-----	12.5	-----	-----	-----	1	3.3	R
DF 105 R	Red	5.1	2.9	2.8	2.8	2.7	150.0	149.4	151.1	151.5	36.9	33.1	32.9	12.1	13.2	13.5	13.1	1	1.7	R
AgriMAXX 438	Red	2.3	3.0	4.6	6.1	5.8	150.2	149.8	151.9	152.6	38.8	36.1	35.7	13.2	14.7	15.4	14.7	3	5.0	MR
Pioneer Brand 25R40	Red	5.1	3.5	3.3	2.6	2.6	150.5	150.0	152.1	152.9	34.5	31.6	31.4	12.7	13.6	13.9	13.6	3	5.0	MR
DF 112 R	Red	5.5	3.5	3.5	3.3	4.0	150.2	149.5	151.5	152.2	37.1	33.4	33.2	12.1	13.2	13.7	13.3	4	5.0	MR
L 11418	Red	-----	4.3	-----	-----	-----	150.0	-----	-----	-----	38.4	-----	-----	12.9	-----	-----	-----	6	24.2	MS
Pioneer Brand 25R25	Red	1.8	2.3	3.4	-----	-----	151.4	150.8	-----	-----	36.5	33.8	-----	13.1	14.8	-----	-----	3	5.0	MR
AgriMAXX 413	Red	5.0	3.5	3.3	3.1	3.0	150.4	149.6	151.4	151.8	36.3	33.0	32.8	12.2	13.1	13.4	13.1	1	0.8	R
AgriMAXX 464	Red	-----	3.2	-----	-----	-----	149.9	-----	-----	-----	39.8	-----	-----	12.6	-----	-----	-----	5	23.0	MR
DF 109 R	Red	1.6	2.7	5.0	5.1	5.6	150.5	150.0	152.0	153.0	38.5	36.0	35.4	12.9	14.4	15.2	14.5	5	5.0	MR
W 304	Red	-----	2.7	-----	-----	-----	150.4	-----	-----	-----	38.3	-----	-----	13.0	-----	-----	-----	7	23.3	S
W 204	Red	5.2	1.8	-----	-----	-----	150.0	-----	-----	-----	37.3	-----	35.2	13.0	-----	-----	-----	6	36.7	MS
SC 1325-15™	Red	-----	2.3	-----	-----	-----	150.0	-----	-----	-----	36.4	-----	-----	13.0	-----	-----	-----	7	41.7	S
W 307	Red	-----	1.7	-----	-----	-----	152.2	-----	-----	-----	32.6	-----	-----	14.8	-----	-----	-----	5	11.7	MR
Diener 491W	Red	4.7	2.2	2.1	1.7	-----	150.0	149.4	151.2	-----	36.6	33.4	33.2	12.4	13.4	13.9	-----	6	28.3	MS
Dyna-Gro 9552	Red	3.7	2.7	2.4	-----	-----	150.9	150.3	-----	-----	36.5	33.4	-----	12.7	13.6	-----	-----	4	5.0	MR
Dyna-Gro Shirley	Red	2.3	2.7	2.6	2.3	2.2	151.2	150.8	152.8	153.9	34.8	32.2	31.6	13.0	13.9	14.2	13.9	7	46.7	S
HS 284R	Red	3.5	3.8	4.9	4.2	3.9	150.4	150.0	151.7	152.4	43.7	39.0	38.6	12.4	13.3	13.7	13.4	6	34.2	MS
Dyna-Gro 9772	Red	-----	3.2	-----	-----	-----	149.9	-----	-----	-----	39.0	-----	-----	12.6	-----	-----	-----	6	19.2	MS
DF EX R J-55	Red	-----	3.5	-----	-----	-----	151.9	-----	-----	-----	36.7	-----	-----	12.8	-----	-----	-----	0	0.0	R
SC EXP 142™	Red	-----	2.9	-----	-----	-----	150.0	-----	-----	-----	38.6	-----	-----	12.5	-----	-----	-----	5	13.3	MR
LCS 3677	Red	1.9	3.7	3.4	-----	-----	150.0	149.3	-----	-----	40.0	35.4	-----	12.9	13.7	-----	-----	6	26.7	MS
Dyna-Gro 9522	Red	3.3	4.0	3.8	-----	-----	150.5	150.6	-----	-----	37.3	34.4	-----	12.9	14.2	-----	-----	5	5.0	MR
RS 972	Red	2.8	2.5	4.8	5.1	5.4	150.4	150.1	152.3	153.1	38.0	35.4	35.1	13.3	14.9	15.5	14.8	2	4.0	R
Pioneer Brand 25R50	Red	1.3	1.9	1.8	-----	-----	151.0	150.8	-----	-----	35.1	32.3	-----	12.5	13.2	-----	-----	6	8.3	MS
Dyna-Gro 9692	Red	4.3	2.7	4.0	-----	-----	150.4	149.9	-----	-----	38.0	35.2	-----	13.1	14.1	-----	-----	7	17.5	S
DF 111 R	Red	3.3	2.4	2.7	2.5	2.7	151.5	150.5	152.4	152.9	36.9	34.9	35.2	12.8	13.9	14.5	13.9	8	51.7	S
W 206	Red	4.6	2.5	2.5	2.3	2.1	150.5	149.9	151.9	152.4	38.4	35.4	35.1	12.5	13.7	14.2	13.9	7	20.0	S
Exp DEI 16098	Red	-----	3.4	-----	-----	-----	150.5	-----	-----	-----	41.3	-----	-----	13.8	-----	-----	-----	6	33.3	MS
RS 910	Red	4.6	2.2	3.0	-----	-----	150.5	150.0	-----	-----	37.8	35.0	-----	12.5	13.7	-----	-----	6	21.7	MS
LCS 2214	Red	2.9	2.8	3.9	-----	-----	149.5	149.0	-----	-----	37.6	33.9	-----	12.9	13.6	-----	-----	4	6.3	MR
W 303	Red	-----	3.2	-----	-----	-----	151.3	-----	-----	-----	36.1	-----	-----	12.9	-----	-----	-----	6	14.2	MS
Hilliard	Red	4.3	3.0	2.7	-----	-----	150.0	149.8	-----	-----	39.5	35.6	-----	12.6	13.7	-----	-----	3	5.0	MR
SC 1335-15™	Red	-----	2.4	-----	-----	-----	150.2	-----	-----	-----	37.3	-----	-----	12.4	-----	-----	-----	6	10.0	MS
SC 13526™	Red	-----	2.9	-----	-----	-----	150.2	-----	-----	-----	37.4	-----	-----	13.0	-----	-----	-----	7	37.5	S
DF 114 R	Red	2.8	2.7	3.8	-----	-----	150.4	149.7	-----	-----	38.4	35.4	-----	13.2	14.2	-----	-----	7	41.7	S
MCIA 7002012	Red	3.9	4.0	3.8	3.7	3.7	150.2	150.1	152.0	152.6	40.5	37.3	35.8	13.8	15.6	16.0	15.2	7	47.5	S
HS 30.06	Red	-----	2.7	-----	-----	-----	150.7	-----	-----	-----	37.7	-----	-----	13.1	-----	-----	-----	8	23.3	S
MCIA Red Devil	Red	2.4	2.7	3.9	3.3	3.0	151.2	150.5	152.2	153.0	39.1	36.0	35.2	12.5	13.4	13.9	13.5	4	5.0	MR
L-334	Red	2.5	7.2	7.3	6.0	-----	151.0	150.2	151.9	-----	41.5	37.1	36.1	13.2	14.3	14.7	-----	4	5.8	MR
Equity Brand Butler	Red	-----	1.9	-----	-----	-----	152.2	-----	-----	-----	38.9	-----	-----	13.6	-----	-----	-----	4	5.0	MR
Pioneer Brand 25R46	Red	-----	2.5	-----	-----	-----	150.3	-----	-----	-----	36.6	-----	-----	13.0	-----	-----	-----	8	38.3	S

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

ir data are the most informative.

Table 2 : Multi-Year Performance Summary (Note: Tables sorted by 2016 Yield, red wheat's grouped before white)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Visual Sprout Score (0-9)	Lodging Score (0-9) (0=none)				Flowering Date (Days Past Jan. 1)				Plant Height (Inches)			Percent Grain Moisture at Harvest				Stripe Rust Evaluation		
		Multi-Yr Avg.	Multi-Year Averages				Multi-Year Averages				Multi-Year Avg.			Multi-Year Averages				Infection Type 2016	Percent Infection 2016	Class 2016
			3 YR 2014-16	2 YR 2015-16	3 YR 2014-16	4 YR 2013-16	2 YR 2015-16	3 YR 2014-16	4 YR 2013-16	2016	2 YR 2015-16	3 YR 2014-16	4 YR 2013-16	2016	2 YR 2015-16	3 YR 2014-16	4 YR 2013-16			
			2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016	2016			
SC 1315-15™	Red	-----	3.4	-----	-----	-----	149.9	-----	-----	-----	38.8	-----	-----	12.8	-----	-----	-----	6	14.0	MS
W 202	Red	-----	4.2	-----	-----	-----	150.2	-----	-----	-----	39.9	-----	-----	13.1	-----	-----	-----	5	11.3	MR
AgriMAXX 444	Red	2.6	3.5	3.4	-----	-----	151.0	150.5	-----	-----	36.8	34.3	-----	13.1	14.2	-----	-----	3	5.0	MR
RS 911	Red	3.9	2.8	3.8	-----	-----	150.5	149.9	-----	-----	37.3	34.7	-----	13.0	14.2	-----	-----	7	36.7	S
VA12W-72	Red	-----	3.0	-----	-----	-----	149.7	-----	-----	-----	37.2	-----	-----	12.4	-----	-----	-----	0	0.8	R
Sunburst	Red	1.1	1.7	1.9	1.6	1.5	152.3	151.5	153.3	154.3	33.3	30.9	30.5	14.8	15.6	15.9	15.3	5	14.2	MR
MCIA Red Dragon	Red	3.5	3.2	4.6	4.3	3.8	150.5	149.9	151.7	152.5	42.6	38.6	38.2	12.5	13.2	13.5	13.3	4	31.7	MR
Red Ruby	Red	4.1	3.7	3.0	3.0	3.0	151.0	150.3	152.5	153.4	39.7	35.6	35.1	13.0	13.9	14.4	13.9	7	50.0	S
MCIA Whale	Red	2.3	1.7	2.2	2.2	2.2	151.7	151.7	153.7	154.8	38.3	35.4	35.4	13.3	14.6	15.5	15.0	6	6.0	MS
SY 483	Red	1.7	3.4	4.0	3.3	3.2	151.5	151.4	153.7	154.5	37.6	35.1	34.8	14.1	14.9	15.6	14.9	1	1.7	R
VA11W-106	Red	3.5	3.0	3.7	-----	-----	150.5	149.9	-----	-----	35.0	32.8	-----	12.5	13.6	-----	-----	3	4.2	MR
AgriMAXX 454	Red	-----	2.9	-----	-----	-----	150.5	-----	-----	-----	37.9	-----	-----	13.1	-----	-----	-----	7	29.2	S
Diener 496W	Red	-----	3.2	-----	-----	-----	150.4	-----	-----	-----	37.4	-----	-----	12.2	-----	-----	-----	2	5.0	R
MCIA Harpoon	Red	2.8	1.5	1.7	-----	-----	149.9	149.6	-----	-----	36.4	33.2	-----	11.9	13.0	-----	-----	2	2.5	R
AgriMAXX 463	Red	-----	1.9	-----	-----	-----	150.0	-----	-----	-----	37.5	-----	-----	12.1	-----	-----	-----	5	5.0	MR
F1026R	Red	4.5	2.4	3.4	-----	-----	151.7	151.6	-----	-----	36.4	33.2	-----	12.8	13.9	-----	-----	7	33.3	S
DF EX R J-15	Red	-----	1.8	-----	-----	-----	150.4	-----	-----	-----	36.5	-----	-----	12.1	-----	-----	-----	4	8.0	MR
Dyna-Gro WX16771	Red	-----	3.0	-----	-----	-----	150.2	-----	-----	-----	35.1	-----	-----	13.9	-----	-----	-----	2	3.3	R
Hopewell	Red	3.0	2.8	3.5	3.1	2.8	151.5	150.7	152.6	153.2	42.3	38.2	37.4	13.1	13.6	13.8	13.5	7	19.2	S
L-241	Red	2.2	7.4	7.0	6.3	-----	149.7	149.3	150.8	-----	41.5	36.7	36.1	13.1	13.7	14.3	-----	7	19.2	S
L 11528	Red	-----	6.2	-----	-----	-----	150.2	-----	-----	-----	44.4	-----	-----	14.5	-----	-----	-----	1	1.7	R
Jupiter	White	5.8	2.7	2.8	2.4	2.5	152.0	152.0	153.8	154.6	35.0	31.9	32.0	13.9	14.1	14.2	13.7	4	15.8	MR
DF EX W 25	White	-----	2.3	-----	-----	-----	151.4	-----	-----	-----	36.1	-----	-----	13.4	-----	-----	-----	5	8.8	MR
Ambassador	White	5.1	3.2	3.5	3.4	3.0	150.5	150.1	152.1	152.9	38.3	34.8	34.5	12.2	12.5	12.9	12.7	7	39.0	S
Target	White	-----	3.7	-----	-----	-----	150.9	-----	-----	-----	42.9	-----	-----	12.6	-----	-----	-----	2	2.5	R
Dyna-Gro 9242W	White	4.3	3.0	3.0	2.7	2.6	151.4	150.9	152.4	153.4	39.5	35.1	34.6	13.1	13.6	14.0	13.6	5	36.7	MR
AC Mountain	White	5.7	2.9	5.1	6.0	6.2	151.5	151.0	153.1	153.9	41.7	39.8	39.0	12.8	13.1	13.5	13.1	6	19.2	MS
Aubrey	White	6.2	3.8	3.9	3.3	3.3	149.9	149.6	151.5	152.3	43.6	37.0	35.7	13.2	13.6	14.0	13.6	7	21.7	S
MSU 6012	White	5.7	3.9	4.0	3.3	3.5	150.9	150.8	152.9	153.4	37.8	34.4	33.4	12.1	12.9	13.3	13.0	6	6.7	MS
MCIA Venus	White	4.7	7.5	6.3	4.9	4.4	149.2	148.9	151.2	152.2	43.0	37.5	36.4	12.2	13.4	13.9	13.5	3	2.5	MR
Francis	White	-----	6.2	-----	-----	-----	151.0	-----	-----	-----	46.3	-----	-----	13.8	-----	-----	-----	7	20.8	S
Skeet	White	5.0	4.2	5.0	-----	-----	150.5	150.0	-----	-----	43.9	38.3	-----	13.2	13.5	-----	-----	7	29.2	S
HS EX15	White	-----	2.8	-----	-----	-----	150.7	-----	-----	-----	39.4	-----	-----	13.1	-----	-----	-----	6	56.7	MS
Glacier	White	4.6	2.5	4.5	4.5	-----	152.5	152.7	154.4	-----	39.4	37.7	36.5	13.6	14.3	14.8	-----	6	27.0	MS
F1027	White	6.3	2.2	2.1	-----	-----	151.0	150.5	-----	-----	34.8	31.5	-----	13.2	13.9	-----	-----	7	48.0	S
Dyna-Gro 9491W	White	6.9	2.5	2.2	1.9	-----	151.2	150.5	152.5	-----	36.4	32.9	32.2	13.0	14.3	14.9	-----	8	81.7	S
AgriMAXX EXP 1696W	White	-----	3.7	-----	-----	-----	152.0	-----	-----	-----	35.3	-----	-----	14.8	-----	-----	-----	8	36.7	S
F2016	White	3.7	3.7	5.1	-----	-----	153.2	152.6	-----	-----	37.5	36.7	-----	15.3	16.5	-----	-----	7	55.8	S
MEAN (2016 90 Entries)		3.8	3.2	3.6	3.6	3.4	150.6	150.3	152.3	153.1	38.4	35.0	34.8	13.0	13.9	14.3	13.8	5	20.3	-----
LSD (0.05)		-----	1.2	1.1	2.1	1.7	0.5	0.4	0.4	0.8	1.5	0.9	0.8	0.3	0.6	0.5	0.8	-----	-----	-----
CV (%)		-----	32.0	35.0	36.3	35.0	0.3	0.3	0.3	0.3	3.4	2.9	2.9	3.7	4.8	5.0	3.9	-----	-----	-----

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.
MSU makes no endorsement of any variety or brand.

Table 3 : Multi-Year Performance Summary (Note: Tables sorted by 2016 Yield, red wheat's grouped before white)

Name	Grain Color	Powdery Mildew Score (0-9)				Leaf Rust Score (0-9)			Winter Injury Score (1-5) 2014	Leaf Blotch Score (0-9)		Cephalosporium Stripe Score (0-9) 2015	Wheat Streak Mosaic Virus Score (0-9) 2014	Barley Yellow Dwarf Score (0-9) 2013	Black Point (tip) Percent			
		Multi-Year Avg.				Multi-Year Avg.				Multi-Year					Multi-Year Averages			
		2016	2 YR 2015-16	3 YR 2014-16	4 YR 2013-16	2015	2 YR 2014-15	3 YR 2013-15		2015	2 YR 2014-15				2015	2 YR 2014-15	3 YR 2013-15	4 YR 2012-15
SC 1315-15™	Red	4.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
W 202	Red	3.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
AgriMAXX 444	Red	3.7	2.6	----	----	2.6	----	----	----	5.3	----	4.0	----	----	16.8	----	----	----
RS 911	Red	5.3	4.1	----	----	5.9	----	----	----	3.7	----	4.1	----	----	37.4	----	----	----
VA12W-72	Red	0.7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Sunburst	Red	0.7	1.0	1.2	0.9	2.1	1.7	1.7	1.4	7.0	4.9	1.9	5.0	2.5	22.0	26.5	21.9	17.5
MCIA Red Dragon	Red	2.3	2.0	2.7	2.8	5.0	4.4	3.2	1.0	5.1	4.1	4.5	4.3	1.2	10.6	13.5	15.7	12.6
Red Ruby	Red	2.0	1.0	1.9	1.4	4.1	4.2	2.9	1.6	7.8	5.6	7.4	4.3	0.9	17.9	24.8	21.3	17.5
MCIA Whale	Red	4.0	4.7	5.8	5.3	0.0	0.5	0.3	1.1	4.6	3.5	3.5	5.7	2.0	38.9	33.8	35.7	----
SY 483	Red	1.0	1.1	1.8	1.6	6.5	4.6	3.2	1.3	6.0	4.5	2.6	4.3	1.0	23.6	38.9	32.8	----
VA11W-106	Red	2.0	1.1	----	----	0.3	----	----	----	5.2	----	5.3	----	----	45.9	----	----	----
AgriMAXX 454	Red	6.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Diener 496W	Red	2.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MCIA Harpoon	Red	2.7	1.5	----	----	0.2	----	----	----	4.8	----	4.0	----	----	5.8	----	----	----
AgriMAXX 463	Red	2.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F1026R	Red	2.7	2.7	----	----	1.9	----	----	----	5.8	----	4.8	----	----	36.2	----	----	----
DF EX R J-15	Red	3.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dyna-Gro WX16771	Red	4.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hopewell	Red	1.7	0.9	1.9	1.7	4.9	4.6	3.3	1.1	6.6	4.8	4.1	4.7	3.5	12.8	8.9	9.5	7.8
L-241	Red	4.7	4.1	5.6	----	2.5	2.3	----	1.0	4.2	4.3	1.6	3.0	----	7.1	7.6	----	----
L 11528	Red	5.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Jupiter	White	2.0	1.3	2.5	2.6	5.1	5.4	3.6	1.6	5.3	4.0	4.5	3.0	0.8	12.6	9.2	9.4	8.0
DF EX W 25	White	3.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ambassador	White	3.3	1.7	2.4	1.8	5.9	5.0	3.5	1.1	7.2	5.5	5.6	6.7	2.1	24.6	17.3	14.4	11.7
Target	White	2.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dyna-Gro 9242W	White	3.0	2.2	3.1	2.3	4.8	4.1	3.2	1.3	4.9	4.0	1.9	6.7	2.7	10.2	14.8	14.0	11.0
AC Mountain	White	3.0	2.5	2.6	2.2	4.4	3.9	2.7	1.0	5.7	4.2	2.0	5.0	3.1	27.3	24.2	20.1	16.6
Aubrey	White	2.0	1.0	1.3	1.0	2.5	1.9	1.3	1.0	4.8	4.1	3.0	4.0	2.7	13.8	16.0	14.2	10.9
MSU 6012	White	2.7	1.8	2.5	1.9	8.9	6.6	4.9	2.0	6.5	4.1	4.2	3.7	0.2	8.8	13.5	12.0	9.5
MCIA Venus	White	2.7	1.6	1.8	1.3	2.5	2.6	1.8	3.1	5.8	4.8	3.6	7.3	0.0	5.9	9.9	9.3	7.3
Francis	White	1.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Skeet	White	2.0	1.3	----	----	3.6	----	----	----	5.6	----	5.4	----	----	22.9	----	----	----
HS EX15	White	0.3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Glacier	White	0.0	0.2	0.8	----	5.0	4.2	----	1.1	3.0	2.4	4.0	6.3	----	21.7	28.6	----	----
F1027	White	2.0	1.1	----	----	3.8	----	----	----	5.8	----	4.6	----	----	33.8	----	----	----
Dyna-Gro 9491W	White	0.7	0.6	1.2	----	0.5	0.6	----	1.1	5.8	4.8	5.0	3.0	----	11.8	23.6	----	----
AgriMAXX EXP 1696W	White	5.0	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F2016	White	4.7	3.8	----	----	4.3	----	----	----	5.2	----	3.0	----	----	20.6	----	----	----
MEAN (2016 90 Entries)		2.8	2.0	2.5	2.1	3.0	3.0	2.6	1.4	5.3	4.1	4.2	4.6	1.9	57.4	48.3	45.2	45.3
LSD (0.05)		1.3	1.8	1.5	1.2	1.6	1.9	2.0	0.5	1.1	1.5	1.6	1.3	1.1	0.0	13.8	10.1	8.4
CV (%)		35.4	45.7	36.1	41.4	39.0	31.4	48.6	44.8	18.6	17.7	32.5	20.4	33.8	22.2	24.6	23.1	15.5

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.

Table 4 : Single Site: Multi-Year Yield Performance Summary (Note: Tables sorted alphabetically by organization/entry name)

MSU makes no endorsement of any variety or brand.

Grain	Color	HURON Yield: Bushels/Acre (Adjusted to 13.5% Moisture)						INGHAM Yield: Bushels/Acre (Adjusted to 13.5% Moisture)						LENAWEE Yield: Bushels/Acre (Adjusted to 13.5% Moisture)				SANILAC Yield: Bushels/Acre (Adjusted to 13.5% Moisture)				TUSCOLA Yield: Bushels/Acre (Adjusted to 13.5% Moisture)									
		Multi-Year Averages						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		2 YR		3 YR		2 YR		3 YR		2 YR		3 YR			
Name		2016	RANK	2015-16	RANK	2014-16	RANK	2015	RANK	2014-15	RANK	2013-15	RANK	2015	RANK	2014-15	RANK	2015	RANK	2014-15	RANK	2015	RANK	2014-15	RANK	2015	RANK	2014-15	RANK	2013-15	RANK
AgriMAXX 413	Red	100.9	13	100.5	25	95.3	17	121.3	25	106.5	13	103.1	5	106.4	36	93.3	25	143.4	7	132.5	2	125.3	2	117.8	4	111.6	3				
AgriMAXX 438	Red	98.4	27	103.4	13	100.6	5	127.4	4	107.8	11	100.7	7	112.9	11	94.2	22	144.3	4	129.9	4	125.0	3	120.4	2	113.2	1				
AgriMAXX 444	Red	91.4	61	101.4	21	-----		115.5	48	101.5	29	-----		98.2	61	94.3	21	140.7	17	129.1	7	117.7	25	113.8	15	-----					
AgriMAXX 454	Red	93.8	52	-----		-----		115.8	47	-----		-----		99.8	58	-----		132.9	46	-----		113.9	47	-----		-----					
AgriMAXX 463	Red	96.1	42	-----		-----		113.8	54	-----		-----		96.4	65	-----		132.7	47	-----		112.5	54	-----		-----					
AgriMAXX 464	Red	103.7	4	-----		-----		123.2	16	-----		-----		110.9	20	-----		141.3	13	-----		115.5	38	-----		-----					
AgriMAXX EXP 1696W	White	88.7	70	-----		-----		105.6	73	-----		-----		90.9	74	-----		118.2	73	-----		104.1	72	-----		-----					
Diener 491W	Red	99.2	21	103.2	14	100.1	8	121.0	26	109.2	6	103.4	4	113.6	9	99.8	5	137.3	27	126.4	14	118.9	15	113.1	20	109.5	7				
Diener 496W	Red	92.8	56	-----		-----		110.5	62	-----		-----		106.6	34	-----		131.8	50	-----		112.6	53	-----		-----					
Ambassador	White	103.3	7	112.5	2	105.0	1	108.8	63	92.7	42	90.1	26	112.2	15	96.2	13	131.8	50	126.5	13	116.5	32	109.7	35	103.4	20				
Aubrey	White	102.2	10	107.7	5	99.7	9	111.4	61	91.1	44	84.3	30	98.2	61	91.8	29	134.3	36	126.0	17	113.6	48	109.9	34	103.4	20				
DF 105 R	Red	105.6	1	104.8	10	99.3	10	128.9	3	103.7	21	99.5	11	117.2	3	101.4	4	141.2	14	126.4	14	123.5	7	114.1	13	108.5	10				
DF 109 R	Red	94.8	48	95.6	36	94.7	19	124.1	14	103.1	24	98.5	15	111.4	17	95.8	15	141.1	15	131.1	3	121.2	9	115.5	7	110.3	5				
DF 111 R	Red	100.6	14	103.4	13	97.3	11	127.0	6	104.2	18	100.0	9	101.5	51	96.3	12	130.0	57	121.7	30	120.7	11	113.3	18	109.3	8				
DF 112 R	Red	101.7	12	108.5	4	100.8	4	121.8	23	102.4	26	99.4	12	112.6	13	102.6	2	143.8	5	133.8	1	127.0	1	119.3	3	112.2	2				
DF 114 R	Red	91.1	63	88.9	46	-----		122.4	21	109.4	5	-----		105.6	38	92.9	26	138.0	24	129.5	5	115.4	39	115.3	9	-----					
DF EX R J-15	Red	88.6	71	-----		-----		111.8	59	-----		-----		101.5	51	-----		126.7	64	-----		117.6	26	-----		-----					
DF EX R J-55	Red	97.7	32	-----		-----		117.9	37	-----		-----		117.5	2	-----		129.4	58	-----		120.9	10	-----		-----					
DF EX W 25	White	102.6	9	-----		-----		123.0	18	-----		-----		104.5	42	-----		134.2	37	-----		118.6	17	-----		-----					
Francis	White	96.5	39	-----		-----		112.1	57	-----		-----		100.3	54	-----		129.2	60	-----		109.8	64	-----		-----					
Skeet	White	96.7	38	104.6	11	-----		107.1	68	89.5	46	-----		99.9	57	89.1	34	128.8	61	126.1	16	110.5	61	110.9	31	-----					
Target	White	105.3	2	-----		-----		120.9	27	-----		-----		91.0	73	-----		133.5	42	-----		118.3	20	-----		-----					
Equity Brand Butler	Red	94.2	51	-----		-----		119.5	32	-----		-----		100.2	55	-----		134.7	34	-----		116.4	33	-----		-----					
Exp DEI 16098	Red	99.1	22	-----		-----		116.1	45	-----		-----		110.7	22	-----		135.0	33	-----		117.0	30	-----		-----					
Pioneer Brand 25R25	Red	100.9	13	104.4	12	-----		120.0	29	100.8	31	-----		116.0	5	96.2	13	142.0	12	127.6	10	120.7	11	115.2	10	-----					
Pioneer Brand 25R40	Red	98.9	24	98.4	28	97.1	12	127.0	6	109.6	3	104.3	3	112.8	12	101.8	3	149.0	2	129.3	6	120.5	12	115.9	6	108.6	9				
Pioneer Brand 25R46	Red	95.8	43	-----		-----		117.0	41	-----		-----		109.8	24	-----		132.3	49	-----		110.0	63	-----		-----					
Pioneer Brand 25R50	Red	96.3	40	97.9	30	-----		115.3	50	103.4	22	-----		114.6	8	97.7	8	137.9	25	123.7	23	117.5	27	113.0	21	-----					
Dyna-Gro 9242W	White	96.3	40	99.8	26	96.7	14	120.4	28	109.0	8	99.7	10	97.0	64	92.2	27	133.8	39	126.2	15	117.7	25	110.9	31	103.9	19				
Dyna-Gro 9491W	White	93.5	53	97.8	31	90.4	27	105.9	71	95.8	39	91.3	24	94.8	70	82.4	41	127.6	63	116.7	36	103.4	73	103.0	43	94.6	30				
Dyna-Gro 9522	Red	92.2	57	101.6	19	-----		123.1	17	102.3	27	-----		111.5	16	94.2	22	137.1	28	124.8	20	117.6	26	115.4	8	-----					
Dyna-Gro 9552	Red	93.1	55	96.0	33	-----		125.7	9	113.6	1	-----		109.7	25	97.5	9	142.5	9	128.5	8	118.5	18	114.7	12	-----					
Dyna-Gro 9692	Red	99.7	17	97.0	32	-----		124.4	13	111.2	2	-----		103.6	47	91.8	29	136.6	29	121.9	29	116.9	31	117.3	5	-----					
Dyna-Gro 9772	Red	100.9	13	-----		-----		119.2	33	-----		-----		115.9	6	-----		136.0	30	-----		112.9	52	-----		-----					
Dyna-Gro Shirley	Red	103.2	8	113.1	1	100.4	6	124.0	15	97.5	37	90.7	25	111.0	19	95.0	18	126.4	65	119.2	33	124.5	5	111.8	26	100.2	28				
Dyna-Gro WX16771	Red	95.6	44	-----		-----		106.7	69	-----		-----		88.7	77	-----		133.7	40	-----		116.3	34	-----		-----					
Glacier	White	98.6	25	102.1	16	97.0	13	105.8	72	90.9	45	85.7	29	96.4	65	88.5	36	123.7	67	117.8	35	112.3	56	107.5	39	102.8	23				
HS 284R	Red	100.0	16	91.1	45	90.9	26	114.3	53	100.5	32	97.2	18	115.7	7	102.7	1	140.9	16	128.5	8	116.5	32	112.0	25	106.7	15				
HS 30.06	Red	90.6	65	-----		-----		125.5	10	-----		-----		103.7	46	-----		130.8	53	-----		117.2	29	-----		-----					
HS EX15	White	94.6	49	-----		-----		104.3	74	-----		-----		106.5	35	-----		128.5	62	-----		108.8	68	-----		-----					
L 11418	Red	99.4	19	-----		-----		122.6	20	-----		-----		120.9	1	-----		142.1	11	-----		120.7	11	-----		-----					
L 11528	Red	85.8	72	-----		-----		103.8	75	-----		-----		75.5	80	-----		123.4	68	-----		99.2	76	-----		-----					

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.

Table 4 : Single Site: Multi-Year Yield Performance Summary (Note: Tables sorted alphabetically by organization/entry name)

MSU makes no endorsement of any variety or brand.

Grain Name	Color	HURON Yield: Bushels/Acre (Adjusted to 13.5% Moisture)						INGHAM Yield: Bushels/Acre (Adjusted to 13.5% Moisture)						LENAWEE Yield: Bushels/Acre (Adjusted to 13.5% Moisture)				SANILAC Yield: Bushels/Acre (Adjusted to 13.5% Moisture)				TUSCOLA Yield: Bushels/Acre (Adjusted to 13.5% Moisture)							
		Multi-Year Averages						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		2 YR			3 YR				
		2016	RANK	2015-16	RANK	2014-16	RANK	2015	RANK	2014-15	RANK	2013-15	RANK	2015	RANK	2014-15	RANK	2015	RANK	2014-15	RANK	2015	RANK	2014-15	RANK	2015	RANK	2014-15	RANK
L-241	Red	92.2	57	93.7	42	92.0	24	101.8	76	95.2	41	89.5	27	101.7	50	94.0	23	130.2	55	121.2	31	106.1	71	106.9	41	103.2	21		
L-334	Red	100.4	15	98.2	29	96.4	15	119.6	31	100.3	33	93.0	23	106.7	33	96.9	10	131.8	50	124.5	21	108.8	68	111.2	29	106.3	16		
LCS 2214	Red	99.4	19	101.9	17	-----		112.0	58	108.4	10	-----		113.1	10	98.6	7	133.6	41	125.2	19	116.2	35	109.5	36	-----			
LCS 3677	Red	99.2	21	101.8	18	-----		121.3	25	109.1	7	-----		104.3	43	96.1	14	138.4	22	125.8	18	118.2	21	113.2	19	-----			
AC Mountain	White	101.8	11	105.9	8	100.2	7	107.2	67	88.3	47	87.4	28	107.8	28	92.0	28	133.3	44	123.6	24	114.8	42	114.1	13	107.3	13		
Hopewell	Red	98.5	26	101.1	22	95.5	16	108.0	64	97.5	37	93.5	22	94.2	71	88.8	35	122.6	69	115.3	39	111.6	60	104.2	42	98.6	29		
Jupiter	White	103.8	3	110.1	3	100.9	3	123.1	17	104.6	17	98.2	16	116.4	4	99.4	6	138.6	21	127.1	12	117.8	24	115.1	11	107.6	12		
MCIA 7002012	Red	103.3	7	95.7	35	90.9	26	116.7	43	104.7	16	98.6	14	95.3	68	89.8	33	138.3	23	123.7	23	118.2	21	113.7	16	110.5	4		
MCIA Harpoon	Red	89.5	68	94.0	41	-----		112.8	55	102.9	25	-----		104.2	44	96.5	11	132.3	49	126.0	17	114.0	46	111.7	27	-----			
MCIA Red Devil	Red	95.1	46	95.3	37	92.3	23	119.7	30	102.3	27	97.2	17	107.2	30	94.9	19	138.6	21	123.6	24	107.2	69	107.4	40	102.9	22		
MCIA Red Dragon	Red	90.3	66	91.9	44	91.6	25	115.8	47	105.4	14	99.7	10	103.7	46	97.5	9	134.1	38	122.9	27	115.0	41	113.9	14	107.9	11		
MCIA Venus	White	90.9	64	95.8	34	89.8	28	125.8	8	99.8	35	95.0	19	96.3	66	89.9	32	132.9	46	123.3	25	110.2	62	107.9	38	100.9	27		
MCIA Whale	Red	103.6	5	106.0	7	100.6	5	122.7	19	103.2	23	102.3	6	86.9	79	87.6	38	131.8	50	126.1	16	112.4	55	112.5	23	105.4	18		
MSU 6012	White	91.2	62	95.1	38	88.3	29	118.5	35	96.6	38	93.7	21	103.6	47	94.2	22	131.6	51	120.2	32	114.1	45	111.3	28	102.6	24		
Red Ruby	Red	89.1	69	95.3	37	93.0	21	122.7	19	101.1	30	94.3	20	100.1	56	89.8	33	132.5	48	117.9	34	113.9	47	108.3	37	101.6	26		
Sunburst	Red	97.3	34	99.8	26	93.3	20	117.1	40	104.8	15	97.2	17	95.5	67	93.3	25	134.6	35	124.0	22	116.1	36	112.8	22	102.4	25		
F1026R	Red	99.4	19	99.7	27	-----		112.5	56	100.0	34	-----		99.2	59	93.9	24	121.5	72	115.9	38	115.1	40	111.1	30	-----			
F1027	White	96.2	41	100.6	24	-----		107.3	66	95.4	40	-----		91.8	72	88.1	37	117.6	74	109.7	40	114.1	45	112.1	24	-----			
F2016	White	92.1	58	101.5	20	-----		106.4	70	91.8	43	-----		89.1	76	84.7	40	117.3	75	116.6	37	97.4	77	100.8	44	-----			
RS 910	Red	94.5	50	102.4	15	-----		121.7	24	106.9	12	-----		112.5	14	95.2	17	129.3	59	115.9	38	118.0	22	113.6	17	-----			
RS 972	Red	96.5	39	94.3	40	95.0	18	127.2	5	108.6	9	100.6	8	90.3	75	84.8	39	143.6	6	128.1	9	123.9	6	120.6	1	113.2	1		
RS 911	Red	95.1	46	92.4	43	-----		118.1	36	104.1	19	-----		98.0	62	90.0	31	133.5	42	122.0	28	117.9	23	115.1	11	-----			
SC 1315-15™	Red	99.0	23	-----		-----		119.5	32	-----		-----		103.9	45	-----		130.1	56	-----		111.9	59	-----		-----			
SC 1325-15™	Red	97.0	36	-----		-----		122.2	22	-----		-----		111.1	18	-----		138.6	21	-----		122.0	8	-----		-----			
SC 1335-15™	Red	96.3	40	-----		-----		114.9	51	-----		-----		109.4	26	-----		133.5	43	-----		118.5	18	-----		-----			
SC 13S26™	Red	95.6	44	-----		-----		117.7	38	-----		-----		104.6	41	-----		140.9	16	-----		113.5	49	-----		-----			
SC EXP 142™	Red	100.0	16	-----		-----		116.9	42	-----		-----		110.8	21	-----		138.3	23	-----		117.2	29	-----		-----			
SY 100	Red	103.7	4	-----		-----		132.6	1	-----		-----		110.6	23	-----		152.4	1	-----		124.9	4	-----		-----			
SY 483	Red	99.4	19	107.2	6	101.1	2	124.9	11	104.0	20	99.3	13	88.1	78	86.8	39	131.2	52	126.1	16	113.0	51	110.6	32	105.8	17		
Hilliard	Red	94.9	47	100.9	23	-----		116.1	45	102.0	28	-----		107.0	32	94.7	20	139.6	19	124.0	22	115.9	37	111.2	29	-----			
VA11W-106	Red	93.3	54	94.6	39	-----		116.6	44	98.6	36	-----		101.7	50	91.7	30	135.6	31	123.0	26	109.4	65	110.3	33	-----			
VA12W-72	Red	99.3	20	-----		-----		111.6	60	-----		-----		100.7	53	-----		130.5	54	-----		118.4	19	-----		-----			
W 202	Red	92.0	59	-----		-----		123.2	16	-----		-----		106.1	37	-----		133.3	44	-----		109.3	66	-----		-----			
W 204	Red	96.9	37	-----		92.9	22	126.5	7	-----		108.8	1	107.8	28	-----		142.1	11	-----		118.0	22	-----		110.1	6		
W 206	Red	97.9	30	105.0	9	100.9	3	116.7	43	109.5	4	105.3	2	107.1	31	95.6	16	140.3	18	127.3	11	116.9	31	111.3	28	107.0	14		
W 303	Red	98.0	29	-----		-----		117.6	39	-----		-----		103.6	47	-----		134.1	38	-----		120.1	13	-----		-----			
W 304	Red	93.3	54	-----		-----		130.2	2	-----		-----		107.3	29	-----		142.4	10	-----		119.0	14	-----		-----			
W 307	Red	103.2	8	-----		-----		124.6	12	-----		-----		104.5	42	-----		138.9	20	-----		118.8	16	-----		-----			
MEAN (2016 90 Entries)		97.0		100.3		96.2		116.9		102.1		96.9		103.7		93.7		134.3		124.1		115.0		112.3		106.0			
LSD (0.05)		4.2		4.9		3.3		6.8		7.7		5.6		9.5		5.4		6.0		5.1		4.9		4.0		3.1			
CV (%)		3.2		5.5		4.8		4.3		8.2		7.4		6.8		6.3		3.3		4.5		3.2		4.0		3.8			

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

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

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Name	Grain Color	INGHAM COUNTY															Organization
		Conventional					High Management					Conventional vs. High Management Differences					
		Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	
AgriMAXX 413	Red	116.6	21	56.4	11.8	3.0	121.3	25	56.5	11.6	3.7	+4.7	43	+0.1	-0.2	-0.7	AgriMAXX Wheat Company
AgriMAXX 438	Red	117.5	15	58.1	13.1	3.0	127.4	4	58.4	12.9	3.7	+9.9	19	+0.3	-0.2	-0.7	AgriMAXX Wheat Company
AgriMAXX 444	Red	120.6	8	58.2	12.7	3.3	115.5	48	58.3	12.4	4.3	-5.1	69	+0.1	-0.3	-1.0	AgriMAXX Wheat Company
AgriMAXX 454	Red	116.9	19	58.0	12.9	3.3	115.8	47	58.2	12.6	3.0	-1.1	67	+0.2	-0.3	+0.3	AgriMAXX Wheat Company
AgriMAXX 463	Red	113.2	32	56.8	12.3	1.3	113.8	54	56.6	12.0	1.7	+0.6	61	-0.2	-0.3	-0.4	AgriMAXX Wheat Company
AgriMAXX 464	Red	116.7	20	56.4	12.1	3.0	123.2	16	56.9	11.9	3.7	+6.5	33	+0.5	-0.2	-0.7	AgriMAXX Wheat Company
AgriMAXX EXP 1696W	White	101.2	66	58.4	12.3	3.3	105.6	73	59.3	12.2	4.3	+4.4	45	+0.9	-0.1	-1.0	AgriMAXX Wheat Company
Diener 491W	Red	111.5	40	56.6	12.6	2.7	121.0	26	57.7	12.4	2.7	+9.5	21	+1.1	-0.2	0.0	Bio Town Seeds
Diener 496W	Red	108.3	56	56.6	12.1	1.7	110.5	62	56.6	11.9	4.0	+2.2	55	0.0	-0.2	-2.3	Bio Town Seeds
Ambassador	White	107.8	57	57.7	12.3	3.3	108.8	63	57.9	11.8	3.3	+1.0	59	+0.2	-0.5	0.0	D.F. Seeds, Inc.
Aubrey	White	102.9	64	60.7	13.3	4.0	111.4	61	60.9	13.3	4.3	+8.5	27	+0.2	0.0	-0.3	D.F. Seeds, Inc.
DF 105 R	Red	120.8	7	56.7	11.7	3.3	128.9	3	56.8	11.5	2.7	+8.1	30	+0.1	-0.2	+0.6	D.F. Seeds, Inc.
DF 109 R	Red	121.8	5	58.1	13.0	2.7	124.1	14	57.8	12.6	3.3	+2.3	54	-0.3	-0.4	-0.6	D.F. Seeds, Inc.
DF 111 R	Red	106.9	59	56.8	12.3	2.3	127.0	6	57.9	12.1	2.7	+20.1	1	+1.1	-0.2	-0.4	D.F. Seeds, Inc.
DF 112 R	Red	127.1	1	56.4	11.7	3.3	121.8	23	56.3	11.6	4.0	-5.3	70	-0.1	-0.1	-0.7	D.F. Seeds, Inc.
DF 114 R	Red	111.1	43	58.5	12.8	3.0	122.4	21	58.8	12.6	3.0	+11.3	16	+0.3	-0.2	0.0	D.F. Seeds, Inc.
DF EX R J-15	Red	111.6	39	56.7	12.2	1.7	111.8	59	57.0	12.1	2.3	+0.2	63	+0.3	-0.1	-0.6	D.F. Seeds, Inc.
DF EX R J-55	Red	105.4	61	58.1	12.7	3.7	117.9	37	59.7	12.4	3.7	+12.5	12	+1.6	-0.3	0.0	D.F. Seeds, Inc.
DF EX W 25	White	118.4	12	58.7	12.5	2.0	123.0	18	58.5	12.2	2.3	+4.6	44	-0.2	-0.3	-0.3	D.F. Seeds, Inc.
Francis	White	108.4	55	59.3	12.6	5.0	112.1	57	60.2	13.1	6.0	+3.7	47	+0.9	+0.5	-1.0	D.F. Seeds, Inc.
Skeet	White	98.4	71	58.1	12.7	3.3	107.1	68	59.0	12.6	5.0	+8.7	26	+0.9	-0.1	-1.7	D.F. Seeds, Inc.
Target	White	112.1	36	57.4	12.5	2.0	120.9	27	58.2	11.9	4.3	+8.8	25	+0.8	-0.6	-2.3	D.F. Seeds, Inc.
Equity Brand Butler	Red	116.5	22	57.9	12.8	2.0	119.5	32	57.8	12.5	2.0	+3.0	51	-0.1	-0.3	0.0	Direct Enterprises
Exp DEI 16098	Red	111.0	44	58.6	12.6	3.7	116.1	45	58.4	12.7	3.0	+5.1	41	-0.2	+0.1	+0.7	Direct Enterprises
Pioneer Brand 25R25	Red	117.8	14	56.9	12.3	3.0	120.0	29	56.9	12.0	2.3	+2.2	55	0.0	-0.3	+0.7	DuPont Pioneer
Pioneer Brand 25R40	Red	122.3	4	57.9	12.5	4.0	127.0	6	58.4	12.2	3.7	+4.7	43	+0.5	-0.3	+0.3	DuPont Pioneer
Pioneer Brand 25R46	Red	104.3	62	58.6	12.7	2.3	117.0	41	59.1	12.5	3.0	+12.7	10	+0.5	-0.2	-0.7	DuPont Pioneer
Pioneer Brand 25R50	Red	111.8	38	57.5	12.4	2.0	115.3	50	58.4	12.0	2.0	+3.5	49	+0.9	-0.4	0.0	DuPont Pioneer
Dyna-Gro 9242W	White	111.2	42	58.0	12.7	2.7	120.4	28	59.1	12.4	3.7	+9.2	22	+1.1	-0.3	-1.0	Dyna-Gro Seed
Dyna-Gro 9491W	White	92.4	76	56.9	12.5	2.3	105.9	71	57.3	12.1	3.0	+13.5	9	+0.4	-0.4	-0.7	Dyna-Gro Seed
Dyna-Gro 9522	Red	119.2	11	58.3	12.7	4.3	123.1	17	58.5	12.3	5.0	+3.9	46	+0.2	-0.4	-0.7	Dyna-Gro Seed
Dyna-Gro 9552	Red	109.8	50	57.8	12.6	2.7	125.7	9	58.6	12.1	2.7	+15.9	5	+0.8	-0.5	0.0	Dyna-Gro Seed
Dyna-Gro 9692	Red	109.4	52	57.9	12.7	3.0	124.4	13	58.7	12.6	2.7	+15.0	6	+0.8	-0.1	+0.3	Dyna-Gro Seed
Dyna-Gro 9772	Red	111.0	44	56.0	12.0	3.0	119.2	33	56.7	11.9	4.0	+8.2	29	+0.7	-0.1	-1.0	Dyna-Gro Seed
Dyna-Gro Shirley	Red	109.2	53	56.6	12.1	2.7	124.0	15	56.6	12.0	3.0	+14.8	8	0.0	-0.1	-0.3	Dyna-Gro Seed
Dyna-Gro WX16771	Red	107.3	58	58.6	12.9	2.7	106.7	69	59.3	12.6	3.0	-0.6	65	+0.7	-0.3	-0.3	Dyna-Gro Seed
Glacier	White	102.9	64	59.4	12.9	2.7	105.8	72	59.1	12.4	2.7	+2.9	52	-0.3	-0.5	0.0	Harrington Seeds, Inc.
HS 284R	Red	113.3	31	57.9	12.5	3.7	114.3	53	58.1	12.2	4.3	+1.0	59	+0.2	-0.3	-0.6	Harrington Seeds, Inc.
HS 30.06	Red	110.6	47	58.6	12.8	2.7	125.5	10	59.0	12.5	3.0	+14.9	7	+0.4	-0.3	-0.3	Harrington Seeds, Inc.
HS EX15	White	110.1	49	57.7	12.1	2.7	104.3	74	57.8	11.7	3.3	-5.8	71	+0.1	-0.4	-0.6	Harrington Seeds, Inc.
L 11418	Red	119.6	9	59.0	13.0	6.0	122.6	20	58.7	13.0	5.3	+3.0	51	-0.3	0.0	+0.7	Irrer Seed Farm
L 11528	Red	98.3	72	58.4	13.4	4.3	103.8	75	59.0	12.9	6.3	+5.5	40	+0.6	-0.5	-2.0	Irrer Seed Farm

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.

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

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Conventional					INGHAM COUNTY High Management					Conventional vs. High Management Differences					Organization
		Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	
L-241	Red	100.5	67	58.3	12.9	6.0	101.8	76	58.2	13.0	8.0	+1.3	57	-0.1	+0.1	-2.0	Irrer Seed Farm
L-334	Red	113.4	30	58.6	13.3	5.7	119.6	31	58.9	12.8	7.7	+6.2	35	+0.3	-0.5	-2.0	Irrer Seed Farm
LCS 2214	Red	99.3	70	57.0	12.8	3.3	112.0	58	57.5	12.6	2.3	+12.7	10	+0.5	-0.2	+1.0	Irrer Seed Farm
LCS 3677	Red	112.3	35	58.9	13.0	4.7	121.3	25	59.7	12.8	4.0	+9.0	24	+0.8	-0.2	+0.7	Irrer Seed Farm
AC Mountain	White	105.8	60	57.6	12.2	3.7	107.2	67	57.6	11.8	3.0	+1.4	56	0.0	-0.4	+0.7	Michigan Crop Improvement Association
Hopewell	Red	102.2	65	58.7	12.7	3.3	108.0	64	59.3	12.6	3.3	+5.8	38	+0.6	-0.1	0.0	Michigan Crop Improvement Association
Jupiter	White	117.1	17	56.9	12.1	4.0	123.1	17	57.2	12.2	3.0	+6.0	37	+0.3	+0.1	+1.0	Michigan Crop Improvement Association
MCIA 7002012	Red	113.1	33	59.6	13.1	4.3	116.7	43	59.7	12.8	5.0	+3.6	48	+0.1	-0.3	-0.7	Michigan Crop Improvement Association
MCIA Harpoon	Red	109.4	52	57.1	12.5	2.0	112.8	55	57.2	11.9	1.7	+3.4	50	+0.1	-0.6	+0.3	Michigan Crop Improvement Association
MCIA Red Devil	Red	114.2	28	58.6	12.6	3.3	119.7	30	58.6	12.0	3.3	+5.5	40	0.0	-0.6	0.0	Michigan Crop Improvement Association
MCIA Red Dragon	Red	115.6	25	58.1	12.7	3.0	115.8	47	58.3	12.2	3.7	+0.2	63	+0.2	-0.5	-0.7	Michigan Crop Improvement Association
MCIA Venus	White	119.4	10	57.2	12.2	8.0	125.8	8	57.7	12.0	6.7	+6.4	34	+0.5	-0.2	+1.3	Michigan Crop Improvement Association
MCIA Whale	Red	117.2	16	58.1	12.7	2.3	122.7	19	58.3	12.5	2.0	+5.5	40	+0.2	-0.2	+0.3	Michigan Crop Improvement Association
MSU 6012	White	112.9	34	56.9	11.6	3.3	118.5	35	57.4	11.3	3.7	+5.6	39	+0.5	-0.3	-0.4	Michigan Crop Improvement Association
Red Ruby	Red	114.6	27	58.5	12.6	4.0	122.7	19	59.5	12.5	4.0	+8.1	30	+1.0	-0.1	0.0	Michigan Crop Improvement Association
Sunburst	Red	116.0	23	59.5	13.0	2.0	117.1	40	60.1	12.8	1.7	+1.1	58	+0.6	-0.2	+0.3	Michigan Crop Improvement Association
F1026R	Red	100.2	68	57.7	12.4	2.3	112.5	56	58.0	12.0	3.0	+12.3	13	+0.3	-0.4	-0.7	Michigan State University
F1027	White	94.7	74	58.6	12.8	2.0	107.3	66	59.6	12.5	2.3	+12.6	11	+1.0	-0.3	-0.3	Michigan State University
F2016	White	90.3	77	54.8	12.2	3.7	106.4	70	57.2	12.5	3.7	+16.1	4	+2.4	+0.3	0.0	Michigan State University
RS 910	Red	111.5	40	58.0	12.6	2.3	121.7	24	58.1	12.4	2.3	+10.2	18	+0.1	-0.2	0.0	Rupp Seeds, Inc
RS 911	Red	114.6	27	58.2	12.7	3.3	118.1	36	58.3	12.6	3.3	+3.5	49	+0.1	-0.1	0.0	Rupp Seeds, Inc
RS 972	Red	118.1	13	57.3	13.0	2.7	127.2	5	57.8	12.8	2.7	+9.1	23	+0.5	-0.2	0.0	Rupp Seeds, Inc
SC 1315-15™	Red	108.7	54	59.2	12.6	3.3	119.5	32	59.7	12.4	3.7	+10.8	17	+0.5	-0.2	-0.4	Seed Consultants, Inc.
SC 1325-15™	Red	110.8	46	57.2	12.7	2.7	122.2	22	57.0	12.4	2.3	+11.4	15	-0.2	-0.3	+0.4	Seed Consultants, Inc.
SC 1335-15™	Red	114.0	29	58.4	12.8	2.7	114.9	51	58.0	12.4	2.7	+0.9	60	-0.4	-0.4	0.0	Seed Consultants, Inc.
SC 13S26™	Red	110.9	45	58.1	12.8	3.0	117.7	38	58.3	12.4	3.0	+6.8	32	+0.2	-0.4	0.0	Seed Consultants, Inc.
SC EXP 142™	Red	112.1	36	56.0	12.2	4.0	116.9	42	56.9	11.8	3.0	+4.8	42	+0.9	-0.4	+1.0	Seed Consultants, Inc.
SY 100	Red	126.5	2	57.2	12.1	3.7	132.6	1	57.2	12.3	4.7	+6.1	36	0.0	+0.2	-1.0	Syngenta
SY 483	Red	124.5	3	57.8	12.4	3.3	124.9	11	58.1	12.2	3.7	+0.4	62	+0.3	-0.2	-0.4	Syngenta
Hilliard	Red	117.0	18	57.8	12.6	3.0	116.1	45	57.6	12.1	3.0	-0.9	66	-0.2	-0.5	0.0	Virginia Crop Improvement Assoc. / VA Tech
VA11W-106	Red	121.5	6	58.1	12.6	3.0	116.6	44	57.8	12.1	3.0	-4.9	68	-0.3	-0.5	0.0	Virginia Crop Improvement Assoc. / VA Tech
VA12W-72	Red	105.8	60	57.8	11.8	3.0	111.6	60	57.5	11.6	2.7	+5.8	38	-0.3	-0.2	+0.3	Virginia Crop Improvement Assoc. / VA Tech
W 202	Red	111.0	44	58.8	12.8	2.7	123.2	16	59.8	12.7	4.0	+12.2	14	+1.0	-0.1	-1.3	Wellman Seeds, Inc.
W 204	Red	110.2	48	56.6	12.4	2.0	126.5	7	57.9	12.6	2.3	+16.3	3	+1.3	+0.2	-0.3	Wellman Seeds, Inc.
W 206	Red	111.9	37	56.9	12.5	3.0	116.7	43	57.9	12.2	2.3	+4.8	42	+1.0	-0.3	+0.7	Wellman Seeds, Inc.
W 303	Red	109.7	51	57.7	12.5	4.0	117.6	39	58.5	12.3	3.7	+7.9	31	+0.8	-0.2	+0.3	Wellman Seeds, Inc.
W 304	Red	117.5	15	58.3	12.7	2.3	130.2	2	59.2	12.5	3.3	+12.7	10	+0.9	-0.2	-1.0	Wellman Seeds, Inc.
W 307	Red	117.8	14	60.1	12.8	2.3	124.6	12	60.2	12.8	2.0	+6.8	32	+0.1	0.0	+0.3	Wellman Seeds, Inc.
MEAN (2016 90 Entries)		110.8		58.0	12.5	3.3	116.9		58.4	12.3	3.6	+6.1		+0.4	-0.2	-0.3	
LSD (0.05)		7.2		0.6	0.3	1.1	6.8		0.7	0.2	1.6	-----		-----	-----	-----	
CV (%)		4.8		0.8	1.6	25.4	4.3		0.9	1.2	33.0	-----		-----	-----	-----	

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.

Table 6 : Single Site: Yield, Test Weight and Moisture Performance Summary (Note: Tables sorted alphabetically by organization/entry name)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Conventional					TUSCOLA COUNTY High Management					Conventional vs. High Management Differences					Organization
		Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	
AgriMAXX 413	Red	120.7	7	57.3	11.8	3.0	125.3	2	57.5	12.2	3.3	+4.6	32	+0.2	+0.4	-0.3	AgriMAXX Wheat Company
AgriMAXX 438	Red	119.9	11	57.9	12.8	2.7	125.0	3	57.6	13.0	2.3	+5.1	29	-0.3	+0.2	+0.4	AgriMAXX Wheat Company
AgriMAXX 444	Red	115.4	23	57.9	12.6	2.3	117.7	25	58.3	13.3	2.7	+2.3	46	+0.4	+0.7	-0.4	AgriMAXX Wheat Company
AgriMAXX 454	Red	110.7	43	58.6	12.9	2.3	113.9	47	58.6	12.9	2.7	+3.2	41	0.0	0.0	-0.4	AgriMAXX Wheat Company
AgriMAXX 463	Red	115.3	24	57.4	12.1	1.7	112.5	54	56.6	12.3	2.0	-2.8	64	-0.8	+0.2	-0.3	AgriMAXX Wheat Company
AgriMAXX 464	Red	110.6	44	57.4	12.2	2.7	115.5	38	57.8	12.9	2.7	+4.9	31	+0.4	+0.7	0.0	AgriMAXX Wheat Company
AgriMAXX EXP 1696W	White	96.5	76	60.2	13.1	2.3	104.1	72	59.7	13.7	3.0	+7.6	14	-0.5	+0.6	-0.7	AgriMAXX Wheat Company
Diener 491W	Red	118.9	12	58.6	12.9	2.3	118.9	15	58.5	12.9	1.7	0.0	56	-0.1	0.0	+0.6	Bio Town Seeds
Diener 496W	Red	113.2	34	57.4	12.1	1.0	112.6	53	57.0	12.3	2.3	-0.6	59	-0.4	+0.2	-1.3	Bio Town Seeds
Ambassador	White	109.1	51	58.0	12.2	2.0	116.5	32	57.8	12.6	3.0	+7.4	16	-0.2	+0.4	-1.0	D.F. Seeds, Inc.
Aubrey	White	108.1	56	59.4	12.7	2.7	113.6	48	60.1	13.2	3.3	+5.5	27	+0.7	+0.5	-0.6	D.F. Seeds, Inc.
DF 105 R	Red	126.5	1	57.9	12.0	3.3	123.5	7	57.2	12.1	3.0	-3.0	65	-0.7	+0.1	+0.3	D.F. Seeds, Inc.
DF 109 R	Red	122.7	4	58.0	13.1	2.0	121.2	9	57.9	13.0	2.0	-1.5	61	-0.1	0.0	0.0	D.F. Seeds, Inc.
DF 111 R	Red	109.4	50	58.4	11.9	2.0	120.7	11	58.9	12.9	2.0	+11.3	6	+0.5	+1.0	0.0	D.F. Seeds, Inc.
DF 112 R	Red	123.6	3	57.7	12.2	3.0	127.0	1	57.3	12.6	3.0	+3.4	40	-0.4	+0.4	0.0	D.F. Seeds, Inc.
DF 114 R	Red	104.1	69	57.7	12.4	2.7	115.4	39	58.3	13.2	2.3	+11.3	6	+0.6	+0.8	+0.4	D.F. Seeds, Inc.
DF EX R J-15	Red	115.9	21	57.4	12.1	1.7	117.6	26	57.4	12.1	1.3	+1.7	50	0.0	0.0	+0.4	D.F. Seeds, Inc.
DF EX R J-55	Red	112.2	40	59.5	12.5	2.3	120.9	10	60.2	13.1	3.3	+8.7	13	+0.7	+0.6	-1.0	D.F. Seeds, Inc.
DF EX W 25	White	120.4	8	58.9	12.9	1.3	118.6	17	59.1	13.9	2.3	-1.8	62	+0.2	+1.0	-1.0	D.F. Seeds, Inc.
Francis	White	103.8	70	59.6	13.2	4.7	109.8	64	59.8	13.4	6.3	+6.0	24	+0.2	+0.2	-1.6	D.F. Seeds, Inc.
Skeet	White	104.5	67	57.8	12.6	2.7	110.5	61	58.8	13.1	3.3	+6.0	24	+1.0	+0.5	-0.6	D.F. Seeds, Inc.
Target	White	110.7	43	59.0	11.9	2.0	118.3	20	59.6	12.9	3.0	+7.6	14	+0.6	+1.0	-1.0	D.F. Seeds, Inc.
Equity Brand Butler	Red	114.0	31	59.1	13.0	1.3	116.4	33	59.4	13.6	1.7	+2.4	45	+0.3	+0.6	-0.4	Direct Enterprises
Exp DEI 16098	Red	110.3	46	58.6	13.5	3.0	117.0	30	59.2	13.8	3.7	+6.7	20	+0.6	+0.3	-0.7	Direct Enterprises
Pioneer Brand 25R25	Red	118.6	13	57.6	12.7	2.3	120.7	11	57.5	12.8	2.3	+2.1	48	-0.1	+0.1	0.0	DuPont Pioneer
Pioneer Brand 25R40	Red	120.1	10	58.7	12.5	2.7	120.5	12	58.2	12.6	3.3	+0.4	54	-0.5	+0.1	-0.6	DuPont Pioneer
Pioneer Brand 25R46	Red	95.5	77	59.0	12.7	2.0	110.0	63	59.3	13.2	2.0	+14.5	2	+0.3	+0.5	0.0	DuPont Pioneer
Pioneer Brand 25R50	Red	113.3	33	58.7	12.3	1.3	117.5	27	58.2	12.5	1.7	+4.2	36	-0.5	+0.2	-0.4	DuPont Pioneer
Dyna-Gro 9242W	White	109.0	52	59.1	12.6	2.3	117.7	25	59.8	13.0	2.3	+8.7	13	+0.7	+0.4	0.0	Dyna-Gro Seed
Dyna-Gro 9491W	White	88.4	78	57.8	12.4	2.3	103.4	73	58.1	12.5	2.0	+15.0	1	+0.3	+0.1	+0.3	Dyna-Gro Seed
Dyna-Gro 9522	Red	117.8	15	58.4	12.7	3.0	117.6	26	58.1	13.0	3.0	-0.2	57	-0.3	+0.3	0.0	Dyna-Gro Seed
Dyna-Gro 9552	Red	115.1	26	58.6	12.3	2.3	118.5	18	59.1	12.6	2.7	+3.4	40	+0.5	+0.3	-0.4	Dyna-Gro Seed
Dyna-Gro 9692	Red	106.9	61	58.1	12.7	2.3	116.9	31	58.6	13.1	2.7	+10.0	10	+0.5	+0.4	-0.4	Dyna-Gro Seed
Dyna-Gro 9772	Red	113.5	32	56.9	12.5	2.7	112.9	52	56.6	12.6	2.3	-0.6	59	-0.3	+0.1	+0.4	Dyna-Gro Seed
Dyna-Gro Shirley	Red	110.0	47	56.8	12.4	2.0	124.5	5	57.2	13.2	2.3	+14.5	2	+0.4	+0.8	-0.3	Dyna-Gro Seed
Dyna-Gro WX16771	Red	104.1	69	59.3	12.9	2.7	116.3	34	59.8	13.8	3.0	+12.2	4	+0.5	+0.9	-0.3	Dyna-Gro Seed
Glacier	White	110.7	43	59.3	12.8	1.7	112.3	56	59.7	13.6	2.3	+1.6	51	+0.4	+0.8	-0.6	Harrington Seeds, Inc.
HS 284R	Red	110.4	45	57.5	12.3	2.7	116.5	32	58.3	12.6	3.3	+6.1	23	+0.8	+0.3	-0.6	Harrington Seeds, Inc.
HS 30.06	Red	103.4	72	58.1	12.8	2.3	117.2	29	58.6	12.9	2.3	+13.8	3	+0.5	+0.1	0.0	Harrington Seeds, Inc.
HS EX15	White	105.0	66	59.4	12.5	2.0	108.8	68	59.4	12.3	2.3	+3.8	38	0.0	-0.1	-0.3	Harrington Seeds, Inc.
L 11418	Red	114.5	27	59.4	13.1	3.0	120.7	11	59.8	13.5	3.3	+6.2	22	+0.4	+0.4	-0.3	Irrer Seed Farm
L 11528	Red	99.5	75	59.7	13.4	4.0	99.2	76	59.2	13.7	6.0	-0.3	58	-0.5	+0.3	-2.0	Irrer Seed Farm

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.

Table 6 : Single Site: Yield, Test Weight and Moisture Performance Summary (Note: Tables sorted alphabetically by organization/entry name)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Conventional					TUSCOLA COUNTY High Management					Conventional vs. High Management Differences					Organization
		Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	Yield bu/acre	Yield Rank	Test Weight	Grain Moisture	Lodge Score (0-9)	
L-241	Red	101.1	74	59.2	13.0	5.3	106.1	71	59.1	13.2	6.7	+5.0	30	-0.1	+0.2	-1.4	Irrer Seed Farm
L-334	Red	112.3	39	59.5	12.8	6.7	108.8	68	57.8	13.0	6.7	-3.5	66	-1.7	+0.2	0.0	Irrer Seed Farm
LCS 2214	Red	120.3	9	57.6	12.7	3.0	116.2	35	57.9	13.0	3.3	-4.1	68	+0.3	+0.3	-0.3	Irrer Seed Farm
LCS 3677	Red	108.2	55	59.0	12.9	2.3	118.2	21	59.4	13.0	3.3	+10.0	10	+0.4	+0.1	-1.0	Irrer Seed Farm
AC Mountain	White	107.9	57	57.8	12.6	2.3	114.8	42	58.2	12.5	2.7	+6.9	19	+0.4	0.0	-0.4	Michigan Crop Improvement Association
Hopewell	Red	104.3	68	58.4	12.6	2.0	111.6	60	59.8	12.8	2.3	+7.3	17	+1.4	+0.2	-0.3	Michigan Crop Improvement Association
Jupiter	White	121.5	5	58.8	12.8	2.0	117.8	24	58.5	13.0	2.3	-3.7	67	-0.3	+0.2	-0.3	Michigan Crop Improvement Association
MCIA 7002012	Red	111.3	42	59.3	13.5	3.0	118.2	21	59.7	14.0	3.0	+6.9	19	+0.4	+0.5	0.0	Michigan Crop Improvement Association
MCIA Harpoon	Red	112.0	41	56.8	12.0	1.7	114.0	46	56.8	12.3	1.3	+2.0	49	0.0	+0.3	+0.4	Michigan Crop Improvement Association
MCIA Red Devil	Red	107.0	60	58.3	12.2	2.0	107.2	69	57.8	12.4	2.0	+0.2	55	-0.5	+0.2	0.0	Michigan Crop Improvement Association
MCIA Red Dragon	Red	112.5	38	57.8	12.2	2.7	115.0	41	58.7	12.5	2.7	+2.5	44	+0.9	+0.3	0.0	Michigan Crop Improvement Association
MCIA Venus	White	116.1	20	58.1	11.8	6.7	110.2	62	57.2	11.9	8.3	-5.0	71	-0.9	+0.1	-1.6	Michigan Crop Improvement Association
MCIA Whale	Red	114.2	29	59.0	12.9	1.0	112.4	55	59.3	13.4	1.3	+5.9	25	+0.3	+0.5	-0.3	Michigan Crop Improvement Association
MSU 6012	White	108.5	53	58.6	11.9	2.3	114.1	45	59.4	12.3	4.0	+5.6	26	+0.8	+0.4	-1.7	Michigan Crop Improvement Association
Red Ruby	Red	109.5	49	59.0	12.3	3.0	113.9	47	60.0	13.0	3.3	+4.4	34	+1.0	+0.7	-0.3	Michigan Crop Improvement Association
Sunburst	Red	112.6	37	61.2	14.0	1.3	116.1	36	60.8	15.4	1.7	+3.5	39	-0.4	+1.4	-0.4	Michigan Crop Improvement Association
F1026R	Red	103.7	71	58.3	12.4	1.7	115.1	40	59.0	12.7	1.7	+11.4	5	+0.7	+0.3	0.0	Michigan State University
F1027	White	103.7	71	60.1	13.3	2.0	114.1	45	60.2	13.4	2.0	+10.4	9	+0.1	+0.1	0.0	Michigan State University
F2016	White	86.2	79	56.3	13.2	2.7	97.4	77	56.7	14.1	3.7	+11.2	7	+0.4	+0.9	-1.0	Michigan State University
RS 910	Red	115.5	22	58.9	12.4	1.7	118.0	22	59.1	12.8	2.0	+2.5	44	+0.2	+0.4	-0.3	Rupp Seeds, Inc
RS 911	Red	108.3	54	57.6	12.7	2.0	117.9	23	58.2	13.0	2.3	+9.6	11	+0.6	+0.3	-0.3	Rupp Seeds, Inc
RS 972	Red	121.1	6	57.7	13.0	2.0	123.9	6	57.5	13.3	2.3	+2.8	42	-0.2	+0.3	-0.3	Rupp Seeds, Inc
SC 1315-15™	Red	107.9	57	59.1	12.8	4.3	111.9	59	59.8	13.1	3.0	+4.0	37	+0.7	+0.3	+1.3	Seed Consultants, Inc.
SC 1325-15™	Red	117.4	16	58.7	12.6	1.7	122.0	8	58.6	13.5	2.3	+4.6	32	-0.1	+0.9	-0.6	Seed Consultants, Inc.
SC 1335-15™	Red	114.3	28	58.6	12.4	2.0	118.5	18	59.1	12.5	2.0	+4.2	36	+0.5	+0.1	0.0	Seed Consultants, Inc.
SC 13S26™	Red	106.3	63	57.8	12.0	2.3	113.5	49	58.0	13.0	2.7	+7.2	18	+0.2	+1.0	-0.4	Seed Consultants, Inc.
SC EXP 142™	Red	112.9	35	57.5	12.6	2.3	117.2	29	57.3	12.4	2.7	+4.3	35	-0.2	-0.1	-0.4	Seed Consultants, Inc.
SY 100	Red	125.6	2	57.1	12.4	2.7	124.9	4	56.1	12.5	3.3	-0.7	60	-1.0	+0.1	-0.6	Syngenta
SY 483	Red	117.3	17	59.2	12.9	2.3	113.0	51	59.0	13.6	3.0	-4.3	69	-0.2	+0.7	-0.7	Syngenta
Hilliard	Red	118.0	14	57.9	12.5	2.3	115.9	37	57.5	12.5	3.0	-2.1	63	-0.4	0.0	-0.7	Virginia Crop Improvement Assoc. / VA Tech
VA11W-106	Red	113.5	32	57.9	12.1	2.7	109.4	65	57.4	12.3	3.0	-4.1	68	-0.5	+0.2	-0.3	Virginia Crop Improvement Assoc. / VA Tech
VA12W-72	Red	115.2	25	58.9	12.1	2.0	118.4	19	57.9	12.5	3.3	+3.2	41	-1.0	+0.4	-1.3	Virginia Crop Improvement Assoc. / VA Tech
W 202	Red	107.2	59	58.4	12.6	2.3	109.3	66	59.4	12.4	4.3	+2.1	48	+1.0	-0.1	-2.0	Wellman Seeds, Inc.
W 204	Red	117.0	18	58.7	12.5	1.7	118.0	22	58.3	13.1	1.3	+1.0	52	-0.4	+0.6	+0.4	Wellman Seeds, Inc.
W 206	Red	114.3	28	59.3	11.9	2.3	116.9	31	58.6	12.4	2.7	+2.6	43	-0.7	+0.5	-0.4	Wellman Seeds, Inc.
W 303	Red	109.4	50	58.7	13.0	1.7	120.1	13	58.6	13.1	2.7	+10.7	8	-0.1	+0.1	-1.0	Wellman Seeds, Inc.
W 304	Red	109.5	49	58.4	12.4	2.3	119.0	14	58.8	13.4	2.0	+9.5	12	+0.4	+1.0	+0.3	Wellman Seeds, Inc.
W 307	Red	116.6	19	61.2	13.7	1.3	118.8	16	60.9	15.2	1.3	+2.2	47	-0.3	+1.5	0.0	Wellman Seeds, Inc.
MEAN (2016 90 Entries)		111.0		58.6	12.6	2.5	115.0		58.7	13.0	2.9	+4.0		+0.1	+0.4	-0.4	
LSD (0.05)		4.9		0.6	0.5	1.1	4.9		0.6	0.5	1.2	-----		-----	-----	-----	
CV (%)		3.3		0.7	2.6	33.4	3.2		0.7	2.9	29.8	-----		-----	-----	-----	

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.
MSU makes no endorsement of any variety or brand.

Table 7 : Multi-Year Performance Summary (Note: Tables sorted by 2016 Yield, red wheat's grouped before white)

Name	Grain Color	Milling and Baking Properties (2015 Crop and Earlier)																			
		Percent Flour Yield				Percent Protein In Flour (at 14%)				Softness Equivalent Percent				Water SRC (%)				Sodium Carbonate SRC (%)			
		Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages			
		2015	2 YR	3 YR	4 YR	2015	2 YR	3 YR	4 YR	2015	2 YR	3 YR	4 YR	2015	2 YR	3 YR	4 YR	2015	2 YR	3 YR	4 YR
SC 1315-15™	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
W 202	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
AgriMAXX 444	Red	72.3	----	----	----	7.5	----	----	----	60.4	----	----	----	50.8	----	----	----	64.7	----	----	
RS 911	Red	72.0	----	----	----	8.1	----	----	----	59.4	----	----	----	51.8	----	----	----	64.7	----	----	
VA12W-72	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	
Sunburst	Red	65.8	65.3	65.4	65.4	9.0	8.9	8.4	8.0	46.4	48.8	50.1	50.3	58.9	60.4	59.1	59.2	77.3	78.4	76.7	76.8
MCIA Red Dragon	Red	70.7	70.5	70.6	70.8	8.5	8.6	8.1	7.6	56.5	57.7	59.0	60.3	51.5	53.5	52.5	52.3	65.2	68.0	66.7	66.7
Red Ruby	Red	70.5	69.7	69.7	69.8	8.6	8.8	8.3	7.8	56.3	57.3	59.3	60.5	53.9	54.6	53.6	53.5	68.8	71.4	70.5	69.8
MCIA Whale	Red	69.1	69.0	69.0	----	8.4	8.3	7.8	----	52.4	54.2	56.2	----	54.8	55.6	54.8	----	69.7	72.8	71.3	----
SY 483	Red	70.3	69.4	69.6	----	8.3	8.2	7.7	----	55.2	56.6	58.6	----	54.1	56.4	55.2	----	69.3	72.9	71.4	----
VA11W-106	Red	68.2	----	----	----	9.0	----	----	----	54.7	----	----	----	54.3	----	----	----	69.3	----	----	----
AgriMAXX 454	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Diener 496W	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MCIA 0762	Red	68.0	----	----	----	8.7	----	----	----	52.5	----	----	----	51.6	----	----	----	66.0	----	----	----
AgriMAXX 463	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F1026R	Red	70.2	----	----	----	8.6	----	----	----	51.3	----	----	----	53.7	----	----	----	68.7	----	----	----
DF EX R J-15	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dyna-Gro WX16771	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Hopewell	Red	67.8	67.6	67.8	68.0	8.7	8.7	8.2	7.8	55.1	57.0	58.4	59.3	53.4	55.3	54.2	54.2	68.0	72.3	71.1	70.6
L-241	Red	69.1	68.8	----	----	8.4	8.5	----	----	54.8	55.7	----	----	56.0	56.6	----	----	69.4	73.8	----	----
L 11528	Red	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Jupiter	White	70.6	70.4	70.6	70.9	8.2	8.4	7.8	7.3	52.5	54.6	57.2	58.8	53.3	54.2	53.6	53.9	66.7	70.1	69.3	69.2
DF EX W 25	White	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ambassador	White	72.1	71.8	71.8	72.1	8.3	8.6	8.1	7.6	53.4	54.1	56.5	58.2	51.3	52.2	51.4	51.5	63.9	67.2	65.9	65.6
Target	White	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Dyna-Gro 9242W	White	69.1	68.8	68.9	69.1	7.9	8.2	7.9	7.4	55.9	56.4	57.5	59.0	52.6	54.2	53.6	54.0	65.4	69.2	67.9	67.9
AC Mountain	White	71.0	70.7	71.0	70.9	8.4	8.3	7.8	7.4	52.2	54.7	57.1	58.7	49.9	51.0	50.9	51.0	63.1	67.0	65.9	65.3
Aubrey	White	70.4	69.5	69.6	69.8	8.6	8.9	8.5	8.0	56.3	57.8	59.2	60.1	51.6	52.5	52.0	52.3	65.4	69.6	68.4	68.2
MSU 6012	White	71.5	71.0	71.1	71.3	8.3	8.4	7.9	7.5	54.5	55.8	58.6	59.9	52.7	54.6	53.3	53.1	66.4	68.2	67.1	66.9
MCIA Venus	White	71.8	70.8	71.3	71.3	8.5	8.7	8.0	7.6	51.6	52.5	54.5	55.8	56.2	58.3	56.3	56.1	71.1	72.4	70.5	70.4
Francis	White	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Skeet	White	71.3	----	----	----	8.8	----	----	----	54.9	----	----	----	53.2	----	----	----	64.8	----	----	----
HS EX15	White	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Glacier	White	69.8	69.8	----	----	8.6	8.6	----	----	53.9	56.3	----	----	53.2	54.0	----	----	65.6	69.4	----	----
F1027	White	69.7	----	----	----	8.4	----	----	----	56.5	----	----	----	53.6	----	----	----	71.4	----	----	----
Dyna-Gro 9491W	White	70.6	70.3	----	----	8.9	9.0	----	----	54.3	54.5	----	----	52.6	55.1	----	----	66.5	70.0	----	----
AgriMAXX EXP 1696W	White	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F2016	White	70.8	----	----	----	8.1	----	----	----	54.4	----	----	----	59.0	----	----	----	71.7	----	----	----
MEAN		70.3	69.8	70.0	70.1	8.4	8.5	8.0	7.6	55.2	55.8	57.5	58.5	53.2	54.6	53.7	53.4	66.9	70.0	68.8	68.3
LSD (0.05)		4.1	2.8	2.2	1.9	1.0	0.8	0.7	0.5	9.0	6.4	5.1	4.7	6.1	5.0	3.6	3.1	7.9	6.2	4.7	4.1
CV (%)		2.1	2.1	2.0	2.0	4.4	4.8	5.0	4.9	5.9	5.8	5.5	5.8	4.0	4.7	4.2	4.1	4.2	4.6	4.2	4.3

2016 Michigan State University Wheat Performance Trials (Including Experimentals)

Multi-year data are the most informative.

Table 8 : Multi-Year Performance Summary (Note: Tables sorted by 2016 Yield, red wheat's grouped before white)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Sucrose SRC (%)				Lactic Acid SRC (%)				Cookie Diameter (cm)				NIR Kernel Protein		SKCS Kernel Hard	
		Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Yr		Multi-Yr	
		2015	2 YR 2014-15	3 YR 2013-15	4 YR 2012-15	2015	2 YR 2014-15	3 YR 2013-15	4 YR 2012-15	2015	2 YR 2014-15	3 YR 2013-15	4 YR 2012-15	2015	2 YR 2014-15	2015	2 YR 2014-15
SC 1315-15™	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
W 202	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
AgriMAXX 444	Red	82.7	-----	-----	-----	96.5	-----	-----	-----	19.5	-----	-----	-----	9.4	-----	4.3	-----
RS 911	Red	82.7	-----	-----	-----	96.9	-----	-----	-----	19.4	-----	-----	-----	10.5	-----	8.3	-----
VA12W-72	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
Sunburst	Red	101.7	101.2	98.4	97.9	100.4	103.6	99.1	98.9	17.0	17.3	17.4	17.4	10.4	10.9	41.1	43.6
MCIA Red Dragon	Red	89.4	89.2	87.5	87.2	98.9	103.7	97.2	98.6	17.7	18.1	18.4	18.4	10.3	10.7	3.0	6.5
Red Ruby	Red	89.8	90.5	88.2	87.2	105.5	111.0	106.6	103.5	18.0	18.1	18.3	18.4	10.8	11.1	14.3	18.1
MCIA Whale	Red	89.0	88.3	87.8	-----	90.5	98.3	97.0	-----	18.6	18.2	18.0	-----	10.4	10.6	23.2	25.3
SY 483	Red	90.9	90.2	88.3	-----	94.5	97.2	94.7	-----	19.4	18.8	18.5	-----	10.0	10.2	14.2	19.0
VA11W-106	Red	96.3	-----	-----	-----	100.5	-----	-----	-----	18.9	-----	-----	-----	10.8	-----	18.6	-----
AgriMAXX 454	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Diener 496W	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MCIA Harpoon	Red	87.7	-----	-----	-----	94.2	-----	-----	-----	18.9	-----	-----	-----	10.5	-----	15.0	-----
AgriMAXX 463	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
F1026R	Red	84.9	-----	-----	-----	79.9	-----	-----	-----	19.3	-----	-----	-----	10.3	-----	14.6	-----
DF EX R J-15	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro WX16771	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Hopewell	Red	90.8	91.6	89.6	88.2	106.5	108.1	104.2	103.8	18.0	18.2	18.3	18.4	10.7	11.1	15.5	18.6
L-241	Red	98.6	100.9	-----	-----	112.4	119.1	-----	-----	17.7	18.1	-----	-----	9.9	10.2	17.1	21.8
L 11528	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Jupiter	White	84.9	86.5	85.1	84.1	94.0	98.7	95.3	92.2	18.4	18.2	18.4	18.6	10.1	10.6	17.6	22.4
DF EX W 25	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Ambassador	White	81.8	83.0	81.2	80.3	84.2	90.3	86.6	85.8	19.2	18.9	18.9	19.1	10.6	10.8	8.3	13.6
Target	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9242W	White	85.5	85.3	84.2	83.4	99.2	105.0	100.6	96.4	19.2	19.0	19.0	19.1	9.7	10.1	17.9	21.9
AC Mountain	White	81.8	82.7	80.8	80.4	75.2	81.7	79.8	80.3	18.7	18.9	18.9	19.0	10.0	10.5	11.7	17.7
Aubrey	White	85.9	89.2	87.4	86.3	100.4	106.8	103.2	100.7	18.8	18.3	18.4	18.4	10.5	11.0	16.3	20.4
MSU 6012	White	84.9	85.4	83.9	83.6	93.5	100.5	98.0	97.3	18.6	18.7	18.6	18.7	10.1	10.6	15.6	17.4
MCIA Venus	White	90.6	89.8	87.4	87.0	95.7	91.9	87.3	86.1	18.5	18.2	18.3	18.3	10.0	10.4	25.5	28.7
Francis	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Skeet	White	83.6	-----	-----	-----	93.8	-----	-----	-----	17.9	-----	-----	-----	10.6	-----	14.4	-----
HS EX15	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Glacier	White	87.4	87.1	-----	-----	99.2	100.6	-----	-----	18.3	18.2	-----	-----	10.8	10.9	21.3	22.9
F1027	White	89.4	-----	-----	-----	86.0	-----	-----	-----	19.0	-----	-----	-----	10.1	-----	13.4	-----
Dyna-Gro 9491W	White	87.7	87.6	-----	-----	96.6	98.9	-----	-----	18.1	18.3	-----	-----	11.0	11.3	17.3	20.8
AgriMAXX EXP 1696W	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
F2016	White	90.9	-----	-----	-----	114.9	-----	-----	-----	18.3	-----	-----	-----	9.8	-----	15.8	-----
MEAN		87.4	88.5	86.4	85.3	95.5	101.4	96.5	94.6	18.8	18.5	18.6	18.7	10.2	10.6	15.8	21.5
LSD (0.05)		13.2	9.3	6.9	6.0	33.2	22.8	17.8	15.4	1.8	1.1	0.9	0.8	1.1	0.9	20.3	15.3
CV (%)		5.3	5.3	4.9	5.0	12.2	11.6	11.5	11.5	3.4	3.0	2.9	2.9	3.9	4.2	42.2	39.6

**ORGANIZATIONS PARTICIPATING IN THE 2016
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AgriMAXX Wheat Company

AgriMAXX 413
AgriMAXX 438
AgriMAXX 444
AgriMAXX 454
AgriMAXX 463
AgriMAXX 464
AgriMAXX EXP 1696W

Dyna-Gro Seed

Dyna-Gro 9242W
Dyna-Gro 9491W
Dyna-Gro 9522
Dyna-Gro 9552
Dyna-Gro 9692
Dyna-Gro 9772
Dyna-Gro Shirley
Dyna-Gro WX16771

Michigan Crop

Improvement Association

AC Mountain
Hopewell
Jupiter
MCIA 7002012
MCIA Harpoon
MCIA Red Devil
MCIA Red Dragon
MCIA Venus
MCIA Whale
MSU E6012
Red Ruby
Sunburst

BioTown Seeds

Diener 491W
Diener 496W

Harrington Seeds, Inc.

Glacier
HS 284R
HS 30.06
HS EX15

D.F. Seeds, Inc.

Ambassador
Aubrey
DF 105R
DF 109R
DF 111R
DF 112R
DF 114R
DF EX R J-15
DF EX R J-55
DF EX W 25
Francis
Skeet
Target

Irrer Seed Farm

L 11418
L 11528
L-241
L-334
LCS 2214
LCS 3677

Seed Consultants, Inc.

SC 1315-15™
SC 1325-15™
SC 1335-15™
SC 13S26™
SC EXP 142™

Virginia Crop

Improvement Assoc. /

VA Tech

Hillard
VA11W-106
VA12W-72

Michigan State University

F1026R
F1027
F2016

Direct Enterprises

Equity Brand Butler
EXP DEI 16098

Rupp Seeds, Inc.

RS 910
RS 911
RS 972

Wellman Seeds, Inc.

W 202
W 204
W 206
W 303
W 304
W 307

DuPont Pioneer

Pioneer Brand 25R25
Pioneer Brand 25R40
Pioneer Brand 25R46
Pioneer Brand 25R50

Syngenta

SY 100
SY 483

**ORGANIZATIONS PARTICIPATING IN THE 2016
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Irrer Seed Farm
9621 Dexter Trail
Fowler, MI 48835
Phone: 989-593-3453

BioTown Seeds
P.O. Box 299
Reynolds, IN 47980
Phone: 219-984-6038

Michigan Crop Improvement
Association
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Phone: 517-332-3546

D.F. Seeds, Inc.
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Dansville, MI 48819
Phone: 517-623-6161

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

Direct Enterprises Inc.
P.O. Box 978
Westfield, IN 46074
Phone: 317-910-2140

Seed Consultants Inc.
648 Miami Trace Rd. SW
Washington Court House,
Ohio 43160
Phone: 800-708-2676

DuPont Pioneer
1000 West Jefferson Street
Tipton, IN 46072-9496
765-675-2101

Syngenta
806 - N. 2nd Street
Berthoud, CO 80513
Phone: 252-814-5425
765-412-5420

Dyna-Gro Seed
4648 S Garfield Rd
Auburn, MI 48611
Phone: 989-662-0000

Virginia Tech / VCIA
2229 Menokin Road
Warsaw, VA 22572
Phone: 804-333-3485

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

Wellman Seeds, Inc.
23778 Delphos Jennings Road
Delphos, OH 45833
Phone: 419-695-9010