

# 2017 Michigan State Wheat Performance Trials

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Where wheat followed soybeans, planting was delayed in many parts of the state due to green stems not drying out in soybeans. Weather conditions in the fall made it tough to get wheat planted early. Overall, wheat survived the winter very well with only small pockets of winter injury. Wet conditions in March and April created waterlogging in many counties. Unseasonably warm temperatures early in the spring helped wheat to break dormancy and advance in growth rapidly with growth stages being reached about 2 weeks early. However, cool weather in the latter half of April and May slowed development back to normal rates. Periodic rain showers extended the 2017 harvest to as long as three weeks. Test weights were variable with reports between 55 and 61. DON levels were very low. Falling numbers were a big problem early in the harvest season, but after the early planted wheat was harvested became less of a problem overall. Some farmers reported falling numbers as low as 165.

There were several diseases present in 2017 including barley yellow dwarf virus, powdery mildew, septoria and tan spot. Stripe rust was less widespread compared to 2016 although there were some fields sprayed for control. Fusarium head blight infections were very low to non-existent in commercial fields. Ratings for FHB severity, incidence and index in a nursery inoculated with FHB and a misting system is used to create ideal infection conditions to allow for comparison between varieties. Infection levels in this trial will always be higher than what farmers see in the field.

## **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 2014 through 2017. 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 2017 State Wheat Performance Trial entries were planted at seven sites in 7 counties: Allegan, Clinton, Huron, Ingham, Lenawee, Sanilac, and Tuscola. The Clinton County site was abandoned due to excessive water damage. 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 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 an additional conventionally managed trial at Tuscola county. Under high management, an additional 30 pounds of nitrogen was applied using streamer bars and 28% N. Quilt 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 an underestimation of yield. For data reported on a 0-9 scale 0 is the best possible score.

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. Funding for the high-management trial inputs was provided by the Michigan Wheat Program. Questions and comments regarding the research reported here should be directed to Eric Olson at [eolson@msu.edu](mailto: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 125 entries (64 of which were experimental lines) from 13 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 57 commercially available varieties from 12 organizations. 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 2017. In some instances (e.g. yield), data columns to the right of the 2017 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 2017 yield data contains the multi-site yield averages of only the high management sites and does not include the single site of conventionally managed yield data in Tuscola County. The conventionally managed single site data can be found on table 5 under 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. 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. 2017 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 Levels of DON mycotoxin and severity are the most reliable traits to be used in selecting FHB-resistant varieties.

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

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 blotch, cephalosporium stripe, wheat streak mosaic virus, barley yellow dwarf virus, leaf rust, winter injury, stripe rust, 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. Wheat streak mosaic virus and barley yellow dwarf virus were not observed in the 2017 growing season and reported scores are from the 2014 and 2013 growing seasons respectively. Stripe rust and leaf rust scores are based primarily on infection observations on the flag leaf. Black point is reported on a percentage basis (percent of seeds with visible black point). 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 from the 2016 harvest season and earlier.

### Single Site Yield Performance Summary

**Table 4** contains 2017 yield (adjusted to 13.5% moisture), as well as multi-year means, for entries in each of the five sites harvested for yield in 2017. 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

**Table 5** 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 Tuscola County. The Conventional vs. High Management Differences portion of the table provides the difference between high management and conventional management.

### Milling and Baking Quality

**Tables 6 & 7** contains data for milling and baking quality. Quality data are from the 2016 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. 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%.

## 2017 Michigan State University Wheat Performance Trials

### Appendix A. Trial Site Descriptions for 2017 MSU Wheat Performance Trials.

	FUSARIUM HEAD BLIGHT NURSERY	ALLEGAN COUNTY	HURON COUNTY	CLINTON COUNTY		LENAWEE COUNTY	SANILAC COUNTY	TUSCOLA COUNTY	
				CONV. MANAGED	HIGH MANAGED			CONV. MANAGED	HIGH MANAGED
COOPERATOR	Michigan State University	Harvey Jipping	Darwin Sneller	Tom Galecka		Woods Seed Farm	JGDM Farms	Stuart Bierlein	
NEAREST CITY	Lansing	Hamilton	Owenedale	Elsie		Deerfield	Deckerville	Reese	
PLANTING DATE	Sept. 22, 2016	Oct. 14, 2016	Oct. 12, 2016	Oct. 20, 2016		Oct. 11, 2016	Sept. 24, 2016	Sept. 25, 2016	
HARVEST DATE	N/A	July 17, 2017	July 18, 2017	N/A		July 9, 2017	July 19, 2017	July 15, 2017	
SOIL TYPE	Capac loam, 0 to 4 percent slopes & Colwood-Brookston loams	Kibbie fine sandy loam, 0 to 3 percent slopes	Avoca loamy sand, 0 to 2 percent slopes	Corunna sandy loam		Colwood loam	Parkhill loam, 0 to 1 percent slopes	Tappan-Londo loams, 0 to 2 percent slopes	
PRE-PLANT FERTILIZER	None		150 lbs. MAP + 50 lbs. Potash + 50 lbs. AMS	None		100# DAP + 100# Potash	275 lbs of 9-14-23 + 3.6S	275# 13-5-25 +3.7 S + .45 Mg + 0.8 Zn + 0.3 Mn + .24 B + 0.05 Cu + 0.02 Iron	
COMMENTS	Inoculated / Misted Fusarium Head Blight Screening Nursery.		Additional 30 lbs. Nitrogen And Fungicides Were Applied.	Abandoned due to water damage.		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	87.2	79.6	N/A	N/A	86.4	105.0	90.6	99.2
AVERAGE TEST WEIGHT (LBS. / BUSHEL)	N/A	55.1	57.5	N/A	N/A	58.9	58.9	55.7	55.6
AVERAGE PERCENT GRAIN MOISTURE AT HARVEST	N/A	13.4	13.9	N/A	N/A	13.5	13.4	13.6	14.0
2014 DATA RECORDED (NUMBER OF REPS)	%INC.(4); %SEV. (4); INDEX (4)	JDF (3); PLHT (3)						JDF (3); PLHT (3); LODGE (3)	JDF (3); PLHT (3); LODGE (3)

\*DATA: **FD** - Flowering Date (Days Past Jan. 01), **PL\_HT** - Plant Height in Inches, **LODGE** - Lodging 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

**2017 Michigan State University Wheat Performance Trials** (Commercially Available Only)

Multi-year data are the most informative.

**Table 1 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)**

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Name	Grain Color Awns Chaff Color			Yield: Bushels/Acre (Adjusted to 13.5% Moisture)				Test Weight: lbs/Bushel				Incidence (% of spikes)				Severity (% within spikes)				FHB (Scab) : Field Observation				DON (ppm) in grain			
				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages							
				2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017
				2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017
Jupiter	White	Awnletted	Bronze	96.2	108.1	104.4	100.2	56.5	57.3	57.2	57.5	51.4	50.7	66.3	66.0	48.7	48.4	43.4	41.4	25.0	24.6	27.3	26.2	8.7	7.9	9.2	7.1
Ambassador	White	Awnletted	White	95.8	105.2	101.8	98.7	55.6	57.1	56.5	56.6	47.6	42.2	60.2	68.3	58.7	56.7	54.6	55.7	28.0	23.9	32.0	37.7	14.5	14.1	20.1	15.2
Dyna-Gro 9362W	White	Awnless	White	95.6	-----	-----	-----	58.1	-----	-----	-----	38.5	-----	-----	-----	44.6	-----	-----	-----	17.2	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9242W	White	Awnletted	White	95.1	104.1	102.2	98.8	57.2	58.4	58.3	58.5	21.2	27.2	49.0	56.1	17.9	16.4	18.2	21.7	3.8	4.6	10.0	13.5	5.2	7.1	7.8	5.9
Dyna-Gro 9611W	White	Awnletted	White	92.9	-----	-----	-----	57.7	-----	-----	-----	44.6	-----	-----	-----	39.9	-----	-----	-----	17.8	-----	-----	-----	-----	-----	-----	-----
E6012	White	Awned	White	92.8	102.3	98.8	95.2	56.8	58.1	57.7	57.9	46.4	48.2	60.9	66.3	31.1	33.9	36.0	36.4	14.4	17.2	23.1	25.1	9.8	9.4	8.2	6.2
AC Mountain	White	Awnletted	White	91.0	102.0	98.5	96.6	56.1	57.1	56.8	57.4	64.9	53.3	67.6	72.0	69.1	57.0	54.3	52.7	44.9	31.7	36.9	37.5	8.9	11.0	12.9	9.8
MCIA Venus	White	Awned	White	90.2	100.7	96.9	93.3	56.0	56.3	56.3	56.8	44.2	47.9	61.6	66.8	41.3	37.8	37.0	36.7	18.2	18.0	22.5	24.2	9.1	10.5	14.5	11.0
W 151	White	Awnletted	White	90.1	-----	-----	-----	57.5	-----	-----	-----	25.5	-----	-----	-----	34.7	-----	-----	-----	8.9	-----	-----	-----	-----	-----	-----	-----
Skeet	White	Awnletted	White	90.0	99.3	97.2	-----	56.9	58.1	57.6	-----	40.5	41.9	55.9	-----	53.2	43.2	44.6	-----	21.5	18.2	25.3	-----	10.0	-----	-----	-----
Aubrey	White	Awnletted	White	87.3	99.6	97.4	94.0	58.1	59.0	59.2	59.4	40.5	36.9	50.9	55.0	36.5	38.6	34.5	34.8	14.8	14.7	16.8	18.6	11.1	9.7	11.9	8.9
SY 944	White	Awned	White	82.8	-----	-----	-----	57.3	-----	-----	-----	29.2	-----	-----	-----	40.2	-----	-----	-----	11.8	-----	-----	-----	-----	-----	-----	-----
Glacier	White	Awnletted	White	77.4	92.4	91.9	90.4	56.5	57.5	57.4	58.0	35.7	41.2	57.1	59.1	53.8	48.4	40.4	40.2	19.2	19.6	20.4	22.4	5.8	4.3	-----	-----
DF 112 R	Red	Awned	White	104.3	112.9	108.3	105.2	56.4	56.9	56.9	57.3	38.4	49.2	61.1	62.1	44.7	41.6	34.4	34.8	17.2	20.3	19.3	20.5	3.9	4.8	8.6	-----
SY 100	Red	Awnletted	White	101.9	113.4	-----	-----	54.6	55.7	-----	-----	18.4	27.5	-----	-----	27.6	32.6	-----	-----	5.1	10.2	-----	-----	-----	-----	-----	-----
RS 910	Red	Awned	White	100.0	107.6	103.2	-----	57.8	58.8	58.6	-----	24.5	33.1	51.7	-----	31.1	34.0	29.9	-----	7.6	11.4	14.0	-----	8.3	-----	-----	-----
W 206	Red	Awned	White	99.5	107.7	105.0	102.7	57.8	58.8	58.8	59.3	32.4	36.2	50.0	54.3	44.7	39.0	33.0	30.3	14.4	13.9	14.6	15.3	8.1	5.9	7.6	-----
DF 105 R	Red	Awned	White	99.0	111.2	105.0	102.0	55.9	56.9	56.9	57.4	39.7	39.9	59.1	63.7	59.4	46.9	37.9	35.9	23.6	18.7	19.0	20.1	6.7	5.9	8.6	6.5
Dyna-Gro 9552	Red	Awned	White	98.1	108.0	104.3	-----	57.9	58.7	58.6	-----	32.3	37.0	52.2	-----	24.5	28.4	25.2	-----	7.9	11.5	12.8	-----	7.1	-----	-----	-----
L11610	Red	Awnletted	White	98.0	-----	-----	-----	57.4	-----	-----	-----	31.8	-----	-----	-----	41.8	-----	-----	-----	13.3	-----	-----	-----	-----	-----	-----	-----
W 204	Red	Awned	White	97.7	108.0	-----	-----	56.9	58.1	-----	-----	49.3	50.5	-----	-----	59.5	48.5	-----	-----	29.3	24.4	-----	-----	-----	-----	-----	-----
DF 109 R	Red	Awnless	White	97.2	107.9	102.8	100.8	57.0	57.5	56.8	57.1	40.7	39.5	52.2	55.4	33.7	36.5	34.3	31.9	13.7	14.4	17.2	16.8	7.5	5.9	9.6	7.2
DF 111 R	Red	Awned	White	97.1	106.6	102.8	100.5	57.5	58.7	58.8	59.2	43.4	48.4	61.0	67.0	23.6	28.3	25.2	25.0	10.2	13.9	14.7	16.3	5.9	6.4	9.9	-----
L11621	Red	Awned	White	97.1	-----	-----	-----	58.5	-----	-----	-----	55.7	-----	-----	-----	27.3	-----	-----	-----	15.2	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9701	Red	Awned	White	96.8	-----	-----	-----	57.4	-----	-----	-----	20.3	-----	-----	-----	37.3	-----	-----	-----	7.6	-----	-----	-----	-----	-----	-----	-----
AgriMAXX 413	Red	Awned	White	96.0	107.8	104.2	101.1	55.9	56.8	57.4	57.7	52.8	44.7	58.6	60.8	24.0	27.5	25.3	23.2	12.7	12.1	14.1	13.4	5.4	5.5	9.9	7.4
L11418	Red	Awnletted	White	96.0	108.6	-----	-----	57.7	58.8	-----	-----	34.0	40.4	-----	-----	31.0	38.4	-----	-----	10.6	15.9	-----	-----	-----	-----	-----	-----
AgriMAXX 464	Red	Awned	White	95.7	107.3	-----	-----	55.9	57.1	-----	-----	73.9	47.8	-----	-----	36.4	33.7	-----	-----	26.9	16.9	-----	-----	-----	-----	-----	-----
StarBurst	Red	Awnless	White	95.4	-----	-----	-----	60.1	-----	-----	-----	28.4	-----	-----	-----	18.9	-----	-----	-----	5.4	-----	-----	-----	-----	-----	-----	-----
Steyer Berwick	Red	Awnless	White	95.0	-----	-----	-----	57.5	-----	-----	-----	34.3	-----	-----	-----	36.3	-----	-----	-----	12.4	-----	-----	-----	-----	-----	-----	-----
SY 547	Red	Awnletted	White	94.8	-----	-----	-----	57.8	-----	-----	-----	65.5	-----	-----	-----	41.3	-----	-----	-----	27.0	-----	-----	-----	-----	-----	-----	-----
L11538	Red	Awned	White	94.2	-----	-----	-----	56.6	-----	-----	-----	56.2	-----	-----	-----	54.9	-----	-----	-----	30.8	-----	-----	-----	-----	-----	-----	-----
RS 972	Red	Awnless	White	94.2	105.3	101.9	100.4	56.7	57.2	57.2	57.4	58.4	48.3	58.5	62.0	50.2	46.0	39.0	38.7	29.3	22.8	21.9	23.9	3.9	4.5	8.7	6.6

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Multi-year data are the most informative.

**Table 1 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)**

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Name	Grain Color	Awns	Chaff Color	Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages				Test Weight: lbs/Bushel Multi-Year Averages				Incidence (% of spikes) Multi-Year Averages				Severity (% within spikes) Multi-Year Averages				FHB (Scab) : Field Observation Index (% overall) Multi-Year Averages				DON (ppm) in grain Multi-Year Averages							
				2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2017	2 YR	3 YR	4 YR	2015	2014-15	2013-15	2012-15	
				2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2015	2014-15	2013-15	2012-15
				2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2015	2014-15	2013-15	2012-15
MCIA Harpoon	Red	Awnless	White	94.0	102.3	100.7	-----	55.5	56.6	56.9	-----	7.2	19.5	44.2	-----	17.5	21.4	21.4	-----	1.3	4.8	9.9	-----	3.9	-----	-----	-----				
Dyna-Gro 9772	Red	Awned	White	93.9	105.5	-----	-----	55.9	57.3	-----	-----	23.1	38.2	-----	-----	29.7	29.2	-----	-----	6.9	11.9	-----	-----	-----	-----	-----	-----				
Hilliard	Red	Awned	White	93.8	104.3	100.4	-----	57.0	58.0	58.2	-----	29.1	42.0	54.7	-----	29.7	34.7	32.5	-----	8.6	15.3	17.7	-----	5.5	-----	-----	-----				
AgriMAXX 438	Red	Awnletted	White	93.6	107.6	103.8	101.8	57.0	58.0	57.7	57.9	42.3	42.8	59.4	64.5	51.4	44.1	39.0	39.2	21.7	18.9	21.7	24.0	6.1	6.9	7.6	-----				
Sunburst	Red	Awnless	White	93.6	102.9	101.6	96.8	60.0	60.1	60.2	60.3	32.3	32.8	54.4	61.4	43.0	38.2	34.8	31.9	13.9	12.7	17.5	18.3	4.7	5.8	8.9	6.7				
W 302	Red	Awned	White	93.4	-----	-----	-----	56.1	-----	-----	-----	29.6	-----	-----	-----	44.8	-----	-----	-----	13.2	-----	-----	-----	-----	-----	-----	-----				
Dyna-Gro 9750	Red	Awnless	White	93.3	-----	-----	-----	55.6	-----	-----	-----	13.1	-----	-----	-----	14.1	-----	-----	-----	1.8	-----	-----	-----	-----	-----	-----	-----				
W 305	Red	Awnletted	White	93.3	-----	-----	-----	57.6	-----	-----	-----	33.0	-----	-----	-----	35.2	-----	-----	-----	11.6	-----	-----	-----	-----	-----	-----	-----				
W 303	Red	Awnless	White	93.0	103.9	-----	-----	57.2	58.1	-----	-----	21.7	27.5	-----	-----	30.2	32.9	-----	-----	6.5	9.5	-----	-----	-----	-----	-----	-----				
AgriMAXX 444	Red	Awned	White	92.9	102.8	101.2	-----	56.8	57.5	57.6	-----	29.1	23.7	43.3	-----	35.0	32.7	29.0	-----	10.2	7.9	11.2	-----	2.7	-----	-----	-----				
Diener XW1701	Red	Awnless	White	92.9	-----	-----	-----	57.4	-----	-----	-----	36.8	-----	-----	-----	49.9	-----	-----	-----	18.4	-----	-----	-----	-----	-----	-----	-----				
MCIA Whale	Red	Awnless	White	92.5	102.0	101.1	98.5	57.8	58.3	57.9	57.9	44.1	37.1	54.7	57.4	47.6	40.4	40.9	39.1	21.0	15.9	23.5	23.6	6.6	11.4	14.1	-----				
Steyer Morrin	Red	Awnletted	White	92.4	-----	-----	-----	57.7	-----	-----	-----	29.0	-----	-----	-----	36.5	-----	-----	-----	10.6	-----	-----	-----	-----	-----	-----	-----				
MCIA Red Devil	Red	Awned	White	92.0	102.8	99.3	96.7	57.2	57.9	58.4	58.9	48.1	39.9	54.9	64.3	36.0	34.0	32.7	32.2	17.3	13.8	17.9	20.4	8.9	8.6	11.9	9.0				
Curly	Red	Awned	White	91.5	-----	-----	-----	58.1	-----	-----	-----	55.6	-----	-----	-----	61.9	-----	-----	-----	34.4	-----	-----	-----	-----	-----	-----	-----				
W 304	Red	Awned	White	90.1	104.3	-----	-----	56.5	57.5	-----	-----	29.5	34.8	-----	-----	27.2	24.0	-----	-----	8.0	8.1	-----	-----	-----	-----	-----	-----				
AgriMAXX 454	Red	Awned	White	89.2	100.2	-----	-----	56.5	57.5	-----	-----	37.2	37.7	-----	-----	50.9	41.5	-----	-----	18.9	15.8	-----	-----	-----	-----	-----	-----				
Dyna-Gro 9692	Red	Awned	White	89.1	102.7	100.4	-----	56.4	57.4	57.8	-----	34.7	31.5	48.9	-----	58.2	43.7	33.5	-----	20.2	14.1	13.1	-----	3.8	-----	-----	-----				
RS 902	Red	Awned	White	87.9	-----	-----	-----	56.6	-----	-----	-----	34.3	-----	-----	-----	44.2	-----	-----	-----	15.2	-----	-----	-----	-----	-----	-----	-----				
Diener XW1601	Red	Awned	White	87.1	-----	-----	-----	57.8	-----	-----	-----	24.0	-----	-----	-----	47.0	-----	-----	-----	11.3	-----	-----	-----	-----	-----	-----	-----				
HS 30.06	Red	Awned	White	86.9	100.3	-----	-----	56.4	57.4	-----	-----	37.2	37.7	-----	-----	44.0	35.1	-----	-----	16.4	13.1	-----	-----	-----	-----	-----	-----				
Hopewell	Red	Awnletted	Bronze	86.3	96.7	94.4	92.4	57.9	58.4	58.0	58.4	55.1	51.7	64.5	66.5	61.2	52.8	48.3	46.7	33.7	27.8	30.1	30.5	8.3	7.4	11.1	8.5				
MCIA Red Dragon	Red	Awnless	White	85.8	98.8	98.3	97.1	56.3	57.5	57.9	58.2	14.0	20.3	42.7	50.8	14.4	16.4	20.0	25.2	2.0	3.7	10.4	15.6	4.1	4.1	7.4	5.6				
MCIA 110201	Red	Awnletted	White	85.3	-----	-----	-----	57.9	-----	-----	-----	17.0	-----	-----	-----	7.1	-----	-----	-----	1.2	-----	-----	-----	-----	-----	-----	-----				
<b>MEAN (2017 125 Entries)</b>				<b>91.6</b>	<b>104.3</b>	<b>101.2</b>	<b>98.5</b>	<b>57.1</b>	<b>57.8</b>	<b>57.8</b>	<b>58.1</b>	<b>37.9</b>	<b>39.5</b>	<b>55.6</b>	<b>61.9</b>	<b>40.0</b>	<b>38.0</b>	<b>35.0</b>	<b>35.9</b>	<b>16.0</b>	<b>15.8</b>	<b>19.1</b>	<b>22.1</b>	<b>6.6</b>	<b>7.5</b>	<b>10.6</b>	<b>8.3</b>				
<b>LSD (0.05)</b>				<b>2.9</b>	<b>6.8</b>	<b>5.2</b>	<b>4.7</b>	<b>0.3</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>-----</b>	<b>23.1</b>	<b>15.0</b>	<b>12.1</b>	<b>-----</b>	<b>16.5</b>	<b>13.3</b>	<b>10.5</b>	<b>-----</b>	<b>13.2</b>	<b>10.1</b>	<b>8.5</b>	<b>3.8</b>	<b>3.0</b>	<b>2.7</b>	<b>2.0</b>				
<b>CV (%)</b>				<b>4.7</b>	<b>3.1</b>	<b>3.0</b>	<b>3.2</b>	<b>0.9</b>	<b>0.9</b>	<b>1.1</b>	<b>1.1</b>	<b>0.3</b>	<b>28.9</b>	<b>16.5</b>	<b>13.9</b>	<b>0.3</b>	<b>21.6</b>	<b>23.3</b>	<b>20.6</b>	<b>0.5</b>	<b>41.3</b>	<b>32.3</b>	<b>27.2</b>	<b>47.9</b>	<b>51.4</b>	<b>40.5</b>	<b>40.6</b>				

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

Multi-year data are the most informative.

**Table 2 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)**

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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-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Infection Type 2016	Percent Infection 2016	Class 2016
			2 YR	3 YR	4 YR	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017			
			2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17
Jupiter	White	9.0	2.0	2.4	2.5	2.3	151.0	151.5	151.6	152.7	33.3	34.2	32.4	32.4	13.6	13.8	13.8	14.0	4.0	15.8	MR
Ambassador	White	5.5	2.0	2.6	3.0	3.0	149.2	149.9	149.7	151.0	35.9	37.1	35.2	34.9	13.1	12.7	12.7	13.0	7.0	39.0	S
Dyna-Gro 9362W	White	8.5	2.0	-----	-----	-----	149.2	-----	-----	-----	34.2	-----	-----	-----	13.8	-----	-----	-----	-----	-----	-----
Dyna-Gro 9242W	White	4.5	2.0	2.5	2.6	2.5	149.3	150.4	150.3	151.3	36.3	37.9	35.5	35.0	13.8	13.5	13.7	14.0	5.3	36.7	MR
Dyna-Gro 9611W	White	5.5	2.0	-----	-----	-----	149.2	-----	-----	-----	34.1	-----	-----	-----	13.8	-----	-----	-----	-----	-----	-----
E6012	White	9.0	2.7	3.3	3.7	3.2	149.7	150.3	150.4	151.8	34.4	36.1	34.4	33.6	13.0	12.6	12.9	13.2	6.0	6.7	MS
AC Mountain	White	8.0	2.7	2.8	4.1	5.0	150.9	151.2	150.9	152.2	40.2	41.0	40.0	39.3	13.3	13.1	13.1	13.5	6.2	19.2	MS
MCIA Venus	White	7.5	4.0	5.8	5.6	4.8	148.1	148.7	148.6	150.1	38.6	40.8	37.8	37.0	13.1	12.7	13.2	13.7	2.5	2.5	MR
W 151	White	6.5	3.0	-----	-----	-----	149.4	-----	-----	-----	36.1	-----	-----	-----	14.1	-----	-----	-----	-----	-----	-----
Skeet	White	4.5	3.0	3.6	4.1	-----	149.3	149.9	149.7	-----	39.9	41.9	38.8	-----	13.9	13.6	13.6	-----	7.3	29.2	S
Aubrey	White	9.0	2.3	3.1	3.5	3.1	149.2	149.6	149.5	150.6	36.5	40.1	36.8	35.9	13.9	13.6	13.7	13.9	6.8	21.7	S
SY 944	White	5.5	6.0	-----	-----	-----	151.2	-----	-----	-----	40.7	-----	-----	-----	14.2	-----	-----	-----	-----	-----	-----
Glacier	White	3.0	2.0	2.3	3.6	3.8	151.8	152.2	152.2	153.4	37.4	38.4	37.6	36.8	13.8	13.7	14.1	14.6	5.6	27.0	MS
DF 112 R	Red	6.0	3.3	3.4	3.5	3.4	148.2	149.2	149.1	150.6	34.0	35.6	33.6	33.4	13.2	12.7	13.1	13.5	3.5	5.0	MR
SY 100	Red	4.0	2.3	3.2	-----	-----	149.5	150.0	-----	-----	33.0	34.8	-----	-----	13.4	13.0	-----	-----	0.8	3.3	R
RS 910	Red	6.0	2.0	2.1	2.6	-----	148.4	149.5	149.4	-----	36.8	37.3	35.6	-----	13.5	13.0	13.6	-----	5.7	21.7	MS
W 206	Red	4.5	2.3	2.4	2.5	2.4	148.8	149.7	149.5	150.8	36.0	37.2	35.6	35.4	13.5	13.0	13.6	14.0	6.7	20.0	S
DF 105 R	Red	3.0	2.0	2.5	2.7	2.7	148.2	149.1	149.0	150.1	33.0	35.0	33.1	32.9	12.9	12.5	13.0	13.3	1.2	1.7	R
Dyna-Gro 9552	Red	0.5	2.0	2.4	2.3	-----	149.8	150.4	150.2	-----	33.4	35.0	33.4	-----	13.7	13.2	13.6	-----	3.8	5.0	MR
L11610	Red	3.0	4.7	-----	-----	-----	148.0	-----	-----	-----	35.7	-----	-----	-----	13.9	-----	-----	-----	-----	-----	-----
W 204	Red	6.0	2.0	1.9	-----	-----	147.8	148.9	-----	-----	34.3	35.8	-----	-----	13.6	13.3	-----	-----	6.2	36.7	MS
DF 109 R	Red	1.5	2.0	2.4	3.7	4.1	149.1	149.8	149.6	151.1	35.2	36.9	35.7	35.4	14.2	13.6	14.2	14.9	4.7	5.0	MR
DF 111 R	Red	5.5	2.3	2.4	2.5	2.4	149.7	150.6	150.2	151.4	35.0	36.0	35.0	35.2	13.8	13.3	13.7	14.2	7.7	51.7	S
L11621	Red	3.5	5.0	-----	-----	-----	149.0	-----	-----	-----	35.2	-----	-----	-----	13.5	-----	-----	-----	-----	-----	-----
Dyna-Gro 9701	Red	5.5	2.7	-----	-----	-----	149.5	-----	-----	-----	36.0	-----	-----	-----	13.7	-----	-----	-----	-----	-----	-----
AgriMAXX 413	Red	5.5	2.0	2.8	2.9	2.8	148.5	149.5	149.2	150.4	32.7	34.5	32.9	32.8	12.9	12.6	13.0	13.2	1.0	0.8	R
L11418	Red	1.5	5.0	4.7	-----	-----	147.9	149.0	-----	-----	34.6	36.5	-----	-----	14.0	13.5	-----	-----	6.3	24.2	MS
AgriMAXX 464	Red	7.0	2.3	2.8	-----	-----	148.4	149.2	-----	-----	36.8	38.3	-----	-----	13.2	12.9	-----	-----	5.4	23.0	MR
StarBurst	Red	0.0	2.0	-----	-----	-----	150.8	-----	-----	-----	30.0	-----	-----	-----	14.4	-----	-----	-----	-----	-----	-----
Steyer Berwick	Red	1.0	2.3	-----	-----	-----	150.3	-----	-----	-----	32.3	-----	-----	-----	13.7	-----	-----	-----	-----	-----	-----
SY 547	Red	2.5	3.0	-----	-----	-----	149.3	-----	-----	-----	36.1	-----	-----	-----	13.8	-----	-----	-----	-----	-----	-----
L11538	Red	2.5	2.7	-----	-----	-----	149.2	-----	-----	-----	35.8	-----	-----	-----	13.5	-----	-----	-----	-----	-----	-----
RS 972	Red	1.5	2.0	2.3	3.5	4.1	149.2	149.8	149.7	151.2	35.7	36.9	35.5	35.3	14.2	13.8	14.5	15.1	2.0	4.0	R

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Table 2 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)

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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-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Infection Type 2016	Percent Infection 2016	Class 2016		
			2 YR	3 YR	4 YR	2017	2016-17	2015-17	2014-17	2 YR	3 YR	4 YR	2017	2016-17	2015-17	2014-17	2 YR	3 YR				4 YR	2017
			2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	2017	2016-17	2015-17	2014-17	
MCIA Harpoon	Red	3.0	2.0	1.8	1.9	-----	148.7	149.3	149.3	-----	34.0	35.2	33.4	-----	13.3	12.6	13.1	-----	1.8	2.5	R		
Dyna-Gro 9772	Red	7.5	2.0	2.6	-----	-----	148.0	149.0	-----	-----	35.8	37.4	-----	-----	13.1	12.9	-----	-----	5.8	19.2	MS		
Hilliard	Red	3.5	2.0	2.5	2.4	-----	147.8	148.9	149.0	-----	36.2	37.9	35.8	-----	13.6	13.1	13.6	-----	3.3	5.0	MR		
AgriMAXX 438	Red	3.0	2.0	2.5	3.5	4.9	149.4	149.8	149.7	151.0	35.4	37.1	35.8	35.6	14.2	13.7	14.4	15.0	3.0	5.0	MR		
Sunburst	Red	1.5	2.0	1.9	1.8	1.6	150.7	151.5	151.1	152.3	30.8	32.1	30.9	30.6	14.3	14.6	15.0	15.5	5.2	14.2	MR		
W 302	Red	4.0	2.0	-----	-----	-----	149.3	-----	-----	-----	34.0	-----	-----	-----	13.7	-----	-----	-----	-----	-----	-----		
Dyna-Gro 9750	Red	3.0	1.7	-----	-----	-----	148.6	-----	-----	-----	33.0	-----	-----	-----	13.3	-----	-----	-----	-----	-----	-----		
W 305	Red	3.0	2.0	-----	-----	-----	149.3	-----	-----	-----	32.2	-----	-----	-----	13.6	-----	-----	-----	-----	-----	-----		
W 303	Red	1.5	3.0	3.1	-----	-----	149.0	150.2	-----	-----	32.4	34.3	-----	-----	13.6	13.3	-----	-----	6.2	14.2	MS		
AgriMAXX 444	Red	0.5	2.3	2.9	3.0	-----	149.4	150.2	150.1	-----	34.6	35.7	34.4	-----	13.9	13.5	14.0	-----	3.3	5.0	MR		
Diener XW1701	Red	2.5	2.0	-----	-----	-----	150.0	-----	-----	-----	32.2	-----	-----	-----	13.5	-----	-----	-----	-----	-----	-----		
MCIA Whale	Red	4.5	2.0	1.9	2.2	2.2	150.6	151.2	151.2	152.5	34.1	36.2	35.0	35.1	14.1	13.7	14.3	15.1	5.8	6.0	MS		
Steyer Morrin	Red	4.5	2.0	-----	-----	-----	150.4	-----	-----	-----	34.6	-----	-----	-----	14.1	-----	-----	-----	-----	-----	-----		
MCIA Red Devil	Red	0.5	2.0	2.4	3.1	2.8	149.8	150.5	150.2	151.2	36.3	37.7	36.1	35.5	13.5	13.0	13.4	13.8	4.2	5.0	MR		
Curly	Red	6.5	2.7	-----	-----	-----	148.4	-----	-----	-----	35.4	-----	-----	-----	13.7	-----	-----	-----	-----	-----	-----		
W 304	Red	3.5	2.0	2.4	-----	-----	149.1	149.8	-----	-----	35.0	36.7	-----	-----	13.9	13.5	-----	-----	7.2	23.3	S		
AgriMAXX 454	Red	4.5	2.0	2.5	-----	-----	149.1	149.8	-----	-----	34.6	36.3	-----	-----	13.8	13.5	-----	-----	7.2	29.2	S		
Dyna-Gro 9692	Red	3.0	2.0	2.4	3.1	-----	149.1	149.8	149.6	-----	34.7	36.4	35.0	-----	13.8	13.5	13.9	-----	7.3	17.5	S		
RS 902	Red	3.0	2.0	-----	-----	-----	149.1	-----	-----	-----	34.7	-----	-----	-----	13.8	-----	-----	-----	-----	-----	-----		
Diener XW1601	Red	3.5	2.7	-----	-----	-----	148.3	-----	-----	-----	32.5	-----	-----	-----	14.0	-----	-----	-----	-----	-----	-----		
HS 30.06	Red	4.5	2.0	2.4	-----	-----	149.2	150.0	-----	-----	34.9	36.3	-----	-----	13.7	13.4	-----	-----	7.7	23.3	S		
Hopewell	Red	3.0	2.0	2.4	3.2	3.0	149.7	150.6	150.3	151.6	37.9	40.1	38.1	37.5	13.7	13.4	13.6	13.8	6.7	19.2	S		
MCIA Red Dragon	Red	2.5	3.0	3.1	3.9	3.8	149.0	149.8	149.6	150.7	40.2	41.4	39.1	38.7	13.4	13.0	13.2	13.5	4.3	31.7	MR		
MCIA 110201	Red	0.5	2.0	-----	-----	-----	151.1	-----	-----	-----	39.3	-----	-----	-----	15.4	-----	-----	-----	-----	-----	-----		
<b>MEAN (2017 125 Entries)</b>		<b>4.4</b>	<b>2.5</b>	<b>2.8</b>	<b>3.1</b>	<b>3.2</b>	<b>149.3</b>	<b>150.0</b>	<b>149.9</b>	<b>151.3</b>	<b>35.1</b>	<b>37.2</b>	<b>35.3</b>	<b>35.0</b>	<b>13.7</b>	<b>13.2</b>	<b>13.6</b>	<b>14.0</b>	<b>5.0</b>	<b>20.3</b>	<b>-----</b>		
LSD (0.05)		<b>3.3</b>	<b>0.9</b>	<b>1.3</b>	<b>1.5</b>	<b>1.9</b>	<b>0.5</b>	<b>0.7</b>	<b>0.5</b>	<b>0.6</b>	<b>1.3</b>	<b>1.8</b>	<b>2.1</b>	<b>1.8</b>	<b>0.2</b>	<b>0.6</b>	<b>0.7</b>	<b>0.7</b>	<b>-----</b>	<b>-----</b>	<b>-----</b>		
CV (%)		<b>53.9</b>	<b>27.5</b>	<b>23.4</b>	<b>28.9</b>	<b>38.4</b>	<b>0.4</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>3.9</b>	<b>2.3</b>	<b>3.4</b>	<b>3.4</b>	<b>1.7</b>	<b>2.1</b>	<b>3.0</b>	<b>3.4</b>	<b>-----</b>	<b>-----</b>	<b>-----</b>		



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Name	Grain Color	Powdery Mildew Score (0-9)			Leaf Rust Score (0-9)			Winter Injury Score (1-5) 2014	Leaf Blotch Score (0-9)		Cephalo-sporium 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	2015	2 YR 2014-15	3 YR 2013-15		2 YR 2014-15	2016				2 YR 2015-16	3 YR 2014-16	4 YR 2013-16	
Jupiter	White	2.0	1.3	2.5	5.1	5.4	3.6	1.6	5.3	4.0	4.5	3.0	0.8	3.0	7.8	7.1	7.8
Ambassador	White	3.3	1.7	2.4	5.9	5.0	3.5	1.1	7.2	5.5	5.6	6.7	2.1	2.6	13.6	12.4	11.4
Dyna-Gro 9362W	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9242W	White	3.0	2.2	3.1	4.8	4.1	3.2	1.3	4.9	4.0	1.9	6.7	2.7	6.2	8.2	11.9	12.0
Dyna-Gro 9611W	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
E6012	White	2.7	1.8	2.5	8.9	6.6	4.9	2.0	6.5	4.1	4.2	3.7	0.2	1.2	5.0	9.4	9.3
AC Mountain	White	3.0	2.5	2.6	4.4	3.9	2.7	1.0	5.7	4.2	2.0	5.0	3.1	1.0	14.2	16.5	15.3
MCIA Venus	White	2.7	1.6	1.8	2.5	2.6	1.8	3.1	5.8	4.8	3.6	7.3	0.0	0.8	3.4	6.8	7.2
W 151	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Skeet	White	2.0	1.3	-----	3.6	-----	-----	-----	5.6	-----	5.4	-----	-----	3.6	13.3	-----	-----
Aubrey	White	2.0	1.0	1.3	2.5	1.9	1.3	1.0	4.8	4.1	3.0	4.0	2.7	0.0	6.9	10.6	10.7
SY 944	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Glacier	White	0.0	0.2	0.8	5.0	4.2	-----	1.1	3.0	2.4	4.0	6.3	-----	0.4	11.1	19.2	-----
DF 112 R	Red	3.0	2.2	2.3	8.0	6.9	5.3	1.6	5.4	4.2	5.1	5.7	0.4	2.4	7.9	15.8	15.6
SY 100	Red	1.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3.0	-----	-----	-----
RS 910	Red	2.0	1.0	-----	0.0	-----	-----	-----	4.8	-----	2.6	-----	-----	1.8	20.7	-----	-----
W 206	Red	1.3	0.9	1.8	0.0	0.0	0.0	1.0	4.5	3.4	4.7	3.0	1.2	5.8	23.2	29.7	28.5
DF 105 R	Red	2.3	1.2	2.0	3.7	3.0	2.5	1.0	4.5	3.9	2.9	5.0	2.9	1.4	7.9	14.9	13.5
Dyna-Gro 9552	Red	3.0	2.6	-----	3.4	-----	-----	-----	5.4	-----	5.4	-----	-----	1.6	15.0	-----	-----
L11610	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 204	Red	4.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	8.0	-----	-----	-----
DF 109 R	Red	5.0	3.9	4.5	5.7	4.9	3.3	1.6	5.1	3.7	4.5	5.7	2.0	1.6	12.6	25.6	25.6
DF 111 R	Red	1.3	1.4	2.8	5.0	3.9	2.7	1.4	5.0	3.9	4.5	2.0	1.9	3.6	20.9	31.6	35.4
L11621	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9701	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
AgriMAXX 413	Red	2.3	2.0	3.0	1.3	2.5	2.3	1.0	4.8	3.8	4.1	4.7	2.9	4.0	6.1	16.9	14.5
L11418	Red	3.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.2	-----	-----	-----
AgriMAXX 464	Red	1.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.2	-----	-----	-----
StarBurst	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Steyer Berwick	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SY 547	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
L11538	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
RS 972	Red	5.0	4.1	4.0	6.2	5.6	4.1	1.0	5.8	4.4	4.0	6.7	1.5	8.8	21.0	29.1	28.1

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

Table 3 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)

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

Name	Grain Color	Powdery Mildew Score (0-9)			Leaf Rust Score (0-9)			Winter Injury Score (1-5) 2014	Leaf Blotch Score (0-9)		Cephalo-sporium 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	2015	2 YR 2014-15	3 YR 2013-15		2 YR	2014-15				2016	2 YR 2015-16	3 YR 2014-16	4 YR 2013-16
MCIA Harpoon	Red	2.7	1.5	-----	0.2	-----	-----	-----	4.8	-----	4.0	-----	-----	3.4	4.6	-----	-----
Dyna-Gro 9772	Red	1.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	5.0	-----	-----	-----
Hilliard	Red	0.7	0.7	-----	0.0	-----	-----	-----	5.8	-----	5.9	-----	-----	3.4	16.1	-----	-----
AgriMAXX 438	Red	3.7	3.5	4.0	4.8	3.9	3.0	1.4	5.4	4.1	4.3	6.3	3.1	3.8	10.7	23.7	21.7
Sunburst	Red	0.7	1.0	1.2	2.1	1.7	1.7	1.4	7.0	4.9	1.9	5.0	2.5	3.0	12.5	18.6	17.2
W 302	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9750	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 305	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 303	Red	5.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	0.6	-----	-----	-----
AgriMAXX 444	Red	3.7	2.6	-----	2.6	-----	-----	-----	5.3	-----	4.0	-----	-----	2.6	9.7	-----	-----
Diener XW1701	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MCIA Whale	Red	4.0	4.7	5.8	0.0	0.5	0.3	1.1	4.6	3.5	3.5	5.7	2.0	6.6	22.8	24.7	28.5
Steyer Morrin	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MCIA Red Devil	Red	1.3	0.8	1.2	2.9	1.8	1.2	1.0	5.3	4.2	3.8	1.3	1.8	3.0	7.8	15.3	18.7
Curly	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 304	Red	5.3	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3.8	-----	-----	-----
AgriMAXX 454	Red	6.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	2.8	-----	-----	-----
Dyna-Gro 9692	Red	5.3	5.6	-----	5.6	-----	-----	-----	5.0	-----	4.3	-----	-----	1.0	20.6	-----	-----
RS 902	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Diener XW1601	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
HS 30.06	Red	5.7	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1.8	-----	-----	-----
Hopewell	Red	1.7	0.9	1.9	4.9	4.6	3.3	1.1	6.6	4.8	4.1	4.7	3.5	2.2	7.5	6.7	7.7
MCIA Red Dragon	Red	2.3	2.0	2.7	5.0	4.4	3.2	1.0	5.1	4.1	4.5	4.3	1.2	1.2	5.9	9.4	12.1
MCIA 110201	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>MEAN (2017 125 Entries)</b>		<b>2.8</b>	<b>2.0</b>	<b>2.5</b>	<b>3.0</b>	<b>3.0</b>	<b>2.6</b>	<b>1.4</b>	<b>5.3</b>	<b>4.1</b>	<b>4.2</b>	<b>4.6</b>	<b>1.9</b>	<b>3.4</b>	<b>11.8</b>	<b>16.7</b>	<b>16.8</b>
LSD (0.05)		<b>1.3</b>	<b>1.8</b>	<b>1.5</b>	<b>1.6</b>	<b>1.9</b>	<b>2.0</b>	<b>0.5</b>	<b>1.1</b>	<b>1.5</b>	<b>1.6</b>	<b>1.3</b>	<b>1.1</b>	-----	<b>16.3</b>	<b>15.1</b>	<b>12.3</b>
CV (%)		<b>35.4</b>	<b>45.7</b>	<b>36.1</b>	<b>39.0</b>	<b>31.4</b>	<b>48.6</b>	<b>44.8</b>	<b>18.6</b>	<b>17.7</b>	<b>32.5</b>	<b>20.4</b>	<b>33.8</b>	-----	<b>64.9</b>	<b>52.1</b>	<b>48.3</b>

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

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.

Name	Grain Color	Allegan Yld: Bu/Acre (Adjusted to 13.5% Moist)		HURON Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages								LENAWEE Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages						SANILAC Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages						TUSCOLA Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages							
		2017	RANK	2 YR		3 YR		4 YR		2017	RANK	2 YR		3 YR		2017	RANK	2 YR		3 YR		2017	RANK	2 YR		3 YR		4 YR			
				2016-17	RANK	2015-17	RANK	2014-17	RANK			2016-17	RANK	2015-17	RANK			2016-17	RANK	2015-17	RANK			2016-17	RANK	2015-17	RANK	2014-17	RANK		
AgriMAXX 413	Red	87.5	57	85.0	23	93.0	10	95.3	12	92.8	11	87.3	59	96.9	21	91.3	20	114.6	16	129.0	6	126.5	3	106.1	18	115.7	5	113.9	5	110.2	5
AgriMAXX 438	Red	97.4	8	69.2	116	83.8	37	92.0	20	92.7	12	95.9	7	104.4	5	94.7	9	106.9	57	125.6	11	122.3	10	99.6	67	112.3	17	113.5	6	109.8	6
AgriMAXX 444	Red	88.7	53	85.1	21	88.3	25	96.0	10	-----		88.6	50	93.4	28	92.4	15	100.5	92	120.6	26	119.6	16	99.3	71	108.5	23	109.0	17	-----	
AgriMAXX 454	Red	84.1	86	80.0	69	86.9	29	-----		-----		87.1	62	93.5	27	-----		102.8	79	117.9	33	-----		93.1	100	103.5	36	-----		-----	
AgriMAXX 464	Red	84.1	86	83.1	38	93.4	6	-----		-----		85.0	74	98.0	16	-----		113.4	21	127.4	9	-----		110.1	7	112.8	13	-----		-----	
Diener XW1601	Red	76.9	116	63.7	123	-----		-----		-----		84.0	79	-----		-----		101.4	86	-----		-----		104.7	30	-----		-----		-----	
Diener XW1701	Red	85.3	79	81.1	55	-----		-----		-----		88.6	50	-----		-----		109.1	45	-----		-----		99.1	76	-----		-----		-----	
Ambassador	White	85.6	77	81.9	46	92.6	11	102.3	1	99.2	1	89.9	39	101.1	9	94.1	11	116.3	11	124.1	16	123.1	7	108.3	12	112.4	16	109.2	15	104.7	15
Aubrey	White	82.9	97	87.7	10	95.0	3	101.0	3	96.7	4	71.8	123	85.0	41	85.1	29	105.3	66	119.8	27	119.1	17	92.4	104	103.0	37	104.1	27	100.7	21
DF 105 R	Red	91.9	34	80.8	57	93.2	9	96.8	9	94.7	8	86.4	65	101.8	8	96.4	5	118.6	4	129.9	5	123.8	6	115.9	2	119.7	1	114.7	3	110.4	3
DF 109 R	Red	97.1	9	78.4	78	86.6	30	89.9	25	90.7	18	98.0	3	104.7	3	96.5	4	106.9	57	124.0	17	123.1	8	105.4	25	113.3	8	112.1	9	109.1	7
DF 111 R	Red	94.3	18	76.8	89	88.7	23	94.5	14	92.2	14	93.2	19	97.4	19	95.3	7	117.3	6	123.7	20	120.2	12	105.0	28	112.9	11	110.5	13	108.2	9
DF 112 R	Red	105.8	1	89.3	6	95.5	2	102.1	2	97.9	3	95.2	11	103.9	6	100.2	1	124.7	1	134.3	2	130.8	1	111.5	3	119.3	2	116.7	1	112.0	1
Skeet	White	88.0	55	84.1	28	90.4	17	97.7	7	-----		81.1	100	90.5	36	86.4	28	103.4	76	116.1	36	118.6	19	96.6	87	103.6	35	106.1	24	-----	
Dyna-Gro 9242W	White	82.9	97	76.1	94	86.2	35	91.9	21	91.6	16	92.4	24	94.7	25	92.2	17	108.2	49	121.0	25	120.2	13	110.5	5	114.1	6	110.8	11	105.6	12
Dyna-Gro 9362W	White	90.6	43	80.5	62	-----		-----		-----		90.4	36	-----		-----		112.2	26	-----		-----		104.9	29	-----		-----		-----	
Dyna-Gro 9552	Red	92.1	32	82.1	45	87.6	27	91.3	22	-----		92.2	26	101.0	10	95.7	6	118.5	5	130.5	4	125.2	5	107.2	14	112.9	11	112.2	8	-----	
Dyna-Gro 9611W	White	93.9	21	76.6	91	-----		-----		-----		79.4	111	-----		-----		110.0	41	-----		-----		105.1	27	-----		-----		-----	
Dyna-Gro 9692	Red	88.9	50	83.7	31	91.7	14	92.5	18	-----		83.1	83	93.4	29	88.9	24	97.7	101	117.2	35	113.8	27	96.2	91	106.6	30	110.3	14	-----	
Dyna-Gro 9701	Red	92.4	29	81.5	51	-----		-----		-----		92.9	22	-----		-----		116.9	8	-----		-----		102.0	44	-----		-----		-----	
Dyna-Gro 9750	Red	80.8	105	83.9	30	-----		-----		-----		85.0	74	-----		-----		114.9	14	-----		-----		97.5	82	-----		-----		-----	
Dyna-Gro 9772	Red	92.9	26	83.0	39	92.0	13	-----		-----		79.4	111	97.7	17	-----		112.8	24	124.4	15	-----		101.7	49	107.3	26	-----		-----	
Glacier	White	77.2	114	78.4	78	88.5	24	94.2	15	92.3	13	82.8	85	89.6	38	86.6	27	79.2	124	101.5	41	104.9	29	78.9	125	95.6	41	98.0	29	96.8	22
HS 30.06	Red	83.1	92	74.8	101	82.7	40	-----		-----		90.2	38	97.0	20	-----		103.6	74	117.2	34	-----		86.8	117	102.0	38	-----		-----	
Curly	Red	83.8	88	80.6	60	-----		-----		-----		81.9	95	-----		-----		107.2	56	-----		-----		101.7	49	-----		-----		-----	
L11418	Red	87.3	60	85.7	18	92.6	12	-----		-----		94.1	13	107.5	1	-----		115.0	13	128.6	7	-----		101.2	56	111.0	19	-----		-----	
L11538	Red	89.0	49	87.7	10	-----		-----		-----		90.5	35	-----		-----		95.5	108	-----		-----		104.3	31	-----		-----		-----	
L11610	Red	96.1	13	91.3	2	-----		-----		-----		86.9	63	-----		-----		105.7	63	-----		-----		106.6	16	-----		-----		-----	
L11621	Red	92.8	27	79.2	73	-----		-----		-----		91.7	32	-----		-----		106.6	60	-----		-----		110.6	4	-----		-----		-----	
AC Mountain	White	88.5	54	80.1	68	91.0	16	97.3	8	95.2	6	83.2	82	95.5	23	89.0	23	103.7	73	118.5	32	117.0	22	99.3	71	107.1	28	109.2	16	105.3	14
E6012	White	86.0	71	81.7	49	86.5	32	90.6	23	86.6	21	95.8	8	99.7	13	94.8	8	105.6	64	118.6	31	115.3	25	99.4	70	106.8	29	107.4	23	101.8	19
Hopewell	Red	86.8	67	79.6	70	89.1	21	93.9	17	91.5	17	82.5	89	88.4	40	86.7	26	101.0	88	111.8	40	110.5	28	90.6	106	101.1	40	99.7	28	96.6	23
Jupiter	White	90.0	45	83.0	39	93.4	6	101.0	3	96.5	5	95.2	11	105.8	2	98.0	2	108.8	46	123.7	18	121.0	11	105.3	26	111.6	18	111.8	10	107.0	11

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

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

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

Name	Grain Color	Allegan Yld: Bu/Acre (Adjusted to 13.5% Moist)		HURON Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages						LENAWEE Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages						SANILAC Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages						TUSCOLA Yield: Bushels/Acre (Adjusted to 13.5% Moisture) Multi-Year Averages														
		2017	RANK	2 YR		3 YR		4 YR		2017	RANK	2 YR		3 YR		2017	RANK	2 YR		3 YR		2017	RANK	2 YR		3 YR		4 YR								
				RANK	Yield	RANK	Yield	RANK	Yield			RANK	Yield	RANK	Yield			RANK	Yield	RANK	Yield			RANK	Yield	RANK	Yield	RANK	Yield	RANK	Yield	RANK	Yield	RANK	Yield	RANK
				2016-17	2015-17	2016-17	2015-17	2016-17	2015-17			2016-17	2015-17	2016-17	2015-17			2016-17	2015-17	2016-17	2015-17			2016-17	2015-17	2016-17	2015-17	2016-17	2015-17	2016-17	2015-17	2016-17	2015-17	2014-17	2013-17	2014-17
MCIA 110201	Red	91.8	35	72.3	110	-----	-----	-----	78.9	113	-----	-----	96.3	104	-----	-----	88.6	112	-----	-----	-----															
MCIA Harpoon	Red	87.3	60	77.3	88	83.4	38	88.4	28	-----	83.3	81	93.8	26	92.1	18	124.1	2	128.2	8	125.4	4	100.8	60	107.4	25	108.1	21	-----							
MCIA Red Devil	Red	82.3	99	77.5	83	86.3	34	89.4	26	88.6	20	87.6	55	97.4	18	92.4	15	105.3	66	122.0	24	117.5	20	103.2	38	105.2	33	106.0	25	103.0	17					
MCIA Red Dragon	Red	78.2	112	64.7	121	77.5	41	82.8	29	84.9	23	81.2	98	92.5	31	92.0	19	103.8	72	119.0	30	116.5	23	98.1	79	106.6	31	108.6	20	105.4	13					
MCIA Venus	White	91.1	41	75.0	100	83.0	39	88.9	27	86.1	22	87.3	59	91.8	33	89.1	22	95.8	106	114.4	38	114.1	26	101.1	57	105.7	32	105.6	26	100.9	20					
MCIA Whale	Red	88.9	50	75.7	96	89.7	19	95.9	11	94.4	9	95.5	10	91.2	34	90.3	21	106.7	59	119.3	28	119.6	15	97.6	81	105.0	34	107.5	22	103.5	16					
StarBurst	Red	85.7	75	87.3	13	-----	-----	-----	79.9	107	-----	-----	114.9	14	-----	-----	103.3	37	-----	-----	-----															
Sunburst	Red	85.9	73	77.8	82	87.6	28	92.5	19	89.4	19	95.6	9	95.6	22	94.0	13	103.4	76	119.0	29	117.2	21	101.3	54	108.7	22	109.0	17	102.1	18					
RS 902	Red	84.2	84	68.5	118	-----	-----	-----	89.5	41	-----	-----	100.9	89	-----	-----	94.5	96	-----	-----	-----															
RS 910	Red	91.4	39	88.7	8	91.6	15	97.8	6	-----	91.9	29	102.2	7	94.1	10	115.4	12	122.4	22	115.7	24	109.7	8	113.9	7	112.3	7	-----							
RS 972	Red	89.5	46	81.5	51	89.0	22	90.0	24	91.6	15	91.8	31	91.1	35	87.1	25	102.7	80	123.2	21	119.7	14	102.0	44	113.0	10	114.4	4	110.4	4					
Steyer Berwick	Red	84.7	81	85.1	21	-----	-----	-----	85.1	71	-----	-----	112.1	27	-----	-----	102.1	43	-----	-----	-----															
Steyer Morrin	Red	87.5	57	83.4	33	-----	-----	-----	87.6	55	-----	-----	105.2	68	-----	-----	100.0	63	-----	-----	-----															
SY 100	Red	100.4	3	88.0	9	95.9	1	-----	-----	-----	98.6	1	104.6	4	-----	-----	113.3	22	132.9	3	-----	-----	109.3	10	117.1	4	-----	-----								
SY 547	Red	84.5	82	80.3	65	-----	-----	-----	89.1	45	-----	-----	111.1	34	-----	-----	104.0	32	-----	-----	-----															
SY 944	White	70.9	124	83.3	37	-----	-----	-----	94.0	14	-----	-----	75.4	125	-----	-----	81.9	123	-----	-----	-----															
Hilliard	Red	86.0	71	80.5	62	87.7	26	94.1	16	94.1	10	89.0	46	98.0	15	92.8	14	107.8	51	123.7	18	118.6	18	103.7	35	109.8	20	108.7	19	108.7	8					
W 151	White	87.9	56	83.4	33	-----	-----	-----	88.8	49	-----	-----	102.2	81	-----	-----	93.2	99	-----	-----	-----															
W 204	Red	90.8	42	83.4	33	90.2	18	-----	-----	-----	93.1	21	100.5	11	-----	-----	107.5	53	124.8	13	-----	-----	107.0	15	112.5	15	-----	-----								
W 206	Red	87.3	60	89.7	5	93.8	5	99.9	5	98.1	2	91.0	33	99.1	14	94.1	12	113.6	20	127.0	10	122.7	9	109.7	8	113.3	8	110.8	12	107.7	10					
W 302	Red	92.8	27	77.4	87	-----	-----	-----	89.5	41	-----	-----	111.5	31	-----	-----	96.9	86	-----	-----	-----															
W 303	Red	81.0	104	73.4	109	85.7	36	-----	-----	-----	82.1	92	92.9	30	-----	-----	116.4	10	125.3	12	-----	-----	105.5	24	112.8	13	-----	-----								
W 304	Red	89.2	48	79.6	70	86.5	33	-----	-----	-----	82.8	85	95.1	24	-----	-----	101.9	83	122.2	23	-----	-----	99.2	75	109.1	21	-----	-----								
W 305	Red	81.2	102	84.3	27	-----	-----	-----	82.2	90	-----	-----	111.1	34	-----	-----	101.8	48	-----	-----	-----															
<b>MEAN (2017 125 Entries)</b>		<b>87.2</b>		<b>79.6</b>		<b>89.2</b>		<b>94.3</b>		<b>92.7</b>		<b>86.4</b>		<b>96.5</b>		<b>92.4</b>		<b>105.0</b>		<b>122.3</b>		<b>119.6</b>		<b>99.2</b>		<b>109.5</b>		<b>109.5</b>		<b>105.5</b>						
	LSD (0.05)	<b>6.7</b>		<b>7.3</b>		<b>8.4</b>		<b>7.9</b>		<b>7.6</b>		<b>6.0</b>		<b>12.9</b>		<b>10.3</b>		<b>5.3</b>		<b>11.9</b>		<b>10.2</b>		<b>5.5</b>		<b>9.4</b>		<b>8.1</b>		<b>7.0</b>						
	CV (%)	<b>4.6</b>		<b>6.8</b>		<b>4.6</b>		<b>5.1</b>		<b>5.8</b>		<b>5.2</b>		<b>6.6</b>		<b>6.8</b>		<b>3.7</b>		<b>4.8</b>		<b>5.2</b>		<b>4.1</b>		<b>4.3</b>		<b>4.5</b>		<b>4.7</b>						

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

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.

		TUSCOLA															
Name	Grain Color	Conventional					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	92.7	61	53.4	12.4	2.0	106.1	18	54.2	13.3	2.3	+ 13.4	11	+ 0.8	+ 0.6	- 0.3	AgriMAXX Wheat Company
AgriMAXX 438	Red	94.1	42	55.6	13.9	1.7	99.6	67	55.2	14.5	2.0	+ 5.5	98	- 0.3	+ 0.1	- 0.3	AgriMAXX Wheat Company
AgriMAXX 444	Red	93.8	45	54.8	13.7	1.7	99.3	71	55.0	14.3	2.7	+ 5.5	98	+ 0.2	+ 0.3	-1.0	AgriMAXX Wheat Company
AgriMAXX 454	Red	86.6	92	54.6	13.7	2.0	93.1	100	54.3	13.8	2.0	+ 6.5	88	- 0.3	+ 0.4	0.0	AgriMAXX Wheat Company
AgriMAXX 464	Red	94.5	37	54.1	13.1	2.0	110.1	7	54.9	13.4	2.0	+ 15.6	6	+ 0.7	+ 0.4	0.0	AgriMAXX Wheat Company
Diener XW1601	Red	88.6	82	55.8	13.8	1.7	104.7	30	55.7	14.1	2.3	+ 16.1	5	0.0	+ 0.6	- 0.6	Bio Town Seeds
Diener XW1701	Red	91.4	66	56.0	13.2	2.0	99.1	76	54.6	13.7	2.0	+ 7.7	79	- 1.4	+ 0.4	0.0	Bio Town Seeds
Ambassador	White	89.4	75	55.3	13.1	3.0	108.3	12	55.3	13.7	3.0	+ 18.9	1	0.0	+ 0.6	0.0	DF Seeds, Inc.
Aubrey	White	82.2	111	58.7	14.0	2.0	92.4	104	57.2	14.4	2.0	+ 10.2	46	- 1.5	+ 0.7	0.0	DF Seeds, Inc.
DF 105 R	Red	98.0	11	53.9	12.5	2.0	115.9	2	54.3	13.1	3.3	+ 17.9	2	+ 0.3	+ 0.7	- 1.3	DF Seeds, Inc.
DF 109 R	Red	97.5	13	56.1	13.8	2.0	105.4	25	55.2	14.6	2.0	+ 7.9	77	- 0.8	+ 0.3	0.0	DF Seeds, Inc.
DF 111 R	Red	94.8	34	55.5	13.6	2.0	105.0	28	56.2	14.3	2.0	+ 10.2	46	+ 0.7	+ 0.2	0.0	DF Seeds, Inc.
DF 112 R	Red	100.0	8	54.7	13.2	4.0	111.5	3	54.7	13.5	6.0	+ 11.5	27	0.0	+ 0.6	-2.0	DF Seeds, Inc.
Skeet	White	86.4	96	56.1	14.0	2.3	96.6	87	56.0	14.2	2.3	+ 10.2	51	- 0.1	+ 0.6	0.0	DF Seeds, Inc.
Dyna-Gro 9242W	White	96.6	18	56.4	14.0	1.7	110.5	5	57.3	14.5	2.0	+ 13.9	10	+ 0.8	+ 0.5	- 0.3	Dyna-Gro Seed
Dyna-Gro 9362W	White	93.4	50	57.2	13.8	2.0	104.9	29	57.4	14.4	2.3	+ 11.5	27	+ 0.1	+ 0.6	- 0.3	Dyna-Gro Seed
Dyna-Gro 9552	Red	94.3	41	55.8	13.5	2.0	107.2	14	56.0	14.0	2.7	+ 12.9	14	+ 0.2	+ 0.3	- 0.7	Dyna-Gro Seed
Dyna-Gro 9611W	White	93.0	57	56.5	13.7	1.7	105.1	27	56.1	14.3	2.0	+ 12.1	20	- 0.3	+ 0.6	- 0.3	Dyna-Gro Seed
Dyna-Gro 9692	Red	85.1	101	54.3	13.5	2.0	96.2	91	54.2	13.8	2.3	+ 11.1	34	0.0	+ 0.4	- 0.3	Dyna-Gro Seed
Dyna-Gro 9701	Red	93.7	46	55.4	13.6	2.3	102.0	44	56.0	14.2	2.7	+ 8.3	69	+ 0.6	+ 0.4	- 0.4	Dyna-Gro Seed
Dyna-Gro 9750	Red	93.3	52	53.8	13.0	2.3	97.5	82	54.0	13.4	2.3	+ 4.2	111	+ 0.2	+ 0.5	0.0	Dyna-Gro Seed
Dyna-Gro 9772	Red	93.1	53	54.3	13.0	1.7	101.7	49	54.3	13.4	2.3	+ 8.6	65	0.0	+ 0.8	- 0.6	Dyna-Gro Seed
Glacier	White	67.7	125	55.1	13.8	2.0	78.9	125	55.4	14.4	2.0	+ 11.2	33	+ 0.2	+ 0.8	0.0	Harrington Seeds, Inc.
HS 30.06	Red	81.7	116	53.7	13.0	2.0	86.8	117	53.5	13.8	1.7	+ 5.1	104	- 0.2	+ 0.7	+ 0.3	Harrington Seeds, Inc.
Curly	Red	91.2	67	56.9	13.7	2.3	101.7	49	57.3	14.2	2.0	+ 10.5	42	+ 0.3	+ 0.4	+ 0.3	Irrer Seed Farm
L11418	Red	89.6	73	55.6	13.6	3.0	101.2	56	56.9	14.3	3.0	+ 11.6	25	+ 1.3	+ 0.5	0.0	Irrer Seed Farm
L11538	Red	96.5	20	54.3	13.4	2.0	104.3	31	54.7	13.8	2.3	+ 7.8	78	+ 0.4	+ 0.3	- 0.3	Irrer Seed Farm
L11610	Red	101.0	6	56.2	13.8	1.7	106.6	16	55.8	14.3	1.7	+ 5.6	96	- 0.4	+ 0.5	0.0	Irrer Seed Farm
L11621	Red	100.3	7	57.1	13.5	2.0	110.6	4	57.5	13.8	2.3	+ 10.3	45	+ 0.3	+ 0.6	- 0.3	Irrer Seed Farm
AC Mountain	White	90.2	72	54.7	13.4	2.0	99.3	71	55.0	13.9	2.0	+ 9.1	59	+ 0.2	+ 0.3	0.0	Michigan Crop Improvement Association
E6012	White	86.1	97	54.7	12.7	2.3	99.4	70	54.5	13.3	2.3	+ 13.3	12	- 0.2	+ 0.9	0.0	Michigan Crop Improvement Association
Hopewell	Red	77.3	120	56.5	13.8	2.3	90.6	106	56.3	14.2	1.7	+ 13.3	13	- 0.2	+ 0.3	+ 0.6	Michigan Crop Improvement Association
Jupiter	White	92.9	60	55.5	13.5	2.0	105.3	26	56.0	14.4	2.0	+ 12.4	18	+ 0.5	0.0	0.0	Michigan Crop Improvement Association

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

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	TUSCOLA															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)	
MCIA 110201	Red	85.8	99	57.3	15.4	2.0	88.6	112	56.9	15.9	2.0	+ 2.8	118	- 0.3	+ 0.6	0.0	Michigan Crop Improvement Association
MCIA Harpoon	Red	88.8	80	53.8	13.5	3.0	100.8	60	54.0	13.6	3.3	+ 12.0	22	+ 0.2	+ 0.2	- 0.3	Michigan Crop Improvement Association
MCIA Red Devil	Red	93.0	57	55.6	13.4	2.0	103.2	38	55.2	13.6	2.3	+ 10.2	46	- 0.3	+ 0.7	- 0.3	Michigan Crop Improvement Association
MCIA Red Dragon	Red	86.5	94	55.4	13.4	3.3	98.1	79	55.7	14.0	5.0	+ 11.6	26	+ 0.3	+ 0.5	- 1.7	Michigan Crop Improvement Association
MCIA Venus	White	91.2	67	54.2	12.8	4.3	101.1	57	54.7	13.6	3.7	+ 9.9	54	+ 0.5	+ 0.3	+ 0.6	Michigan Crop Improvement Association
MCIA Whale	Red	89.4	75	56.3	14.0	2.7	97.6	81	56.1	14.7	2.0	+ 8.2	71	- 0.1	+ 0.1	+ 0.7	Michigan Crop Improvement Association
StarBurst	Red	97.8	12	59.9	14.2	3.0	103.3	37	59.1	14.7	4.0	+ 5.5	98	- 0.7	+ 0.3	-1.0	Michigan Crop Improvement Association
Sunburst	Red	94.8	34	59.6	14.4	3.0	101.3	54	58.9	14.6	2.7	+ 6.5	88	- 0.7	+ 0.1	+ 0.3	Michigan Crop Improvement Association
RS 902	Red	88.7	81	54.5	13.7	1.7	94.5	96	54.2	14.1	2.0	+ 5.8	94	- 0.2	+ 0.5	- 0.3	Rupp Seeds, Inc.
RS 910	Red	100.0	8	56.2	13.2	2.3	109.7	8	55.9	13.8	2.3	+ 9.7	56	- 0.3	+ 0.7	0.0	Rupp Seeds, Inc.
RS 972	Red	95.9	24	55.1	13.9	2.0	102.0	44	55.2	14.4	2.3	+ 6.1	91	+ 0.1	+ 0.6	- 0.3	Rupp Seeds, Inc.
Steyer Berwick	Red	97.3	15	55.6	13.4	2.0	102.1	43	55.4	14.0	2.0	+ 4.8	109	- 0.2	+ 0.6	0.0	Steyer Seeds
Steyer Morrin	Red	89.0	79	55.8	13.9	2.3	100.0	63	56.7	14.7	2.0	+ 11.0	36	+ 0.9	+ 0.5	+ 0.3	Steyer Seeds
SY 100	Red	101.3	5	52.9	12.9	2.3	109.3	10	53.4	13.5	2.7	+ 8.0	74	+ 0.5	+ 0.2	- 0.4	Syngenta AgriPro
SY 547	Red	96.4	22	56.7	13.7	2.7	104.0	32	57.3	14.3	2.3	+ 7.6	80	+ 0.5	0.0	+ 0.4	Syngenta AgriPro
SY 944	White	87.2	88	57.4	14.2	2.0	81.9	123	55.8	14.4	3.3	- 5.3	125	- 1.6	+ 0.3	- 1.3	Syngenta AgriPro
Hilliard	Red	93.0	57	55.9	14.0	2.0	103.7	35	54.8	13.9	2.3	+ 10.7	38	- 1.1	+ 0.3	- 0.3	Virginia Tech / VCIA
W 151	White	84.2	105	57.0	14.1	2.7	93.2	99	56.4	14.4	2.0	+ 9.0	60	- 0.6	+ 0.8	+ 0.7	Wellman Seeds, Inc.
W 204	Red	101.9	3	55.0	13.3	1.7	107.0	15	55.3	13.9	2.0	+ 5.1	104	+ 0.2	+ 0.7	- 0.3	Wellman Seeds, Inc.
W 206	Red	101.7	4	56.2	13.2	2.3	109.7	8	56.2	14.0	2.7	+ 8.0	74	0.0	+ 0.4	- 0.4	Wellman Seeds, Inc.
W 302	Red	91.9	64	53.0	13.3	3.3	96.9	86	53.1	14.1	3.7	+ 5.0	106	+ 0.1	+ 0.8	- 0.4	Wellman Seeds, Inc.
W 303	Red	95.5	29	55.7	13.6	2.3	105.5	24	56.1	14.0	2.3	+ 10.0	53	+ 0.3	+ 0.6	0.0	Wellman Seeds, Inc.
W 304	Red	87.7	86	54.6	13.5	2.0	99.2	75	54.8	14.3	2.3	+ 11.5	27	+ 0.1	+ 0.6	- 0.3	Wellman Seeds, Inc.
W 305	Red	95.1	33	56.2	13.3	2.0	101.8	48	55.5	14.0	2.0	+ 6.7	85	- 0.7	+ 0.6	0.0	Wellman Seeds, Inc.
<b>MEAN (2017 125 Entries)</b>		<b>90.6</b>		<b>55.7</b>	<b>13.6</b>	<b>2.3</b>	<b>99.2</b>		<b>55.6</b>	<b>14.0</b>	<b>2.5</b>	<b>+ 8.6</b>		<b>- 0.1</b>	<b>+ 0.4</b>	<b>- 0.2</b>	
<b>LSD (0.05)</b>		<b>4.6</b>		<b>0.6</b>	<b>0.3</b>	<b>1.1</b>	<b>5.5</b>		<b>0.6</b>	<b>0.3</b>	<b>0.9</b>	<b>-----</b>		<b>-----</b>	<b>-----</b>	<b>-----</b>	
<b>CV (%)</b>		<b>3.7</b>		<b>0.9</b>	<b>1.8</b>	<b>34.6</b>	<b>4.1</b>		<b>0.8</b>	<b>1.6</b>	<b>27.5</b>	<b>-----</b>		<b>-----</b>	<b>-----</b>	<b>-----</b>	

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

**Table 6 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)**

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

Name	Grain Color	Milling and Baking Properties (2016 Crop and Earlier)															
		Percent Flour Yield				Percent Protein In Flour (at 14%)				Softness Equivalent Percent				Sodium Carbonate SRC (%)			
		Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages			
		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	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
Jupiter	White	69.2	69.9	70.0	70.3	7.8	8.0	8.2	7.8	57.3	54.9	55.5	57.2	67.3	67.0	69.2	68.8
Ambassador	White	71.1	71.6	71.6	71.6	7.5	7.9	8.2	7.9	58.6	56.0	55.6	57.0	62.8	63.3	65.7	65.1
Dyna-Gro 9362W	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9242W	White	67.9	68.5	68.5	68.7	7.8	7.8	8.0	7.9	57.2	56.5	56.6	57.4	65.7	65.6	68.0	67.4
Dyna-Gro 9611W	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
E6012	White	69.1	70.3	70.4	70.6	8.4	8.3	8.4	8.0	56.7	55.6	56.1	58.1	65.8	66.1	67.4	66.8
AC Mountain	White	69.6	70.3	70.3	70.6	8.0	8.2	8.2	7.8	54.0	53.1	54.5	56.3	63.3	63.2	65.8	65.3
MCIA Venus	White	71.1	71.4	70.9	71.2	7.6	8.0	8.3	7.9	57.4	54.5	54.1	55.2	67.6	69.4	70.8	69.8
W 151	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Skeet	White	69.1	70.2	-----	-----	8.3	8.5	-----	-----	59.0	56.9	-----	-----	65.2	65.0	-----	-----
Aubrey	White	68.3	69.4	69.1	69.3	8.5	8.6	8.8	8.5	56.4	56.4	57.3	58.5	65.4	65.4	68.2	67.6
SY 944	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Glacier	White	67.8	68.8	69.1	-----	8.6	8.6	8.6	-----	58.1	56.0	56.9	-----	65.1	65.4	68.0	-----
DF 112 R	Red	69.7	71.1	71.1	71.3	7.7	7.9	8.1	7.8	54.4	54.8	55.7	57.3	65.8	66.8	70.1	69.8
SY 100	Red	70.0	-----	-----	-----	7.1	-----	-----	-----	59.3	-----	-----	-----	63.8	-----	-----	-----
RS 910	Red	67.3	68.6	-----	-----	8.1	8.4	-----	-----	58.4	56.0	-----	-----	70.5	70.7	-----	-----
W 206	Red	67.8	68.7	68.9	69.2	7.3	8.0	8.3	7.9	58.7	55.7	55.6	56.7	69.8	69.9	70.8	70.1
DF 105 R	Red	69.6	70.5	70.3	70.5	8.2	8.5	8.6	8.3	53.2	53.0	54.0	55.1	64.6	64.7	66.3	66.0
Dyna-Gro 9552	Red	69.1	70.0	-----	-----	7.8	7.8	-----	-----	61.6	59.3	-----	-----	67.4	66.6	-----	-----
L11610	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 204	Red	67.2	-----	-----	-----	6.7	-----	-----	-----	62.3	-----	-----	-----	69.4	-----	-----	-----
DF 109 R	Red	70.6	71.1	70.9	71.0	7.9	7.9	8.0	7.6	62.5	60.8	60.6	61.8	64.5	64.0	65.9	65.5
DF 111 R	Red	67.7	69.1	68.8	69.2	7.8	8.1	8.1	7.7	56.2	53.9	54.3	55.1	70.8	71.6	73.0	72.9
L11621	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9701	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
AgriMAXX 413	Red	70.2	71.2	70.4	70.6	8.2	8.4	8.5	8.2	53.9	53.8	54.5	55.1	64.5	64.0	66.3	66.0
L11418	Red	69.8	-----	-----	-----	7.6	-----	-----	-----	60.7	-----	-----	-----	69.0	-----	-----	-----
AgriMAXX 464	Red	66.1	-----	-----	-----	7.7	-----	-----	-----	57.5	-----	-----	-----	68.0	-----	-----	-----
StarBurst	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Steyer Berwick	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SY 547	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
L11538	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
RS 972	Red	71.2	71.5	71.0	71.2	7.5	7.7	7.7	7.6	62.7	60.6	60.6	61.5	63.7	64.1	64.9	64.8

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

Table 6 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)

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

Name	Grain Color	Milling and Baking Properties (2016 Crop and Earlier)															
		Percent Flour Yield				Percent Protein In Flour (at 14%)				Softness Equivalent Percent				Sodium Carbonate SRC (%)			
		Multi-Year Averages				Multi-Year Averages				Multi-Year Averages				Multi-Year Averages			
		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	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
MCIA Harpoon	Red	65.7	66.8	-----	-----	8.4	8.5	-----	-----	55.4	53.9	-----	-----	68.5	67.3	-----	-----
Dyna-Gro 9772	Red	65.9	-----	-----	-----	7.4	-----	-----	-----	58.5	-----	-----	-----	67.4	-----	-----	-----
Hilliard	Red	66.5	67.2	-----	-----	7.5	8.1	-----	-----	59.7	57.9	-----	-----	68.6	69.2	-----	-----
AgriMAXX 438	Red	71.1	71.4	70.9	71.1	7.4	7.5	7.8	7.9	63.6	61.7	61.1	61.8	63.8	63.3	64.8	64.6
Sunburst	Red	64.2	65.0	65.0	65.1	8.2	8.6	8.6	8.3	51.1	48.8	49.6	50.3	76.0	76.6	77.6	76.5
W 302	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9750	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 305	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 303	Red	65.6	-----	-----	-----	7.5	-----	-----	-----	52.2	-----	-----	-----	69.1	-----	-----	-----
AgriMAXX 444	Red	70.9	71.6	-----	-----	7.2	7.3	-----	-----	63.9	62.1	-----	-----	64.7	64.7	-----	-----
Diener XW1701	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MCIA Whale	Red	68.1	68.6	68.7	68.8	7.8	8.1	8.1	7.8	56.9	54.7	55.1	56.4	69.3	69.5	71.6	70.8
Steyer Morrin	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MCIA Red Devil	Red	66.9	67.9	67.8	68.1	8.6	8.5	8.5	8.2	57.4	56.0	55.9	56.9	69.5	69.4	71.3	70.2
Curly	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 304	Red	70.6	-----	-----	-----	7.2	-----	-----	-----	64.4	-----	-----	-----	63.8	-----	-----	-----
AgriMAXX 454	Red	70.4	-----	-----	-----	7.7	-----	-----	-----	64.2	-----	-----	-----	64.8	-----	-----	-----
Dyna-Gro 9692	Red	70.1	70.9	-----	-----	8.0	8.3	-----	-----	63.0	61.1	-----	-----	65.3	65.2	-----	-----
RS 902	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Diener XW1601	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
HS 30.06	Red	70.5	-----	-----	-----	7.7	-----	-----	-----	63.9	-----	-----	-----	65.5	-----	-----	-----
Hopewell	Red	67.0	67.4	67.4	67.6	8.8	8.7	8.7	8.4	56.3	55.7	56.7	57.9	69.2	68.6	71.3	70.6
MCIA Red Dragon	Red	69.7	70.2	70.2	70.3	7.9	8.2	8.4	8.0	58.7	57.6	58.0	58.9	65.4	65.3	67.1	66.4
MCIA 110201	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>MEAN (2017 125 Entries)</b>		<b>69.1</b>	<b>69.6</b>	<b>69.6</b>	<b>69.8</b>	<b>7.7</b>	<b>8.2</b>	<b>8.3</b>	<b>8.0</b>	<b>58.1</b>	<b>56.3</b>	<b>56.1</b>	<b>57.2</b>	<b>66.7</b>	<b>68.8</b>	<b>68.8</b>	<b>68.3</b>
LSD (0.05)		-----	<b>0.9</b>	<b>1.0</b>	<b>0.7</b>	-----	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	-----	<b>2.6</b>	<b>2.3</b>	<b>2.0</b>	-----	<b>1.7</b>	<b>2.2</b>	<b>1.8</b>
CV (%)		-----	<b>0.7</b>	<b>0.8</b>	<b>0.7</b>	-----	<b>3.4</b>	<b>3.5</b>	<b>4.1</b>	-----	<b>2.3</b>	<b>2.5</b>	<b>2.4</b>	-----	<b>1.3</b>	<b>1.9</b>	<b>1.8</b>



## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

Multi-year data are the most informative.

Table 7 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Milling and Baking Properties (2016 Crop and Earlier)													
		Lactic Acid SRC (%)				Cookie Diameter (cm)				NIR Kernel Protein			SKCS Kernel Hard		
		Multi-Year Averages				Multi-Year Averages				Multi-Yr Averages			Multi-Yr Averages		
		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	2 YR 2015-16	3 YR 2014-16	2016	2 YR 2015-16	3 YR 2014-16
Jupiter	White	90.6	92.3	96.0	94.2	18.8	18.6	18.4	18.5	9.7	9.9	10.3	18.3	18.0	21.0
Ambassador	White	86.8	85.5	89.1	86.6	19.0	19.1	18.9	18.9	9.5	10.0	10.3	6.1	7.2	11.0
Dyna-Gro 9362W	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9242W	White	87.0	93.1	99.0	97.2	19.0	19.1	19.0	19.0	9.7	9.7	9.9	21.5	19.7	21.8
Dyna-Gro 9611W	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
E6012	White	92.0	92.8	97.7	96.5	18.9	18.8	18.7	18.7	10.4	10.2	10.5	22.4	19.0	19.0
AC Mountain	White	79.6	77.4	81.0	79.7	19.0	18.8	18.9	18.9	9.5	9.7	10.1	18.9	15.3	18.1
MCIA Venus	White	87.7	91.7	90.5	87.4	18.3	18.4	18.3	18.4	9.1	9.5	9.9	22.9	24.2	26.8
W 151	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Skeet	White	94.5	94.2	-----	-----	19.0	18.5	-----	-----	10.3	10.4	-----	18.1	16.2	-----
Aubrey	White	98.3	99.4	104.0	102.0	18.7	18.7	18.4	18.5	10.6	10.6	10.9	24.1	20.2	21.6
SY 944	White	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Glacier	White	103.8	101.5	101.6	-----	18.2	18.3	18.2	-----	10.4	10.6	10.7	21.6	21.4	22.5
DF 112 R	Red	84.7	99.6	110.1	108.7	18.8	19.0	18.8	18.9	9.3	9.7	9.9	25.9	18.9	18.6
SY 100	Red	80.6	-----	-----	-----	19.5	-----	-----	-----	9.2	-----	-----	8.9	-----	-----
RS 910	Red	103.5	98.0	-----	-----	18.3	18.5	-----	-----	9.7	10.1	-----	33.9	30.7	-----
W 206	Red	91.4	93.7	98.1	95.0	18.6	17.9	18.1	18.1	9.2	9.9	10.2	34.9	32.2	32.8
DF 105 R	Red	80.4	78.7	83.9	82.4	19.0	19.2	19.0	19.0	10.0	10.1	10.5	28.4	28.0	29.1
Dyna-Gro 9552	Red	99.5	97.6	-----	-----	18.6	19.0	-----	-----	9.8	9.7	-----	12.6	11.8	-----
L11610	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 204	Red	81.2	-----	-----	-----	19.5	-----	-----	-----	8.7	-----	-----	23.5	-----	-----
DF 109 R	Red	107.0	105.3	108.4	104.9	19.4	19.4	19.3	19.2	9.5	9.6	9.8	13.4	12.7	17.4
DF 111 R	Red	84.4	83.3	87.3	85.3	18.5	18.6	18.3	18.1	9.4	9.7	9.9	29.2	26.3	29.0
L11621	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9701	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
AgriMAXX 413	Red	80.7	80.9	85.9	84.0	19.1	18.8	18.8	18.9	9.8	9.8	10.3	30.9	27.4	29.5
L11418	Red	108.3	-----	-----	-----	18.8	-----	-----	-----	9.3	-----	-----	14.6	-----	-----
AgriMAXX 464	Red	100.3	-----	-----	-----	18.9	-----	-----	-----	9.7	-----	-----	25.3	-----	-----
StarBurst	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Steyer Berwick	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
SY 547	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
L11538	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
RS 972	Red	98.5	101.3	103.3	101.9	19.1	19.0	19.2	19.3	9.1	9.4	9.6	13.7	13.3	16.7

## 2017 Michigan State University Wheat Performance Trials (Commercially Available Only)

Multi-year data are the most informative.

Table 7 : Multi-Year Performance Summary (Note: Tables sorted by 2017 High Management Yield, white wheat's grouped before red)

MSU makes no endorsement of any variety or brand.

Name	Grain Color	Lactic Acid SRC (%)				Milling and Baking Properties (2016 Crop and Earlier)				NIR Kernel Protein			SKCS Kernel Hard		
		Multi-Year Averages				Cookie Diameter (cm)				Multi-Yr Averages			Multi-Yr Averages		
		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	2 YR 2015-16	3 YR 2014-16	2016	2 YR 2015-16	3 YR 2014-16
MCIA Harpoon	Red	99.4	96.8	-----	-----	18.7	18.8	-----	-----	9.7	10.1	-----	22.4	18.7	-----
Dyna-Gro 9772	Red	102.5	-----	-----	-----	18.3	-----	-----	-----	9.3	-----	-----	24.9	-----	-----
Hilliard	Red	97.2	105.6	-----	-----	18.5	18.3	-----	-----	9.4	10.1	-----	21.0	19.3	-----
AgriMAXX 438	Red	103.1	103.1	106.6	103.8	19.3	19.3	18.9	18.8	9.0	9.3	9.8	11.0	10.8	17.4
Sunburst	Red	97.1	98.8	101.4	98.6	17.6	17.3	17.4	17.4	9.9	10.2	10.5	46.6	43.8	44.6
W 302	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Dyna-Gro 9750	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 305	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 303	Red	82.3	-----	-----	-----	18.2	-----	-----	-----	9.1	-----	-----	40.2	-----	-----
AgriMAXX 444	Red	99.2	97.9	-----	-----	19.3	19.4	-----	-----	9.0	9.2	-----	4.1	4.2	-----
Diener XW1701	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MCIA Whale	Red	96.5	93.5	97.7	96.9	18.8	18.7	18.3	18.2	9.7	10.0	10.3	24.5	23.9	25.0
Steyer Morrin	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MCIA Red Devil	Red	93.1	105.5	104.9	100.6	18.7	18.8	18.6	18.7	10.3	10.1	10.3	31.8	29.2	31.6
Curly	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
W 304	Red	84.4	-----	-----	-----	19.9	-----	-----	-----	9.2	-----	-----	6.7	-----	-----
AgriMAXX 454	Red	96.6	-----	-----	-----	19.0	-----	-----	-----	9.5	-----	-----	10.5	-----	-----
Dyna-Gro 9692	Red	100.8	98.3	-----	-----	20.0	19.9	-----	-----	9.8	10.3	-----	12.4	10.9	-----
RS 902	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Diener XW1601	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
HS 30.06	Red	101.2	-----	-----	-----	19.3	-----	-----	-----	9.6	-----	-----	8.4	-----	-----
Hopewell	Red	110.2	108.3	108.8	105.7	18.8	18.4	18.4	18.4	10.9	10.8	11.0	21.5	18.5	19.5
MCIA Red Dragon	Red	110.8	104.8	106.1	100.6	19.0	18.4	18.4	18.5	9.6	10.0	10.3	8.4	5.7	7.2
MCIA 110201	Red	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
<b>MEAN (2017 125 Entries)</b>		<b>93.1</b>	<b>95.7</b>	<b>98.2</b>	<b>95.6</b>	<b>18.9</b>	<b>18.8</b>	<b>18.9</b>	<b>18.6</b>	<b>9.5</b>	<b>10.0</b>	<b>10.3</b>	<b>18.5</b>	<b>19.6</b>	<b>22.9</b>
LSD (0.05)		-----	<b>13.9</b>	<b>10.9</b>	<b>8.3</b>	-----	<b>0.8</b>	<b>0.6</b>	<b>0.5</b>	-----	<b>0.7</b>	<b>0.5</b>	-----	<b>5.2</b>	<b>5.7</b>
CV (%)		-----	<b>7.1</b>	<b>6.7</b>	<b>6.2</b>	-----	<b>2.0</b>	<b>2.0</b>	<b>1.9</b>	-----	<b>3.4</b>	<b>2.7</b>	-----	<b>13.1</b>	<b>15.1</b>

**ORGANIZATIONS PARTICIPATING IN THE 2017  
MICHIGAN STATE UNIVERSITY WHEAT PERFORMANCE TRIALS**

AgriMAXX Wheat Company

AgriMAXX 413  
AgriMAXX 438  
AgriMAXX 444  
AgriMAXX 454  
AgriMAXX 464  
AgriMAXX Exp. 1785  
AgriMAXX Exp. 1786

Dyna-Gro Seed

Dyna-Gro 9242W  
Dyna-Gro 9362W  
Dyna-Gro 9552  
Dyna-Gro 9611W  
Dyna-Gro 9692  
Dyna-Gro 9701  
Dyna-Gro 9750  
Dyna-Gro 9772  
Dyna-Gro WX17441W  
Dyna-Gro WX17702W

Michigan Crop

Improvement Association

AC Mountain  
E6012  
Hopewell  
Jupiter  
MCIA 110201  
MCIA Harpoon  
MCIA Red Devil  
MCIA Red Dragon  
MCIA Venus  
MCIA Whale  
StarBurst  
Sunburst

BioTown Seeds

Diener XW1601  
Diener XW1701

Irrer Seed Farm

Curly  
L11418  
L11538  
L11610  
L11621

D.F. Seeds, Inc.

Ambassador  
Aubrey  
DF 105 R  
DF 109 R  
DF 111 R  
DF 112 R  
DF EX 1701  
DF EX 1702  
DF EX 1710  
DF EX 1711  
DF EX 1713  
DF EX 1714  
DF EX 1715  
DF EX 1716  
DF EX 1717  
DF EX 1718  
Skeet

Michigan State University

MI14R0009  
MI14R0011  
MI14R0029  
MI14R0160  
MI14R0213  
MI14R0267  
MI14R0288  
MI14R0330  
MI14W0003  
MI14W0013  
MI14W0054  
MI14W0064  
MI14W0190  
MI14W0245  
MI14W0250  
MI14W0334  
MI14W0652  
VA09W-192WS-121  
VA09W-192WS-29

Rupp Seeds, Inc.

9xp710  
9xp732  
RS 902  
RS 910  
RS 972

Syngenta

SY 100  
SY 547  
SY 944

Virginia Crop

Improvement Assoc. /

VA Tech

Hilliard  
VA11W-108PA  
VA11W-313  
VA12W-31

Harrington Seeds, Inc.

Glacier  
HS 30.06  
HS EX16R  
HS EX17R

Wellman Seeds, Inc.

W 151  
W 204  
W 206  
W 302  
W 303  
W 304  
W 305

Steyer Seeds

Steyer Berwick  
Steyer Morrin  
Steyer STex166

**ORGANIZATIONS PARTICIPATING IN THE 2017  
MICHIGAN STATE UNIVERSITY WHEAT PERFORMANCE TRIALS**

AgriMAXX Wheat Company  
7167 Highbanks Road  
Mascoutah, IL 62258  
Phone: 855-629-9432

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

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

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

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

Steyer Seeds  
P.O. Box 209  
Old Fort, OH 44861

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

Syngenta  
14031 Trestle Road  
Highland, IL 64229  
Phone: 765-412-5420

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

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

Irrer Seed Farm  
9621 Dexter Trail  
Fowler, MI 48835  
Phone: 517-719-5710

Wellman Seeds, Inc.  
23778 Delphos Jennings Road  
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