

OHIO WHEAT PERFORMANCE TEST, 2016

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The purpose of the Ohio Wheat Performance Test is to evaluate wheat varieties, blends, brands, and breeding lines for yield, grain quality, and other important performance characteristics. This information gives wheat producers comparative information for selecting the varieties best suited for their production system and market. Varieties differ in yield potential, winter hardiness, maturity, standability, disease and insect resistance, and other agronomic characteristics. Selection should be based on performance from multiple test sites and years.

EVALUATION PROCEDURES

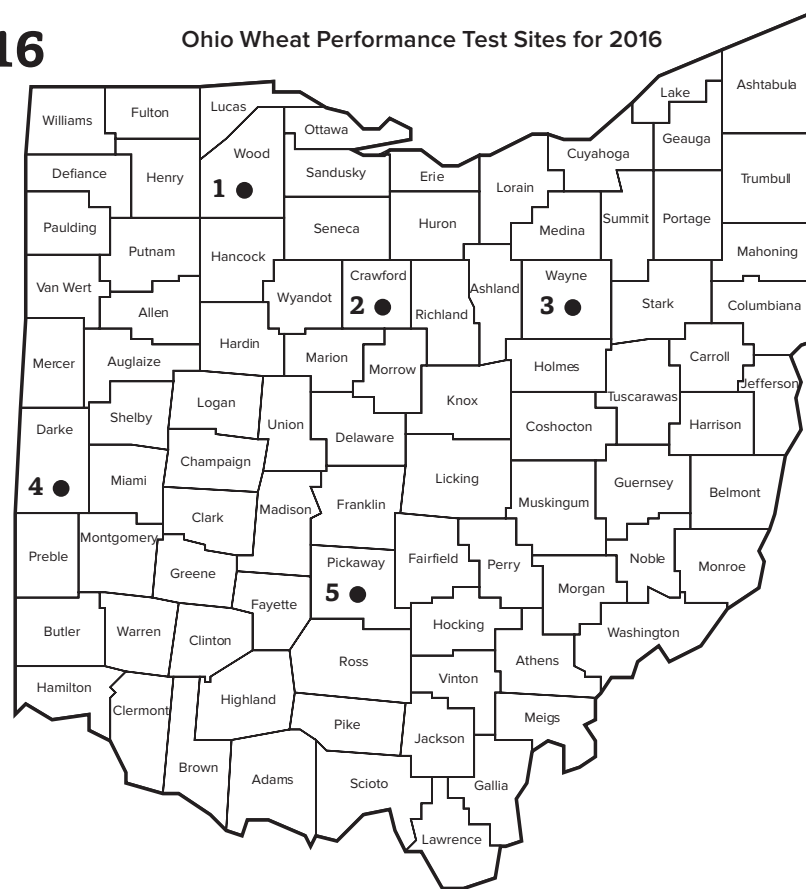
Each entry was evaluated at five test sites (see front cover) using four replications per site in a randomized complete block design. Plots consisted of 7 rows, 7.5 inches apart and 40 feet long. Participating companies specified the seeding rate used for each of their varieties. Tests were planted within fourteen days after the fly-free date and approximately 30 pounds of nitrogen/acre was applied at planting followed by the addition of 80-100 pounds/acre in early spring. Herbicides, insecticides, and fungicides were applied as needed. The following data were collected:

- Yield** is reported in bushels/acre at 13.5 percent moisture.
- Test Weight** is reported in lb/bushel averaged across all locations.
- Seed Size** is thousands of harvested seeds per pound (Ex: 15.5 = 15,500 seeds/lb).
- Lodging** is the percent of plants that lean more than 45 degrees from vertical.
- Plant Height** is the distance from the soil surface to the top of the heads.
- Heading Date** was the average calendar day of the year on which 50 percent of the heads were completely emerged. Average of Wood, Wayne, and Crawford locations. (Example: Day 136 = May 15)
- Powdery mildew (PM)** Powdery mildew (caused by *Blumaria graminis* f. sp. *tritici*) was evaluated at Wooster when most varieties were past the flowering (Feekes growth stage 10.5.1) growth stage.
- Fusarium Head Blight (FHB)** Varieties were evaluated in an inoculated disease screening nursery at Wooster. FHB was rated as the percentage of spikelets diseased per plot (disease index).
- Glume Blotch (SGB) and Leaf Blotch (SLB)** Varieties were evaluated for *Stagonospora* leaf and glume blotch in an inoculated, irrigated disease screening nursery at Wooster. Both SLB and SGB severity were rated at about Feekes growth stage 11.3 as the average percent leaf and spike area diseased, respectively.

CULTURAL PRACTICES BY TEST SITE

County	Test Site				
	1	2	3	4	5
County	Wood	Crawford	Wayne	Darke	Pickaway
Previous Crop	Soybean	Soybean	Soybean	Soybean	Soybean
Soil Type	Hoytville	Blount	Canfield	Crosby	Miamian
Tillage	Min-Till	Min-Till	Min-Till	No-Till	Min-Till
Fly-Free Date	Sept. 23	Sept. 26	Sept. 26	Sept. 29	Oct. 1
Plant Date	Oct. 1	Oct. 5	Oct. 8	Oct. 6	Oct. 7
Soil pH	6.8	6.6	6.1	6.7	6.3
Soil P (ppm)	49	74	46	82	54
Soil K (ppm)	232	287	199	174	154
Fertilizer (N,P,K)	120-78-78	124-0-120	119-69-90	140-4-47	121-63-93
Herbicides	None	None	Harmony Extra SG, Broclean	None	Harmony Extra SG
Fungicide	Prosaro	Prosaro	Prosaro	Prosaro	Caramba
Insecticide	None	Warrior	Warrior	Tombstone	Tombstone
Harvest Date	July 5	July 12	July 10	July 11	June 30

Ohio Wheat Performance Test Sites for 2016



GROWING CONDITIONS

In fall 2015, wheat was planted at four out of the five locations within 10-days of the fly-free date. Wheat emergence at the Wood County location was delayed due to dry soil conditions. However, above average temperatures through December promoted early growth, and wheat entered dormancy in good to excellent condition. Above average temperatures in March accelerated green-up. In April and May, several areas in Ohio experienced freezing temperatures, but wheat survival was good. Overall, grain test weight averaged 58.4 lb/bu (compared to an average test weight of 56.3 lb/bu in 2015). Grain yield averaged between 97 and 119 bu/acre at the five locations.

RESULTS

Results of the 2016 wheat performance test are presented in Tables 1-3. Entries in the data tables are arranged by seed source. A least significant difference (LSD) value can be used to determine if the performance of two varieties was statistically different. The yields of two varieties are expected to be significantly different 90 percent of the time if their yields differ by more than the reported LSD value. Flour yield and softness tests were performed by USDA-ARS Soft Wheat Quality Laboratory, at OARDC in Wooster, OH, Dr. Byung-Kee Baik, Director. Quality test results will be available online at hostedweb.cfaes.ohio-state.edu/perf.

Test results for the 73 soft red winter wheat varieties evaluated in 2016 are presented in Table 1. Tables 2 and 3 contain multi-year variety performance data. Depending on variety and test site, yields varied between 74.5 and 136.1 bushels per acre and test weight ranged from 56.2 to 60.3 pounds per bushel. Yield differences between test sites were due primarily to the soil drainage, weather during the grain fill period & harvest, and disease level. Variety selection should be based on disease resistance, average yield across test sites and years (Tables 2 & 3), winter hardiness, test weight and standability.

Table 4 contains susceptibility of winter wheat varieties to various diseases in Ohio. Particular emphasis should be placed on FHB as this is important in reducing vomitoxin in grain. Table 5 contains the company contact information and seed treatments used for each variety entered in the 2016 wheat performance test.

This report can be found on the Internet at: hostedweb.cfaes.ohio-state.edu/perf and agcrops.osu.edu. Any column of data can be sorted by clicking at the top of the column, which makes it easy to arrange varieties in order by any characteristic for comparison purposes.

Inclusion of varieties in the Ohio Wheat Performance Test does not constitute an endorsement of any variety by The Ohio State University, Ohio Agricultural Research and Development Center, or Ohio State University Extension.

Acknowledgments: We thank our farmer cooperators for their contributions to the 2016 wheat variety testing program. We are grateful for the assistance provided by Ken Scaife, OARDC Field Operations, Wooster and Matt Davis, OARDC Northwest Branch Research Station. Special thanks to Rich Minyo, OARDC Wooster, for his assistance and expertise in conducting the 2016 Ohio Wheat Performance Test.



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 AND ENVIRONMENTAL SCIENCES

Table 1. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2016.

Brand	Variety	Seeds/ft row	Yield						Characteristics				
			Wood	Craw	Wayn	Dark	Pick	Avg.	Test Wt.	Seeds/lb	Lodg.	Ht.	Head Date
			-----bu/ac-----						lb/bu	(1000)	%	in.	
AGI	306	25	83.4	119.4	120.7	110.7	104.3	107.7	57.3	12.5	13	38	145
AGI	307	25	95.7	101.9	105.6	100.2	89.4	98.6	58.9	13.6	4	41	144
AGI	401	25	90.4	106.3	111.3	96.9	95.7	100.1	57.1	14.9	2	44	143
AGI	109B	25	94.9	117.7	122.6	97.4	99.0	106.3	57.7	14.4	0	36	143
AGI	215B	25	102	106.9	117.8	99.7	102.9	105.9	58.0	11.7	1	38	143
AGI	216B	25	94.6	104.7	118.0	100.6	105.8	104.7	59.9	11.3	0	39	142
AgriMAXX	413	27	104.3	118.7	136.1	107.2	98.5	113.0	58.9	14.6	0	37	142
AgriMAXX	444	27	102.3	113.6	116.9	110.8	106.6	110.0	58.6	12.6	0	38	144
AgriMAXX	446	27	98	116.6	115.4	109.1	97.1	107.2	59.1	14.1	2	37	143
AgriMAXX	452	27	94.1	104.9	110.5	97.1	97.6	100.8	57.7	14.3	6	41	142
AgriMAXX	454	27	107.8	110.8	115.3	112.9	98.6	109.1	58.1	12.4	2	40	144
AgriMAXX	462	27	95.2	100.4	109.4	101.0	105.0	102.2	58.7	13.7	4	39	142
AgriPro	SY 007	26.2	94.7	109.9	110.9	94.6	88.8	99.8	58.0	14.2	3	40	141
AgriPro	SY 100	25.3	101.7	123.6	130.9	123.5	105.1	117.0*	57.8	12.3	3	37	143
AgriPro	SY 483	25.3	104.2	117.2	117.9	116.9	106.1	112.5	57.8	11.3	4	41	144
AgriPro	SY 547	26.2	102.8	122.5	132.6	116.2	109.7	116.8*	59.2	12.7	3	40	142
Beck	114	24	94.9	101.8	113.3	101.5	99.8	102.3	57.5	14.4	5	42	142
Beck	120	24	100.9	117.6	124.3	106.0	106.2	111.0	58.1	14.5	2	36	141
Beck	123	24	97.2	107.4	117.7	112.7	105.2	108.0	58.8	12.2	4	41	142
Beck	125	24	85.7	118.5	120.4	109.3	101.2	107.0	59.7	13.4	1	38	144
Beck	128	24	96.5	119.8	117.2	118.2	107.0	111.7	58.4	13.2	0	39	144
BioGene	BG 2W16	25	101.3	105.4	120.6	102.0	107.0	107.3	58.7	12.9	2	40	144
Certified	Freedom	25	91.4	95.1	106.0	99.8	83.9	95.2	56.3	14.8	9	43	144
Certified	Hopewell	25	91	104.5	120.1	106.6	93.2	103.1	57.9	11.6	0	40	143
Certified	Malabar	25	93.5	103.5	104.2	93.5	88.3	96.6	59.0	13.3	2	45	145
Certified	Roane	25	86.6	99.6	110.2	83.9	94.8	95.0	59.0	15.2	11	39	144
Certified	Sunburst	28	95.9	104.7	119.7	106.7	102.1	105.8	58.9	13.1	2	37	144
Dyna-Gro	9171	25	106.1	118.0	121.9	101.0	105.9	110.6	57.4	14.4	0	37	142
Dyna-Gro	9522	25	105.6	111.4	120.9	103.9	105.2	109.4	58.6	12.3	0	39	144
Dyna-Gro	9552	25	96.4	117.4	127.0	118.3	100.4	111.9	59.7	13.1	2	38	144
Dyna-Gro	9591	25	90.4	108.0	119.1	104.2	96.4	103.6	59.3	11.7	3	40	141
Dyna-Gro	9692	25	99.7	112.7	116.5	117.4	103.9	110.0	58.4	12.5	0	38	144
Equity	Butler	30	96.1	117.1	129.5	120.3	98.5	112.3	58.4	14.3	0	39	144
Hiser	L-214	30	105.8	122.8	123.4	113.8	104.5	114.1*	58.7	12.7	3	39	140
Hiser	L-264	30	98	106.9	106.7	103.3	100.3	103.0	58.0	12.5	11	40	141
Limagrain LCS	L11512	30	95.5	107.7	112.2	105.3	94.6	103.1	56.2	14.1	3	41	141
OFSI	Lion	25	97.1	111.5	118.4	95.6	106.8	105.9	56.9	12.4	0	43	143
Pioneer	25R25	25	105.4	118.3	121.8	115.3	106.2	113.4	58.3	12.5	0	38	144
Pioneer	25R40	25	103.8	109.6	114.9	102.0	111.9	108.4	59.2	11.2	0	36	143
Pioneer	25R46	25	94.8	112.6	120.9	108.2	104.6	108.2	59.8	12.1	1	37	144
Pioneer	25R50	25	89.8	117.0	123.5	111.8	106.0	109.6	57.5	14.2	2	35	145
Pioneer	25R77	25	96.8	112.5	119.1	108.9	104.8	108.4	60.1	14.7	0	38	143
Rupp	RS910	24	93	112.4	127.0	109.9	104.2	109.3	60.0	13.7	1	40	143
Rupp	RS972	24	102.4	121.6	125.6	108.1	105.8	112.7	57.6	13.4	4	39	144
Rupp	RS9XP011	24	96.7	114.3	128.4	108.3	102.6	110.1	59.7	13.7	0	38	144
Seed Consultants	SC 1315-15™	27	91.7	101.3	112.3	101.5	102.3	101.8	58.4	11.9	1	40	142
Seed Consultants	SC 1325-15™	27	104.4	115.0	124.4	120.9	104.6	113.9*	58.6	12.5	0	38	142
Seed Consultants	SC 1335-15™	27	82	107.8	117.8	109.6	104.7	104.4	59.4	13.7	1	39	144
Seed Consultants	SC 13S26™	27	97.5	113.2	117.0	114.7	99.8	108.4	58.5	12.6	3	39	143
Shur Grow	SG-1542	26	97.2	103.5	114.0	88.7	93.4	99.4	58.6	12.6	6	40	140
Shur Grow	SG-1544	26	97.9	110.1	123.9	113.0	107.0	110.4	57.2	13.1	1	42	143
Shur Grow	SG-1546S	26	95	116.0	116.4	111.3	106.5	109.0	57.8	13.2	6	38	144
Shur Grow	SG-1552	26	105.7	110.2	122.7	108.7	103.8	110.2	57.5	13.1	11	40	144
Shur Grow	SG-1554	26	99.9	120.0	115.5	113.6	95.8	109.0	57.4	12.8	0	39	144
Stewart	SW470	24	98.5	106.8	116.4	101.2	104.6	105.5	58.0	12.7	0	41	143
Stewart	SW490	24	98	117.6	122.4	113.5	109.8	112.3	58.3	12.3	2	43	143

Table 1. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2016. (continued)

Brand	Variety	Seeds/ft row	Yield						Characteristics				
			Wood	Craw	Wayn	Dark	Pick	Avg.	Test Wt. lb/bu	Seeds/lb (1000)	Lodg. %	Ht. in.	Head Date
			-----bu/ac-----										
Stewart	SW500	24	89.4	99.6	110.8	93.5	96.6	98.0	57.8	15.4	2	40	143
Steyer	Ackley	25	91.2	100.2	108.2	92.8	74.5	93.4	58.8	13.7	16	40	139
Steyer	Evans	25	98.2	121.4	114.4	106.9	107.3	109.6	58.5	12.5	1	38	144
Steyer	Haubert	25	103.3	115.3	111.1	115.0	105.7	110.1	58.3	12.3	1	39	144
Steyer	Morrin	25	98.2	118.3	127.6	111.3	97.1	110.5	58.1	13.5	1	40	145
Strike Genetics	403	24	97.2	120.5	115.9	117.6	115.1	113.3	58.1	13.2	1	37	142
Strike Genetics	603	24	99.2	114.4	120.3	106.4	106.8	109.4	57.9	12.1	1	39	144
Va. Tech	Hilliard	25	103.8	107.3	120.3	98.8	104.1	106.9	59.5	12.9	3	39	142
Wellman	W 202	26	95.1	111.1	127.0	100.6	105.8	107.9	60.3	11.6	2	40	142
Wellman	W 204	26	111.9	115.7	127.3	125.5	113.4	118.8**	58.4	13.2	2	38	142
Wellman	W 206	26	98.1	121.3	122.2	103.5	99.7	109.0	59.8	13.9	1	39	143
Wellman	W 303	26	91.2	109.8	126.2	113.9	98.7	108.0	59.1	14.5	3	36	143
Wellman	W 304	26	102.6	111.5	121.5	103.4	112.5	110.3	58.5	12.8	0	39	144
Wellman	W 307	26	95.7	109.2	119.5	106.6	87.2	103.6	59.5	11.8	0	37	143
Yerks	Y2313	24	87.3	115.4	122.4	108.9	109.9	108.8	57.4	13.3	3	40	144
Yerks	Y925	24	100.8	112.2	119.3	106.2	113.3	110.4	57.9	13.0	0	39	144
Yerks	Y936	24	85.4	103.0	110.7	92.0	98.1	97.8	57.7	14.2	4	42	141
	High	30.0	111.9	123.6	136.1	125.5	115.1	113.4	60.3	15.4	16.0	44.9	144.8
	Average	25.6	97.1	111.7	118.8	106.7	101.9	106.6	58.4	13.1	2.5	39.1	142.9
	Low	24.0	82.0	95.1	104.2	83.9	74.5	93.4	56.2	11.2	0.0	34.5	138.7
	LSD (P=0.1)		12.4	8.2	9.5	11.1	11.1	5.0	1.4		5.7	2.0	1.1
	CV		11.0	6.4	6.9	9.0	9.5	12.4	4.3		351.0	7.4	2.2

**Highest yielding variety.

*Not statistically different than the highest yielding variety.

Table 2. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2015 and 2016.

Brand	Variety	Yield						Characteristics				Brand	Variety	Yield						Characteristics			
		Wood	Craw	Wayn	Dark	Pick	Avg.	Test Wt. lb/bu	Lodg. %	Ht. in.	Head Date			Wood	Craw	Wayn	Dark	Pick	Avg.	Test Wt. lb/bu	Lodg. %	Ht. in.	Head Date
		-----bu/ac-----												-----bu/ac-----									
AGI	306	79.8	106.3	104.9	95.7	92.9	95.9	56.4	11	36	145	Pioneer	25R50	86.9	105.3	105.4	90.1	94.1	96.3	56.8	3	33	145
AGI	307	90.3	92.7	97.9	90.4	83.2	90.9	57.7	7	38	143	Pioneer	25R77	89.1	109.1	102.6	96.0	94.5	98.3	58.7	7	34	142
AGI	215B	96.2	102.3	107.2	87.8	96.5	98.0	57.4	2	35	143	Rupp	RS910	91.4	104.3	109.1	92.5	93.7	98.2	58.7	3	37	143
AGI	216B	94.0	98.7	98.7	88.0	88.7	93.6	58.5	7	37	141	Rupp	RS972	89.8	108.8	108.9	95.6	94.4	99.5	56.5	8	37	144
AgriMAXX	413	96.6	106.7	112.4	90.3	95.0	100.2	57.0	3	35	141	Rupp	RS9XP011	90.8	104.0	110.5	97.4	96.1	99.8	58.1	4	36	144
AgriMAXX	444	94.8	103.9	102.3	94.8	95.2	98.2	57.2	4	35	144	Seed Consultants	SC 1315-15™	93.2	98.1	97.4	91.1	92.6	94.5	57.8	8	37	141
AgriMAXX	446	91.7	108.6	104.0	96.6	89.0	98.0	57.6	4	34	144	Seed Consultants	SC 1325-15™	95.6	106.4	107.0	98.0	96.4	100.7	57.3	3	35	142
AgriMAXX	454	96.9	100.4	105.5	98.3	97.7	99.8	57.4	5	37	144	Seed Consultants	SC 1335-15™	86.4	103.9	102.3	92.9	95.0	96.1	58.5	3	36	143
AgriPro	SY 007	90.1	102.8	100.1	85.8	87.5	93.3	57.5	4	37	140	Shur Grow	SG-1542	91.7	97.3	102.3	84.9	85.8	92.4	58.3	10	37	140
AgriPro	SY 483	94.8	107.8	104.8	97.7	96.9	100.4	56.1	5	37	145	Shur Grow	SG-1544	90.9	102.2	109.9	95.4	99.1	99.5	56.6	4	40	142
AgriPro	SY 547	96.6	109.0	112.0	99.3	95.6	102.5	58.0	4	38	142	Shur Grow	SG-1552	92.5	101.1	107.0	93.5	95.2	97.9	56.4	13	37	144
Beck	120	93.4	104.5	108.9	90.2	97.2	98.8	56.7	3	34	141	Shur Grow	SG-1554	92.9	105.9	99.8	94.8	93.8	97.4	56.7	1	37	144
Beck	125	88.2	108.4	104.6	92.0	93.9	97.4	58.6	2	35	144	Stewart	SW470	92.3	96.0	102.4	87.5	93.7	94.4	56.6	4	38	143
Certified	Freedom	81.6	85.7	91.9	83.3	82.7	85.0	55.1	9	40	145	Stewart	SW490	89.7	100.5	106.0	93.9	95.9	97.2	57.1	3	40	143
Certified	Hopewell	78.9	91.6	99.5	85.6	86.9	88.5	56.2	2	38	144	Stewart	SW500	87.5	96.3	97.5	84.9	89.0	91.0	57.1	4	37	143
Certified	Malabar	76.9	92.3	89.9	75.9	82.4	83.5	57.5	2	42	145	Steyer	Evans	92.4	108.0	102.9	94.8	97.5	99.1	57.1	4	36	144
Certified	Sunburst	87.7	97.0	103.4	93.9	90.4	94.5	58.4	2	34	144	Steyer	Haubert	94.6	108.5	104.3	99.4	101.3	101.6	57.4	4	37	144
Dyna-Gro	9171	95.7	106.5	107.2	89.5	97.8	99.3	56.5	6	35	141	Steyer	Morrin	91.6	107.0	105.9	95.6	92.2	98.4	57.1	1	37	145
Dyna-Gro	9522	95.5	100.5	106.5	91.8	99.4	98.7	57.2	4	36	144	Strike Genetics	403	93.5	113.0	102.9	97.2	103.9	102.1	57.0	2	35	142
Dyna-Gro	9552	88.9	106.2	107.9	101.8	92.3	99.4	57.8	4	34	144	Strike Genetics	603	90.5	105.7	108.3	95.6	97.9	99.6	57.2	5	36	144
Dyna-Gro	9591	90.9	101.0	103.0	92.3	90.9	95.6	58.3	9	37	141	Va. Tech	Hilliard	94.7	97.0	105.2	84.0	90.7	94.3	58.2	5	36	142
Equity	Butler	89.6	106.4	106.8	99.1	92.3	98.8	57.4	1	37	144	Wellman	W 202	93.6	104.1	104.6	90.6	93.8	97.3	58.8	9	37	142
Hiser	L-214	96.4	110.6	103.5	98.1	95.8	100.9	57.4	9	36	140	Wellman	W 204	100.2	108.6	108.5	101.6	104.7	104.7	57.2	5	35	142
Hiser	L-264	93.7	98.9	98.0	92.7	92.9	95.2	58.2	10	37	140	Wellman	W 206	93.1	109.3	104.6	90.8	95.0	98.6	58.5	2	37	143
OFSI	Lion	89.7	96.8	103.8	89.4	94.2	94.8	56.3	3	41	143	Yerks	Y2313	86.1	107.0	105.6	93.1	102.4	98.8	56.4	7	37	144
Pioneer	25R25	95.2	109.3	104.4	94.2	98.4	100.3	57.0	2	35	144		High	100.2	113.0	112.4	101.8	104.7	104.7	58.8	13.0	41.5	144.9
Pioneer	25R40	97.5	102.8	102.2	87.4	98.9	97.7	57.6	1	33	143		Average	91.4	103.1	104.1	92.6	94.1	97.1	57.4	4.6	36.4	142.9
Pioneer	25R46	89.7	102.0	104.0	94.8	92.7	96.7	58.3	1	35	144		Low	76.9	85.7	89.9	75.9	82.4	83.5	55.1	0.5	32.6	139.9

Table 3. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2014–2016.

Brand	Variety	Yield						Characteristics			
		Wood	Craw	Wayn	Dark	Pick	Avg.	Test Wt.	Lodg.	Ht.	Head Date
		-----bu/ac-----						lb/bu	%	in.	
AGI	306	83.0	109.0	105.9	94.8	96.7	97.9	13.4	57	14	36
AGI	307	89.7	100.4	98.8	93.2	89.1	94.2	14.4	58	8	37
AgriMAXX	413	96.1	111.9	113.2	93.8	98.5	102.7	12.6	57	3	34
AgriMAXX	444	95.5	109.8	104.7	95.5	99.9	101.1	13.5	57	7	35
AgriMAXX	446	92.6	114.4	107.0	96.5	96.6	101.4	13.4	58	6	34
AgriPro	SY 007	89.3	105.4	102.9	89.8	90.1	95.5	13.6	58	6	37
AgriPro	SY 483	95.1	112.8	105.7	96.8	103.5	102.8	13.1	57	9	37
AgriPro	SY 547	93.6	111.7	112.0	99.3	99.1	103.1	13.6	59	7	37
Beck	120	93.7	109.1	110.6	93.0	100.4	101.3	12.5	57	3	34
Beck	125	90.6	110.2	107.1	94.5	98.6	100.2	13.9	59	2	35
Certified	Freedom	81.0	91.9	93.5	83.9	86.3	87.3	12.7	56	10	39
Certified	Hopewell	81.8	99.4	100.2	85.1	89.7	91.3	12.8	57	5	37
Certified	Malabar	80.1	98.8	93.7	81.7	86.1	88.1	13.6	58	5	41
Certified	Sunburst	88.9	101.3	103.0	94.1	95.9	96.6	13.8	59	2	33
Dyna-Gro	9171	95.9	111.4	109.6	93.8	99.9	102.1	12.6	57	5	35
Dyna-Gro	9522	96.0	108.3	104.3	93.0	101.8	100.7	13.4	57	8	35
Dyna-Gro	9552	91.8	110.9	109.7	105.5	99.7	103.5	13.4	58	7	34
OFSI	Lion	90.4	102.7	106.1	91.6	98.1	97.8	13.2	57	11	40
Pioneer	25R40	98.8	105.8	107.7	90.1	102.5	101.0	13.7	58	3	33
Pioneer	25R46	90.2	111.3	105.8	96.3	100.1	100.8	13.9	59	5	35
Rupp	RS910	92.6	109.4	110.4	92.4	97.4	100.4	13.4	59	3	36
Rupp	RS972	91.0	113.6	108.7	96.4	98.7	101.7	13.8	57	15	37
Seed Consultants	SC 1325-15™	96.0	112.2	113.2	100.8	102.4	104.9	13.4	58	2	35
Seed Consultants	SC 1335-15™	89.5	109.3	105.7	93.3	99.2	99.4	13.7	59	3	36
Shur Grow	SG-1542	90.5	99.5	103.4	88.0	90.2	94.3	13.9	59	14	36
Shur Grow	SG-1544	93.3	105.0	109.3	91.1	103.3	100.4	13.5	57	8	40
Shur Grow	SG-1552	93.2	104.8	106.5	95.9	99.2	99.9	13.7	57	19	37
Shur Grow	SG-1554	93.3	110.0	104.1	96.1	99.3	100.6	13.8	57	3	36
Stewart	SW490	91.9	103.5	108.7	95.4	99.6	99.8	13.4	58	3	39
Stewart	SW500	88.2	101.4	99.6	87.2	93.1	93.9	14.4	58	9	37
Strike Genetics	403	93.9	116.4	110.7	99.2	104.8	105.0	13.4	58	2	34
Wellman	W 204	99.5	114.5	112.7	100.4	106.8	106.8	13.3	58	3	35
Wellman	W 206	94.0	114.3	106.8	91.6	98.7	101.1	13.6	59	5	36
Yerks	Y2313	88.4	110.4	106.5	93.2	103.6	100.4	13.6	57	16	37
	High	99.5	116.4	113.2	105.5	106.8	106.8	14.4	59.3	18.5	41.1
	Average	91.5	107.7	106.1	93.6	97.9	99.4	13.5	57.8	6.8	36.2
	Low	80.1	91.9	93.5	81.7	86.1	87.3	12.5	55.7	1.8	33.0

Table 4. Reaction of Winter Wheat Varieties to Various Diseases in Ohio.

Brand	Cultivar	PM	PM	SLB	SGB	FHB
		2015	2016	%	%	%
AGI	306	S	.	15.0	2.5	65.0
AGI	307	S	.	20.0	5.0	60.0
AGI	401	.	MS	35.0	2.0	.
AGI	109B	.	R	17.5	5.0	64.2
AGI	215B	S	MS	5.0	2.0	27.8
AGI	216B	S	MS	17.5	3.0	15.6
AgriMAXX	413	MS	.	20.0	4.0	58.3
AgriMAXX	444	MS	.	7.0	6.0	40.8
AgriMAXX	446	.	MS	25.0	5.0	68.3
AgriMAXX	452	.	S	11.0	4.0	33.3
AgriMAXX	454	S	MS	15.0	2.0	41.7
AgriMAXX	462	.	MR	20.0	2.0	69.4
AgriPro	SY 007	R	MR	37.5	3.0	29.4
AgriPro	SY 100	.	MR	27.5	3.0	61.7
AgriPro	SY 483	MS	.	5.0	4.0	57.5
AgriPro	SY 547	MS	MR	55.0	2.0	24.4
Beck	114	.	MS	15.0	5.0	35.6
Beck	120	MS	MS	25.0	6.0	18.3
Beck	123	.	MR	70.0	3.5	31.7
Beck	125	MS	MS	30.0	3.5	34.2
Beck	128	.	S	20.0	8.5	45.0
BioGene	BG 2W16	.	MS	12.5	12.5	45.9
Certified	Freedom	MS	MR	20.0	3.0	59.2
Certified	Hopewell	MR	MR	16.5	2.0	63.3
Certified	Malabar	MS	.	42.5	2.0	58.3
Certified	Roane	.	R	22.5	10.0	57.5
Certified	Sunburst	R	R	20.0	1.0	40.0
Dyna-Gro	9171	MS	.	7.5	4.0	35.0
Dyna-Gro	9522	MS	.	20.0	2.5	48.3
Dyna-Gro	9552	S	.	12.5	9.0	55.8
Dyna-Gro	9591	S	S	22.5	3.5	30.0
Dyna-Gro	9692	.	MS	35.0	4.0	47.8
Equity	Butler	S	MS	9.0	8.5	58.3
Hiser	L-214	MR	MR	20.0	5.0	65.0
Hiser	L-264	MR	R	7.5	10.0	39.4
Limagrain LCS	L11512	.	MS	4.0	3.5	55.6
OFSI	Lion	S	MR	7.0	10.0	56.7
Pioneer	25R25	MS	.	7.5	7.5	23.9
Pioneer	25R40	MS	MR	62.5	4.0	40.0
Pioneer	25R46	MS	.	20.0	4.0	39.2
Pioneer	25R50	MS	.	30.0	3.0	28.3
Pioneer	25R77	MS	.	8.5	4.0	47.2
Rupp	RS910	MS	MR	20.0	5.0	35.0
Rupp	RS972	MS	MS	62.5	3.0	54.0
Rupp	RS9XP011	S	MS	6.5	4.0	31.7
Seed Consultants	SC 1315-15™	S	MS	17.5	12.5	25.6
Seed Consultants	SC 1325-15™	S	.	7.5	4.0	36.7
Seed Consultants	SC 1335-15™	.	R	5.0	2.5	29.4
Seed Consultants	SC 13S26™	.	MS	11.5	7.5	47.2
Shur Grow	SG-1542	R	R	57.5	3.5	39.2
Shur Grow	SG-1544	MS	MS	30.0	1.5	50.6
Shur Grow	SG-1546S	.	MR	8.0	6.5	66.1
Shur Grow	SG-1552	MS	MS	6.5	2.0	54.2
Shur Grow	SG-1554	S	MS	42.5	4.0	38.9
Stewart	SW470	S	MS	17.5	13.5	65.0
Stewart	SW490	S	MS	30.0	5.0	61.7
Stewart	SW500	S	.	10.0	2.0	36.7
Steyer	Ackley	.	R	8.5	8.5	39.4
Steyer	Evans	MR	MS	50.0	9.0	40.8
Steyer	Haubert	S	S	35.0	4.0	35.0
Steyer	Morrin	S	S	9.0	7.5	46.7

Table 4. Reaction of Winter Wheat Varieties to Various Diseases in Ohio. (continued)

Brand	Cultivar	PM 2015	PM 2016	SLB %	SGB %	FHB %
Strike Genetics	403	S	MS	50.0	13.5	.
Strike Genetics	603	S	MS	42.5	10.0	.
Va. Tech	Hilliard	R	MR	17.5	4.0	51.1
Wellman	W 202	S	MS	9.0	3.5	22.8
Wellman	W 204	S	MS	20.0	5.0	25.6
Wellman	W 206	S	MS	20.0	4.0	20.8
Wellman	W 303	.	MR	50.0	4.5	46.1
Wellman	W 304	.	MR	4.0	4.0	55.6
Wellman	W 307	.	R	5.0	10.0	11.7
Yerks	Y2313	MS	MS	12.5	6.5	65.0
Yerks	Y925	.	MS	42.5	4.0	45.6
Yerks	Y936	.	S	20.0	5.0	54.4
			High	70.0	13.5	69.4
			Average	22.3	5.1	44.4
			Low	4.0	1.0	11.7

Powdery mildew was rated on a 0-10 scale, but then the resulting scores were converted to susceptibility/resistance rankings, with R = resistance (disease restricted to leaves 3 and 4, with less than 5% severity on leaf 3), MR = moderately resistant (disease restricted to leaves 3 and 4), MS = moderately susceptible (disease restricted to leaves 2, 3 and 4, the leaves below the flag leaf) and S = susceptible (disease reaching leaf 1, the flag leaf).

Leaf Blotch due to *Stagonospora nodorum*, *Bipolaris sorokinianum* and/or *Pyrenophora tritici-repentis*.

Varieties were evaluated for *Stagonospora* leaf blotch (SLB) and glume blotch (SGB) in an inoculated, irrigated disease screening nursery at Wooster. Both SLB and SGB severity were rated at about Feekes growth stage 11.3 as the average percent leaf and spike area diseased, respectively.

Fusarium Head Blight (FHB) was rated as the percentage of spikelets diseased per plot (disease index). Varieties were evaluated in an inoculated disease screening nursery at Wooster.

For additional disease information and wheat varieties, please visit our website:

oardc.ohio-state.edu/ohiofieldcropdisease

Table 5. Ohio Wheat Performance Test, 2015—Seed Source & Seed Treatment.

Brand	Producer	Variety	Seed Treatment
AGI	Advanced Genetics, Inc. 11491 Foundation Rd., Box 6 Croton, OH 43013 740-893-2501 www.advancedgeneticsinc.com	109B 215B 216B 306 307 401	Vibrance Extreme Ceresus Trio Nipsit Suite / Release EverGol / Storcide Vibrance Extreme / Cruiser Vibrance Extreme / Storcide II
AgriMAXX	AgriMAXX Wheat Company 7167 Highbanks Rd. Mascoutah, IL 62258 855-629-9432	413 444 446 452 454 462	Vibrance Extreme / Maxim / Cruiser Vibrance Extreme / Maxim / Cruiser Vibrance Extreme / Maxim / Cruiser Vibrance Extreme / Maxim / Cruiser Vibrance Extreme / Maxim / Cruiser Vibrance Extreme / Maxim / Cruiser
AgriPro	Syngenta 806 N. 2nd St. Berthoud, CO 80513 970-214-4075 www.agriprowheat.com	SY007 SY100 SY483 SY547	Cruiser Maxx / Vibrance / Cruiser 5FS Cruiser Maxx / Vibrance / Cruiser 5FS Cruiser Maxx / Vibrance / Cruiser 5FS Cruiser Maxx / Vibrance / Cruiser 5FS
Beck	Beck's Hybrids 6767 E. 276th St. Atlanta, IN 46031 317-937-2325 www.BecksHybrids.com	114 120 123 125 128	Escalate™ Escalate™ Escalate™ Escalate™ Escalate™
BioGene	BioGene Seeds 5477 Tri-County Hwy. Sardinia, OH 45171 888-862-3276 www.biogeneseeds.com	BG 2W16	ARMA 5W
Certified	Ohio Seed Improvement Assn. 6150 Avery Rd., Box 477 Dublin, OH 43017 614-889-1136 www.ohseed.org	Freedom Hopewell Malabar Roane Sunburst	Rancona / Macho Ceresus Raxil-Thiram+ Ceresus / Storcide II Ceresus Trio / Storcide / Release
Dyna-Gro	Dyna-Gro Seed 8947 County Rd. 84 Findlay, OH 45840 419-859-2131 www.dyna-groseed.com	9171 9522 9552 9591 9692	Awaken Awaken Awaken Awaken Awaken

Equity	Direct Enterprises, Inc. 16545 Southpark Rd. Westfield, IN 46074 317-910-2140	Butler	Vibrance Extreme
Hiser	Hiser Seed Company 2311 Mile Tree Rd. Clarksburg, OH 43115 740-993-2311	L-214 L-264	Ceresus Trio / Mocho 600ST / Release Vibrance Extreme / Cruiser
Limagrain LCS	Limagrain Cereal Seeds 2040 S. E. Frontage Rd. Fort Collins, CO 80520 970-498-2200 www.LimagrainCerealSeeds.com	L11512	Dividend / Cruiser
OFS	Ohio Foundation Seeds, Inc. 11491 Foundation Rd., Box 6 Croton, OH 43013 740-893-2501	Lion	Vibrance Extreme
Pioneer	DuPont Pioneer 59 Greif Parkway West, Suite 200 Deleware, OH 43015 740-657-6120 www.pioneer.com	25R25 25R40 25R46 25R50 25R77	Vibrance Extreme / Gaucho Vibrance Extreme / Gaucho Vibrance Extreme / Gaucho Vibrance Extreme / Gaucho Vibrance Extreme / Gaucho
Rupp	Rupp Seeds, Inc. 17919 County Rd. B Wauseon, OH 43567 419-337-1841 www.ruppseeds.com	RS 910 RS 972 RS 9XP011	Vibrance Extreme Vibrance Extreme Vibrance Extreme / Cruiser
Seed Consultants	Seed Consultants, Inc. 648 Miami Trace Rd. SW Washington Courthouse, OH 43160 800-708-2676 www.seedconsultants.com	SC 1315-15™ SC 1325-15™ SC 1335-15™ SC 13S26™	Dividend Extreme / Vibrance Dividend Extreme / Vibrance Dividend Extreme / Vibrance Dividend Extreme / Vibrance
Shur Grow	Heritage Cooperative, Inc. 11177 Township Rd. 133 West Mansfield, OH 43358 800-321-7333 www.heritagecooperative.com	SG-1542 SG-1544 SG-1546S SG-1552 SG-1554	Warden Cereals Warden Cereals LSP / Cruiser / Vibrance Extreme Warden Cereals Warden Cereals
Stewart	Stewart Seeds 2230 E. County Rd. 300 N. Greensburg, IN 47240 800-365-SEED www.stewartseeds.com	SW 470 SW 490 SW 500	SecureKote SecureKote SecureKote
Steyer	Steyer Seeds P.O. Box 209 Old Fort, OH 44861 800-231-4274 www.steyerseeds.com	Ackley Evans Morrin Haubert	Steyer Surestand Cereals Steyer Surestand Cereals Steyer Surestand Cereals Steyer Surestand Cereals
Strike Genetics	Burtch Seed Co., Inc. 4742 Tama Rd. Celina, OH 45822 419-363-3713 www.burtchseed.com	403 603	Vibrance Extreme Vibrance Extreme / Cruiser
Va. Tech	Virginia Crop Improvement Assn. 9225 Atlee Branch Lane Mechanicsville, VA 23116 804-746-4884 www.virginiacrop.org	Hilliard	Provoke ST / Foothold / Storcide II
Wellman	Wellman Seeds, Inc. 23778 Delphos Jennings Rd. Delphos, OH 45833 800-717-7333 www.wellmanseeds.com	W 202 W 204 W 206 W 303 W 304 W 307	Encase Encase Encase Encase Encase Encase
Yerks	Yerks Seed, Inc. 20202 Notestine Rd. Woodburn, IN 46797 260-657-5127	Y 925 Y 936 Y 2313	Dividend Extreme Dividend Extreme Cruiser Maxx / Vibrance