

# OHIO WHEAT PERFORMANCE TEST, 2018

M.W. Hankinson, J. McCormick, C.H. Sneller, L.E. Lindsey, *Dept. of Horticulture & Crop Science*  
 P. Paul, *Dept. of Plant Pathology*  
 D.G. Lohnes, *Information Technology*  
 Ohio Agricultural Research & Development Center / Ohio State University Extension

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 using four replications per site in a randomized complete block design. Plots consisted of 7 rows, 7.5 inches apart and 25 feet long. Participating companies specified the seeding rate used for each of their varieties. Tests were planted three to twenty-one days after the fly-free date based on soil conditions 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 in inches 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 Marion locations. (Example: Day 135 = May 15)

**Powdery mildew (PM)** Powdery mildew (caused by *Blumeria graminis* f. sp. *tritici*) was evaluated on a 0 to 10 scale at Wooster at the heading (Feekes growth stage 10.5) growth stage. Varieties were then ranked as Susceptible (S: score  $\geq$  8), Moderately Susceptible (MS: score  $>$  5 and  $<$  8), Moderately Resistant (MR: score  $>$  3 and  $<$  5) and Resistant (R: score  $<$  3).

**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, mist-irrigated disease screening nursery at Wooster. Both SLB and SGB severity were rated at about Feekes growth stage 11.3 as the average percent flag leaf and spike area diseased, respectively

**Flour Yield** is the percent flour yield from milled whole grain.

**Flour Softness** is the percent of fine-granular milled flour. Values higher than approximately 50 indicate kernel textures that are appropriate for soft wheat. Generally, high values are more desirable.

## CULTURAL PRACTICES BY TEST SITE

	TEST SITES				
	1	2	3	4	5
County	Wood	Marion	Wayne	Darke	Pickaway
Previous Crop	Soybean	Soybean	Soybean	Soybean	Soybean
Soil Type	Hoytville	Glynwood	Canfield	Crosby	Miamian
Tillage	Min-Till	No-Till	Min-Till	Min-Till	Min-Till
Fly-Free Date	Sept. 23	Sept. 26	Sept. 26	Sept. 29	Oct. 1
Plant Date	Sept. 29	Oct. 17	Oct. 7	Oct. 18	Oct. 4
Soil pH	6.7	6.1	6.4	6.3	5.9
Soil P (ppm)	66	27	47	102	37
Soil K (ppm)	226	196	164	256	111
Fertilizer (N,P,K)	120-78-78	75-46-240	113-54-108	132-4-0	118-66-60
Herbicides	Stinger	Range Star	Harmony Extra SG, Broclean	Harmony Extra SG, Maestro	Harmony Extra SG, Maestro
Fungicide	Prosaro	Prosaro	Prosaro	None	Caramba
Insecticide	None	None	Lamcamp II	None	Tombstone
Harvest Date	July 3	July 4	July 9	June 30	July 1

Ohio Wheat Performance Test Sites for 2018



## GROWING CONDITIONS

In fall 2017, wheat was planted at three out of the five locations within two weeks of the fly-free date. Due to poor soil conditions, wheat was planted in Marion and Darke County 21 and 19 days after the fly-free date, respectively. Wheat entered dormancy in good to excellent condition. Early season wheat growth and development were slower than the previous two years due to cool temperatures in March and April. However, harvest conditions were favorable and earlier than normal. Overall, grain test weight averaged 55.5 lb/bu (compared to an average test weight of 56.0 lb/bu in 2017). Grain yield averaged between 80.0 and 94.5 bu/acre at the five locations.

## RESULTS

Results of the 2018 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.

Test results for the 68 winter wheat varieties evaluated in 2018 are presented in Table 1. Tables 2 and 3 contain multi-year variety performance data. Depending on variety and test site, yields varied between 53.2 and 102.8 bushels per acre and test weight ranged from 52.5 to 57.6 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 2018 wheat performance test.

This report can be found on the Internet at: <http://www.oardc.ohio-state.edu/wheattrials>. 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 Agriculture Research and Development Center, or Ohio State University Extension.

**Acknowledgments:** We thank our farmer cooperators for their contributions to the 2018 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. We thank CFAES Marketing and Communications for their assistance in preparing the test results for publication. Special thanks to Rich Minyo, OARDC Wooster, for his assistance and expertise in conducting the 2018 Ohio Wheat Performance Test.



**THE OHIO STATE UNIVERSITY**

COLLEGE OF FOOD, AGRICULTURAL,  
AND ENVIRONMENTAL SCIENCES

**Table 1. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2018.**

Brand	Variety	Seeds/ft row	YIELD						CHARACTERISTICS						
			Wood	Marion	Wayne	Darke	Pickaway	Avg.	Test Wt.	Seeds/lb	Lodg.	Ht.	Head Date	Flour	Softness
			-----bu/ac-----						lb/bu	(1000)	%	in.		%	%
AGI	114	25	95.8	84.6	83.0	80.3	86.2	86.0	55.7	13.8	3	32	144	74.0	45.5
AGI	401	25	92.4	76.3	95.2	71.8	83.2	83.8	55.6	13.1	6	37	144	69.1	51.7
AGI	215B	25	97.6	78.2	101.2	83.5	96.0	91.3*	56.7	11.0	0	33	143	72.1	37.8
AGI	217B	25	102.8	90.4	97.5	84.1	93.9	93.7**	56.1	11.6	0	34	143	71.4	62.2
AGI	Bolt	28	93.3	78.6	73.0	84.0	85.8	82.9	56.0	15.8	10	33	143	63.8	57.7
AgriMAXX	438	27	97.5	81.0	84.9	81.9	88.8	86.8	54.0	11.7	5	35	144	72.1	59.5
AgriMAXX	446	27	95.0	74.0	90.9	76.6	88.8	85.1	56.7	12.9	0	32	144	69.6	58.8
AgriMAXX	454	27	99.1	85.9	99.8	80.6	90.4	91.2*	56.5	11.7	0	34	144	69.7	58.5
AgriMAXX	463	27	91.1	62.1	79.7	76.8	88.6	79.7	54.5	11.3	1	33	143	67.3	52.1
AgriMAXX	473	27	88.2	77.7	79.0	75.4	86.0	81.3	55.6	10.9	2	35	144	70.5	51.0
AgriMAXX	485	27	93.8	85.5	86.6	78.3	85.6	86.0	56.0	14.0	3	33	145	73.2	41.1
AgriMAXX	486	27	94.3	75.7	83.4	81.2	90.3	85.0	55.7	11.8	7	34	144	71.6	38.9
AgriPro	SY 100	25	97.0	84.7	88.4	80.9	85.2	87.2	52.5	11.7	13	32	145	70.5	58.5
AgriPro	SY 547	26	95.7	86.7	91.1	83.2	89.4	89.2	56.5	11.7	0	35	142	68.5	51.5
Albert Lea	LCS 3204	25	88.4	70.1	80.3	71.0	80.6	78.1	57.6	13.6	0	37	142	68.6	57.5
Beck	726	25	100.8	83.0	87.4	81.1	87.9	88.0	53.9	12.3	12	33	143	70.2	56.0
Beck	730	25	96.8	83.9	89.7	83.3	89.9	88.7	55.8	11.5	11	34	144	71.3	58.1
Certified	Freedom	25	77.1	74.6	71.8	67.0	77.3	73.6	54.3	12.5	7	37	145	67.8	52.1
Certified	Hopewell	25	87.6	76.2	74.6	73.6	78.4	78.1	55.2	11.3	0	38	143	67.4	56.6
Certified	Kokosing	25	84.5	84.8	89.9	77.5	83.6	84.1	55.4	10.8	3	37	140	71.7	54.4
Certified	Starburst	25	97.6	83.5	91.2	77.0	93.0	88.5	56.9	13.2	1	31	144	65.4	51.2
Certified	Sunburst	25	97.1	83.3	86.1	77.2	83.3	85.4	57.6	13.2	0	32	144	65.1	51.6
CROPLAN	8550	25	94.7	78.4	80.7	71.9	84.3	82.0	55.8	11.5	1	34	145	70.9	51.5
CROPLAN	9415	25	91.3	82.8	80.5	77.1	87.8	83.9	55.9	13.0	2	31	144	70.5	58.9
CROPLAN	9606	25	95.2	86.9	84.7	85.7	79.4	86.4	54.7	12.3	10	34	143	71.6	55.4
Dyna-Gro	9522	27	96.7	85.5	90.3	80.1	90.9	88.7	56.2	11.9	0	33	145	71.7	59.5
Dyna-Gro	9692	27	98.5	85.6	97.3	84.5	91.3	91.4*	56.3	12.5	3	35	143	71.4	63.3
Dyna-Gro	9701	27	100.2	85.4	87.2	81.5	81.1	87.1	55.8	11.4	4	35	144	70.2	52.2
Dyna-Gro	9862	27	94.0	81.0	86.2	81.2	87.6	86.0	56.2	13.8	6	33	145	73.4	41.9
Dyna-Gro	9242W	27	92.2	77.9	82.7	75.7	85.3	82.8	55.3	12.8	3	35	144	69.4	56.8
Dyna-Gro	9362W	27	83.2	74.7	74.0	70.5	80.7	76.6	54.8	12.4	3	34	143	69.3	51.7
Dyna-Gro	9611W	27	90.5	78.2	86.6	79.4	87.5	84.4	55.4	11.1	0	33	145	71.6	54.2
Dyna-Gro	WX17775	27	101.5	87.9	88.2	82.6	87.4	89.5	54.1	11.7	9	33	142	70.1	52.5
Ebberts	903	25	96.9	85.6	88.6	81.0	87.8	88.0	56.2	13.4	8	33	145	73.8	45.7
Ebberts	916	25	100.5	90.0	85.1	90.7	89.9	91.2*	56.4	12.8	31	34	140	71.3	57.7
Ebberts	990	25	92.1	89.1	84.9	81.7	86.8	86.9	53.5	12.1	12	33	142	70.6	52.8
Limagrain LCS	L11549	24	87.5	53.2	79.5	71.5	80.9	74.5	55.5	12.4	3	32	141	71.1	54.9
Limagrain LCS	L11610	24	93.7	77.3	78.2	76.2	83.5	81.8	55.3	14.0	23	33	142	69.7	57.1
Limagrain LCS	L11639	24	95.8	81.1	91.5	77.8	91.7	87.6	56.7	12.0	3	39	141	70.6	56.8
Limagrain LCS	L11719	24	96.4	73.5	80.7	75.4	88.8	83.0	56.0	11.9	0	31	144	69.1	60.4
Prible	PA 218	24	97.7	83.5	89.8	80.4	86.4	87.6	54.6	12.6	16	35	141	71.3	61.2
Prible	PA 258	24	96.4	83.9	86.9	78.3	82.1	85.5	56.1	13.5	4	33	145	73.5	43.0
Rupp	RS 902	24	99.7	84.7	95.9	83.4	88.4	90.4*	55.8	11.9	1	34	143	71.0	59.9
Rupp	RS 910	24	94.4	70.3	86.1	78.7	84.0	82.7	56.2	13.4	1	34	143	69.0	56.6
Rupp	RS 918	24	101.1	85.1	89.4	87.9	85.3	89.8	55.3	11.6	24	35	142	71.4	56.7
Rupp	RS 961	24	91.5	85.6	86.9	80.4	81.0	85.1	56.0	14.0	5	33	144	73.5	45.5
Rupp	RS 968	24	97.9	81.3	92.9	80.2	87.4	87.9	55.7	11.8	2	34	144	72.4	41.5
Seed Consultants	SC 13S26™	22	100.4	89.7	99.3	82.3	92.1	92.8*	56.2	12.0	0	34	143	69.8	59.2
Seed Consultants	SC 13S37™	22	94.1	79.8	84.1	81.6	83.6	84.6	55.8	13.8	8	33	145	73.7	43.3
Shur Grow	SG-1537S	30	92.1	78.2	85.2	76.7	84.6	83.4	54.4	11.8	3	33	143	67.5	51.8
Shur Grow	SG-1544	26	96.3	80.5	92.9	79.7	88.3	87.5	55.3	12.3	3	39	142	70.1	56.8
Shur Grow	SG-1546S	28	97.7	82.9	97.9	86.3	91.2	91.2*	56.1	11.8	1	34	143	71.1	63.7
Shur Grow	SG-1547S	28	93.7	87.1	86.5	82.1	88.4	87.6	56.0	13.5	9	32	144	73.7	43.4
Shur Grow	SG-1552	26	93.0	90.7	85.9	83.3	88.0	88.2	54.8	12.6	7	35	143	73.1	61.0

**Table 1. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2018. (continued)**

Brand	Variety	Seeds/ft row	YIELD						CHARACTERISTICS						
			Wood	Marion	Wayne	Darke	Pickaway	Avg.	Test Wt.	Seeds/lb	Lodg.	Ht.	Head Date	Flour	Softness
			-----bu/ac-----						lb/bu	(1000)	%	in.		%	%
Steyer	Hepburn	25	94.4	86.7	94.1	82.7	87.8	89.1	54.5	13.3	12	34	142	71.5	59.8
Steyer	Shiloh	25	98.1	83.0	86.8	89.4	84.1	88.3	55.1	12.3	22	35	141	72.0	61.6
Strike Genetics	403	24	89.0	67.5	82.1	73.0	89.0	80.1	55.0	12.8	1	33	142	65.1	53.3
Strike Genetics	803	24	95.7	85.2	87.9	82.0	85.9	87.3	55.6	11.3	7	33	145	71.5	58.4
Wellman	W 204	25	87.2	77.1	83.7	77.9	88.4	82.9	55.3	13.1	3	32	141	67.5	57.2
Wellman	W 302	25	93.2	84.5	91.1	84.4	88.3	88.3	54.5	13.1	11	35	141	71.1	60.7
Wellman	W 303	25	84.8	83.4	85.4	75.4	83.0	82.4	55.6	12.1	5	33	143	65.6	49.4
Wellman	W 304	25	97.0	88.0	96.3	84.9	92.2	91.7*	56.4	12.6	0	34	143	71.6	63.6
Wellman	W 305	25	99.8	89.4	85.4	84.5	83.4	88.5	56.2	13.3	6	33	144	73.9	43.5
Wellman	W 312	25	100.9	90.6	82.0	80.1	88.9	88.5	53.8	11.7	10	33	142	70.3	53.6
Wellman	W 316	25	92.4	89.7	92.8	82.2	91.2	89.7	55.5	12.0	1	34	144	71.0	41.0
Yerks	Y2313	24	96.6	88.7	93.3	85.0	89.7	90.7*	54.9	12.4	3	36	143	71.2	60.3
Yerks	Y925	24	94.1	87.3	96.1	83.4	90.3	90.2*	56.0	12.6	0	34	143	71.7	62.3
Yerks	Y933	24	95.2	86.4	83.7	79.9	87.9	86.6	55.8	11.1	6	34	144	71.1	58.3
	<b>High</b>	30.0	102.8	90.7	101.2	90.7	96.0	93.7	57.6	15.8	31	39	145	74.0	63.7
	<b>Average</b>	25.4	94.5	81.8	87.2	80.0	86.9	86.1	55.5	12.4	5	34	143	70.5	54.0
	<b>Low</b>	22.0	77.1	53.2	71.8	67.0	77.3	73.6	52.5	10.8	0	31	140	63.8	37.8
	<b>LSD (P=0.1)</b>		6.5	7.6	4.8	4.6	4.7	3.6	1.5			2.4	1.7		
	<b>CV</b>		5.9	8.0	4.7	5.0	4.6	10.2	5.1			8.0	1.6		

\*\*Highest yielding variety.

\*Not statistically different than the highest yielding variety.

**Table 2. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2017 and 2018.**

Brand	Variety	YIELD						CHARACTERISTICS			
		Wood	Marion	Wayne	Darke	Pickaway	Avg.	Test Wt.	Lodg.	Ht.	Head Date
		-----bu/ac-----						lb/bu	%	in.	
AGI	401	101.8	91.1	105.3	73.1	89.0	92.1	55.5	3	38	140
AGI	217B	108.1	99.6	107.5	91.3	95.7	100.4	56.1	0	36	139
AGI	Bolt	99.5	91.2	91.2	86.8	86.7	91.1	56.1	5	35	139
AgriMAXX	446	102.7	95.0	105.3	81.2	90.8	95.0	56.7	0	34	140
AgriMAXX	454	107.2	102.1	108.2	87.8	95.0	100.0	56.4	0	35	140
AgriMAXX	463	98.0	79.1	92.8	79.3	90.8	88.0	54.8	1	35	138
AgriMAXX	485	103.3	97.4	100.4	83.3	93.0	95.5	56.3	2	34	140
AgriMAXX	486	101.0	93.5	100.5	81.3	96.2	94.5	55.7	4	37	140
AgriPro	SY 100	106.9	101.7	103.5	88.2	90.5	98.1	53.4	7	34	140
AgriPro	SY 547	101.9	102.0	101.9	83.5	91.9	96.2	56.2	0	38	138
Certified	Freedom	91.1	83.4	85.0	70.0	81.9	82.3	54.4	4	39	140
Certified	Hopewell	90.9	87.9	83.3	72.4	78.6	82.6	55.4	0	40	140
Certified	Kokosing	94.5	95.8	100.8	84.1	84.6	92.0	55.6	1	38	137
Certified	Starburst	102.8	89.0	100.1	78.1	94.9	93.0	57.2	1	33	140
Certified	Sunburst	101.4	88.7	98.5	79.0	90.1	91.5	57.5	0	34	140
CROPLAN	9415	101.6	100.0	100.9	82.3	85.8	94.1	56.2	1	34	140
CROPLAN	9606	106.7	101.9	101.5	88.0	87.7	97.1	55.0	5	36	139
Dyna-Gro	9522	106.5	99.2	102.5	82.8	91.3	96.5	56.2	0	36	140
Dyna-Gro	9692	106.3	97.3	108.6	91.4	92.9	99.3	56.3	2	37	139
Dyna-Gro	9701	105.7	99.1	100.7	83.8	87.8	95.4	56.1	2	37	139
Dyna-Gro	9862	104.3	95.5	97.6	86.2	94.0	95.5	56.4	3	35	140
Ebberts	903	103.6	97.0	100.1	82.9	91.3	95.0	56.3	4	34	140
Ebberts	916	105.5	95.8	101.2	87.1	91.2	96.1	56.9	15	36	137
Limagrain LCS	L11610	94.3	92.5	97.5	83.6	90.8	91.7	55.8	12	35	137
Rupp	RS 902	106.7	96.7	104.8	89.3	93.8	98.3	56.0	1	36	139
Rupp	RS 910	103.5	87.2	98.6	80.0	88.8	91.6	56.5	1	36	138
Rupp	RS 961	101.4	97.4	99.5	86.6	89.1	94.8	56.3	3	35	140
Seed Consultants	SC 13S26™	105.3	100.6	106.2	87.8	95.6	99.1	56.3	0	35	139
Seed Consultants	SC 13S37™	102.0	94.5	99.5	85.4	90.8	94.4	56.1	4	35	140
Shur Grow	SG-1537S	97.1	86.2	96.9	78.2	89.0	89.4	54.7	1	35	139
Shur Grow	SG-1544	103.9	93.5	101.0	82.4	91.5	94.5	55.2	2	41	138
Shur Grow	SG-1546S	104.6	95.1	110.1	89.8	92.5	98.4	56.1	0	36	139
Shur Grow	SG-1547S	102.0	97.7	101.9	88.3	94.2	96.8	56.3	4	34	140
Shur Grow	SG-1552	103.0	103.7	102.2	86.9	89.7	97.1	55.4	4	37	139
Strike Genetics	403	102.5	90.5	98.4	82.5	92.6	93.3	55.3	1	35	137
Strike Genetics	803	105.3	93.5	101.4	85.3	90.8	95.3	56.1	4	35	140
Wellman	W 204	101.8	94.2	98.2	86.3	93.2	94.7	55.5	1	34	136
Wellman	W 302	104.1	101.0	103.1	87.4	94.5	98.0	55.5	5	36	137
Wellman	W 303	91.0	91.4	91.5	83.1	86.1	88.6	55.5	4	34	138
Wellman	W 304	105.9	101.9	105.8	92.7	94.5	100.2	56.5	0	36	139
Wellman	W 305	104.7	101.4	99.7	86.1	87.6	95.9	56.2	3	35	140
Wellman	W 312	109.1	103.4	100.2	85.1	94.1	98.4	54.5	5	35	138
Wellman	W 316	97.5	102.3	104.9	83.8	97.6	97.2	55.6	1	37	140
Yerks	Y2313	105.3	102.4	106.2	85.3	93.3	98.5	55.4	1	37	139
Yerks	Y925	103.6	98.6	107.7	90.5	94.2	98.9	56.3	0	36	139
	<b>High</b>	109.1	103.7	110.1	92.7	97.6	100.4	57.5	15	41	140
	<b>Average</b>	102.3	95.7	100.7	84.2	91.0	94.8	55.9	2	36	139
	<b>Low</b>	90.9	79.1	83.3	70.0	78.6	82.3	53.4	0	33	136

**Table 3. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2016–2018.**

Brand	Variety	YIELD						CHARACTERISTICS			
		Wood	Marion	Wayne	Darke	Pickaway	Avg.	Test Wt.	Lodg.	Ht.	Head Date
		-----bu/ac-----						lb/bu	%	in.	
AGI	401	98.0	96.2	107.3	81.0	91.2	94.7	56.0	3	40	141
AGI	217B	105.3	104.0	111.4	101.0	100.1	104.4	57.0	2	37	140
AGI	Bolt	96.1	97.9	97.5	92.3	93.0	95.3	57.1	4	37	141
AgriMAXX	446	101.1	102.2	108.7	90.5	92.9	99.1	57.5	1	35	141
AgriMAXX	454	107.4	105.0	110.5	96.1	96.2	103.0	57.0	1	37	141
AgriPro	SY 100	105.2	109.0	112.6	100.0	95.3	104.4	54.9	6	35	141
AgriPro	SY 547	102.2	108.8	112.1	94.4	97.8	103.1	57.2	1	38	139
Certified	Freedom	91.2	87.3	92.0	80.0	82.6	86.6	55.0	5	40	142
Certified	Hopewell	90.9	93.5	95.5	83.8	83.4	89.4	56.2	0	40	141
Certified	Kokosing	93.1	100.9	106.1	89.8	92.2	96.4	55.9	1	39	138
Certified	Sunburst	99.6	94.1	105.5	88.2	94.1	96.3	58.0	1	35	142
Dyna-Gro	9522	106.2	103.3	108.6	89.9	95.9	100.8	57.0	0	37	141
Dyna-Gro	9692	104.1	102.4	111.2	100.1	96.6	102.9	57.0	1	37	141
Rupp	RS 910	100.0	95.6	108.0	89.9	93.9	97.5	57.7	1	38	140

Brand	Variety	YIELD						CHARACTERISTICS			
		Wood	Marion	Wayne	Darke	Pickaway	Avg.	Test Wt.	Lodg.	Ht.	Head Date
		-----bu/ac-----						lb/bu	%	in.	
Seed Consultants	SC 13S26™	102.7	104.8	109.8	96.7	97.0	102.2	57.1	1	37	141
Shur Grow	SG-1544	101.9	99.0	108.6	92.6	96.6	99.8	55.8	1	41	139
Shur Grow	SG-1546S	101.4	102.1	112.2	97.0	97.2	102.0	56.6	2	37	141
Shur Grow	SG-1552	103.9	105.8	109.0	94.2	94.4	101.5	56.1	6	38	141
Strike Genetics	403	100.7	100.5	104.2	94.2	100.1	99.9	56.2	1	36	139
Wellman	W 204	105.2	101.3	107.9	99.4	99.9	102.7	56.5	1	36	138
Wellman	W 303	91.0	97.5	103.0	93.4	90.3	95.1	56.7	4	35	140
Wellman	W 304	104.8	105.1	111.0	96.3	100.5	103.5	57.2	0	37	141
Yerks	Y2313	99.3	106.7	111.6	93.2	98.8	101.9	56.1	2	38	141
Yerks	Y925	102.6	103.1	111.5	95.7	91.5	100.9	56.8	0	37	141
	<b>High</b>	107.4	109.0	112.6	101.0	100.5	104.4	58.0	6	41	142
	<b>Average</b>	100.6	101.1	107.3	92.9	94.6	99.3	56.6	2	37	140
	<b>Low</b>	90.9	87.3	92.0	80.0	82.6	86.6	54.9	0	35	138

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

Brand	Variety	PM	PM	SLB	SGB	FHB
		2018	2017	2018	2018	2018
AGI	114	S	.	MS	S	MR
AGI	401	.	.	R	MR	MR
AGI	215B	S	.	R	R	MR
AGI	217B	S	S	MS	R	MR
AGI	Bolt	MS	MR	S	R	R
AgriMAXX	438	S	.	MS	MR	MS
AgriMAXX	446	S	MS	MR	MR	MS
AgriMAXX	454	S	S	MR	R	MR
AgriMAXX	463	S	MS	R	MS	R
AgriMAXX	473	S	.	S	S	MR
AgriMAXX	485	S	S	MS	S	MR
AgriMAXX	486	S	MS	S	MR	MR
AgriPro	SY 100	MS	MR	MR	MR	MS
AgriPro	SY 547	MS	R	R	R	MR
Albert Lea	LCS 3204	MR	.	S	S	R
Beck	726	S	.	S	S	MR
Beck	730	S	.	R	R	MR
Certified	Freedom	MR	MS	R	MR	MR
Certified	Hopewell	MR	MS	S	MS	MS
Certified	Kokosing	R	MR	R	S	MR
Certified	Starburst	MR	R	R	MS	MR
Certified	Sunburst	MR	R	R	R	MR
CROPLAN	8550	S	.	MS	S	MR
CROPLAN	9415	S	MS	S	MR	MS
CROPLAN	9606	S	MS	S	MS	MR
Dyna-Gro	9522	S	MS	MR	R	MR
Dyna-Gro	9692	S	S	S	R	MR
Dyna-Gro	9701	.	.	MS	MS	MR
Dyna-Gro	9862	.	.	MR	MS	MR
Dyna-Gro	9242W	S	.	R	R	MR
Dyna-Gro	9362W	S	.	MS	S	MS
Dyna-Gro	9611W	S	.	MR	MS	MS

Brand	Variety	PM	PM	SLB	SGB	FHB
		2018	2017	2018	2018	2018
Dyna-Gro	WX17775	S	.	MR	S	R
Ebberts	903	S	MS	R	S	MR
Ebberts	916	MS	MR	MS	S	MR
Ebberts	990	S	.	MR	S	R
Limagrain LCS	L11549	MS	.	MR	S	MR
Limagrain LCS	L11610	MS	MS	R	MS	MR
Limagrain LCS	L11639	R	.	MS	S	MR
Limagrain LCS	L11719	MS	.	S	MS	MS
Prible	PA 218	MS	.	MS	S	R
Prible	PA 258	S	.	S	S	MR
Rupp	RS 902	S	S	MS	R	MR
Rupp	RS 910	MR	R	R	R	MR
Rupp	RS 918	S	.	S	MR	MR
Rupp	RS 961	S	MS	MR	MR	MR
Rupp	RS 968	S	.	MS	MS	MR
Seed Consultants	SC 13S26™	S	S	MS	R	MR
Seed Consultants	SC 13S37™	.	.	MS	S	MR
Shur Grow	SG-1537S	.	.	R	S	R
Shur Grow	SG-1544	.	.	MS	R	MR
Shur Grow	SG-1546S	S	S	S	R	MR
Shur Grow	SG-1547S	S	MS	MR	MS	MR
Shur Grow	SG-1552	S	MS	MS	MR	MR
Steyer	Hepburn	S	.	MS	MS	MR
Steyer	Shiloh	S	.	S	MR	MR
Strike Genetics	403	S	S	R	MR	MR
Strike Genetics	803	S	MS	R	R	MR
Wellman	W 204	S	MS	MR	MR	MR
Wellman	W 302	S	MS	MS	MS	MR
Wellman	W 303	S	S	R	MR	MR
Wellman	W 304	S	S	MS	R	R



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

Brand	Variety	PM	PM	SLB	SGB	FHB
		2018	2017	2018	2018	2018
Wellman	W 305	S	MS	MS	MS	MR
Wellman	W 312	S	MS	MR	MS	MR
Wellman	W 316	.	.	S	MS	MR
Yerks	Y2313	S	MS	MS	MR	MR
Yerks	Y925	S	S	MS	R	MR
Yerks	Y933	S	.	MS	R	MR

Powdery mildew (caused by *Blumeria graminis* f. sp. *tritici*) was evaluated on a 0 to 10 scale at Wooster at or after the heading (Feekes growth stage 10.5) growth stage. Varieties were then ranked as Susceptible (S: score ≥ 8), Moderately Susceptible (MS: score > 5 and < 8), Moderately Resistant (MR: score > 3 and < 5) and Resistant (R: score < 3).

Varieties were evaluated for *Stagonospora* leaf blotch (SLB) and glume blotch (SGB) in an inoculated, mist-irrigated disease screening nursery at Wooster. Both SLB and SGB severity were rated at about Feekes growth stage 11.3 as the average percent flag leaf and spike area diseased, respectively, and varieties were given S, MS, MR and R resistance scores based on average severity.

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 web site: [oardc.ohio-state.edu/ohiofieldcroplandisease](http://oardc.ohio-state.edu/ohiofieldcroplandisease)

**Table 5. Ohio Wheat Performance Test, 2018—Seed Source & Seed Treatment.**

BRAND	PRODUCER	VARIETY	SEED TREATMENT
AGI	Advanced Genetics, Inc. 11491 Foundation Rd., Box 6 Croton, OH 43013 740-893-2501 <a href="http://www.advancedgeneticsinc.com">www.advancedgeneticsinc.com</a>	114	Cruiser 5FS / Cruiser Maxx / Vibrance
		401	Centynal / Ceresus IM / Release LC
		215B	Vibrance Extreme
		217B	Ceresus
		Bolt	Ceresus
AgriMAXX	AgriMAXX Wheat Company 7167 Highbanks Rd. Mascoutah, IL 62258 855-629-9432 <a href="http://www.agrimaxxwheat.com">www.agrimaxxwheat.com</a>	438	Prime ST
		446	Prime ST
		454	Prime ST
		463	Prime ST
		473	Prime ST
		485	Prime ST
AgriPro	Burtch Seed Co., Inc. 4742 Tama Rd. Celina, OH 45822 419-363-3713 <a href="http://www.burtchseed.com">www.burtchseed.com</a>	SY100	Cruiser Maxx / Vibrance
		SY547	Cruiser Maxx / Vibrance
Albert Lea	Albert Lea Seed P.O. Box 127 1414 W. Main Street Albert Lea, MN 56007 800-352-5247 <a href="http://www.alseed.com">www.alseed.com</a>	LCS 3204	Centynal / Ceresus IM / Release LC
Beck	Beck's Hybrids 6767 E. 276th St. Atlanta, IN 46031 317-937-2325 <a href="http://www.beckshybrids.com">www.beckshybrids.com</a>	726	Escalate™
		730	Escalate™
Certified	Ohio Seed Improvement Assn. 6150 Avery Rd., Box 477 Dublin, OH 43017 614-889-1136 <a href="http://www.ohseed.org">www.ohseed.org</a>	Freedom Hopewell Kokosing Starburst Sunburst	Ceresus IM Ceresus / Storcide II Centynal / Ceresus IM / Release LC Centynal / Ceresus IM / Release LC Centynal / Ceresus IM / Release LC
CROPLAN	Winfield United 1080 County Road F West, MS 5850 Shoreview, MN 55126 631-375-6620 <a href="http://www.winfieldunited.com">www.winfieldunited.com</a>	8550	Nitro Shield IV / Warden Cereals II
		9415	Nitro Shield IV / Warden Cereals II
		9606	Nitro Shield IV / Warden Cereals II

Dyna-Gro	Dyna-Gro Seed 8947 County Rd. 84 Findlay, OH 45840 419-859-2131 <a href="http://www.dyna-groseed.com">www.dyna-groseed.com</a>	9522 9692 9701 9862 9242W 9362W 9611W WX17775	Awaken ST / Foothold Virock Awaken ST / Foothold Virock Awaken ST / Foothold Virock Awaken ST / Foothold Virock Awaken ST / Foothold Virock Awaken ST / Foothold Virock Awaken ST / Foothold Virock
Ebberts	Ebberts Field Seeds Inc. 6840 North State Route 48 Covington, OH 45318 973-473-2521 <a href="http://www.ebbertsseeds.com">www.ebbertsseeds.com</a>	903 916 930	Vibrance Extreme Vibrance Extreme Vibrance Extreme
Limagrain LCS	Limagrain Cereal Seeds 257 E. Hail Street Bushnell, IL 61422 309-569-0008 <a href="http://www.LimagrainCerealSeeds.com">www.LimagrainCerealSeeds.com</a>	L11549 L11610 L11639 L11719	Cruiser 5FS / Vibrance Extreme Cruiser 5FS / Vibrance Extreme Centynal / Ceresus IM / Release LC Centynal / Ceresus IM / Release LC
Prible	Prible Ag Products 1920 W 700 S Poneto, IN 46781 765-348-9091 <a href="http://www.pribleagproducts.com">www.pribleagproducts.com</a>	PA 218 PA 258	
Rupp	Rupp Seeds, Inc. 17919 County Rd. B Wauseon, OH 43567 419-337-1841 <a href="http://www.ruppseeds.com">www.ruppseeds.com</a>	RS 902 RS 910 RS 918 RS 961 RS 968	SabrEx / Warden Cereals SabrEx / Warden Cereals Vibrance Extreme SabrEx / Warden Cereals Warden Cereals
Seed Consultants	Seed Consultants, Inc. 648 Miami Trace Rd. SW Washington Courthouse, OH 43160 800-708-2676 <a href="http://www.seedconsultants.com">www.seedconsultants.com</a>	SC 13S26™ SC 13S37™	Dividend Extreme / Vibrance Dividend Extreme / Vibrance
Shur Grow	Heritage Cooperative, Inc. 11177 Township Rd. 133 West Mansfield, OH 43358 800-321-7333 <a href="http://www.heritagecooperative.com">www.heritagecooperative.com</a>	SG-1537S SG-1544 SG-1546S SG-1547S SG-1552	Cruiser Maxx / Vibrance Extreme Warden Cereals II Warden Cereals II Cruiser Maxx / Vibrance Extreme Wardem Cereals II
Steyer	Steyer Seeds P.O. Box 209 Old Fort, OH 44861 800-231-4274 <a href="http://www.steyerseeds.com">www.steyerseeds.com</a>	Hepburn Shiloh	Steyer Surestand Cereals Steyer Surestand Cereals
Strike Genetics	Burtch Seed Co., Inc. 4742 Tama Rd. Celina, OH 45822 419-363-3713 <a href="http://www.burtchseed.com">www.burtchseed.com</a>	403 803	Vibrance Extreme Vibrance Extreme
Wellman	Wellman Seeds, Inc. 23778 Delphos Jennings Rd. Delphos, OH 45833 800-717-7333 <a href="http://www.wellmanseeds.com">www.wellmanseeds.com</a>	W 204 W 302 W 303 W 304 W 305 W 312 W 316	Encase Encase Encase Encase Encase Encase
Yerks	Yerks Seed, Inc. 20202 Notestine Rd. Woodburn, IN 46797 260-657-5127	Y 2313 Y 925 Y 933	Eclipse US IM Eclipse US IM Eclipse US IM