

# 2021 OHIO WHEAT PERFORMANCE TEST

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The purpose of the 2021 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 seven rows, 7.5 inches apart and 25 feet long. Participating companies specified the seeding rate used for each of their varieties. Test sites were planted within 21 days after the fly-free date based on soil conditions. Approximately 30 pounds of nitrogen per acre was applied at planting followed by the addition of 80–100 pounds per acre in early spring. Herbicides, insecticides, and fungicides were applied as needed. The following data were collected:

**Yield** is reported in bushels per acre at 13.5% moisture.

**Test weight** is reported in pounds per bushel averaged across all locations.

**Seed size** is thousands of harvested seeds per pound (Ex: 15.5 = 15,500 seeds per pound).

**Lodging** is the percentage of plants that leans 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% of the heads were completely emerged. Average of Wood and Pickaway locations. (Ex: Day 135 = May 15).

**Powdery mildew (PM)** varieties were evaluated for powdery mildew at Wooster at the heading (Feeke's growth stage 10.5) growth stage. Varieties were classified as susceptible, moderately susceptible, moderately resistant, and resistant.

**Fusarium head blight (FHB)** varieties were evaluated in an inoculated disease screening nursery at Wooster. FHB was rated as the percentage of spikelets showing diseased symptoms. Varieties were classified as susceptible, moderately susceptible, moderately resistant, and resistant.

**Leaf blotch (SLB) and glume blotch (SGB)** 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 Feeke's growth stage 11.3 as the average percentage of flag leaf and spike area diseased, respectively. Varieties were classified as susceptible, moderately susceptible, moderately resistant, and resistant.

**Flour yield** is the percentage of flour yield from milled whole grain.

**Flour softness** is the percentage 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	Madison	Wayne	Darke	Pickaway
Previous Crop	Soybean	Soybean	Soybean	Soybean	Soybean
Soil Type	Hoytville	Crosby	Canfield	Crosby	Miamian
Tillage	Min-Till	No-Till	Min-Till	Min-Till	Min-Till
Fly-Free Date	Sept. 23	Sept. 30	Sept. 26	Sept. 29	Oct. 1
Plant Date	Sept. 25	Sept. 27	Oct. 3	Sept. 26	Oct. 9
Soil pH	6.6	6.7	6.0	6.5	5.7
Soil P (ppm)	47	25	51	91	37
Soil K (ppm)	214	143	238	220	127
Fertilizer (N,P,K)	120-78-78	124-0-0-375	122-54-108	120-0-0-305	117-66-90
Herbicides	Quelex	Roundup, Sharpen (Pre-Plant), Harmony Extra SG, Brox 2EC (Spring)	Sharpen (Pre-Plant), Harmony Extra SG (Spring)	Harmony Extra SG, Brox 2EC	Quelex
Fungicide	Prosaro	Tilt (Feeke's 6) Miravis Ace	Prosaro	Miravis Ace	Miravis Ace
Insecticide	None	None	Lamcap II	None	Lamcap II
Harvest Date	July 5	July 6	July 6	July 6	June 29

Ohio Wheat Performance Test Sites for 2021



## GROWING CONDITIONS

In fall 2020, wheat was planted at all five locations within eight days of the fly-free date. Wheat entered dormancy in good to excellent condition. Cool temperatures and adequate moisture led to a long grain fill period and high-yielding conditions. Harvest conditions were favorable and harvest dates average. Overall, grain test weight averaged 58.1 pounds per bushel (compared to an average test weight of 58.8 pounds per bushel in 2020). Grain yield averaged between 85.1 and 115.0 bushels per acre among the five locations.

## RESULTS

Results of the 2021 Ohio 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% 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 by Dr. Byung-Kee Baik, director.

Test results for the 79 winter wheat varieties evaluated in 2021 are presented in Table 1. Tables 2 and 3 contain multiyear variety performance data. Depending on the variety and the test site, yields varied between 74.7 and 128.2 bushels per acre and test weight ranged from 55.1 to 60.3 pounds per bushel. Yield differences between test sites were due primarily to the soil drainage, weather during the grain fill period and harvest, and disease level. Variety selection should be based on disease resistance, average yield across test sites and years (Tables 2 and 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 2021 Ohio Wheat Performance Test.

This report can be found at [oardc.ohio-state.edu/wheattrials](http://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 2021 Ohio Wheat Performance Test does not constitute an endorsement of any variety by The Ohio State University, OARDC, or Ohio State University Extension.

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**Table 1. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2021.**

Brand	Variety	Seed Rate #/FT	Wood	Madison	Wayne	Darke	Pickaway	Avg.	Test Wt.	Seeds/lb. (1000)	Lodging	Height	Heading	Flour	Softness
			bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	lb/bu	%	in.	Date	%	%	
AGI	114	25	107.4	105.3	99.4	81.0	89.6	96.5	58.2	12.7	0	35	140	72.3	54.9
AGI	218	25	112.6	114.4	104.7	84.3	97.4	102.7	58.2	11.5	0	37	139	69.6	58.1
AGI	115B	25	100.1	111.4	103.5	88.0	95.1	99.6	57.6	14.6	0	35	137	70.1	62.7
AGI	116B	25	109.8	118.8	107.5	85.1	99.2	104.1	59.3	11.8	0	37	138	68.1	62.2
AGI	217B	25	117.4	115.0	110.4	79.4	101.2	104.7	58.0	12.4	0	36	139	71.4	69.2
AGI	222B	25	114.2	112.6	109.5	89.1	99.3	104.9	58.7	13.8	0	35	140	68.8	63.5
AgriMAXX	AM 454	27	113.9	112.2	112.9	87.4	102.0	105.7*	57.7	13.2	0	37	139	71.7	67.3
AgriMAXX	AM 485	27	110.1	110.8	104.7	74.7	96.9	99.4	58.1	12.8	0	35	140	72.6	54.7
AgriMAXX	AM 498	27	114.0	116.7	104.7	90.7	96.7	104.6	56.9	12.0	0	38	139	70.9	63.9
AgriMAXX	AM 503	27	111.1	119.6	105.1	84.4	95.6	103.2	58.5	12.1	0	37	139	68.6	59.4
AgriMAXX	AM 505	27	112.9	116.9	110.9	79.5	93.8	102.8	60.3	11.1	0	37	139	66.6	57.3
AgriMAXX	AM 513	27	111.6	117.1	102.7	82.9	103.1	103.5	58.9	12.2	0	37	137	69.6	52.4
AgriMAXX	AM 516	27	112.3	118.4	109.5	85.4	100.3	105.2	58.0	13.1	0	35	138	69.7	65.3
AgriPro	SY 100	25	115.3	120.4	106.0	97.4	105.1	108.8**	56.3	11.7	0	36	140	70.7	63.2
AgriPro	SY 547	27	105.6	106.4	108.0	88.2	103.4	102.3	57.7	11.3	0	39	137	68.3	59.3
AgriPro	SY 576	25	101.0	111.2	104.1	82.9	91.3	98.1	57.6	11.4	0	36	141	68.1	59.8
AgriPro	SY Viper	23	103.3	119.5	104.9	78.0	96.5	100.4	59.4	11.1	0	39	137	67.0	60.5
Albert Lea	Erisman	22	96.1	102.4	90.5	79.9	94.1	92.6	58.9	14.1	0	37	135	68.6	53.9
Albert Lea	LCS 3334	22	107.3	119.4	101.1	86.1	105.1	103.8	58.2	14.3	0	39	139	72.1	56.3
Certified	Kokosing	27	98.9	112.1	100.4	82.7	94.7	97.8	57.5	12.0	0	40	135	70.6	57.1
Certified	Starburst	27	104.6	108.3	107.0	80.8	91.1	98.4	58.8	12.6	0	33	139	65.5	54.5
Certified	Sunburst	27	103.8	104.0	105.4	77.1	91.7	96.4	59.0	12.5	0	34	139	64.2	54.4
Dyna-Gro	9002	27	107.3	110.0	116.7	87.2	98.2	103.9	56.4	12.4	0	37	139	69.0	62.1
Dyna-Gro	9120	27	101.5	111.9	102.5	87.8	95.0	99.7	59.8	12.8	0	35	137	67.8	65.4
Dyna-Gro	9151	27	110.5	114.0	111.5	90.8	98.6	105.1	60.2	10.7	0	37	139	66.8	57.3
Dyna-Gro	9172	27	107.6	119.6	107.0	87.6	102.3	104.8	58.3	12.6	0	36	139	69.1	65.3
Dyna-Gro	9182	27	112.3	118.8	102.9	79.3	91.2	100.9	57.9	11.4	0	37	139	69.7	58.3
Dyna-Gro	9692	27	117.1	113.7	108.9	83.5	106.6	106.0*	58.0	12.5	0	37	139	71.4	68.1
Dyna-Gro	9862	27	107.0	112.0	106.4	80.7	94.1	100.0	58.5	12.6	0	35	140	72.2	54.4
Dyna-Gro	WX20734	27	116.8	115.9	115.0	92.1	98.1	107.6*	58.4	12.8	0	34	140	68.6	64.3
Dyna-Gro	WX20738	27	102.7	114.2	101.5	78.7	92.4	97.9	57.9	11.6	0	37	138	68.8	63.5
Dyna-Gro	WX21741	27	112.6	115.3	110.4	87.1	101.4	105.4*	59.8	11.7	0	37	138	68.3	62.5
Ebberts	903	26	108.8	106.1	100.3	79.5	90.1	97.0	57.8	12.8	0	35	140	73.0	54.4
Ebberts	920	26	114.2	119.4	104.9	81.7	96.4	103.3	57.6	12.2	0	37	139	69.1	58.9
Ebberts	952	26	111.9	120.8	106.0	88.8	96.1	104.7	58.3	12.3	0	35	139	69.2	65.8
Ebberts	970	26	111.1	118.2	111.5	86.5	91.5	103.8	58.1	13.4	0	34	140	68.6	63.9
Ebberts	989	26	110.6	113.8	108.4	87.4	104.8	105.0	59.2	11.9	0	37	138	68.6	61.5
FS Wheat	FS 600	25	112.4	111.4	105.6	90.0	92.8	102.4	59.7	10.6	0	36	139	66.6	58.0
FS Wheat	FS 601	25	108.0	116.0	106.9	89.5	99.7	104.0	56.7	13.7	0	36	138	68.2	59.4
FS Wheat	FS 616	25	114.4	120.3	105.5	84.2	94.4	103.8	58.9	13.1	0	37	138	68.9	64.2
FS Wheat	FS 623	25	112.2	120.2	102.8	84.0	96.9	103.2	58.0	11.7	0	38	139	69.1	60.0
FS Wheat	FS 624	25	115.4	121.9	111.6	90.9	98.4	107.6*	58.1	11.6	0	37	139	69.3	61.5
FS Wheat	FS WX21B	25	112.9	120.2	107.4	85.6	100.0	105.2	58.2	12.8	0	36	139	69.5	64.8
KWS	KWS 291	27	109.9	108.7	111.7	93.1	98.4	104.4	56.0	12.2	0	36	140	67.5	60.9
KWS	KWS 340	27	111.5	118.7	110.1	93.1	102.7	107.2*	58.6	12.9	0	36	139	69.1	64.4
KWS	KWS 341	27	105.2	114.8	102.2	81.0	96.0	99.8	57.5	13.5	0	35	139	70.4	60.2
KWS	KWS 361	27	105.3	110.6	105.9	79.2	95.0	99.2	57.6	14.0	0	39	139	69.0	58.9
KWS	KWS 380	27	104.0	108.8	97.7	83.0	97.7	98.2	59.6	11.8	0	35	139	66.9	60.3
Local	LW2068	27	115.6	114.5	106.5	84.9	98.4	104.0	57.2	11.9	0	36	139	68.2	56.3
Local	LW2148	25	116.5	123.5	102.9	84.4	101.6	105.8*	57.6	12.0	0	38	139	69.4	58.4
Local	LW2169	27	115.6	122.1	113.1	87.9	104.4	108.6*	58.3	12.2	0	36	139	69.3	64.4
Local	LW2958	27	111.3	114.1	102.4	84.3	95.1	101.4	59.5	13.0	0	37	139	69.5	65.0
MSU	MI16R0720	26	107.4	128.2	105.6	89.5	105.6	107.3*	55.6	13.3	0	36	136	68.4	59.9
MSU	MI16R0898	26	107.5	113.3	104.2	85.9	87.9	99.8	56.1	14.0	0	38	140	67.5	58.3
MSU	MI16R0906	26	104.7	118.5	110.2	87.2	100.8	104.3	55.1	12.0	0	34	139	70.4	61.9
Seed Consultants	SC 13S26™	20	109.4	111.1	113.8	85.0	105.0	104.9	57.8	12.7	0	37	138	71.5	67.4
Seed Consultants	SC 13S37™	20	105.7	107.0	94.7	80.4	94.0	96.4	58.3	13.1	0	35	139	69.7	59.8
Shur Grow	SG-1544	28	105.9	119.2	106.6	80.5	108.3	104.1	56.6	13.0	0	42	137	69.7	61.7
Shur Grow	SG-1546S	28	114.3	115.2	106.8	88.0	98.1	104.5	58.1	12.8	0	36	139	71.1	68.1
Shur Grow	SG-1547S	28	104.8	112.8	101.7	77.6	87.4	96.9	58.3	12.9	0</				

**Table 1. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2021. (continued)**

Brand	Variety	Seed Rate #/FT	Wood	Madison	Wayne	Darke	Pickaway	Avg.	Test Wt.	Seeds/lb. (1000)	Lodging	Height in.	Heading	Flour	Softness
			bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	lb/bu	(1000)	%	in.	Date	%	%
Shur Grow	SG-1551S	28	111.9	120.0	105.4	84.4	95.5	103.4	57.3	11.9	0	37	139	69.1	59.3
Strike Genetics	203	25	109.0	118.0	110.9	97.9	100.9	107.3*	57.5	11.9	0	36	140	70.5	67.5
Strike Genetics	419	25	113.9	119.0	107.0	91.2	102.1	106.6*	57.8	12.8	0	34	139	65.7	61.4
Strike Genetics	503	25	108.0	114.5	108.1	97.5	100.2	105.7*	57.6	12.4	0	35	139	70.2	67.7
Synergy	EX 1111	25	110.0	117.6	106.3	85.2	105.7	105.0	59.8	11.9	0	37	138	68.2	60.8
Synergy	Haubert	25	115.1	116.1	112.9	86.7	103.8	106.9*	58.2	12.8	0	36	139	71.6	66.8
Synergy	Prestyn	25	109.1	107.9	105.9	87.7	94.7	101.1	57.7	14.0	0	35	138	70.3	62.1
Synergy	Tyson	25	108.7	118.1	106.5	87.6	98.3	103.8	57.9	12.1	0	36	139	68.9	64.7
Va. Tech	Liberty 5658	25	94.4	112.2	96.9	85.1	87.2	95.2	59.2	12.9	0	37	136	69.6	59.2
Va. Tech	VA17W-75	25	99.6	108.7	99.3	84.8	103.1	99.1	59.8	13.0	0	37	135	67.3	56.7
Wellman	W 300	25	105.2	115.6	104.7	81.8	99.3	101.3	57.9	13.6	0	36	137	70.4	60.8
Wellman	W 304	25	112.9	117.0	108.5	85.8	101.3	105.1	58.3	12.6	0	37	139	71.3	67.4
Wellman	W 305	25	109.2	114.7	103.2	75.4	94.4	99.4	57.9	12.5	0	35	139	72.4	55.7
Wellman	W 310	25	111.4	106.3	107.8	84.1	94.4	100.8	57.2	12.2	0	36	139	67.8	56.9
Wellman	W 313	25	111.3	114.6	101.7	80.6	98.7	101.4	57.4	11.9	0	38	139	69.2	58.7
Wellman	W 322	25	109.8	120.1	107.1	84.0	105.7	105.3	59.6	11.6	0	37	138	68.6	62.1
Wellman	W 324	25	111.0	123.7	110.1	85.6	101.7	106.4*	58.0	12.3	0	36	138	69.7	63.9
Yerks	Y925	22	112.7	115.9	109.0	86.7	106.2	106.1*	58.4	12.5	0	37	139	71.4	67.8
Yerks	Y940	24	111.2	118.7	100.9	78.3	92.7	100.4	58.0	11.8	0	38	139	68.7	59.6
<b>High</b>		28	117.4	128.2	116.7	97.9	108.3	108.8	60.3	14.6	0	42	141	73	69
<b>Average</b>		26	109.4	115.0	106.0	85.1	98.0	102.7	58.1	12.5	0	36	139	69	61
<b>Low</b>		20	94.4	102.4	90.5	74.7	87.2	92.6	55.1	10.6	0	33	135	64	52
LSD (P=0.1)			5.5	6.5	5.6	5.9	7.0	3.5	0.9			1.1		0.9	
CV			4.3	4.8	4.5	5.9	6.1	12.0	3.6			5.4		2.7	

\*\* Highest Yielding Variety

\* Not statistically different from the highest yielding variety.

**Table 2. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2020 and 2021.**

Brand	Variety	YIELD					CHARACTERISTICS					Brand	Variety	YIELD					CHARACTERISTICS				
		Wood bu/ac	Wayne bu/ac	Darke bu/ac	Pick bu/ac	Avg. bu/ac	Test Wt. lb/bu	Lodg. %	Ht. in.	Head Date				Wood bu/ac	Wayne bu/ac	Darke bu/ac	Pick bu/ac	Avg. bu/ac	Test Wt. lb/bu	Lodg. %	Ht. in.	Head Date	
AGI	114	105.0	102.8	85.2	87.1	95.0	58.9	4	34	141	FS Wheat	FS 601	104.7	106.3	92.4	88.5	98.0	56.9	0	33	140		
AGI	218	108.6	103.1	85.1	89.9	96.7	58.6	3	35	141	FS Wheat	FS 616	105.7	104.2	87.1	87.0	96.0	59.2	2	35	140		
AGI	217B	112.7	107.9	83.4	97.8	100.4	58.2	1	35	141	FS Wheat	FS 624	106.7	105.0	89.4	91.7	98.2	58.2	0	35	141		
AgriMAXX	AM 454	108.9	110.2	90.1	96.5	101.4	58.1	1	34	140	KWS	KWS 291	108.4	111.3	91.7	97.9	102.3	56.9	2	34	142		
AgriMAXX	AM 485	103.9	106.2	81.2	92.2	95.8	59.1	0	33	141	Local	LW2068	107.4	107.4	89.8	90.5	98.8	57.3	0	34	141		
AgriMAXX	AM 498	109.6	104.0	97.3	92.9	100.9	57.3	5	36	141	Local	LW2169	107.5	105.1	88.5	94.3	98.8	58.3	1	33	141		
AgriMAXX	AM 503	103.9	101.6	83.3	87.1	94.0	58.6	8	35	141	Seed Consultants	SC 13S26™	104.7	110.9	89.1	100.2	101.2	57.9	0	36	140		
AgriMAXX	AM 505	107.4	105.8	85.5	89.2	97.0	60.3	2	35	140	Seed Consultants	SC 13S37™	98.1	97.9	85.9	89.0	92.7	58.8	0	34	141		
AgriPro	SY 547	106.6	108.0	92.2	96.8	100.9	58.4	2	37	139	Strike Genetics	203	106.0	105.7	98.6	98.7	102.2	57.4	2	33	141		
AgriPro	SY 576	99.4	106.0	91.6	92.6	97.4	57.9	0	35	143	Strike Genetics	503	105.9	103.8	99.0	96.0	101.1	57.3	2	33	141		
AgriPro	SY Viper	101.6	106.3	83.1	92.3	95.8	59.5	3	37	139	Va. Tech	Liberty 5658	95.4	96.8	84.9	85.1	90.5	59.0	3	35	139		
Albert Lea	Erisman	91.0	91.9	81.9	83.6	87.1	59.8	7	35	138	Wellman	W 304	107.2	109.3	92.3	97.6	101.6	58.4	2	35	140		
Albert Lea	LCS 3334	105.9	100.6	87.4	98.5	98.1	58.6	8	37	141	Wellman	W 305	102.4	105.9	85.2	90.8	96.0	58.8	0	34	141		
Certified	Kokosing	96.8	102.1	80.8	86.8	91.6	57.3	0	37	138	Wellman	W 310	106.5	105.6	90.9	91.7	98.7	57.3	0	34	140		
Certified	Starburst	99.8	107.1	84.7	86.1	94.4	59.6	0	31	141	Wellman	W 313	106.0	102.0	83.3	90.1	95.3	58.2	4	36	141		
Certified	Sunburst	99.8	106.2	84.3	83.5	93.4	59.7	0	32	141	Wellman	W 324	106.5	105.5	87.2	90.2	97.3	58.2	0	34	140		
Dyna-Gro	9002	105.0	111.6	90.8	91.6	99.7	57.5	5	35	140	Yerks	Y925	107.5	108.0	86.6	98.3	100.1	58.3	0	34	140		
Dyna-Gro	9182	105.8	99.7	81.6	85.3	93.1	58.1	10	35	140	Yerks	Y940	107.5	93.1	78.1	86.6	91.3	58.1	7	35	141		
Dyna-Gro	9692	110.9	108.2	86.3	98.2	100.9	58.3	1	35	140	High		112.7	111.6	99.0	100.2	102.3	60.3	10	37	143		
Dyna-Gro	9862	102.0	108.2	85.6	88.9	96.2	59.2	3	33	142	Average		104.7	104.7	87.1	91.6	97.0	58.4	2	34	141		
Ebberts	903	103.5	105.3	80.6	90.0	94.8	58.9	0	34	141	Low		91.0	91.9	78.1	83.5	87.1	56.9	0	31	138		
Ebberts</td																							

**Table 3. Yield and Agronomic Characteristics of Wheat Varieties Tested in Ohio, 2019–2021.**

Brand	Variety	YIELD					CHARACTERISTICS				
		Wood bu/ac	Wayne bu/ac	Darke bu/ac	Pick bu/ac	Avg. bu/ac	Test Wt. lb/bu	Lodg. %	Ht. in.	Head Date	
AGI	114	99.4	99.1	84.2	89.3	93.0	57.9	3	34	142	
AGI	217B	104.3	101.5	84.0	100.3	97.5	57.1	1	35	141	
AgriMAXX	AM 454	101.2	104.0	88.2	97.7	97.8	56.9	1	34	141	
AgriMAXX	AM 485	97.6	101.7	81.7	92.8	93.5	58.0	0	33	142	
AgriPro	SY 547	98.8	102.7	89.1	97.5	97.0	57.4	1	36	140	
AgriPro	SY 576	94.4	100.9	87.7	94.6	94.4	56.7	0	35	144	
AgriPro	SY Viper	94.2	101.2	80.7	91.6	91.9	58.0	2	36	139	
Albert Lea	LCS 3334	99.2	95.3	86.8	96.4	94.4	57.8	5	37	141	
Certified	Kokosing	87.5	97.2	80.9	89.8	88.8	56.4	0	37	139	
Certified	Starburst	91.2	99.8	81.7	88.5	90.3	58.3	0	31	142	
Certified	Sunburst	91.0	98.1	79.5	82.9	87.9	58.4	0	31	142	
Dyna-Gro	9002	96.2	103.4	89.9	93.2	95.7	56.7	4	35	141	
Dyna-Gro	9692	102.8	100.9	86.4	99.8	97.5	57.2	1	35	141	
Dyna-Gro	9862	96.8	102.9	83.6	90.2	93.4	58.1	2	33	142	

Brand	Variety	YIELD					CHARACTERISTICS				
		Wood bu/ac	Wayne bu/ac	Darke bu/ac	Pick bu/ac	Avg. bu/ac	Test Wt. lb/bu	Lodg. %	Ht. in.	Head Date	
Ebberts	903	97.9	101.3	83.9	91.8	93.7	57.9	0	34	142	
FS Wheat	FS 601	98.0	100.6	88.3	91.4	94.6	56.0	0	33	140	
FS Wheat	FS 616	96.6	98.4	84.9	87.9	92.0	58.3	1	35	140	
FS Wheat	FS 624	98.2	97.9	85.9	90.4	93.1	57.2	0	35	141	
Seed Consultants	SC 13S26™	98.5	104.1	89.8	101.1	98.4	57.0	0	35	141	
Seed Consultants	SC 13S37™	93.4	92.3	82.6	88.9	89.3	57.6	0	33	142	
Wellman	W 304	100.4	103.3	88.4	98.6	97.7	57.2	1	34	141	
Wellman	W 305	96.7	100.7	84.5	91.6	93.4	57.7	0	34	142	
Yerks	Y925	100.6	102.8	86.7	98.9	97.3	57.2	0	35	141	
<b>High</b>		104.3	104.1	89.9	101.1	98.4	58.4	5	37	144	
<b>Average</b>		97.2	100.4	85.2	93.3	94.0	57.4	1	34	141	
<b>Low</b>		87.5	92.3	79.5	82.9	87.9	56.0	0	31	139	

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

Brand	Variety	PM 2021	PM 2020	SLB 2020	SGB 2021	SGB 2020	FHB 2021
		2021	2020	2020	2021	2020	2021
AGI	114	S	MS	MS	MR	MR	MS
AGI	218	S	MS	MS	MR	MR	MR
AGI	115B	S	.	.	MR	.	MR
AGI	116B	MS	.	.	R	.	MR
AGI	217B	S	S	MS	R	R	R
AGI	222B	R	.	.	R	.	R
AgriMAXX	AM 454	S	S	MS	R	R	MR
AgriMAXX	AM 485	S	MS	MR	MR	MR	MR
AgriMAXX	AM 498	S	MS	MS	MR	MR	MR
AgriMAXX	AM 503	S	MS	MR	MR	MR	MR
AgriMAXX	AM 505	S	MS	MR	R	MS	MR
AgriMAXX	AM 513	MS	.	.	R	.	MR
AgriMAXX	AM 516	MS	.	.	R	.	MR
AgriPro	SY 100	MR	MR	MR	MR	R	MR
AgriPro	SY 547	MR	MS	MS	MR	MR	MS
AgriPro	SY 576	S	MS	MR	MR	R	MR
AgriPro	SY Viper	MS	MS	MS	MS	MS	MR
Albert Lea	Erisman	S	MS	MR	S	MS	R
Albert Lea	LCS 3334	S	MR	MS	S	MR	R
Certified	Kokosing	MR	MS	MR	S	S	MR
Certified	Starburst	MR	MS	MR	MR	MR	S
Certified	Sunburst	R	MR	MR	R	R	S
Dyna-Gro	9002	S	S	MR	R	MR	MS
Dyna-Gro	9120	MS	.	.	S	.	MR
Dyna-Gro	9151	MS	.	.	MR	.	MR
Dyna-Gro	9172	MS	.	.	R	.	MR
Dyna-Gro	9182	S	MS	MS	MR	MR	MR
Dyna-Gro	9692	S	MS	S	R	R	R
Dyna-Gro	9862	S	MS	MR	MR	MR	MR
Dyna-Gro	WX20734	R	.	.	R	.	MR
Dyna-Gro	WX20738	S	.	.	R	.	MR
Dyna-Gro	WX21741	S	.	.	R	.	MR
Ebberts	903	S	MS	MS	MR	MR	MS
Ebberts	920	S	MS	MS	MS	MR	MR

Brand	Variety	PM 2021	PM 2020	SLB 2020	SGB 2021	SGB 2020	FHB 2021
		2021	2020	2020	2021	2020	2021
Ebberts	952	S	MS	MR	MR	MR	R
Ebberts	970	MR	.	.	R	.	MR
Ebberts	989	MS	.	.	MR	.	MR
FS Wheat	FS 600	MS	.	.	R	.	MR
FS Wheat	FS 601	S	S	MR	MS	MR	MR
FS Wheat	FS 616	S	MS	MS	MR	MR	R
FS Wheat	FS 623	MS	.	.	MR	.	MR
FS Wheat	FS 624	S	MS	MS	S	MS	MS
FS Wheat	FS WX21B	S	.	.	R	.	S
KWS	KWS 291	S	MS	R	R	MR	S
KWS	KWS 340	S	.	.	R	.	MR
KWS	KWS 341	MS	.	.	S	.	MR
KWS	KWS 361	MS	.	.	MR	.	MR
KWS	KWS 380	S	.	.	MR	.	MS
Local	LW2068	MR	.	.	R	.	MR
Local	LW2148	S	.	.	MR	.	MR
Local	LW2169	S	MS	MR	R	MR	R
Local	LW2958	MS	.	.	MR	.	S
MSU	MI16R0720	MR	.	.	MR	.	MS
MSU	MI16R0898	MS	.	.	MR	.	MR
MSU	MI16R0906	S	.	.	S	.	MR
Seed Consultants	SC 13S26™	S	S	S	R	MR	MR
Seed Consultants	SC 13S37™	S	MS	MS	MR	MR	MS
Shur Grow	SG-1544	MR	.	.	R	.	MR
Shur Grow	SG-1546S	S	.	.	MR	.	MR
Shur Grow	SG-1547S	S	.	.	MR	.	MS
Shur Grow	SG-1551S	MS	.	.	R	.	MR
Strike Genetics	203	MS	MR	MR	MR	MR	MR
Strike Genetics	419	MS	.	.	R	.	MR
Strike Genetics	503	MS	MS	MR	R	MR	MR
Synergy	EX 1111	MS	.	.	R	.	R
Synergy	Haubert	S	.	.	R	.	MR
Synergy	Prestyn	S	.	.	R	.	MR
Synergy	Tyson	S	.	.	MR	.	MR

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

		PM	PM	SLB	SGB	SGB	FHB
Brand	Variety	2021	2020	2020	2021	2020	2021
Va. Tech	Liberty 5658	MS	MR	MR	MR	MR	MR
Va. Tech	VA17W-75	R	.	.	R	.	MR
Wellman	W 300	MS	.	.	R	.	MR
Wellman	W 304	S	S	MS	MR	MR	MS
Wellman	W 305	S	MS	MR	MR	MR	MS
Wellman	W 310	MS	MR	MR	R	R	R
Wellman	W 313	MS	MS	MS	MR	MR	MS
Wellman	W 322	MS	.	.	MR	.	S
Wellman	W 324	S	MS	MR	R	MR	MR
Yerks	Y925	S	S	MS	R	R	MR
Yerks	Y940	MS	MS	MS	MS	MR	MS

Powdery mildew (PM) Varieties were evaluated for Powdery mildew at Wooster at the heading (Feekes growth stage 10.5) 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 showing diseased symptoms.

Leaf Blotch (SLB) and Glume Blotch (SGB) 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.

All varieties were classified as Susceptible, Moderately Susceptible, Moderately Resistant and Resistant based on their disease scores relative to susceptible and resistant checks. It must be noted that there is no true resistance to these diseases. For instance, an R for FHB (head scab) means that the variety had comparable levels of scab to Truman, the resistant check.

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

For additional disease information and wheat  
cards [ohio-state.edu/ohiofieldcrown](http://ohio-state.edu/ohiofieldcrown)

**Table 5. Ohio Wheat Performance Test, 2021—Seed Source & Seed Treatment. (continued)**

Ebberts	Ebberts Field Seeds Inc. 6840 N. State Route 48 Covington, OH 45318 973-473-2521 <a href="http://www.ebbertsseeds.com">www.ebbertsseeds.com</a>	903 920 952 970 989	Vibrance Extreme Vibrance Extreme Vibrance Extreme Vibrance Extreme Vibrance Extreme
FS Wheat	GROWMARK, Inc. 1701 Towanda Avenue Bloomington, IL 61701 309-557-6000 <a href="http://www.fsseeds.com">www.fsseeds.com</a>	FS 600 FS 601 FS 616 FS 623 FS 624 WX21B	CruiserMaxx / Vibrance CruiserMaxx / Vibrance CruiserMaxx / Vibrance CruiserMaxx / Vibrance CruiserMaxx / Vibrance CruiserMaxx / Vibrance
KWS	KWS Cereals 4101 Colleen Dr. Champaign, IL 61822 217-800-1008 <a href="http://www.kws.com">www.kws.com</a>	KWS 291 KWS 340 KWS 341 KWS 361 KWS 380	Cruiser Maxx / Vibrance Cruiser Maxx / Vibrance Cruiser Maxx / Vibrance Cruiser Maxx / Vibrance Cruiser Maxx / Vibrance
Local	Local Seed Company, LLC 802 Rozelle Street Memphis, TN 38104 901-260-6000 <a href="http://www.localseed.com">www.localseed.com</a>	LW2068 LW2148 LW2169 LW2958	Radius Premium Radius Premium Radius Premium Radius Premium
MSU	Michigan State University 1066 Bogue Street A286 East Lansing, MI 48824 517-353-0142 <a href="http://wheat.psm.msu.edu">wheat.psm.msu.edu</a>	MI16R0720 MI16R0898 MI16R0906	Dividend Extreme Dividend Extreme Dividend Extreme
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. 6239 State Route 187 Mechanicsburg, OH 43044 800-321-7333 <a href="http://www.heritagetcooperative.com">www.heritagetcooperative.com</a>	SG-1544 SG-1546S SG-1547S SG-1551S	Warden Cereals II Ascend / Warden Cereals II Warden Cereals II CruiserMaxx / Vibrance
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>	203 419 503	Vibrance Extreme Vibrance Extreme Vibrance Extreme
Synergy	Synergy Ag 6150 N. County Rd. 33 Tiffin, OH 44883 419-618-8428	EX 1111 Haubert Prestyn Tyson	CeresUS IM CeresUS IM CeresUS IM CeresUS IM
Va. Tech	Virginia Crop Improvement Assn. 9225 Atlee Branch Lane Mechanicsville, VA 23116 804-746-4884 <a href="http://www.virginiacrop.org">www.virginiacrop.org</a>	Liberty 5658 VA17W-75	CruiserMaxx / Vibrance Cruiser Maxx / Vibrance
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 300 W 304 W 305 W 310 W 313 W 322 W 324	Encase Encase Encase Encase Encase Encase Encase
Yerks	Yerks Seed, Inc. 20202 Notestine Rd. Woodburn, IN 46797 260-657-5127	Y 925 Y 940	Eclipse US Trio IM Eclipse US Trio IM