

# Wheat Tech Agronomy

## 2020-2021 Wheat Variety Performance Test Results



### General Information:

The 2020-2021 soft red winter wheat variety performance tests were conducted at three different sites: Auburn, Kentucky; Hopkinsville, Kentucky; and Charleston, Missouri. The KY locations contained 59 and the MO location contained 48 different varieties.

Varieties were tested using no-till practices, however; the residue was burned off before planting in MO. The preceding crop for all locations was corn. Seeding rates used were as follows: MO was 325 s/yd<sup>2</sup>, while both KY sites were 375 s/yd<sup>2</sup>. Trials were planted using a Hege Drill with a row spacing of 7.5 inches and were harvested with a Kincaid 8-XP research combine with a HarvestMaster Classic GrainGage. Plot dimensions used were 5 feet wide by 20 feet long and were chemically end trimmed for uniform length. All sites contained four replications, and the experimental design used was randomized complete block.

All locations were managed intensively with split applications of nitrogen, insecticides, herbicide sprays in the fall and spring, and a Feekes 5 and Feekes 10.51 fungicide. Nitrogen applied to the KY locations was a January-February/March split application. Missouri was applied in a three-application split. The rate at Auburn, KY was 55/70 pounds per acre, the rate at Hopkinsville, KY was 55/75 pounds per acre, and MO was 37/43/68 pounds per acre. At the Auburn, Kentucky site, there were four replications treated with a foliar fungicide at Feekes 5 and Feekes 10.51 and four without. The objective for having four untreated replications is to evaluate how each variety responds to the given level of head blight and foliar diseases, and then create a yield fungicide response column. At the Hopkinsville, KY and Missouri sites all replications were sprayed with a fungicide at both timings. The MO site is irrigated, and the other locations are non-irrigated.

### Growing Season:

Planting of the wheat variety trials would begin with our Missouri site on October 17<sup>th</sup>. Then the Hopkinsville, KY location on October 22<sup>nd</sup>, and finally plant the last in Auburn, KY on November 4<sup>th</sup>. During the first part of October the planting conditions were good, however as time progressed through the month they would deteriorate. Beginning the morning of the 23<sup>rd</sup>, scattered rain showers would move through the area along with a cold front. Three inches of rain fell within the next 8 days, however sowing wheat would not resume until November 4<sup>th</sup>. Conditions for this late in the year were warmer than is typical, and this led to good emergence on even November planted wheat.

As the winter months progressed, February would bring some bitter cold. According to [www.kymesonet.org](http://www.kymesonet.org), at the WKU farm from February 11<sup>th</sup> – 21<sup>st</sup>, the temperatures averaged 22.6°F. After being subjected to very cold temperatures, it would take some time for the wheat to fully break dormancy and resume growing as normal.

The cooler temperatures would push back and continue to delay wheat transitioning growth stages. The average heading date for the variety trials for the past 5 years is April 24<sup>th</sup>, which is 9 days earlier than this year (May 3<sup>rd</sup>). Although this timing is much later than the 5-year average, it is not uncommon for us to see wheat be slightly delayed. Spring temperatures can greatly influence this change. The average heading date for the variety trials from 2013-2015 was May 4<sup>th</sup>.

Cooler spring temperatures would create some ideal conditions for high yielding wheat. According to ID-125: A Comprehensive Guide to Wheat Management in Kentucky, <http://www2.ca.uky.edu/agcomm/pubs/ID/ID125/ID125.pdf>, “the grain filling period is critical for producing high yields because kernel size and weight are determined during this stage. Environmental factors affect the rate and duration of the grain filling period. The longer this filling period lasts, the greater is the probability for higher yields.” Temperatures recorded at the WKU mesonet weather station during the month of May have a 5-year average high of 77.6°F, a low of 57.5°F and an average temperature of 67.5°F. This year May would see better temperatures and conditions for grain filling, which lead to some of the best wheat yields in several years. Temperatures would be 3.1°F lower on the average high, 5.4°F lower than the average low and 4.2°F lower than the average 5-year temperature. Although our KY locations would experience some of the best yields in years, there were periods of drought like conditions. The Missouri site would see some hotter and drier conditions, which would lead to slightly lower yields.

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### **Data Interpretation:**

Maturity groups are separated out into the following classifications:

E = Early

M = Medium

L = Late

ME = Medium/Early

ML = Medium/Late

The tables on the following pages have been prepared with the entries listed in order of performance, the highest-yielding entry being listed first. All yields presented have been adjusted to 13.5% moisture. At the bottom of the tables there are three different values: LSD (Least Significant Difference), CV (Coefficient of Variation), and Grand Mean. The mean yields of any two varieties being compared must differ by at least the LSD amount shown to be considered different in yielding ability at the 90% level of probability of significance. CV is a measure of the error variability found within each experiment. Grand Mean is the mean of all values in the group.

### **Acknowledgements**

We would like to acknowledge the following participating companies, Wheat Tech R&D, Wheat Tech owner, and supporting chemical companies. Also, special thanks are extended to all other Wheat Tech employees for any involvement with the research and development division.

### **Wheat Tech Research & Development Division:**

Brad Wilks – Research Director

Matt Miller – Senior Research Associate/Soybean Manager

Kirsten Banks – Research Associate

Ben Goodrum – Research Associate

### **Wheat Tech Owner:**

Bill Brinkley

### **Participating Companies:**

AgriMAXX Wheat Company

AgriPro

Corteva AgriScience – Pioneer Seed

Dyna-Gro Seed

Erwin-Keith Inc. (Progeny Ag Products)

Great Heart Seed

Kentucky American Seeds, LLC

KY Small Grain Growers Association

L&M Glick Seed

UniSouth Genetics, Inc.

Winfield United

### **Supporting Chemical Companies:**

BASF

Bayer CropScience

Corteva AgriScience

FMC Corporation

Syngenta Crop Protection, LLC

# Wheat Tech Agronomy

## Table 1

### 2020-2021 Missouri Winter Wheat Variety Performance Results

*Charleston, MO*

Variety	Maturity	Yield		TW (lb/bu)	Height (inches)	Septoria <sup>¥</sup>	Leaf Rust <sup>¥</sup>
		(bu/ac)				(0-10) 6/1/21	(0-10) 6/1/21
PROGENY PGX 20-11	ME	111.0	a*	59.1	32	5	3
AgriMAXX 514	M	110.1	ab	57.9	32	6	6
KAS 20X29	ME	108.5	abc	60.5	34	5	2
PROGENY PGX 20-6	ME	107.8	a-d	60.6	34	3	3
AgriPro SY 100	ML	107.7	a-d	56.5	31	6	7
PROGENY #BLAZE	ME	106.6	a-e	59.1	32	6	8
USG 3329	ME	105.9	a-f	59.5	31	6	7
AgriMAXX 516	M	105.8	a-f	59.2	32	5	3
Dyna-Gro 9120	E	105.7	a-f	61.7	31	5	4
PROGENY PGX 19-12	M	105.5	a-g	58.1	30	7	8
Dyna-Gro 9172	ML	105.2	a-g	59.0	30	5	6
AgriPro SY Viper	ME	105.1	a-g	59.1	33	4	6
Dyna-Gro WX20734	M	105.0	a-g	59.4	31	6	7
KAS 20X47	VE	105.0	a-g	59.2	33	4	2
Dyna-Gro WX21741	M	104.4	a-h	60.4	32	3	4
Pioneer variety 26R36	ML	104.2	a-i	60.1	33	4	2
USG 3472	M	104.1	a-i	59.0	33	4	7
AgriMAXX 505	M	103.3	a-j	61.5	31	8	8
KAS 20X16	ME	103.2	a-j	58.1	31	7	3
Pioneer variety 26R59	ME	102.8	a-k	58.4	30	2	9
AgriMAXX EXP 2002	E/ME	102.2	a-k	61.5	32	6	1
Pioneer variety 26R10	L	102.2	a-k	59.0	33	5	8
KAS ADAMS	ME	101.5	b-l	61.4	32	2	9
USG 3316	M	101.3	b-l	59.2	31	5	9
Dyna-Gro 9692	M	101.1	b-l	59.4	32	5	9
AgriMAXX 485	M	100.5	c-l	59.9	29	3	6
AgriMAXX 513	ME	100.5	c-l	61.0	33	7	4
PROGENY #CHAD	M	100.4	c-m	57.1	28	3	1
Pioneer variety 26R45	M	100.4	c-m	58.5	32	7	1
PROGENY PGX 20-8	ML	100.2	c-m	58.9	32	5	6
AgriMAXX 454	M	100.2	c-m	59.0	30	4	9
AgriPro SREXP119	ME	99.5	c-m	60.0	30	1	1
Pembroke 2021	E	99.4	d-m	60.3	33	5	4
AgriPro SY 547	ME	98.6	e-m	58.9	34	6	1
PROGENY PGX 20-2	ML	98.0	e-m	61.1	31	4	5
KAS 19X24	M	97.9	e-m	61.5	30	3	1
Dyna-Gro WX20738	E	96.9	f-m	59.4	31	3	1
Pioneer variety 26R41	ME	96.5	g-m	59.8	31	5	1

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**Table 1 - Continued**

**2020-2021 Missouri Winter Wheat Variety Performance Results**

*Charleston, MO*

Variety	Maturity	Yield (bu/ac)	TW (lb/bu)	Height (inches)	Septoria <sup>¥</sup>	Leaf Rust <sup>¥</sup>
					(0-10) 6/1/21	(0-10) 6/1/21
PROGENY #BUSTER	M	96.5 g-m	59.8	32	4	2
AgriMAXX EXP 2009	E	95.7 h-m	59.4	32	4	1
Dyna-Gro 9151	M	95.6 h-m	61.7	32	6	8
AgriMAXX 503	ME	95.3 i-m	58.5	30	4	4
AgriPro SY Richie	E	95.2 i-m	59.6	32	2	1
PROGENY #BULLET	ME	94.7 j-m	58.2	34	7	1
AgriPro SY 576	ML	94.5 j-m	57.0	34	4	1
PROGENY PGX 19-10	ML	93.9 klm	59.0	29	7	9
Dyna-Gro 9002	M	93.1 lm	58.2	31	5	7
AgriPro SREXP117	ME	91.4 m	59.0	30	4	1
LSD P=.10		9.1	.	.	.	.
CV		7.7	.	.	.	.
<b>Grand Mean</b>		<b>101.3</b>	<b>59.4</b>	<b>32</b>	<b>5</b>	<b>5</b>

Planted: October 17, 2020; Harvested: June 17, 2021

\* - Means followed by same letter do not significantly differ (P=.10, LSD)

¥ - Septoria: *Septoria tritici*, Wheat Leaf Rust: *Puccinia triticina*

Ratings were taken from the flagleaf on a 0-10 scale where 0 equals no disease and 10 equals completely diseased

## Wheat Tech Agronomy

### Table 2

#### 2020-2021 Christian County, KY Winter Wheat Variety Performance Results Hopkinsville, KY

Variety	Maturity	Yield		TW (lb/bu)	Height (inches)	FHB <sup>‡</sup> Index	LOD <sup>‡</sup>
		(bu/ac)				(%) 6/4/21	(%) 6/18/21
USG 3472	M	153.0	a*	59.4	39	3	0
AgriPro SY 100	ML	151.6	ab	57.5	36	1	0
L&M Glick 2123	M	151.3	ab	59.8	37	4	0
Dyna-Gro 9692	M	150.7	ab	60.1	39	4	0
AgriPro SREXP117	ME	149.1	abc	59.6	35	5	0
AgriMAXX 516	M	147.3	a-d	59.5	38	4	0
Dyna-Gro 9172	ML	146.5	a-e	59.3	36	3	0
Dyna-Gro WX21741	M	145.8	a-f	61.0	38	3	0
KAS 20X16	ME	145.5	a-f	59.0	37	2	0
AgriMAXX 503	ME	144.3	a-g	60.0	37	0	9
AgriMAXX 514	M	143.6	a-h	57.8	36	4	43
Dyna-Gro 9002	M	142.1	b-i	59.5	37	3	0
PROGENY PGX 19-12	M	141.5	b-j	58.6	38	2	11
USG 3329	ME	141.4	b-j	59.7	36	3	0
PROGENY PGX 20-2	ML	141.4	b-j	62.0	37	7	0
Great Heart GHT9350	M	139.6	c-k	59.6	38	1	0
L&M Glick 1421	ME	139.5	c-k	62.4	38	4	0
Dyna-Gro 9151	M	139.2	c-k	61.9	39	1	0
Pioneer variety 26R59	ME	139.1	c-l	59.0	34	4	0
PROGENY #BLAZE	ME	138.3	d-m	59.9	37	3	0
Great Heart GHT941	M	137.8	d-m	58.5	37	0	0
USG 3316	M	137.7	d-m	60.1	39	1	13
PROGENY #BUSTER	M	137.6	d-m	60.6	40	10	0
X12-3010-4-4-1	ML	137.0	d-n	59.5	41	1	19
KAS 20X29	ME	137.0	d-n	60.6	39	4	0
Pioneer variety 26R10	L	136.6	e-n	59.5	38	1	0
KAS 20X47	VE	136.5	e-o	59.6	38	0	0
AgriMAXX EXP 2009	E	136.4	e-o	59.1	37	0	0
Pioneer variety 26R45	M	136.2	f-o	59.0	37	3	0
AgriMAXX 454	M	135.0	g-p	60.0	38	0	0
AgriMAXX 505	M	134.8	g-p	62.6	37	2	0
PROGENY PGX 20-6	ME	134.5	g-p	60.4	39	4	0
PROGENY PGX 20-8	ML	134.5	g-p	59.4	38	1	0
CROPLAN CP8007	M	134.2	g-q	58.1	33	3	0
AgriMAXX 498	ML	134.0	h-q	58.5	31	5	0
PROGENY #CHAD	M	133.9	h-q	57.0	38	14	48
PROGENY PGX 20-11	ME	132.8	i-r	59.3	38	8	0
Dyna-Gro WX20734	M	132.8	i-r	59.5	36	5	0

## Wheat Tech Agronomy

### Table 2 - Continued

**2020-2021 Christian County, KY Winter Wheat Variety Performance Results**  
Hopkinsville, KY

Variety	Maturity	Yield		TW	Height	FHB <sup>‡</sup> Index	LOD <sup>‡</sup>
		(bu/ac)		(lb/bu)	(inches)	(%)	(%)
PROGENY PGX 19-10	ML	132.7	i-r	59.1	36	1	0
Great Heart GHT918	E	132.4	i-r	58.9	38	2	0
Pembroke 2021	E	132.3	i-r	61.1	39	1	9
AgriPro SY 547	ME	132.1	i-r	60.4	40	5	0
Pioneer variety 26R41	ME	132.0	i-s	59.5	34	6	0
AgriPro SY 576	ML	131.5	j-s	59.1	37	3	0
Dyna-Gro 9120	E	130.8	k-s	61.2	37	3	0
Dyna-Gro WX20738	E	130.4	k-t	60.6	38	3	3
AgriPro SY Viper	ME	130.2	k-t	60.3	40	6	0
AgriMAXX EXP 2002	E/ME	130.1	k-t	61.1	38	1	5
Pioneer variety 26R36	ML	129.8	k-t	60.3	39	3	0
KAS ADAMS	ME	128.8	l-t	62.6	38	3	0
AgriMAXX 485	M	128.4	m-t	60.6	38	0	0
CROPLAN CP8081	ME	127.0	n-t	60.4	37	2	0
CROPLAN CP8022	ML	126.8	n-t	59.1	34	2	0
KAS 19X24	M	126.3	o-t	61.8	36	3	3
X11-0170-52-3-3	ML	125.1	p-t	58.2	38	3	0
PROGENY #BULLET	ME	124.0	q-t	59.6	40	1	0
AgriPro SY Richie	E	122.7	rst	59.5	37	6	0
AgriMAXX 513	ME	121.7	st	62.0	38	0	0
AgriPro SREXP119	ME	120.5	t	60.0	35	6	0
LSD P=.10		10.3		.	.	.	.
CV		6.5		.	.	.	.
<b>Grand Mean</b>		<b>136.0</b>		<b>59.9</b>	<b>37</b>	<b>3</b>	<b>3</b>

Planted: October 22, 2020; Harvested: June 18, 2021

\* - Means followed by same letter do not significantly differ (P=.10, LSD)

‡ - FBH: Fusarium Head Blight: *Fusarium graminearum*, LOD: Lodging %

Ratings were taken from the flagleaf on a 0-10 scale where 0 equals no disease and 10 equals completely diseased

**Wheat Tech Agronomy**  
**Table 3**  
**2020-2021 Logan County, KY Winter Wheat Variety Performance Results**  
**Auburn, KY**

Variety	Maturity	Fungicide Treated					FHB <sup>Y</sup> Index (%) 6/4/21	PM <sup>Y</sup> (0-10) 6/4/21	LR <sup>Y</sup> (0-10) 6/4/21	SR <sup>Y</sup> (0-10) 6/4/21	Fung Response (bu/ac)	LOD <sup>Y</sup> (%) 6/24/21
		Yield (bu/ac)	TW (lb/bu)	Height (inches)	Heading Date							
AgriMAXX 503	ME	139.2	a*	59.0	35	5/3	2	2	1	0	13.6	11
KAS 20X29	ME	138.7	ab	60.7	38	5/3	1	0	0	0	13.9	8
Dyna-Gro WX20738	E	137.1	abc	59.2	37	5/3	4	0	0	0	7.0	0
Pioneer variety 26R45	M	137.1	abc	58.8	35	5/3	2	0	1	0	2.6	13
PROGENY PGX 20-6	ME	137.0	abc	61.3	36	5/3	0	0	2	0	16.2	3
Dyna-Gro 9172	ML	136.2	a-d	59.0	36	5/4	2	0	1	0	8.3	0
KAS ADAMS	ME	135.4	a-e	61.8	35	5/3	2	0	1	0	11.4	3
AgriPro SY Viper	ME	135.2	a-e	59.9	37	5/3	2	0	2	0	10.9	0
KAS 20X16	ME	135.1	a-e	59.1	35	5/4	2	0	2	0	14.0	0
PROGENY PGX 20-2	ML	134.2	a-f	61.5	34	5/2	1	0	2	0	14.1	23
AgriMAXX 505	M	134.1	a-f	61.3	35	5/4	2	0	4	0	15.7	0
Pioneer variety 26R36	ML	134.1	a-f	61.7	35	5/5	1	5	0	0	13.7	0
AgriPro SY 100	ML	133.9	a-f	56.1	36	5/5	1	0	4	0	14.9	8
USG 3472	M	133.9	a-f	58.8	36	5/5	3	0	3	0	17.4	0
Great Heart GHT9350	M	133.6	a-f	58.8	36	5/4	3	0	1	0	12.9	0
AgriMAXX 516	M	133.0	a-g	59.1	35	5/4	3	0	1	0	11.0	0
Dyna-Gro 9151	M	132.9	a-g	61.0	35	5/4	2	0	1	0	0.6	0
USG 3316	M	132.8	a-h	59.2	37	5/3	3	5	5	6	11.6	0
X12-3010-4-4-1	ML	132.6	a-i	59.7	39	5/5	3	0	0	8	11.7	80
AgriMAXX 513	ME	132.4	a-i	62.0	36	5/3	0	0	2	0	18.5	0
KAS 20X47	VE	132.0	a-i	59.1	37	5/4	1	0	3	0	5.8	0
CROPLAN CP8007	M	131.7	a-i	57.2	31	5/4	2	0	2	0	15.1	0
Great Heart GHT918	E	131.4	a-j	59.7	35	5/4	2	0	1	0	13.0	0
Dyna-Gro 9692	M	130.6	a-j	59.0	38	5/5	3	6	5	5	11.2	0
AgriMAXX 514	M	130.2	a-j	57.1	35	5/4	1	0	1	0	10.8	4
PROGENY PGX 20-11	ME	130.1	a-j	58.9	36	5/4	2	0	1	0	14.0	0
AgriMAXX 454	M	129.7	b-j	58.6	37	5/4	2	6	4	6	11.6	3
PROGENY #BUSTER	M	128.8	c-k	59.7	37	5/5	4	0	1	0	10.7	0
CROPLAN CP8022	ML	128.7	c-l	60.0	34	5/4	1	1	1	0	22.0	0
PROGENY #CHAD	M	128.4	c-m	54.8	32	5/4	7	0	1	0	23.5	29
PROGENY PGX 20-8	ML	128.2	c-m	59.0	36	5/5	2	0	4	0	5.1	0
Pioneer variety 26R10	L	127.7	d-m	58.8	36	5/4	3	3	2	0	17.8	0
PROGENY PGX 19-10	ML	127.3	d-m	57.9	35	5/4	1	0	0	0	16.9	0
Dyna-Gro WX21741	M	127.1	d-m	59.6	38	5/4	3	0	2	0	13.3	0



**Wheat Tech Agronomy**  
**Table 3 - Continued**  
**2020-2021 Logan County, KY Winter Wheat Variety Performance Results**  
**Auburn, KY**

Variety	Maturity	Fungicide Treated					FHB <sup>¥</sup> Index (%) 6/4/21	PM <sup>¥</sup> (0-10) 6/4/21	LR <sup>¥</sup> (0-10) 6/4/21	SR <sup>¥</sup> (0-10) 6/4/21	Fung Response (bu/ac)	LOD <sup>¥</sup> (%) 6/24/21										
		Yield (bu/ac)	TW (lb/bu)	Height (inches)	Heading Date																	
Pembroke 2021	E	127.1	d-m	59.1	36	5/2	2	0	1	0	9.4	0										
PROGENY PGX 19-12	M	127.0	d-m	57.2	35	5/4	2	0	1	0	18.9	28										
AgriPro SY 547	ME	126.6	e-n	58.4	38	5/3	4	0	1	2	7.3	0										
Great Heart GHT941	M	126.3	e-n	57.3	36	5/4	0	0	2	0	8.6	0										
AgriPro SY Richie	E	126.2	e-n	59.6	37	4/30	6	0	0	0	13.2	0										
L&M Glick 1421	ME	126.2	e-o	60.3	34	5/4	2	0	3	0	10.0	0										
USG 3329	ME	125.7	f-o	58.2	34	5/3	2	0	2	0	18.2	0										
PROGENY #BLAZE	ME	125.6	f-o	59.6	36	5/3	3	0	2	0	15.9	0										
Pioneer variety 26R59	ME	125.5	f-o	56.7	34	5/3	4	0	1	0	12.0	0										
AgriMAXX EXP 2009	E	125.3	f-o	59.4	35	5/2	2	0	1	0	10.7	8										
X11-0170-52-3-3	ML	125.3	f-o	59.5	36	5/4	3	0	1	1	14.7	8										
AgriMAXX 498	ML	123.8	g-p	57.7	40	5/4	2	1	2	0	16.7	26										
Dyna-Gro 9120	E	123.6	h-p	61.0	34	5/2	1	0	1	0	18.2	0										
AgriMAXX EXP 2002	E/ME	123.4	i-p	59.6	36	4/30	2	0	1	0	22.1	0										
CROPLAN CP8081	ME	123.4	i-p	59.5	38	5/3	1	3	2	0	14.9	0										
Dyna-Gro WX20734	M	122.4	j-p	58.2	36	5/5	5	0	1	0	12.5	0										
Dyna-Gro 9002	M	120.0	k-q	57.5	36	5/6	0	1	0	0	24.1	0										
KAS 19X24	M	119.5	l-q	60.5	35	5/4	2	0	0	0	15.2	0										
Pioneer variety 26R41	ME	119.5	m-q	58.9	34	5/3	5	0	1	0	19.1	0										
L&M Glick 2123	M	119.4	m-q	57.8	36	5/1	3	2	1	2	13.2	0										
AgriPro SY 576	ML	117.7	n-q	57.6	40	5/5	2	0	0	0	7.3	0										
AgriPro SREXP117	ME	117.0	opq	58.7	33	5/4	3	0	0	0	13.1	0										
PROGENY #BULLET	ME	115.5	pqr	57.1	39	5/5	2	0	1	0	12.0	0										
AgriPro SREXP119	ME	111.6	qr	59.0	33	5/3	3	0	0	0	13.1	0										
AgriMAXX 485	M	107.1	r	58.0	32	5/5	1	0	2	0	10.2	0										
LSD P=.10		9.2	.	.	.	.	.	.	.	.	.	.										
CV		6.2	.	.	.	.	.	.	.	.	.	.										
<b>Grand Mean</b>		<b>128.2</b>		<b>59.1</b>		<b>36</b>		<b>5/3</b>		<b>2</b>		<b>1</b>		<b>1</b>		<b>1</b>		<b>1</b>		<b>13.2</b>		<b>4</b>

Planted: November 4, 2020; Harvested: June 24, 2021

\* - Means followed by same letter do not significantly differ (P=.10, LSD)

¥ - FBH: Fusarium Head Blight %; *Fusarium graminearum*, LOD: Lodging %, SR: Stripe Rust: *Puccinia striiformis*, LR: Wheat Leaf Rust: *Puccinia triticina*, PM: Powdery Mildew: *Blumeria graminis tritici*

Ratings were taken from the flagleaf on a 0-10 scale where 0 equals no disease and 10 equals completely diseased



## Wheat Tech Agronomy

### Table 4

#### 2020-2021 Winter Wheat Variety Performance Results

*Kentucky Two Location Average*

Variety	Maturity	Yield (bu/ac)	TW (lb/bu)	Height (inches)	FHB <sup>‡</sup> Index (%)	LOD <sup>‡</sup> (%)
USG 3472	M	143.5	59.1	38	3	0
AgriPro SY 100	ML	142.8	56.8	36	1	4
AgriMAXX 503	ME	141.8	59.5	36	1	10
Dyna-Gro 9172	ML	141.4	59.2	36	3	0
Dyna-Gro 9692	M	140.7	59.6	39	4	0
KAS 20X16	ME	140.3	59.1	36	2	0
AgriMAXX 516	M	140.2	59.3	37	4	0
KAS 20X29	ME	137.9	60.7	39	3	4
PROGENY PGX 20-2	ML	137.8	61.8	36	4	12
AgriMAXX 514	M	136.9	57.5	36	3	23
Pioneer variety 26R45	M	136.7	58.9	36	3	7
Great Heart GHT9350	M	136.6	59.2	37	2	0
Dyna-Gro WX21741	M	136.5	60.3	38	3	0
Dyna-Gro 9151	M	136.1	61.5	37	2	0
PROGENY PGX 20-6	ME	135.8	60.9	38	2	2
L&M Glick 2123	M	135.4	58.8	37	4	0
USG 3316	M	135.3	59.7	38	2	6
X12-3010-4-4-1	ML	134.8	59.6	40	2	49
AgriMAXX 505	M	134.5	62.0	36	2	0
KAS 20X47	VE	134.3	59.4	38	1	0
PROGENY PGX 19-12	M	134.3	57.9	37	2	20
Dyna-Gro WX20738	E	133.8	59.9	38	4	1
USG 3329	ME	133.6	59.0	35	3	0
PROGENY #BUSTER	M	133.2	60.2	39	7	0
AgriPro SREXP117	ME	133.1	59.2	34	4	0
CROPLAN CP8007	M	133.0	57.7	32	3	0
L&M Glick 1421	ME	132.9	61.4	36	3	0
AgriPro SY Viper	ME	132.7	60.1	39	4	0
AgriMAXX 454	M	132.4	59.3	38	1	2
Pioneer variety 26R59	ME	132.3	57.9	34	4	0
Pioneer variety 26R10	L	132.2	59.2	37	2	0
KAS ADAMS	ME	132.1	62.2	37	3	2
Great Heart GHT941	M	132.1	57.9	37	0	0
Pioneer variety 26R36	ML	132.0	61.0	37	2	0
PROGENY #BLAZE	ME	132.0	59.8	37	3	0
Great Heart GHT918	E	131.9	59.3	37	2	0
PROGENY PGX 20-11	ME	131.5	59.1	37	5	0
PROGENY PGX 20-8	ML	131.4	59.2	37	2	0
PROGENY #CHAD	M	131.2	55.9	35	11	38

## Wheat Tech Agronomy

### Table 4 - Continued

#### 2020-2021 Winter Wheat Variety Performance Results

##### Kentucky Two Location Average

Variety	Maturity	Yield (bu/ac)	TW (lb/bu)	Height (inches)	FHB <sup>¥</sup> Index (%)	LOD <sup>¥</sup> (%)
Dyna-Gro 9002	M	131.1	58.5	37	2	0
AgriMAXX EXP 2009	E	130.9	59.3	36	1	4
PROGENY PGX 19-10	ML	130.0	58.5	36	1	0
Pembroke 2021	E	129.7	60.1	38	2	4
AgriPro SY 547	ME	129.4	59.4	39	5	0
AgriMAXX 498	ML	128.9	58.1	36	4	13
CROPLAN CP8022	ML	127.8	59.6	34	2	0
Dyna-Gro WX20734	M	127.6	58.9	36	5	0
Dyna-Gro 9120	E	127.2	61.1	36	2	0
AgriMAXX 513	ME	127.1	62.0	37	0	0
AgriMAXX EXP 2002	E/ME	126.8	60.4	37	2	3
Pioneer variety 26R41	ME	125.8	59.2	34	6	0
CROPLAN CP8081	ME	125.2	60.0	38	2	0
X11-0170-52-3-3	ML	125.2	58.9	37	3	4
AgriPro SY 576	ML	124.6	58.4	39	3	0
AgriPro SY Richie	E	124.5	59.6	37	6	0
KAS 19X24	M	122.9	61.2	36	3	1
PROGENY #BULLET	ME	119.8	58.4	40	2	0
AgriMAXX 485	M	117.8	59.3	35	1	0
AgriPro SREXP119	ME	116.1	59.5	34	5	0
<b>Grand Mean</b>		<b>132.1</b>	<b>59.5</b>	<b>37</b>	<b>3</b>	<b>4</b>

¥ - FBH: Fusarium Head Blight %; *Fusarium graminearum*, LOD: Lodging %

**Wheat Tech Agronomy**  
**Table 5**  
**2020-2021 Winter Wheat Variety Performance Results**  
*Three Location Average*

Variety	Maturity	Yield (bu/ac)	TW (lb/bu)	Height (inches)
AgriPro SY 100	ML	131.1	56.7	34
USG 3472	M	130.3	59.1	36
Dyna-Gro 9172	ML	129.3	59.1	34
AgriMAXX 516	M	128.7	59.3	35
KAS 20X29	ME	128.1	60.6	37
AgriMAXX 514	M	128.0	57.6	34
KAS 20X16	ME	127.9	58.7	34
Dyna-Gro 9692	M	127.5	59.5	36
PROGENY PGX 20-6	ME	126.4	60.8	36
AgriMAXX 503	ME	126.3	59.2	34
Dyna-Gro WX21741	M	125.8	60.3	36
PROGENY PGX 19-12	M	124.7	58.0	34
PROGENY PGX 20-11	ME	124.6	59.1	35
Pioneer variety 26R45	M	124.6	58.8	35
PROGENY PGX 20-2	ML	124.5	61.5	34
KAS 20X47	VE	124.5	59.3	36
USG 3329	ME	124.3	59.1	34
AgriMAXX 505	M	124.1	61.8	34
USG 3316	M	123.9	59.5	36
PROGENY #BLAZE	ME	123.5	59.5	35
AgriPro SY Viper	ME	123.5	59.8	37
Pioneer variety 26R36	ML	122.7	60.7	36
Dyna-Gro 9151	M	122.6	61.5	35
Pioneer variety 26R59	ME	122.5	58.0	33
Pioneer variety 26R10	L	122.2	59.1	36
KAS ADAMS	ME	121.9	61.9	35
AgriMAXX 454	M	121.6	59.2	35
Dyna-Gro WX20738	E	121.5	59.7	35
PROGENY PGX 20-8	ML	121.0	59.1	35
PROGENY #BUSTER	M	121.0	60.0	36
PROGENY #CHAD	M	120.9	56.3	33
Dyna-Gro WX20734	M	120.1	59.0	34
Dyna-Gro 9120	E	120.0	61.3	34
Pembroke 2021	E	119.6	60.2	36
AgriPro SREXP117	ME	119.2	59.1	33
AgriMAXX EXP 2009	E	119.1	59.3	35
AgriPro SY 547	ME	119.1	59.2	37
AgriMAXX EXP 2002	E/ME	118.6	60.7	35
Dyna-Gro 9002	M	118.4	58.4	35
AgriMAXX 513	ME	118.2	61.7	36
PROGENY PGX 19-10	ML	118.0	58.7	33
Pioneer variety 26R41	ME	116.0	59.4	33
AgriPro SY Richie	E	114.7	59.6	35
KAS 19X24	M	114.6	61.3	34
AgriPro SY 576	ML	114.6	57.9	37
AgriMAXX 485	M	112.0	59.5	33
PROGENY #BULLET	ME	111.4	58.3	38
AgriPro SREXP119	ME	110.5	59.7	33
<b>Grand Mean</b>		<b>121.9</b>	<b>59.5</b>	<b>35</b>