Agricultural Experiment Station

2025 Kentucky Small Grain
VARIETY PERFORMANCE TRIAL

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varietytesting.ca.uky.edu/wheat

The objective of the Kentucky small grain variety performance trial is to evaluate varieties of wheat, oat, barley, triticale, and cereal rye that are commercially available or may soon be available to Kentucky farmers. New varieties continually are being developed by agricultural experiment stations and commercial firms. Annual evaluation of small grain varieties and selections provides farmers, seed producers, and other agricultural workers with current information to help them select the varieties best adapted to their locality and individual requirements.

Eight wheat performance trials were conducted in six of the seven agroclimatic regions of Kentucky (Table 1). Agricultural areas within each region are considered to have similar soil types and climatic conditions. Barley, oat, triticale, and cereal rye varietal performance was evaluated at one location. In addition, wheat trials for varietal differences in forage yield and straw yield were conducted at one location.

Experimental Methods

A total of 70 wheat entries were evaluated under either conventional or no-till cultural practices. No-till trials were grown at two locations, and conventional trials were grown at four locations. The experimental design was a randomized complete block. The trials had four replications per entry, and the data presented are the average response from the four replications.

The plots were planted with specially built multi-row conventional and no-till cone seeders. Conventional trial plots consisted of six rows to form a plot 4 feet wide and 15 feet long, which was later trimmed to 12 feet in length. No-till plots consisted of seven rows to form a plot 5 feet wide and 25 feet long, which was later trimmed to 22 feet in length. Plots were harvested with a small-plot combine. The preceding crop for all trials was corn.

Trials were conducted using intensive management practices. Typical herbicide applications included a winter spring application for broadleaf control and a fall preplanting burn-down (no-till trials only) application. Fungicides were applied in the spring on all but two (disease rating) trials. An insecticide for aphid control was typically applied in the spring. Nitrogen was applied in a February/March split application at a rate of approximately 40/60 pounds per acre.

The forage trial was planted using conventional tillage and was harvested using a small plot forage combine at the milk stage in the Bluegrass region. Straw yield was measured using a small plot forage combine following grain harvest in the Bluegrass region trial.

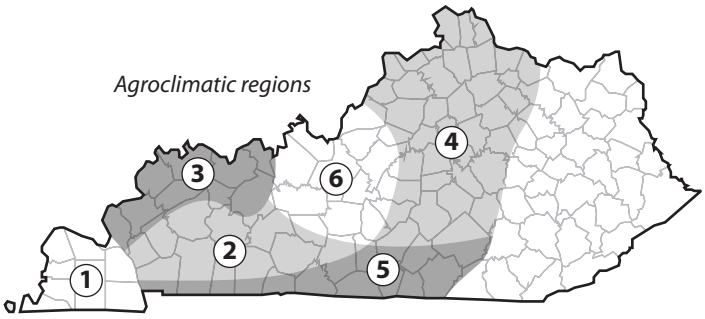

Table 1. Agroclimatic Regions of Kentucky Small Grain Variety Trials.

Region		Location	Cooperator	Crop Tested
1	Purchase	Calloway Co.	Jason Robertson Murray State	No-till wheat
2	Western Coal Field	Caldwell Co.	Princeton Research and Education Ctr. Scott Peek	Wheat*, barley
3	Ohio Valley	Daviess Co.	Jeff Coke & Jason Crisp	No-till wheat
4	Bluegrass	Fayette Co.	Kentucky Ag. Exp. Station; Matt Peake	Wheat*, small grains
5	Southern Tier	Logan Co.	Walnut Grove Farm Sam Halcomb	Wheat*
6	North Central	Woodford Co.	UK Woodford Farm Shannon Rudd	Wheat*

* Conventional tillage.

Characteristics Evaluated

Grain yields were calculated from the weight of grain from each plot and reported in bushels per acre (bu/ac) based on 60-pound, 56-pound, 48-pound, and 32-pound standard bushel weights for wheat, cereal rye, barley, and oats, respectively, at 13.5 percent moisture content. Test weights (lb/bu) were determined using a HarvestMaster Classic GrainGage and adjusted to 13.5 percent moisture. Lodging was reported as the percentage of plant lodging at maturity; winter survival was reported as the percentage of survival after spring green-up. Winter survival was 100 percent for all wheat trials. Plant height was measured in inches from the soil surface to the top of the grain head. Heading dates were reported as the day an estimated 50 percent of the heads had extended above the flag leaf collar. Disease ratings: Leaf rust, leaf blotch (Septoria), wheat streak mosaic virus (WSMV), powdery mildew, and head scab were rated.

Forage and straw yields are expressed as dry matter in tons per acre. Winter cover crop ground cover/biomass values were measured using the Canopeo app at the Lexington wheat trial on February 10, 2025.

Results and Interpretation

Since genetic expression of a variety is greatly influenced by environmental conditions, it is best to have several years' data at multiple locations from which to draw conclusions. Performance of a variety tested for only one year should not be compared with a multi-year average of another variety because it is possible that results in one of the other years were extremely good or poor and thus not comparable.

The yield of a variety is relative and should be compared with the yields of the other varieties in the same trial and at the same location or within the same analysis across locations. Small differences in yield of only a few bushels per acre between two varieties from an individual trial should not be interpreted to indicate the superiority of one variety over another. However, if one variety consistently out yields another over a period of several years or across locations, the chances are that the differences are real. LSD (least significant difference) values are listed at the bottom of table columns to indicate whether differences are statistically significant.

Lodging data are difficult to interpret. A high-yielding variety should not necessarily be downgraded because of a high percentage of lodging for a given year at a given location. Local weather conditions, such as wind and rain, may cause a variety to lodge much more than it normally does. Variety trials normally have a greater degree of lodging than do farmer fields. It also should be emphasized that a variety reported to be 50 percent lodged does not imply that only 50 percent of the grain could be harvested. With good equipment, most of the grain can often be saved.

Kentucky's climate and soils are well-suited for the production of high-quality soft red winter wheat. No single variety has all the desirable characteristics, but each has certain advantages. Grain yield potential, straw strength and yield, height, heading date, grain quality, cover cropping potential, disease resistance, and forage potential are all important in choosing a variety.

Winter barley is less winter-hardy than winter wheat but hardier than winter oats. The degree of winter-hardiness, straw strength, and maturity are important characteristics when choosing a variety. Barley (hulless, malting, and traditional hulled) variety performance data is presented in Table 6. Triticale, cereal rye, and oat variety performance data are presented in tables 7, 8, and 9 respectively.

Trial Conditions

Normal temperature and precipitation in October favored timely planting of the wheat variety trials. The 2025 Kentucky small grain variety tests were planted from October 15 to October 24, 2024 (the late-planted trial was planted November 18, 2024). Warmer and wetter conditions in November & December favored fall growth and were followed by low temperatures with significant snowfall and prolonged snow cover in January and February. March and April had above average temperatures and below average precipitation. May had below average temperatures with above average precipitation which delayed harvest maturity by approximately one week. Early June was cool and wet which delayed harvest in some areas and caused reductions in test weight. Mid-June was warm and dry and favored timely harvest of many wheat acres.

Acknowledgments

Thanks to the following individuals for their support and assistance with this project: Kentucky Small Grain Growers Association, Siemer Milling Inc., Will Bentley, the Halcomb family, Jason Robertson, Jeff Coke, Jason Crisp, Scott Peek, Shannon Rudd, Matt Peake, Bobby Orange, Cam Kenimer, and the UK Wheat Science Group.

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List of Tables

Varieties Tested in 2025

AgriMAXX Wheat Co.

AgriMAXX 503
AgriMAXX 505
AgriMAXX 513
AgriMAXX 525
AgriMAXX 531
AgriMAXX 545
AgriMAXX 553
AgriMAXX 555
AgriMAXX EXP 2405
AgriMAXX EXP 2430

Winfield United

CROPLAN CP8045
CROPLAN CP8081
CROPLAN CP8224
CROPLAN CPX25801

Dyna-Gro/ Nutrien Ag Solutions

Dyna-Gro 9151
Dyna-Gro 9172
Dyna-Gro 9231
Dyna-Gro 9422
Dyna-Gro 9533
Dyna-Gro 9570
Dyna-Gro 9612
Dyna-Gro 9632

Growmark, Inc.

GROWMARK FS 597
GROWMARK FS 600
GROWMARK FS 606
GROWMARK FS 617
GROWMARK FS 624
GROWMARK FS 743
GROWMARK FS 745
GROWMARK FS 749
GROWMARK FS WX25A
GROWMARK FS WX25B
GROWMARK FS WX25C

Kentucky Foundation Seed Project

X11-0039-1-17-5
X14-1009-84-4-3
X14-1035-67-7-1
X14-1128-23-12-5
X15-1091-49-2-3
X15-1118-27-1-3
X16-1001-19-3-1-1
X16-1021-131-19-1-1
X16-1082-62-2-5-1
X17-1088-91-1-1-2
X17-1162-100-11-1-1

Kentucky Small Grain Growers Association

PEMBROKE 2014
PEMBROKE 2016
PEMBROKE 2021

KWS Cereals

KWS579
KWS591
KWS623

Revere Seed

RV X501
RV X502S
RV X503
Revere Anthem
Revere Reagan
Revere Valor

Stratton Seed

Go Wheat 4059S
Go Wheat 6056

University of Missouri

Truman

UniSouth Genetics

USG 3352
USG 3354
USG 3463
USG 3472
USG 3755
USG 3884

Virginia Crop Improvement Association

18VTK10-110
18VTK18-112
19VTK7-66

Table 2. 2025 Kentucky Wheat Variety Trial - State Summary.*

Variety	State Average*		Test Weight* (lb/bu)	Woodford	Calloway	Fayette	Daviess	Logan	Caldwell	Late-planted Caldwell	Height (In)	Heading Date > April 1
	2025	2024-25										
	Yield (bu/a)			Yield (bu/a)								
KWS579	89.9		55.9	81.4	121.7	77.5	88.3	94.4	91.6	74.5	35	30
USG 3354	89.1	84.4	57.2	96.3	107.6	78.7	77.6	92.2	88.7	70.8	36	28
Dyna-Gro 9632	88.5		56.4	83.4	115.5	72.7	79.1	95.8	99.1	75.1	36	29
CROPLAN CP8081	88.3	82.0	55.9	77.1	116.7	84.8	77.1	84.6	90.1	78.6	35	29
AgriMAXX 545	88.2	84.0	56.2	87.2	105.8	84.7	83.1	92.3	86.1	71.1	36	32
KWS591	87.8		54.5	84.0	110.3	73.9	90.5	89.9	98.3	81.1	37	29
USG 3884	87.7	82.3	55.3	84.1	106.8	84.8	81.3	88.0	80.9	74.6	36	30
19VTK7-66	87.6		56.8	96.2	99.5	73.6	63.8	91.0	72.8	77.5	39	29
AgriMAXX 553	87.5		54.9	80.7	114.2	73.3	75.8	92.0	95.3	77.4	34	29
Dyna-Gro 9612	86.6		56.9	67.4	119.3	75.4	86.3	93.1	93.3	77.6	33	29
GROWMARK FS WX25C	85.7		59.7	87.6	104.2	72.7	74.1	93.8	88.5	70.3	35	29
GROWMARK FS WX25B	85.5		54.8	93.0	104.0	75.5	76.5	89.7	83.9	65.4	37	28
18VTK10-110	85.4		55.9	82.7	108.5	68.2	87.8	93.0	87.7	74.8	35	26
AgriMAXX EXP 2430	85.3		57.6	76.1	103.2	81.0	91.8	88.3	99.6	77.9	35	26
RV X503	85.2		53.6	90.5	113.1	65.6	68.6	85.4	89.6	71.3	35	32
AgriMAXX EXP 2405	85.1	80.8	55.6	92.6	97.9	75.2	66.6	86.6	80.0	73.3	36	32
KWS623	85.1		54.2	90.9	100.6	73.2	62.9	89.1	74.8	71.7	34	28
18VTK18-112	84.9		55.8	88.1	100.8	76.1	91.9	81.1	87.4	78.2	35	28
RV X501	84.4		56.4	84.5	103.0	81.2	89.6	85.3	95.8	68.1	34	30
AgriMAXX 555	84.4	79.5	56.4	96.3	101.8	68.7	89.2	79.3	92.1	75.8	36	32
AgriMAXX 525	84.3	80.9	56.5	88.2	100.9	73.6	88.2	87.4	90.7	71.4	35	32
Dyna-Gro 9422	84.3	81.8	55.5	82.4	105.9	76.7	89.5	92.5	80.1	63.8	36	30
USG 3755	84.2		55.4	91.5	111.1	71.6	83.2	80.7	80.1	66.2	34	30
CROPLAN CPX25801	83.9		55.5	85.3	112.4	68.7	69.7	83.5	81.2	69.7	35	30
GROWMARK FS 749	83.8	80.3	55.5	83.2	105.9	72.5	64.0	85.5	82.5	71.9	35	31
AgriMAXX 513	83.7	80.0	56.2	88.7	107.1	74.0	78.1	87.7	72.7	60.8	37	30
Dyna-Gro 9231	83.6	80.6	54.8	86.5	105.6	73.5	78.5	82.8	93.2	69.9	36	30
GROWMARK FS 743	83.1	80.3	58.4	84.3	105.9	73.5	59.2	83.4	91.3	68.5	37	30
Dyna-Gro 9151	82.9	78.4	57.0	82.0	96.4	74.1	69.3	83.4	89.1	78.5	36	31
GROWMARK FS 600	82.6	78.2	56.5	79.1	100.2	73.3	79.7	83.8	88.9	76.7	36	30
USG 3352	81.9	76.6	58.3	73.6	104.4	71.7	90.1	87.1	84.8	73.1	36	31
Dyna-Gro 9151 x	81.6		54.6	78.1	99.7	70.6	68.9	82.6	87.9	77.2	36	30
Revere Reagan	81.6	79.8	55.3	88.8	109.5	63.3	82.8	82.8	85.1	63.6	35	30
GROWMARK FS WX25A	81.2		54.2	84.6	99.2	65.3	92.0	87.2	78.1	69.5	35	31
AgriMAXX 505	81.2	77.8	55.1	79.3	98.2	70.3	68.8	82.3	89.7	75.7	36	30
GROWMARK FS 597	80.9	78.8	58.6	79.9	105.3	69.1	65.1	82.5	78.3	67.5	37	29
CROPLAN CP8224	80.6	73.7	55.9	87.9	110.0	66.4	86.0	75.8	85.6	63.2	35	30
Dyna-Gro 9570	80.2	78.0	56.6	74.0	102.1	73.4	85.0	89.4	76.7	62.3	36	30
USG 3463	80.2	78.5	53.9	74.7	109.3	70.2	87.1	87.2	85.5	59.6	34	30

continued

Table 2. *(continued)*

Variety	State Average*		Test Weight* (lb/bu)	Woodford	Calloway	Fayette	Daviess	Logan	Caldwell	Late-planted Caldwell	Height (In)	Heading Date > April 1
	2025	2024-25		Yield (bu/a)								
	Yield (bu/a)											
GROWMARK FS 606	79.8	76.3	58.2	71.1	92.8	76.6	66.7	88.4	74.5	70.4	37	29
RV X502S	79.6		57.7	76.6	103.4	74.1	80.8	80.5	89.9	63.2	35	31
X14-1009-84-4-3	79.5	77.6	55.0	81.8	107.4	60.8	71.3	85.6	79.2	61.7	36	31
Dyna-Gro 9533	79.2	76.3	55.5	77.0	96.5	69.9	98.0	82.5	65.1	70.2	33	31
X17-1162-100-11-1-1	79.2		53.1	79.3	102.0	59.9	80.8	81.9	89.0	72.8	36	28
X16-1082-62-2-5-1	79.1		56.2	90.4	96.2	69.4	65.9	77.2	70.3	62.5	37	31
AgriMAXX 503	79.0	74.5	57.2	68.7	108.6	68.0	87.4	77.7	85.2	72.2	38	32
GROWMARK FS 617	78.7	72.2	53.9	72.4	99.9	72.9	83.3	85.1	83.7	62.9	36	32
X14-1128-23-12-5	78.2	75.7	57.7	79.4	98.1	68.3	85.2	81.6	90.6	63.7	33	30
X14-1035-67-7-1	78.2	76.5	57.4	84.9	100.6	66.4	65.8	81.9	74.5	57.2	37	30
PEMBROKE 2016	77.6	74.3	55.0	70.3	99.4	66.7	79.2	81.0	76.3	70.7	34	28
AgriMAXX 531	77.5		57.9	74.1	95.4	69.6	73.9	82.6	91.8	65.8	37	30
Revere Anthem	77.3	78.0	57.2	68.1	108.0	61.4	78.6	90.9	71.4	57.9	35	30
GROWMARK FS 745	76.9	76.7	56.4	76.3	109.7	60.6	86.3	77.0	80.4	61.0	35	30
X15-1118-27-1-3	76.9		55.7	78.6	97.9	62.6	85.2	85.6	68.3	59.9	38	33
X16-1021-131-19-1-1	76.8	75.6	57.0	77.4	103.8	68.5	73.5	73.1	71.1	60.9	36	29
Revere Valor	76.3	75.2	56.1	75.9	105.2	62.4	86.6	77.1	78.1	60.9	35	31
Go Wheat 6056	75.7	73.9	58.3	74.8	99.9	60.9	70.4	78.7	69.7	64.1	35	31
CROPLAN CP8045	75.2	73.6	55.0	75.6	106.2	58.7	86.8	75.0	81.6	60.2	35	30
Dyna-Gro 9172 x	75.1		57.3	73.9	105.3	58.8	77.6	77.0	80.8	60.3	35	30
USG 3472	75.0	74.4	55.1	68.5	108.8	60.3	81.6	75.0	79.4	62.6	35	31
Dyna-Gro 9172	75.0	75.4	55.9	76.6	105.8	56.1	84.3	75.4	81.1	61.3	36	30
PEMBROKE 2021	74.6	73.6	57.3	75.0	91.5	70.2	69.9	72.1	84.1	64.2	35	28
X16-1001-19-3-1-1	74.4		56.9	83.8	100.3	50.6	66.1	78.2	70.0	59.1	36	32
X11-0039-1-17-5	74.3	73.5	55.5	76.9	92.3	62.0	79.4	81.8	67.3	58.4	34	29
X15-1091-49-2-3	73.8		55.0	74.5	99.4	60.4	66.3	80.2	64.4	54.7	34	31
PEMBROKE 2014	72.2	70.2	57.8	59.1	99.6	60.1	90.6	74.2	74.2	68.0	32	27
Go Wheat 4059S	71.7	69.5	56.4	70.1	86.4	62.6	85.5	82.1	83.8	57.0	36	31
GROWMARK FS 624	70.8	70.1	58.0	75.1	97.4	55.8	65.4	72.1	71.3	53.7	37	31
Truman	68.1	61.2	55.2	67.6	80.0	55.8	71.6	73.1	69.5	63.9	42	36
X17-1088-91-1-1-2	65.8		57.9	75.5	90.9	47.5	71.5	67.8	49.3	47.5	35	32
Average	**80.7**	**76.7**	**56.2**	**80.3**	**103.3**	**69.0**	**78.6**	**83.5**	**82.0**	**67.5**	**36**	**30**
C.V. (%)	7.9	8.4		9.3	7.6	8.2	15.5	6.4	10.2	7.3		
LSD (0.10)	2.6	4.2		6.8	7.2	5.2	11.1	4.9	13.9	4.5		

* Summary of five 2025 trial locations - (Calloway, Woodford, Fayette, Late-planted Caldwell, Logan).

Daviess Co. and Caldwell Co. data highly variable - due to heavy lodging (likely due to cold damage to stems). NOT RECOMMENDED for vareity selection.

Planting date: Caldwell - 10/15/24; Caldwell Late-planted - 11/18/24; Calloway - 10/24/24; Logan - 10/16/24; Daviess - 10/21/24; Fayette - 10/16/24; Woodford - 10/21/24.

Harvest date: Caldwell - 6/19/25; Calloway - 6/12/25; Logan - 6/12/25; Daviess - 6/20/25; Fayette - 6/23/25; Woodford - 6/21/25.

Height measured at Fayette and Daviess trials; heading date recorded at Fayette and Caldwell trials.

Table 3. 2025 Kentucky Wheat Variety Forage/Cover Crop Trial.

Variety	Milk Stage Dry Matter (tons/a)		Cover Crop* Canopy (%)	Head Type
	2025	2024-25	2025	
AgriMAXX 505	4.26	4.18	51	Bearded
Dyna-Gro 9422	4.21		44	Bearded
X14-1035-67-7-1	4.20	3.96	50	Bearded
Dyna-Gro 9533	4.15		54	Smooth
X15-1118-27-1-3	4.11		55	Bearded
USG 3884	4.10	4.04	58	Bearded
AgriMAXX EXP 2405	4.07	3.85	46	Bearded
CROPLAN CP8081	4.06	3.97	57	Bearded
GROWMARK FS WX25A	4.06		38	Smooth
AgriMAXX 555	4.03	3.89	42	Bearded
GROWMARK FS 600	4.02	4.09	52	Bearded
Dyna-Gro 9151	4.02		47	Bearded
USG 3755	3.98		49	Smooth
AgriMAXX 525	3.97	3.98	47	Bearded
USG 3354	3.96	4.02	54	Smooth
GROWMARK FS 606	3.95	3.79	44	Smooth
X16-1082-62-2-5-1	3.95		49	Smooth
GROWMARK FS WX25C	3.93		52	Bearded
X17-1162-100-11-1-1	3.92		46	Bearded
X15-1091-49-2-3	3.91		52	Bearded
KWS591	3.91		47	Bearded
X14-1128-23-12-5	3.90	3.87	59	Bearded
X16-1001-19-3-1-1	3.90		42	Bearded
X16-1021-131-19-1-1	3.87	3.98	55	Smooth
GROWMARK FS 624	3.83	3.89	57	Smooth
AgriMAXX 513	3.81	3.75	40	Bearded
CROPLAN CP8224	3.80	3.85	48	Smooth
Truman	3.78	3.91	42	Smooth
Dyna-Gro 9151 x	3.77		48	Bearded
GROWMARK FS WX25B	3.77		48	Smooth
USG 3352	3.75	3.92	28	Bearded
GROWMARK FS 743	3.74	3.89	47	Bearded
Revere Valor	3.74	3.70	39	Bearded
AgriMAXX 531	3.74		51	Smooth
Dyna-Gro 9172 x	3.72		41	Bearded
Dyna-Gro 9172	3.72		43	Bearded
Dyna-Gro 9612	3.71		44	Bearded
GROWMARK FS 617	3.69	3.76	47	Bearded
X14-1009-84-4-3	3.68	3.65	45	Bearded
PEMBROKE 2016	3.68	3.77	58	Bearded
AgriMAXX 545	3.65	3.69	57	Bearded
Revere Reagan	3.63	3.64	33	Bearded
Go Wheat 6056	3.63	3.72	43	Bearded
AgriMAXX 553	3.62		45	Bearded
KWS623	3.57		54	Smooth
USG 3472	3.56	3.78	40	Bearded
RV X503	3.56		47	Bearded
RV X501	3.56		49	Smooth
Go Wheat 4059S	3.54	3.75	31	Smooth
CROPLAN CP8045	3.52	3.62	50	Bearded
GROWMARK FS 749	3.52	3.82	54	Bearded
CROPLAN CPX25801	3.52		49	Bearded
Dyna-Gro 9570	3.52		40	Bearded
PEMBROKE 2021	3.51	3.49	54	Smooth
USG 3463	3.47	3.63	31	Bearded
18VTK18-112	3.44		50	Smooth
18VTK10-110	3.40		26	Bearded
GROWMARK FS 745	3.37	3.54	48	Bearded
PEMBROKE 2014	3.36	3.68	49	Bearded
X11-0039-1-17-5	3.36	3.55	45	Smooth
Dyna-Gro 9632	3.36		43	Bearded
X17-1088-91-1-1-2	3.31		40	Bearded
19VTK7-66	3.27		37	Bearded
AgriMAXX EXP 2430	3.26		52	Bearded
AgriMAXX 503	3.25	3.32	28	Smooth
RV X502S	3.19		45	Smooth
Revere Anthem	3.18	3.39	32	Bearded
Dyna-Gro 9231	3.16		43	Bearded
GROWMARK FS 597	3.04	3.36	48	Bearded
KWS579	2.49		46	Bearded
Average	**3.69**	**3.77**	**46**	
C.V. (%)	14.60	11.65		
LSD (0.10)	0.63	0.43		

Location: Bluegrass Region - Fayette Co.
Planting date: 10-16-2024; conventional tillage.;
Dry matter yield harvest date at milk stage: 5-23-2025.
* Winter cover crop/grazing biomass estimate (% canopy coverage using Canopeo); measured: 2-10-2025.

continued

Table 4. 2025 Kentucky Wheat Variety Straw Trial.

Variety	DM Straw Yield* tons/acre		State Average**
	2025	2024-25	Grain Yield (bu/a)
X15-1118-27-1-3	2.30		76.9
X16-1001-19-3-1-1	2.27		74.4
RV X503	2.25		85.2
19VTK7-66	2.20		87.6
Truman	2.13	1.74	68.1
X16-1021-131-19-1-1	2.00	1.65	76.8
Dyna-Gro 9612	1.96		86.6
18VTK18-112	1.92		84.9
X16-1082-62-2-5-1	1.89		79.1
X14-1009-84-4-3	1.88	1.60	79.5
CROPLAN CP8081	1.87	1.46	88.3
PEMBROKE 2014	1.85	1.48	72.2
GROWMARK FS 606	1.85	1.58	79.8
Dyna-Gro 9632	1.84		88.5
Dyna-Gro 9151	1.81	1.44	82.9
X15-1091-49-2-3	1.81		73.8
KWS591	1.79		87.8
AgriMAXX 531	1.78		77.5
CROPLAN CPX25801	1.78		83.9
Dyna-Gro 9231	1.77	1.52	83.6
Dyna-Gro 9151 x	1.77		81.6
GROWMARK FS 617	1.77	1.36	78.7
GROWMARK FS 743	1.74	1.49	83.1
AgriMAXX 555	1.74	1.40	84.4
AgriMAXX 505	1.74	1.42	81.2
GROWMARK FS 600	1.73	1.41	82.6
PEMBROKE 2021	1.73	1.34	74.6
AgriMAXX 553	1.72		87.5
USG 3354	1.72	1.44	89.1
GROWMARK FS 597	1.72	1.42	80.9
AgriMAXX EXP 2405	1.69	1.34	85.1
X17-1088-91-1-1-2	1.69		65.8
X14-1128-23-12-5	1.67	1.40	78.2
USG 3755	1.66		84.2
GROWMARK FS WX25A	1.65		81.2
USG 3884	1.64	1.31	87.7
X14-1035-67-7-1	1.63	1.39	78.2
GROWMARK FS WX25B	1.62		85.5
USG 3352	1.62	1.42	81.9
Dyna-Gro 9172	1.61	1.32	75.0
RV X501	1.61		84.4
GROWMARK FS 624	1.61	1.35	70.8
AgriMAXX 513	1.60	1.30	83.7
GROWMARK FS 749	1.60	1.38	83.8
Dyna-Gro 9422	1.59	1.32	84.3
Dyna-Gro 9570	1.59	1.17	80.2
AgriMAXX 545	1.57	1.30	88.2
AgriMAXX 525	1.57	1.36	84.3
Go Wheat 4059S	1.57	1.32	71.7
X17-1162-100-11-1-1	1.57		79.2
GROWMARK FS WX25C	1.56		85.7
Dyna-Gro 9172 x	1.55		75.1
CROPLAN CP8045	1.55	1.38	75.2
Revere Valor	1.55	1.24	76.3
GROWMARK FS 745	1.52	1.26	76.9
Go Wheat 6056	1.52	1.36	75.7
KWS623	1.51		85.1
KWS579	1.49		89.9
Revere Anthem	1.47	1.21	77.3
PEMBROKE 2016	1.45	1.21	77.6
Dyna-Gro 9533	1.44	1.18	79.2
RV X502S	1.43		79.6
X11-0039-1-17-5	1.43	1.20	74.3
AgriMAXX EXP 2430	1.42		85.3
CROPLAN CP8224	1.42	1.14	80.6
Revere Reagan	1.38	1.15	81.6
USG 3472	1.31	1.25	75.0
AgriMAXX 503	1.28	1.05	79.0
USG 3463	1.24	1.29	80.2
18VTK10-110	1.22		85.4
Average	**1.68**	**1.37**	**80.7**
CV (%)	13.63	14.50	7.9
LSD (0.10)	0.21	0.13	2.6

Location: Bluegrass Region - Fayette Co.
Planting date: 10-16-2024; conventional tillage.
Harvest date: 6-23-2025.
* Dry matter straw yield following grain harvest.

continued

Table 5. 2025 Kentucky Wheat Variety Disease Ratings and Metribuzin Tolerance.

Variety	Leaf Rust	WSMV	Head Scab	Leaf Blotch	Powdery Mildew	Metribuzin Tolerance
18VTK10-110	1.0	7.5	5.5	5.0	3.0	2.7
18VTK18-112	1.0	3.8	5.5	5.3	1.5	2.3
19VTK7-66	1.0	5.5	2.8	3.2	2.8	2.0
AgriMAXX 503	2.5	2.8	2.0	4.9	5.8	2.0
AgriMAXX 505	3.5	3.8	2.8	5.1	2.8	2.0
AgriMAXX 513	3.0	6.3	3.3	4.0	2.8	2.3
AgriMAXX 525	3.0	2.5	2.3	3.0	3.0	3.7
AgriMAXX 531	2.0	3.3	2.5	6.2	5.3	2.5
AgriMAXX 545	5.0	6.0	3.5	4.2	3.3	3.0
AgriMAXX 553	3.5	4.0	3.5	4.0	3.0	3.0
AgriMAXX 555	2.5	5.5	2.8	3.5	2.5	3.3
AgriMAXX EXP 2405	2.5	4.5	3.3	3.5	3.5	2.3
AgriMAXX EXP 2430	6.5	2.5	2.8	4.0	4.3	2.0
CROPLAN CP8045	4.0	5.5	2.3	5.5	2.8	2.7
CROPLAN CP8081	1.5	4.3	3.3	4.3	4.8	2.7
CROPLAN CP8224	3.5	4.8	2.5	5.5	3.3	2.0
CROPLAN CPX25801	1.5	4.3	2.8	4.0	3.0	3.0
Dyna-Gro 9151	5.0	4.0	2.8	5.0	2.5	2.5
Dyna-Gro 9151 x	4.5	3.8	3.3	4.6	2.5	2.7
Dyna-Gro 9172	3.0	5.0	2.8	5.0	3.0	1.3
Dyna-Gro 9172 x	3.5	5.5	3.3	7.8	2.3	2.7
Dyna-Gro 9231	3.5	5.0	3.3	4.2	2.8	2.7
Dyna-Gro 9422	3.5	6.0	3.5	3.3	3.8	3.0
Dyna-Gro 9533	9.0	2.5	2.3	1.9	1.8	4.3
Dyna-Gro 9570	5.5	4.3	3.5	4.3	4.0	3.3
Dyna-Gro 9612	4.0	4.5	1.8	2.8	2.5	3.3
Dyna-Gro 9632	2.5	2.5	2.8	4.3	3.8	2.7
Go Wheat 4059S	1.0	5.8	2.3	3.8	2.3	2.0
Go Wheat 6056	3.0	5.0	2.3	5.5	3.8	3.5
GROWMARK FS 597	1.0	4.8	3.5	5.4	2.0	2.5
GROWMARK FS 600	3.5	3.5	2.8	4.8	2.8	2.0
GROWMARK FS 606	1.5	2.8	2.0	5.0	3.5	2.7
GROWMARK FS 617	2.0	6.8	3.5	3.3	3.3	3.0
GROWMARK FS 624	1.0	4.5	4.3	6.0	5.3	3.0
GROWMARK FS 743	2.0	5.8	3.0	3.8	3.5	2.3
GROWMARK FS 745	4.0	5.5	2.0	6.0	3.8	1.7

continued

Table 5. *(continued)*

Variety	Leaf Rust	WSMV	Head Scab	Leaf Blotch	Powdery Mildew	Metribuzin Tolerance
GROWMARK FS 749	1.0	2.3	2.3	3.3	4.3	2.7
GROWMARK FS WX25A	3.5	3.5	3.5	4.3	5.5	1.7
GROWMARK FS WX25B	1.0	5.5	3.0	5.5	2.5	3.7
GROWMARK FS WX25C	2.0	8.5	3.5	3.0	3.8	2.0
KWS579	1.0	4.8	2.3	3.2	3.8	3.7
KWS591	2.5	3.5	4.0	2.9	1.3	2.7
KWS623	1.5	8.3	4.0	6.2	1.3	3.0
PEMBROKE 2014	3.5	7.8	5.5	6.8	2.0	2.7
PEMBROKE 2016	1.5	6.8	3.5	4.8	2.8	3.0
PEMBROKE 2021	2.5	3.5	6.0	5.3	2.5	3.0
Revere Anthem	4.5	3.5	3.0	5.8	3.8	3.0
Revere Reagan	1.5	5.8	2.8	5.9	1.8	3.7
Revere Valor	4.0	3.5	4.8	4.0	3.8	2.3
RV X501	3.5	4.3	2.3	5.0	3.8	2.7
RV X502S	2.0	5.5	2.5	6.5	3.3	4.0
RV X503	1.0	3.5	3.3	3.2	5.8	2.7
Truman	3.5	4.0	2.5	5.3	3.5	2.0
USG 3352	2.0	5.8	3.3	4.5	4.8	2.7
USG 3354	2.5	5.3	3.5	5.0	2.5	2.3
USG 3463	1.5	8.0	1.8	7.0	2.3	3.3
USG 3472	4.0	5.0	2.5	5.6	2.8	4.0
USG 3755	5.0	4.8	4.5	5.3	2.3	2.0
USG 3884	2.0	7.3	3.5	3.3	3.8	4.0
X11-0039-1-17-5	3.0	4.5	5.3	5.5	3.3	2.7
X14-1009-84-4-3	1.5	6.0	4.0	4.8	5.5	2.3
X14-1035-67-7-1	3.5	6.0	3.8	5.3	3.5	3.3
X14-1128-23-12-5	1.0	7.5	3.5	5.5	3.3	2.7
X15-1091-49-2-3	2.0	5.5	4.0	4.5	2.0	2.3
X15-1118-27-1-3	1.5	4.0	2.5	3.6	3.8	3.0
X16-1001-19-3-1-1	4.5	4.5	4.0	5.3	2.5	1.3
X16-1021-131-19-1-1	2.5	6.3	3.5	5.0	1.3	3.5
X16-1082-62-2-5-1	3.5	8.0	4.3	5.0	1.5	3.0
X17-1088-91-1-1-2	2.0	6.3	6.8	7.0	3.8	1.7
X17-1162-100-11-1-1	1.0	3.0	6.5	3.8	2.5	2.0
Average	**2.8**	**4.9**	**3.3**	**4.7**	**3.2**	**2.7**

Disease rating scale: 1 = resistant; 9 = susceptible.
Disease ratings taken at Woodford Co. (scab, powdery mildew), Fayette Co. (leaf blotch), and Caldwell Co. (leaf rust, WSMV) locations.
Metribuzin tolerance (injury ratings): 1 = no injury; 5 = severe injury. 500g AI / ha applied in spray chamber at three-leaf stage.

Table 6. 2025 Kentucky Barley Variety Trial.

Variety	Yield (Bu/A)*	Yield (Bu/A)*	Test Wt. (Lb/bu)	Height (In)	Heading Date > April 1	Lodging (%)
	2025	2024-25	2025	2025	2025	2025
KWS Chillis	102.3		43.1	36	28	89
FLAVIA	101.4	86.0	44.3	27	26	88
KWS Delis	97.4	75.9	43.9	30	22	94
Secretariat	96.1	74.1	45.9	31	17	79
Hirondella	88.3	67.6	45.4	31	25	44
LCS Calypso	87.7		43.1	33	25	91
LCS Violetta	84.1	64.2	45.1	30	23	92
Avalon	83.8	68.4	48.6	37	23	15
Marouetta	81.7	70.2	46.4	35	23	25
20211573**	75.2	54.6	57.0	34	23	81
Origin Malt FLEX	70.8	59.3	41.0	30	25	96
VT Beahm	64.8	52.4	43.0	41	19	20
Average	**86.1**	**68.3**	**45.6**	**33**	**23**	**68**
CV (%)	11.7	12.5				
LSD (0.10)	9.3	5.5				

* 48-lb standard bushel weight.
** Hulless barley (60-lb bushel wt.).
Planting date: 10-15-24; conventional tillage.
Harvest date: 6-18-25.
Location: Caldwell County (UKREC-Princeton, KY).
Note: High lodging levels likely due to weakened stems associated with freeze injury.

Table 7. 2025 Kentucky Triticale Variety Trial.

Variety	Yield (Bu/A)*	Yield (Bu/A)*	Test Wt. (Lb/bu)	Height (In)	Heading Date > April 1	Lodging (%)
	2025	2024-25	2025	2025	2025	2025
Trical Gainer 154	56.0	56.8	46.2	49	33	8
Trical 7-13-2-1	50.2	47.4	44.0	49	31	20
KYT1	43.8		43.0	50	34	3
Trical Ace	37.0	41.3	42.8	50	30	27
KYT2	35.3		41.7	51	32	9
Trical Surge	32.0	41.8	40.8	53	32	30
Trical Exp 209	26.0	34.5	41.0	50	29	18
Average	**40.0**	**44.4**	**42.8**	**50**	**31**	**16**
CV (%)	20.8	15.0				
LSD (0.01)	7.8	4.3				

*60-lb standard bushel weight.
Planting date: 10-16-24; conventional tillage.
Harvest date: 6-25-25.
Location: Fayette County (Lexington, KY).
Data highly variable due to lodging issues - not recommended for variety selection.

Table 8. 2025 Kentucky Cereal Rye Variety Trial.

Variety	Yield (Bu/A)*	Yield (Bu/A)*	Test Wt. (Lb/bu)	Height (In)	Heading Date > April 1	Lodging (%)
	2025	2024-25	2025	2025	2025	2025
KWS Serafino**	101.7	90.4	50.4	51	33	0
KWS EXP H247**	86.7		48.4	49	32	0
KWS RECEPTOR**	84.5	83.3	49.3	49	33	7
KWS EXP H249**	74.9		49.2	50	32	19
KWS Tayo**	74.4	72.5	47.7	50	33	19
Danko	51.7	54.9	51.1	57	32	0
KYR1	48.2		49.7	58	27	0
KYR2	46.5		46.8	58	27	6
ND Dylan	42.6	46.3	48.2	59	32	10
AC Hazlet	40.9	42.4	48.4	58	33	11
LAX Guardian	32.4	41.3	46.9	56	31	42
Average	**62.2**	**63.5**	**48.7**	**54**	**31**	**11**
CV (%)	17.0	13.9				
LSD (0.10)	8.7	5.3				

* 56-lb standard bushel weight.
** Hybrid rye.
Planting date: 10-16-24; conventional tillage.
Harvest date: 6-25-25.
Location: Fayette County (Lexington, KY).

Table 9. 2025 Kentucky Winter Oat Variety Trial.

Variety	Yield (Bu/A)*	Yield (Bu/A)*	Test Wt. (Lb/bu)	Height (In)	Heading Date > May 1	Winter Survival (%)
	2025	2024-25	2025	2025	2025	2025
NC21-6497	103.4		36.6	40	13	93
NC21-6502	99.4		36.2	43	15	96
NC20-4452	92.9		35.5	41	15	92
NC21-6492	91.8		35.9	41	14	89
GRAHAM	84.3	83.5	32.8	39	14	78
SCOP 85-8	63.8	74.3	34.4	45	15	56
NC 20-4402	60.3		34.6	44	14	56
Cosaque	56.9	70.6	31.4	48	20	82
Bob	44.2	62.1	33.6	38	14	78
Stratton Savage	40.3	63.0	32.4	47	15	69
NSO 12000	24.8		32.1	44	10	100
Average	**69.3**	**74.8**	**34.1**	**43**	**14**	**81**
CV (%)	27.6	21.8				
LSD (0.10)	15.8	9.7				

*32-lb standard bushel weight.
Planting date: 10-16-24; conventional tillage.
Harvest date: 6-25-25.
Location: Fayette County (Lexington, KY).
Data highly variable due to lodging & winter survival issues - not recommended for variety selection.

2025 Kentucky Small Grain Variety Performance Trial

varietytesting.ca.uky.edu/wheat

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