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PR-604

UNIVERSITY OF KENTUCKY College of Agriculture

2010 Kentucky Small Grain VARIETY PERFORMANCE TEST

B. Bruening, C. Tutt, S. Swanson, J. Connelley, G. Olson, and D. Van Sanford

www.uky.edu/ag/WheatVarietyTest

The 2010 soft red winter wheat growing season ended with Kentucky farmers harvesting 270,000 acres of the 420,000 acres planted, for a total production of 17 million bushels of grain. An average yield of 63 bushels per acre was recorded (Table 1).

Small grain performance tests were conducted in six of the seven agroclimatic regions of Kentucky (Table 2). Agricultural areas within each region are considered to have similar soil types and climatic conditions. Each region having a substantial acreage of a small grain commodity had at least one trial conducted in that region for that commodity. The Ohio Valley Region test was not harvested due to severe environmental damage.

Table 1. Wheat acreage harvested and yields (Bu/A) in Kentucky, 2008-2010.*

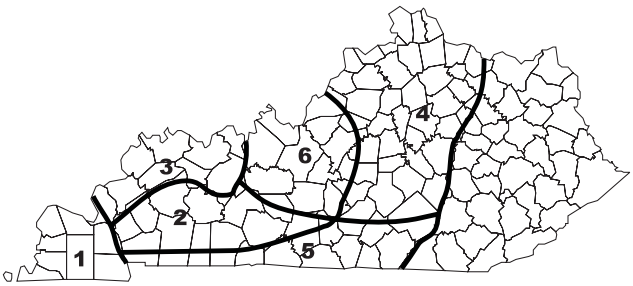
2010		2009		2008	
Harvested	Yield	Harvested	Yield	Harvested	Yield
270,000	63	400,000	60	460,000	71

*July 1, 2010, National Agricultural Statistics Service.

Table 2. Agroclimatic regions of Kentucky small grain variety tests.

Region	Location	Cooperator	Crop Tested
1. Purchase	Graves Co.	Griffith Farms	No-till Wheat
2. Western Coal Field	Caldwell Co.	Princeton Research and Education Ctr.	No-till Wheat, Barley
3. Ohio Valley	Henderson Co.	Double A Farms	No-till Wheat
4. Bluegrass	Fayette Co.	KY Agri. Expt. Station	Wheat,* Forage test
5. Southern Tier	Logan Co.	Don Halcomb	Wheat*
	Christian Co.	Wayne & Steve Hunt	Wheat*
6. North Central	Hardin Co.	Charlie & Jimmy Stuecker	No-till Wheat

* Conventional tillage.



The objective of the Kentucky small grain variety performance test is to evaluate varieties of wheat and barley that are commercially available or may soon be available to Kentucky farmers. New varieties are continually 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.

Because weather, soil, and other environmental factors may alter varietal performance from one location to another, seven tests (three conventional tillage and four no-till) were grown at seven locations throughout the state (Table 2). In addition, tests for varietal differences in forage potential and straw yields were conducted at one location.

Experimental Methods

Eighty-three entries were evaluated under both conventional and no-till cultural practices. No-till tests were grown at four locations, and conventional tests were grown at three locations. The experimental design was a randomized complete block. The tests 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 test plots consisted of six rows to form a plot 4 ft wide and 15 ft long, which was later trimmed to 10 ft in length. No-till plots consisted of seven rows to form a plot 5 ft wide and 25 ft long, which was later trimmed to 20 ft in length. Plots were harvested with a small plot combine.

Tests were conducted using intensive management practices. Typical herbicide applications included a spring application for broadleaf control and a fall preplanting burn-down (no-till tests only) application. Fungicides were applied in the spring on all but two (disease rating) tests. An insecticide for aphid control was typically applied in the fall and spring. Nitrogen was applied in a February/March split application at a rate of approximately 30/60 lb per acre (conventional tests) or 40/70 lb per acre (no-till).

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

Characteristics Evaluated

Grain yields were calculated from the weight of grain from each plot and reported in bushels per acre (bu/A) based on a 60-lb standard bushel weight at 13.5% moisture content. Test weights (lb/bu) were determined using a HarvestMaster Classic GrainGage. 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% for all locations in 2010. 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% of the heads had extended above the flag leaf collar. Disease ratings (leaf blotch complex, Fusarium head scab, and powdery mildew) were recorded from the Logan county (non-fungicide) test, and leaf rust ratings were recorded at Lexington, Ky. Forage and straw yields are expressed as dry matter in tons per acre.

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 experiment 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 test should not be interpreted to indicate the superiority of one variety over another. However, if one variety consistently outyields another over a period of several years, 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 very 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 should also be emphasized that a variety reported to be 50% lodged does not imply that only 50% 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. Yield potential, straw strength and yield, height, heading date, grain quality, disease resistance, and forage potential are important in choosing a variety.

Winter barley is less winter-hardy than winter wheat but more hardy than winter oats. The degree of winter-hardiness, straw strength, and maturity are important characteristics when choosing a variety. Barley (hulled and hulless commercial varieties) performance data are presented in Tables 12 and 13.

Test Conditions

Wet weather during October hindered planting throughout much of the state. The 2010 small grain variety tests were planted between October 12 and November 12. Cool temperatures from November through March limited early growth and development. Warmer temperatures in April stimulated plant growth. Frequent rainfall in late April and May favored disease pressure. Wet conditions during June delayed harvest in some areas.

Acknowledgments

Thanks to the following individuals for their support and assistance with this project: Kentucky Small Grain Growers Association, Joseph Grabau, Charlie and Jimmy Stuecker, Don Halcomb, Wayne and Steve Hunt, Mark Mills, John Griffith, David and Tim Alexander, Chad Lee, Dennis Egli, Marcy Rucker, Kenny Perry, Mike Smith, Doug Shepherd, James Stone, Bobby Orange, Donnie Davis, Joe Williams, David Morgan, David Cooper, Nicki Mundell, Anthony Clark, and the UK Wheat Science Group.

Contact

Bill Bruening
418 Plant Science Building
University of Kentucky
Lexington, KY 40546-0312
859-257-5020 ext. 80802
bruening@email.uky.edu

Wheat Varieties Tested in 2010

Beck's Hybrids
6767 E. 276th
Atlanta, IN 46031

Beck 113
Beck 122
Beck 134
Beck 135
Beck 87

Cash River Valley Seed, LLC
PO Box 10 Hwy 226 E.
Cash, AR 72421

Dixie 427
Dixie 454
Dixie 907
Dixie 940

Cullum Seeds
PO Box 178
Fisher, AR 72429

ARMOR ARX 9304
ARMOR RENEGADE
Delta King 9577

Delta Grow Seed
PO Box 219 / 220 NW 2nd
England, AR 72046

Delta Grow 1600
Delta Grow 5000
Delta Grow 5900

Direct Enterprises
PO Box 978
Westfield, IN 46074

DW Exp 106
DW Exp 109

Dyna-Gro Seed
6221 Riverside Dr., Ste .1
PO Box 1467
Dublin, OH 43017

Dyna-Gro 9012
Dyna-Gro 9042
Dyna-Gro 9911
Dyna-Gro 9922
Dyna-Gro V9723

Excel Seed
257 E. Hail St.
Bushnell, IL 61422

Excel 170
Excel 209
Excel 234
Excel 242
Excel 341
Excel 442

Foundation Seed Project
University of Kentucky
PO Box 11950
Lexington, KY 40579

Cumberland

Kentucky American Seeds, Inc.
205 Means Ave.
Hopkinsville, KY 42240

KAS 1200
KAS 5003
KAS 5058
KAS 7700

Kentucky Small Grain Growers Association
PO Box 90
Eastwood, KY 40018

Pembroke

Miles Seed
Miles Farm Supply
PO Box 22879
Owensboro, KY 42304

Exsegen Anna
Exsegen Candace
Exsegen Dinah
Exsegen Lois
Exsegen Phebe

Pioneer Hi-Bred Intl.
700 Boulevard South
Ste. 302
Huntsville, AL 35802

Pioneer variety 25R32
Pioneer variety 25R56
Pioneer variety 25R78
Pioneer variety 26R15
Pioneer variety 26R20
Pioneer variety 26R22

Progeny AG Products
1529 Hwy 193
Wynne, AR 72396

PROGENY 117
PROGENY 125
PROGENY 166
PROGENY 185

Seed Consultants, Inc.
PO Box 370
Washington Court House, OH 43160

SC 1298
SC 1301
SC 1311
SC 1321
SC 1341

Southern States Coop.
PO Box 26234
Richmond, VA 23260

SS 520
SS 5205
SS 8302
SS 8309
SS 8404
SS 8641
SS EXP 8600
SS EXP 8700
SS MPV-57

Syngenta Seeds
520 E. 1050 St., Box 411
Brookston, IN 47923

SYNGENTA Branson
SYNGENTA Oakes
SYNGENTA SY 9978
SYNGENTA W1104
SYNGENTA W1377
SYNGENTA W1566

Terral Seeds
PO Box 826
Lake Providence, LA 71254

Terral LA821
Terral TV8558
Terral TV8589
Terral TVX8581
Terral TVX8861

UniSouth Genetics
2640-C Nolensville Rd.
Nashville, TN 37211

USG 3251
USG 3350
USG 3555
USG 3770

University of Missouri
Columbia, MO 65211

Bess
Milton
Truman

Virginia Tech
PO Box 338
Warsaw, VA 22572

Merl

List of Tables

Table 3. 2010 Kentucky Wheat Test - Overall State Summary.*

	Yield (Bu/A)			Test Wt. (Lb/bu)	Lodging (%)	Height (In)	Heading Date
VARIETY	2010	2009-10	2008-10	2010	2010	2010	> April 1, 2010
KAS 1200	92.6			57.2	1	32	32
Dyna-Gro 9012	92.4			59.8	0	33	33
Dyna-Gro 9922	92.2	87.0		58.6	0	35	33
BECK 135	91.9			58.0	1	34	35
SS EXP 8600	91.7			58.6	0	35	33
SC 1321	91.2			57.3	0	32	33
SS EXP 8700	90.4			57.5	18	35	36
SYNGENTA W1104	90.0	86.6		56.9	3	34	35
USG 3251	89.7			57.9	1	34	35
DW Exp 106	89.6			57.4	0	38	33
ARMOR RENEGADE	89.4	83.7		58.8	0	34	34
Dyna-Gro 9042	89.0			57.7	1	33	34
Exsegen Dinah	89.0	84.9	86.8	59.4	7	35	34
Terral TVX8861	88.9			57.5	0	32	35
Dixie 454	88.6			59.5	3	34	33
Dyna-Gro 9911	88.4	83.7		59.5	3	35	32
EXCEL 242	88.3			58.5	0	35	35
Delta Grow 5900	88.3			59.7	5	36	33
EXCEL 234	88.3	84.7		59.7	3	35	33
KAS 5058	88.2	84.5		59.7	1	34	34
Pioneer variety 26R22	88.1	82.5	82.9	57.1	5	34	34
Exsegen Lois	88.1	82.3		55.9	6	33	35
DW Exp 109	87.5			57.0	4	35	36
SC 1311	87.5			59.9	1	36	33
SC 1341	87.5			57.0	2	31	34
Exsegen Phebe	87.4			57.7	2	33	35
EXCEL 442	87.3			58.2	1	39	36
BECK 113	87.3	83.6		57.7	0	33	33
Pioneer variety 26R15	86.7	82.1	84.0	57.3	0	34	34
BECK 134	86.7			57.3	0	32	33
SS 8302	86.5	84.2	85.7	59.1	1	34	34
Pioneer variety 25R32	86.4	85.8		59.4	3	34	35
SYNGENTA W1566	86.3	82.4		56.8	1	38	34
ARMOR ARX 9304	85.9			56.6	12	31	34
Exsegen Anna	85.6	81.6		55.8	0	31	32
Pioneer variety 25R56	85.6			56.1	1	33	34
BECK 122	85.3	82.5	83.3	57.1	4	38	32
Pembroke	84.6	81.7	84.0	58.6	2	33	34
Pioneer variety 26R20	84.5	77.8		58.4	7	35	34
SYNGENTA W1377	84.3	80.0	81.0	60.8	1	36	35
SS 8309	84.3	78.9	78.5	58.5	0	35	35
Pioneer variety 25R78	84.1	79.5		58.4	0	33	33
Exsegen Candace	84.1	81.4	82.1	57.6	1	38	32
SS MPV-57	83.9	80.9	84.9	57.1	5	36	35
SYNGENTA OAKES	83.8	79.4		59.5	2	34	34
USG 3555	83.5			57.1	2	31	34
Dyna-Gro V9723	83.4	82.0		57.5	3	37	32
SS 8404	83.4	77.1	80.0	59.7	0	30	35
SYNGENTA SY 9978	83.4			57.6	3	37	33
USG 3350	83.2	80.4	83.4	57.8	2	38	33
Dixie 940	83.1	80.1		57.3	3	37	32
SYNGENTA BRANSON	82.9	81.7	84.7	57.3	1	33	32
SS 5205	81.8	77.5		58.6	7	30	33
KAS 5003	81.6	78.7		55.7	0	31	32
Dixie 427	81.4			56.9	11	34	33
Delta Grow 1600	81.4	78.8	82.1	57.0	2	34	34
SC 1298	81.2	79.5	81.0	57.5	3	37	32
Terral TVX8581	81.2			58.3	11	37	30
Delta King 9577	81.0	74.4	79.4	57.3	0	34	33
Milton	80.9	75.5	76.5	59.0	1	34	36
EXCEL 170	80.8			58.4	1	34	32
USG 3770	80.6			58.3	6	37	31
SC 1301	80.5			60.1	11	37	30
EXCEL 341	80.5	80.2		57.9	4	38	35
Dixie 907	80.4	80.0	83.4	57.9	2	38	34
PROGENY 117	80.4	79.5	82.4	58.4	9	37	31
Terral TV8558	79.7			57.2	0	35	33
Truman	79.3	79.1	81.1	58.1	3	39	41
Merl	79.2	73.3		58.4	0	33	33
KAS 7700	79.1	75.7		57.2	0	34	34
Cumberland	79.0	74.2	76.6	57.5	4	33	33
Terral TV8589	79.0			56.0	6	36	35
SS 520	78.9	76.4	76.1	56.8	3	34	30
BECK 87	78.9			59.9	4	35	28
Bess	78.9	79.4	81.4	59.5	3	36	34
PROGENY 185	78.4	76.9	79.7	57.6	1	35	33
PROGENY 166	77.7	75.9	80.6	58.0	1	38	33
Terral LA821	77.5			57.6	5	36	31
Delta Grow 5000	77.0			56.5	0	31	29
PROGENY 125	75.5			56.6	0	31	30
SS 8641	75.0	65.7	72.4	57.6	0	34	34
EXCEL 209	73.1			58.9	6	34	31
Clark	68.0	68.5	72.6	57.6	2	38	32
AVERAGE	**84.1**	**79.8**	**81.0**	**58.0**	**3**	**35**	**33**
C.V.	6.8	7.1	7.5				
LSD (0.10)	3.0	4.8	4.1				

* Summary of five tests - two no-till (Caldwell, Hardin counties), and three conventional (Fayette, Logan, Christian counties) tests.

TABLE 4. 2010 Kentucky Wheat Forage Test.

VARIETY	DM Yield* at Milk Stage Tons/acre 2010	2009-10	2008-10	Head Type
SS EXP 8700	3.04			Bearded
SYNGENTA W1566	2.99	3.54		Smooth
Dyna-Gro 9012	2.90			Bearded
Dixie 427	2.85			Tip-Awned
SYNGENTA SY 9978	2.84			Bearded
Terral TV8589	2.79			Smooth
Dixie 907	2.75	3.34	3.33	Smooth
Dixie 454	2.71			Tip-Awned
SS 8302	2.70	3.30	3.26	Bearded
SS 8309	2.68	3.18	3.15	Smooth
PROGENY 166	2.66	3.28	3.13	Smooth
EXCEL 341	2.64	3.44		Smooth
Exsegen Anna	2.64	3.25		Smooth
Exsegen Dinah	2.64	3.33	3.24	Smooth
BECK 135	2.63			Bearded
SS MPV-57	2.62	3.20	3.17	Smooth
Delta Grow 5900	2.61			Smooth
SYNGENTA W1377	2.61	3.10	3.19	Smooth
SS 8404	2.60	2.95	3.00	Bearded
Bess	2.59	3.06	2.97	Smooth
SYNGENTA OAKES	2.58	3.23		Smooth
BECK 113	2.57	3.28		Smooth
Dyna-Gro 9042	2.57			Smooth
USG 3350	2.56	2.95	2.92	Smooth
USG 3555	2.56			Tip-Awned
Pembroke	2.55	3.35	3.13	Bearded
SS 8641	2.52	2.98	2.92	Smooth
Dyna-Gro 9922	2.51	2.90		Bearded
Pioneer variety 26R22	2.51	3.17	3.04	Bearded
Terral LA821	2.51			Bearded
Dyna-Gro 9911	2.50	2.80		Tip-Awned
SC 1301	2.50			Smooth
SC 1311	2.50			Smooth
Delta King 9577	2.48	3.13	3.01	Smooth
Pioneer variety 26R15	2.47	3.08	2.99	Bearded
Pioneer variety 26R20	2.46	3.09		Bearded
ARMOR RENEGADE	2.45	2.90		Bearded
Dixie 940	2.44	2.78		Smooth
Milton	2.44	3.23	3.18	Bearded
EXCEL 170	2.43			Smooth
EXCEL 442	2.42			Bearded
ARMOR ARX 9304	2.40			Bearded
EXCEL 234	2.40	2.89		Smooth
Merl	2.40	2.95		Tip-Awned
Exsegen Lois	2.39	2.95		Smooth
USG 3251	2.39			Bearded
SC 1341	2.38			Bearded
BECK 134	2.37			Bearded
Delta Grow 1600	2.37	2.95	2.98	Smooth
SYNGENTA W1104	2.37	3.02		Smooth
Truman	2.37	3.23	3.15	Smooth
Pioneer variety 25R78	2.36	2.89		Bearded
SC 1321	2.35			Bearded
Cumberland	2.34	2.92	2.92	Bearded
Exsegen Candace	2.34	2.83	2.74	Smooth
KAS 1200	2.34			Bearded
SS 5205	2.34	2.92		Smooth
SYNGENTA BRANSON	2.34	2.90	2.87	Smooth
Terral TV8558	2.32			Smooth
Dyna-Gro V9723	2.31	2.75		Smooth
SS EXP 8600	2.30			Bearded
EXCEL 242	2.28			Smooth
Terral TVX8861	2.28			Bearded
DW Exp 106	2.27			Smooth
Delta Grow 5000	2.26			Smooth
Exsegen Phebe	2.26			Bearded
KAS 5058	2.26	3.08		Smooth
PROGENY 117	2.26	2.83	2.85	Smooth
KAS 7700	2.24	2.96		Smooth
Pioneer variety 25R56	2.24			Smooth
BECK 87	2.22			Bearded
DW Exp 109	2.18			Smooth
SS 520	2.18	2.83	2.80	Smooth
USG 3770	2.17			Smooth
Pioneer variety 25R32	2.16	2.86		Bearded
KAS 5003	2.14	2.89		Smooth
Clark	2.11	2.88	2.85	Smooth
PROGENY 185	2.08	2.48	2.44	Smooth
SC 1298	2.08	2.62	2.59	Smooth
BECK 122	2.06	2.74	2.76	Smooth
Terral TVX8581	2.00			Tip-Awned
EXCEL 209	1.93			Smooth
PROGENY 125	1.92			Smooth
AVERAGE	**2.43**	**3.03**	**2.98**	
C.V.	14.06	12.79	12.25	
LSD (0.10)	0.40	0.30	0.24	

Location: Bluegrass Region - Fayette Co.; Conventional tillage. **Planting date:** 10-26-09; *DM=Dry Matter Yield - **Harvest date:** 5-14-10.

TABLE 5. 2010 Kentucky Wheat Straw Test.

	DM Yield* (Tons/acre)		
VARIETY	**2010**	**2009-10**	**2008-10**
Terral LA821	1.65		
SYNGENTA W1566	1.62	1.69	
EXCEL 234	1.60	1.58	
Delta King 9577	1.53	1.58	1.58
Dixie 907	1.52	1.65	1.64
EXCEL 341	1.52	1.72	
SS EXP 8600	1.49		
BECK 135	1.47		
SS 8641	1.46	1.72	1.69
Dyna-Gro 9922	1.44	1.49	
SS 8302	1.42	1.47	1.48
SS MPV-57	1.38	1.40	1.43
Merl	1.38	1.40	
SS 8309	1.37	1.40	1.52
Terral TVX8861	1.37		
Dyna-Gro 9911	1.36	1.29	
USG 3350	1.35	1.56	1.71
SC 1311	1.35		
EXCEL 442	1.33		
Dixie 454	1.33		
Dixie 940	1.32	1.43	
SYNGENTA OAKES	1.31	1.42	
PROGENY 166	1.30	1.37	1.51
DW Exp 106	1.30		
Exsegen Candace	1.29	1.36	1.34
KAS 7700	1.29	1.45	
SC 1301	1.28		
Truman	1.26	1.38	1.56
Dyna-Gro V9723	1.26	1.27	
Dyna-Gro 9012	1.26		
Pembroke	1.24	1.26	1.32
BECK 122	1.24	1.29	1.37
Milton	1.24	1.48	1.55
SS 8404	1.23	1.31	1.26
USG 3555	1.23		
Delta Grow 5900	1.22		
Terral TV8589	1.22		
SYNGENTA W1377	1.21	1.27	1.41
Exsegen Dinah	1.21	1.44	1.46
Terral TV8558	1.21		
Terral TVX8581	1.21		
KAS 5058	1.20	1.42	
KAS 5003	1.19	1.09	
Pioneer variety 26R15	1.18	1.33	1.37
SS 520	1.17	1.18	1.28
Pioneer variety 26R20	1.17	1.44	
SYNGENTA SY 9978	1.17		
Pioneer variety 26R22	1.16	1.43	1.44
Clark	1.15	1.29	1.31
USG 3251	1.15		
Exsegen Anna	1.14	1.09	
BECK 113	1.14	1.21	
SYNGENTA W1104	1.13	1.34	
SS EXP 8700	1.13		
BECK 134	1.13		
KAS 1200	1.12		
Delta Grow 1600	1.11	1.24	1.29
Dixie 427	1.11		
USG 3770	1.11		
SC 1341	1.11		
ARMOR RENEGADE	1.10	1.36	
EXCEL 170	1.10		
Dyna-Gro 9042	1.10		
Pioneer variety 25R78	1.09	1.23	
Exsegen Phebe	1.09		
Bess	1.08	1.16	1.23
PROGENY 117	1.08	1.30	1.39
PROGENY 125	1.08		
DW Exp 109	1.05		
Pioneer variety 25R32	1.04	1.06	
BECK 87	1.04		
SS 5205	1.02	1.06	
SYNGENTA BRANSON	1.00	1.05	1.23
EXCEL 242	0.97		
SC 1298	0.94	1.05	1.19
PROGENY 185	0.93	1.03	1.14
SC 1321	0.91		
Cumberland	0.88	0.98	1.14
Pioneer variety 25R56	0.88		
Exsegen Lois	0.87	1.29	
ARMOR ARX 9304	0.87		
EXCEL 209	0.87		
Delta Grow 5000	0.86		
AVERAGE	**1.20**	**1.34**	**1.40**
C.V.	18.86	17.72	18.26
LSD (0.10)	0.26	0.19	0.16

Location: Bluegrass Region - Fayette Co.; Conventional tillage.
Planting date:10-26-09; **Harvest date:** 6-22-10.
* Dry Matter straw yield following grain harvest.

Table 6. 2010 Kentucky Wheat Test - Purchase Region.

	Yield (Bu/A)		Test Wt. (Lb/bu)		Height (In)	Heading Date
VARIETY	2010	2009-10	2010	2009-10	2010	> April 1, 2010
SYNGENTA SY 9978	84.4		56.7		38	29
SS EXP 8600	84.1		58.8		37	31
Pioneer variety 26R22	83.6	76.8	56.6	55.8	35	31
USG 3555	81.0		56.9		31	32
SC 1321	80.6		56.9		33	29
SS EXP 8700	79.1		56.2		35	33
ARMOR ARX 9304	78.9		57.3		32	32
SYNGENTA W1104	78.8	76.4	55.6	54.5	35	31
Dyna-Gro 9922	78.8	75.7	58.8	56.5	35	30
EXCEL 242	78.7		59.4		36	32
Pioneer variety 25R56	78.5		56.0		32	31
Pioneer variety 26R15	78.0	76.4	58.5	56.5	33	31
Dixie 427	77.8		56.5		36	31
SC 1341	77.5		57.4		32	32
Pioneer variety 26R20	76.7	63.5	57.9	54.9	35	33
Exsegen Lois	76.7	68.2	56.2	53.7	33	32
Dixie 907	76.4	78.4	58.4	56.6	38	31
Pioneer variety 25R32	76.0	80.8	59.2	57.6	34	32
Dyna-Gro V9723	75.3	80.0	57.1	56.2	36	29
EXCEL 209	74.7		59.3		35	29
EXCEL 341	74.5	75.7	58.5	56.2	38	32
SC 1298	74.4	77.4	56.9	55.5	38	29
SYNGENTA W1566	74.2	70.2	55.8	53.8	36	30
SYNGENTA OAKES	74.0	72.8	58.7	57.6	33	30
SS 8404	73.8	67.1	60.4	58.4	31	31
Dyna-Gro 9911	73.5	83.2	59.8	59.1	34	30
KAS 1200	73.4		57.3		33	29
USG 3770	73.2		58.3		36	29
Delta Grow 1600	72.4	73.2	57.0	55.4	34	31
Terral LA821	72.1		58.9		36	29
PROGENY 185	72.0	78.0	58.5	57.4	33	29
SYNGENTA BRANSON	71.8	77.6	55.9	55.5	33	29
Delta Grow 5900	71.4		58.5		35	30
BECK 134	71.3		57.1		33	30
Dyna-Gro 9012	71.2		59.8		31	31
SS MPV-57	71.1	70.3	55.8	54.6	34	31
USG 3350	70.6	72.5	59.0	56.6	37	29
EXCEL 442	70.5		58.0		37	35
EXCEL 170	70.4		58.9		34	29
SC 1301	69.8		60.5		36	28
KAS 5003	69.4	72.9	55.9	55.5	30	30
Exsegen Anna	69.2	75.4	54.7	55.0	30	29
Exsegen Candace	69.0	77.5	57.3	56.4	36	29
Pioneer variety 25R78	68.9	75.5	57.6	56.6	32	30
DW Exp 106	68.4		56.8		35	30
PROGENY 117	68.2	78.4	58.5	58.2	36	29
ARMOR RENEGADE	67.8	67.8	58.4	55.8	34	30
Dyna-Gro 9042	67.8		57.2		30	31
SC 1311	67.6		58.9		34	30
SS 8302	67.5	71.0	58.5	57.2	34	32
Terral TVX8581	66.8		58.1		34	29
EXCEL 234	66.8	77.6	59.4	58.6	33	30
SYNGENTA W1377	66.8	65.7	60.8	58.3	35	32
USG 3251	66.4		56.9		33	32
Dixie 454	66.3		59.1		34	30
DW Exp 109	65.2		56.4		32	33
BECK 135	64.4		56.5		32	32
Dixie 940	63.9	73.8	56.9	56.1	36	29
Bess	63.9	75.6	60.1	58.7	35	30
Delta King 9577	63.2	67.0	57.3	56.7	33	30
Pembroke	62.9	71.8	59.2	57.7	32	31
BECK 113	62.9	74.3	58.4	57.3	31	30
BECK 122	62.2	72.0	56.9	55.9	36	28
Merl	60.5	64.9	57.6	57.0	32	30
SS 5205	59.7	75.3	59.4	58.3	28	30
PROGENY 125	59.0		56.1		31	28
Exsegen Dinah	58.7	63.0	57.9	57.3	32	29
Cumberland	58.6	59.3	57.2	55.5	31	30
PROGENY 166	58.6	70.0	57.8	56.2	34	29
Terral TVX8861	58.4		56.2		30	33
Clark	58.3	64.8	57.3	56.7	36	29
Terral TV8589	58.0		56.2		33	32
SS 520	57.2	71.8	56.9	56.3	31	28
BECK 87	57.0		60.0		35	27
Terral TV8558	56.6		59.8		33	30
SS 8641	56.5	49.7	57.5	53.5	33	30
Truman	56.4	74.7	58.0	58.1	35	39
Exsegen Phebe	56.4		57.8		31	32
SS 8309	56.3	67.4	58.5	57.2	32	33
Delta Grow 5000	53.9		56.0		31	28
Milton	53.2	55.1	58.5	56.2	32	32
KAS 7700	51.7	57.0	57.7	54.7	31	31
KAS 5058	50.6	58.0	58.8	57.2	31	30
AVERAGE	**68.5**	**71.3**	**57.8**	**56.5**	**34**	**30**
C.V.	19.7	16.2				
LSD (0.10)	15.8	9.5				

NOTE: YIELD DATA HIGHLY VARIABLE - NOT RECOMMENDED FOR VARIETY COMPARISON!
Location: Graves Co., 2009 (Fulton Co.); **Lodging** = 0% **Planting date:** 11-12-09; No-Till;
Harvest date: 6-14-10; **Preceding crop** = corn; **Winter Survival** = 100%.

Table 7. 2010 Kentucky Wheat Test - Western Coal Field Region.

	Yield (Bu/A)		Test Wt. (Lb/bu)		Height (In)	Heading Date
VARIETY	2010	2009-10	2010	2009-10	2010	> April 1, 2010
Dyna-Gro 9922	94.3	88.9	57.6	56.6	35	31
Delta Grow 5900	93.4		58.4		35	32
EXCEL 442	92.5		57.0		39	34
Dyna-Gro 9012	91.2		58.7		33	32
EXCEL 242	90.9		56.9		34	33
SC 1321	89.4		57.4		32	32
SS EXP 8700	88.7		56.9		32	35
BECK 135	88.6		56.8		33	35
Exsegen Lois	87.7	82.9	55.4	53.6	32	36
Exsegen Phebe	87.6		56.5		33	34
Dixie 454	87.6		58.1		34	32
SC 1341	87.6		56.3		30	33
SYNGENTA W1104	87.3	86.5	56.5	55.0	32	35
SC 1301	87.0		59.1		37	27
Dyna-Gro 9042	87.0		56.6		32	32
Pioneer variety 26R22	86.9	82.3	56.2	55.3	33	33
Dixie 907	86.3	81.1	56.0	54.5	37	32
USG 3251	86.0		57.1		33	35
Exsegen Dinah	85.9	82.7	58.5	57.5	33	34
BECK 113	85.6	81.0	55.5	55.2	32	31
KAS 1200	85.3		56.9		31	33
Exsegen Candace	85.3	83.0	56.7	55.1	37	31
DW Exp 109	85.2		55.8		34	35
SS EXP 8600	85.1		58.5		33	33
ARMOR ARX 9304	84.7		56.1		30	34
KAS 5058	84.5	82.1	58.1	57.5	33	34
Dixie 940	84.1	81.1	56.5	55.2	37	30
DW Exp 106	84.0		56.3		36	33
Delta Grow 1600	84.0	78.1	55.6	54.4	33	33
SS 8302	83.8	80.8	58.5	57.5	34	34
SS 520	83.2	79.5	56.6	55.2	34	30
Delta Grow 5000	83.1		56.5		31	28
Pioneer variety 26R20	83.1	80.6	58.9	56.1	34	34
Dixie 427	82.8		56.6		32	34
SS MPV-57	82.7	83.2	55.7	55.5	34	35
EXCEL 234	82.6	84.9	58.2	57.9	34	33
SC 1311	82.6		58.1		35	32
USG 3350	82.4	78.0	56.3	55.3	37	33
Pembroke	82.2	78.5	57.9	57.0	32	34
Pioneer variety 25R78	82.2	78.9	58.2	56.4	32	32
Dyna-Gro 9911	82.1	81.9	58.0	57.4	33	30
SYNGENTA W1566	81.7	79.7	56.4	55.0	35	34
Delta King 9577	81.2	78.8	54.9	54.6	33	32
EXCEL 341	81.1	77.6	56.3	54.6	37	34
Dyna-Gro V9723	80.9	78.2	57.0	55.3	36	31
EXCEL 170	80.7		56.7		34	31
SS 8404	80.6	79.4	59.5	58.7	29	35
Pioneer variety 25R56	80.4		55.5		32	33
SYNGENTA W1377	80.2	80.4	59.7	57.2	34	35
Pioneer variety 26R15	80.2	79.5	56.8	55.4	33	34
USG 3555	79.9		55.6		29	34
KAS 7700	79.7	77.2	55.8	54.2	33	33
SC 1298	79.6	78.6	56.9	55.2	37	32
SS 8309	79.2	76.4	56.5	55.3	33	34
SYNGENTA OAKES	79.1	78.3	58.1	57.3	32	33
BECK 134	79.1		55.6		31	33
Terral TVX8861	78.6		56.5		30	35
SS 5205	78.5	75.1	58.5	56.8	30	32
KAS 5003	78.3	76.7	54.5	53.6	30	31
Terral TV8589	78.3		56.7		35	36
SYNGENTA BRANSON	77.7	79.2	56.3	55.4	32	31
Terral TVX8581	77.6		57.8		36	28
Terral TV8558	76.9		54.5		32	33
ARMOR RENEGADE	76.8	78.3	58.5	57.1	32	34
BECK 122	76.6	76.9	56.5	55.1	36	30
SYNGENTA SY 9978	76.0		57.5		36	33
Exsegen Anna	76.0	76.9	54.6	53.7	30	30
USG 3770	75.7		58.1		35	30
BECK 87	75.3		59.0		35	25
Bess	75.1	74.2	57.5	56.5	35	34
Pioneer variety 25R32	74.9	81.3	57.9	57.2	32	35
PROGENY 125	74.5		56.5		30	29
PROGENY 166	74.5	74.0	56.2	54.9	37	33
Merl	74.4	71.9	57.9	57.0	32	33
PROGENY 117	73.9	74.6	58.2	57.3	36	30
SS 8641	73.8	71.2	57.5	55.2	32	35
Cumberland	73.7	71.5	56.9	55.7	31	33
Terral LA821	73.6		57.5		35	32
EXCEL 209	73.1		58.1		34	30
Truman	72.7	70.8	56.2	56.8	38	40
Milton	72.5	73.1	57.7	56.7	32	36
PROGENY 185	69.6	70.6	57.1	55.7	34	31
Clark	69.3	65.5	55.7	55.5	37	31
AVERAGE	**81.4**	**78.4**	**57.0**	**55.9**	**33**	**33**
C.V.	9.6	8.2				
LSD (0.10)	9.1	5.4				

Location: Caldwell Co. (Princeton, KY); **Lodging** = 0%. **Planting date:** 10-12-09; No-Till; **Harvest date:** 6-16-10; **Preceding crop** = corn; **Winter Survival** = 100%.

Table 8. 2010 Kentucky Wheat Test - Bluegrass Region.

VARIETY	Yield (Bu/A)		Test Wt. (Lb/bu)		Height (In)	Heading Date
	2010	2009-10	2010	2009-10	2010	> April 1, 2010
Dyna-Gro 9922	87.2	80.5	58.4	57.7	31	35
SS EXP 8700	87.2		57.4		32	38
Dyna-Gro 9012	87.1		59.9		30	36
ARMOR RENEGADE	86.6	77.9	58.6	57.9	31	36
SS EXP 8600	86.4		57.7		31	35
Exsegen Dinah	86.3	86.4	59.3	59.8	31	36
SC 1311	86.2		60.0		32	35
Terral TVX8861	86.0		57.2		30	38
EXCEL 234	85.5	80.0	59.5	59.8	31	35
Pioneer variety 25R32	85.5	84.5	59.3	59.2	30	37
SS 8309	85.4	80.9	59.3	59.1	32	37
KAS 1200	85.4		57.3		28	35
SYNGENTA W1566	85.0	87.1	56.0	55.8	34	36
Dyna-Gro 9911	84.7	78.7	59.2	59.3	31	35
SC 1321	84.2		56.6		28	35
BECK 135	84.2		58.0		32	38
KAS 5058	83.9	86.4	59.3	60.0	30	36
SYNGENTA W1377	83.6	82.0	60.9	59.9	33	37
USG 3251	83.3		57.8		31	38
SYNGENTA W1104	83.3	84.1	56.7	56.5	31	38
SS 8302	82.4	81.8	58.4	58.4	31	37
Pioneer variety 26R20	82.2	80.0	58.9	57.9	31	37
SC 1301	82.1		60.0		31	34
EXCEL 242	82.0		58.0		31	37
BECK 134	81.9		57.3		29	36
Dixie 454	81.8		58.9		30	36
Delta Grow 5900	81.8		60.1		31	35
Pioneer variety 26R15	81.7	79.3	56.9	56.6	31	38
Pioneer variety 25R78	81.5	78.0	59.4	58.5	29	36
BECK 113	81.1	80.1	57.7	57.7	29	35
USG 3350	80.9	80.3	57.8	57.9	34	35
Dyna-Gro 9042	80.9		56.9		30	37
Pioneer variety 26R22	80.6	81.1	56.7	56.3	31	37
Terral TVX8581	80.4		58.6		32	34
SYNGENTA SY 9978	80.3		57.4		33	36
Dixie 907	80.3	80.6	57.7	57.2	35	35
SS 5205	80.2	77.9	59.2	58.5	25	36
DW Exp 106	80.1		56.7		34	36
Exsegen Phebe	80.1		57.4		30	38
SS MPV-57	80.0	81.7	56.7	57.2	31	38
ARMOR ARX 9304	80.0		57.4		27	36
EXCEL 442	79.6		57.9		35	38
Terral TV8558	79.4		57.9		31	36
Pioneer variety 25R56	79.2		56.1		29	36
SYNGENTA OAKES	78.9	77.5	58.9	58.7	30	36
BECK 122	78.7	77.6	57.0	57.0	33	35
Dyna-Gro V9723	78.7	78.5	57.4	57.6	33	35
SC 1341	78.7		57.5		27	36
PROGENY 166	78.7	75.4	58.1	57.5	34	35
DW Exp 109	78.4		55.9		30	38
Terral TV8589	78.1		55.4		32	37
USG 3770	78.0		58.5		33	35
SYNGENTA BRANSON	77.7	81.5	56.9	57.1	29	34
PROGENY 117	77.6	74.7	58.4	58.5	32	35
EXCEL 341	77.2	79.8	58.1	58.0	35	37
Pembroke	76.9	76.9	58.3	58.5	29	37
Truman	76.8	73.2	56.8	57.4	36	45
Delta King 9577	76.6	77.0	57.8	56.2	31	37
USG 3555	76.5		56.5		28	37
Exsegen Anna	76.3	77.9	56.8	56.0	27	36
Dixie 940	75.9	73.7	57.1	57.0	33	35
Delta Grow 1600	75.3	77.2	57.6	57.3	31	37
EXCEL 170	74.5		59.2		30	34
Dixie 427	74.3		57.2		30	35
Bess	74.2	75.6	60.1	59.2	31	37
Exsegen Candace	74.1	76.0	57.4	57.3	33	35
SC 1298	73.4	73.1	57.4	57.1	33	35
Merl	73.0	72.0	58.9	58.2	29	36
SS 520	72.8	73.3	57.0	56.0	29	34
SS 8404	72.8	72.1	58.9	59.0	27	38
Terral LA821	72.6		58.0		31	35
KAS 5003	72.4	76.3	56.5	55.9	27	36
Exsegen Lois	72.0	76.7	55.8	55.5	29	38
Cumberland	71.8	73.2	56.9	56.6	28	36
EXCEL 209	71.7		58.7		30	34
Milton	71.2	72.9	59.4	58.8	32	38
KAS 7700	71.1	73.0	56.9	56.1	30	37
BECK 87	70.5		60.2		29	33
PROGENY 185	69.9	72.7	56.7	56.6	30	37
Delta Grow 5000	65.9		56.1		26	34
Clark	64.8	69.8	57.7	57.4	33	35
PROGENY 125	64.2		56.0		27	35
SS 8641	63.5	66.5	56.4	55.6	30	37
AVERAGE	**78.7**	**77.8**	**57.9**	**57.6**	**31**	**36**
C.V.	6.4	5.8				
LSD (0.10)	5.9	3.8				

Location: Fayette Co. (Lexington, KY); **Lodging** = 0%. **Planting date:** 10-26-09; Conventional tillage; **Harvest date:** 6-22-10; **Preceding crop** = corn; **Winter Survival** = 100%.

Table 9. 2010 Kentucky Wheat Test - Southern Tier Region A.

	Yield (Bu/A)		Test Wt. (Lb/bu)		Lodging (%)	Height (In)	Heading Date
VARIETY	2010	2009-10	2010	2009-10	2010	2010	> April 1, 2010
Dyna-Gro 9922	96.5	83.1	59.0	54.7	0	37	33
SS EXP 8600	95.4		58.9		0	36	33
ARMOR RENEGADE	95.1	80.9	59.6	54.4	0	36	34
Dyna-Gro 9012	92.7		60.6		0	34	33
KAS 5058	92.2	80.3	60.3	56.9	4	35	34
Dyna-Gro 9042	92.0		58.5		3	34	34
EXCEL 234	91.7	75.2	60.7	57.1	14	37	33
SS EXP 8700	91.7		57.7		55	36	36
USG 3251	90.6		58.7		3	36	35
KAS 1200	90.5		58.0		1	33	32
Exsegen Anna	89.6	74.7	54.7	50.3	0	33	32
SYNGENTA W1104	89.5	76.3	57.0	51.9	1	34	35
Terral TVX8861	89.5		58.6		0	32	35
Dyna-Gro 9911	89.3	73.3	60.9	57.0	3	37	32
Exsegen Lois	88.9	75.7	56.2	50.8	0	33	35
Exsegen Dinah	88.8	79.8	60.2	56.2	15	35	34
EXCEL 242	88.8		59.3		1	36	35
DW Exp 106	88.4		58.5		0	39	33
Pioneer variety 26R22	88.4	71.7	57.1	53.0	23	35	34
Pioneer variety 25R32	88.2	77.5	60.1	55.9	5	34	35
SS 8302	88.1	78.5	59.9	55.9	0	35	34
Dixie 454	88.0		60.5		3	35	33
Pioneer variety 26R15	88.0	77.4	57.8	53.3	0	35	34
DW Exp 109	87.7		57.5		1	36	36
BECK 113	86.5	74.1	58.3	53.9	0	34	33
BECK 134	86.4		57.9		1	34	33
BECK 135	86.4		58.8		5	35	35
SS 8404	86.3	71.5	60.2	55.1	0	31	35
SC 1321	85.8		57.7		1	33	33
Cumberland	85.3	69.1	58.0	54.2	4	35	33
Milton	85.3	69.7	59.3	54.6	3	35	36
SYNGENTA W1566	85.2	69.8	56.9	52.6	1	39	34
SYNGENTA W1377	85.1	71.7	61.6	57.1	3	37	35
Delta Grow 5900	84.8		60.4		23	36	33
SYNGENTA OAKES	84.8	74.6	61.0	57.0	1	35	34
SYNGENTA SY 9978	84.4		58.1		3	39	33
Pioneer variety 26R20	84.1	66.7	59.0	52.7	19	36	34
EXCEL 442	83.7		59.6		5	40	36
SS 8309	83.7	69.6	58.3	53.5	0	36	35
KAS 5003	83.0	69.9	54.8	50.4	0	32	32
USG 3555	83.0		57.1		9	31	34
SS MPV-57	82.8	74.2	58.0	53.6	1	38	35
SC 1341	82.2		56.8		11	31	34
Pembroke	82.1	72.7	59.5	55.9	11	34	34
SC 1311	81.9		60.5		5	36	33
Pioneer variety 25R56	81.5		56.3		3	33	34
SS 5205	80.7	65.4	58.1	53.6	13	30	33
Exsegen Phebe	80.6		58.0		9	34	35
Exsegen Candace	80.1	66.3	57.9	53.2	5	39	32
SYNGENTA BRANSON	79.6	67.8	57.6	53.3	3	33	32
Truman	79.5	75.9	59.2	57.0	11	40	41
Delta King 9577	79.0	63.2	56.9	53.1	1	35	33
BECK 122	78.8	70.3	57.4	52.9	10	39	32
PROGENY 117	77.9	71.3	59.0	55.9	15	38	31
PROGENY 185	77.6	66.9	58.1	53.1	0	36	33
Delta Grow 1600	77.3	67.1	56.4	52.1	3	35	34
Bess	76.8	67.8	60.1	55.5	4	37	34
EXCEL 341	76.4	69.2	57.7	52.6	14	39	35
KAS 7700	76.0	68.5	57.4	51.7	0	36	34
Terral TV8558	75.9		56.6		0	36	33
SC 1298	75.6	66.6	57.5	53.1	8	39	32
Dyna-Gro V9723	75.5	68.1	57.4	53.5	14	38	32
Pioneer variety 25R78	75.2	63.3	58.5	54.1	0	34	33
SS 8641	75.1	61.0	57.7	50.4	0	35	34
Terral LA821	74.7		57.7		10	36	31
Dixie 427	74.5		56.4		11	35	33
SS 520	74.2	58.5	56.7	52.0	8	35	30
Terral TVX8581	73.7		58.5		25	37	30
BECK 87	73.5		60.5		1	36	28
USG 3770	73.4		58.4		15	38	31
EXCEL 170	72.9		57.7		0	35	32
PROGENY 125	72.7		56.7		0	33	30
USG 3350	72.0	64.8	58.0	53.5	1	38	33
Merl	72.0	56.6	58.0	53.3	0	33	33
Dixie 940	71.4	65.5	57.4	53.1	15	38	32
ARMOR ARX 9304	70.5		55.8		58	32	34
SC 1301	69.8		60.1		34	37	30
PROGENY 166	68.6	62.0	58.4	53.5	5	39	33
Terral TV8589	66.5		56.3		15	37	35
Dixie 907	65.9	64.2	58.0	52.9	11	39	34
Delta Grow 5000	65.3		55.8		0	32	29
EXCEL 209	61.2		58.7		21	35	31
Clark	60.1	53.8	58.3	55.0	1	39	32
AVERAGE	**81.4**	**70.0**	**58.3**	**53.9**	**7**	**36**	**33**
C.V.	6.4	6.7					
LSD (0.10)	6.1	4.0					

Location: Logan Co. **Planting date:** 11-04-09; Conventional tillage; **Harvest date:** 6-20-10; **Preceding crop** = corn; **Winter Survival** = 100%.

Table 10. 2010 Kentucky Wheat Test - Southern Tier Region B.

VARIETY	Yield (Bu/A) 2010	Yield (Bu/A) 2009-10	Test Wt. (Lb/bu) 2010	Test Wt. (Lb/bu) 2009-10	Lodging (%) 2010	Height (In) 2010	Heading Date > April 1, 2010
KAS 1200	100.7		55.6		5	34	28
ARMOR ARX 9304	98.3		56.8		0	34	31
BECK 135	98.0		57.9		0	36	31
Exsegen Lois	94.7	89.0	55.3	53.7	24	35	31
SS EXP 8600	94.5		58.5		0	36	30
Exsegen Anna	94.1	89.3	56.3	54.3	0	34	27
SC 1321	93.5		56.0		0	34	28
EXCEL 442	93.4		58.5		0	41	33
ARMOR RENEGADE	93.1	90.0	58.6	56.9	0	35	30
SYNGENTA W1104	92.9	90.5	56.5	54.5	4	37	31
Dyna-Gro 9012	92.0		59.1		0	34	30
BECK 122	92.0	86.6	56.8	55.5	9	39	28
Exsegen Phebe	92.0		57.8		0	35	31
Dixie 454	91.7		59.3		13	37	30
Terral TVX8861	91.5		58.1		0	35	31
DW Exp 106	91.0		57.1		0	40	30
USG 3350	90.7	89.6	58.1	56.6	6	40	30
USG 3251	90.6		57.5		3	36	31
Pioneer variety 25R32	90.5	87.7	59.4	57.7	8	37	32
SC 1341	89.9		56.9		0	33	32
DW Exp 109	89.3		56.7		20	38	33
EXCEL 242	88.8		58.9		0	36	32
Pioneer variety 26R15	88.4	86.1	56.2	54.8	1	37	29
Dixie 907	88.0	86.6	58.1	56.3	0	39	31
Pioneer variety 26R22	87.9	85.0	56.9	55.1	1	36	30
SC 1311	87.7		60.1		1	38	31
Milton	87.6	84.3	58.6	56.5	0	36	31
Exsegen Dinah	87.5	87.9	59.6	58.2	14	37	30
Pembroke	87.3	84.8	57.9	56.7	0	34	29
EXCEL 341	87.0	89.0	57.8	56.4	6	40	32
Exsegen Candace	86.9	86.9	57.2	55.5	1	40	28
Delta Grow 5900	86.7		59.6		3	37	30
Dyna-Gro V9723	86.6	88.6	57.1	55.7	0	39	28
Dyna-Gro 9911	86.5	86.6	59.0	58.0	14	37	29
SS EXP 8700	86.4		56.9		19	37	32
Dixie 940	86.3	81.6	57.1	55.3	0	40	29
Dyna-Gro 9922	86.2	86.6	58.2	56.3	0	37	29
PROGENY 185	85.9	84.8	57.5	56.2	3	36	29
Pioneer variety 25R56	85.8		55.8		1	35	31
KAS 5058	85.6	87.5	59.4	58.2	3	36	30
EXCEL 234	85.3	85.9	59.4	57.8	3	37	29
KAS 5003	85.3	85.9	55.8	54.5	0	33	29
SS 8302	84.8	88.6	58.5	57.2	5	36	30
SS MPV-57	84.5	80.1	56.5	55.0	20	38	30
Pioneer variety 25R78	84.2	81.1	56.9	55.3	0	35	29
EXCEL 170	84.2		58.2		5	37	28
SYNGENTA BRANSON	84.0	84.5	57.0	55.8	3	36	28
PROGENY 166	83.7	81.5	57.8	56.3	0	40	29
SYNGENTA OAKES	83.7	80.7	59.0	57.4	8	37	31
SYNGENTA SY 9978	83.6		56.4		1	38	29
BECK 134	83.5		57.1		0	34	30
Truman	83.4	79.6	59.0	58.2	0	40	38
SC 1298	83.3	83.7	56.6	55.1	5	40	28
SS 8309	83.3	79.6	58.3	56.8	0	37	31
Dyna-Gro 9042	83.3		57.5		0	34	31
SYNGENTA W1377	83.0	81.3	61.0	57.9	4	38	31
SS 8404	82.5	80.0	58.7	57.9	0	31	30
USG 3555	82.3		57.9		0	33	31
BECK 113	82.2	82.7	57.8	56.9	0	35	30
Terral TV8589	82.2		55.5		11	39	30
Merl	82.1	78.2	58.1	56.6	0	35	28
Delta Grow 1600	82.1	83.4	57.2	56.2	9	36	31
Bess	82.0	86.6	58.9	57.5	6	38	29
Terral LA821	81.9		57.3		9	39	25
USG 3770	81.8		57.7		10	37	27
Pioneer variety 26R20	81.8	80.8	56.8	55.0	15	36	31
KAS 7700	81.5	79.4	57.1	55.4	0	37	31
PROGENY 125	80.7		55.7		0	35	24
EXCEL 209	80.6		58.6		6	37	27
SYNGENTA W1566	80.6	82.7	56.2	54.9	0	39	30
Delta Grow 5000	80.5		55.7		0	34	25
BECK 87	80.2		58.8		15	37	24
SS 8641	79.5	67.8	57.0	55.0	0	36	30
PROGENY 117	79.5	81.2	57.2	56.3	28	38	26
Dixie 427	79.5		55.7		33	37	29
Delta King 9577	77.6	64.0	58.1	56.6	0	36	30
SS 520	77.4	75.6	55.9	54.6	5	37	25
Terral TVX8581	76.6		57.4		23	40	25
Terral TV8558	76.4		58.2		0	37	29
SC 1301	76.3		59.7		23	40	25
Cumberland	75.9	73.4	56.6	55.7	14	34	28
SS 5205	73.2	75.7	56.8	55.9	20	32	29
Clark	70.6	68.5	57.4	56.3	10	39	27
AVERAGE	**85.5**	**83.0**	**57.6**	**56.2**	**5**	**37**	**29**
C.V.	6.4	7.2					
LSD (0.10)	6.4	5.0					

Location: Christian Co.; Conventional tillage **Planting date:** 10-21-09; **Harvest date:** 6-15-10; **Preceding crop** = corn; **Winter Survival** = 100%.

Table 11. 2010 Kentucky Wheat Test - North Central Region.

VARIETY	Yield (Bu/A) 2010	Yield (Bu/A) 2009-10	Test Wt. (Lb/bu) 2010	Test Wt. (Lb/bu) 2009-10	Lodging (%) 2010	Height (In) 2010	Heading Date > April 1, 2010
DW Exp 106	104.6		58.5		0	40	35
SC 1321	103.2		58.8		0	33	35
BECK 134	102.6		58.5		0	33	35
BECK 135	102.6		58.9		0	37	37
Dyna-Gro 9042	101.9		58.9		0	35	35
Pioneer variety 25R56	101.0		57.0		0	34	36
BECK 113	100.9	87.6	59.1	56.0	0	35	35
KAS 1200	100.9		58.1		0	34	34
BECK 122	100.2	90.9	57.8	55.8	0	41	33
Dyna-Gro 9911	99.5	88.2	60.4	57.6	0	39	34
SYNGENTA W1566	99.2	89.2	58.7	55.0	4	42	36
SC 1341	99.2		57.7		0	33	36
SC 1311	99.2		60.9		0	39	34
Dyna-Gro 9012	99.1		60.8		0	36	34
Terral TVX8861	98.7		57.3		0	34	37
SS EXP 8700	98.2		58.7		18	37	38
Dixie 940	98.0	88.0	58.4	56.1	0	39	34
USG 3251	97.8		58.4		0	36	36
Terral TVX8581	97.5		59.4		5	41	32
SS EXP 8600	97.4		59.4		0	37	35
Pioneer variety 25R78	97.4	86.3	58.9	55.9	0	35	35
SYNGENTA W1104	97.1	88.8	57.9	55.1	11	36	37
Exsegen Lois	97.1	87.4	57.0	54.1	4	35	37
DW Exp 109	97.1		59.0		0	38	37
Pioneer variety 26R22	96.7	85.4	58.8	55.3	0	36	35
Dyna-Gro 9922	96.7	89.3	59.5	57.3	0	38	35
Exsegen Phebe	96.6		59.0		0	35	37
SS 5205	96.5	80.1	60.6	57.1	0	31	34
Exsegen Dinah	96.3	86.8	59.6	57.7	4	38	35
ARMOR ARX 9304	96.1		56.9		0	33	35
EXCEL 234	96.1	86.7	60.8	58.9	0	38	34
Dixie 427	96.1		58.5		10	37	35
SYNGENTA BRANSON	95.7	87.5	58.8	55.5	0	36	34
USG 3555	95.6		58.5		0	32	36
Dyna-Gro V9723	95.6	87.0	58.5	56.2	1	40	34
ARMOR RENEGADE	95.4	83.9	58.9	56.6	0	38	35
BECK 87	95.2		61.2		1	37	31
Pioneer variety 26R15	95.2	82.8	58.7	55.3	0	35	36
SS 8404	95.0	78.5	61.0	57.4	0	32	36
Delta Grow 5900	94.8		60.2		1	39	34
Merl	94.7	81.5	59.0	56.2	0	34	34
KAS 5058	94.6	86.0	61.4	58.6	0	37	35
Pembroke	94.5	83.0	59.3	57.0	0	36	36
SC 1298	94.3	84.0	59.3	56.5	0	39	34
USG 3770	94.3		59.1		4	40	33
Exsegen Candace	93.9	85.6	58.7	55.8	0	40	34
Dixie 454	93.7		60.7		0	36	35
SS 8302	93.5	84.7	60.3	57.3	0	37	36
Pioneer variety 25R32	93.1	89.6	60.2	58.2	1	37	37
PROGENY 117	92.9	86.4	59.3	57.5	4	39	33
SYNGENTA OAKES	92.8	81.4	60.5	57.8	0	36	36
SYNGENTA SY 9978	92.6		58.4		13	39	35
Exsegen Anna	91.9	81.9	56.9	54.0	0	34	34
EXCEL 170	91.7		60.5		0	37	34
EXCEL 242	91.2		59.5		0	38	36
Pioneer variety 26R20	91.1	80.2	58.5	54.9	0	37	36
Delta King 9577	90.8	79.2	58.9	55.4	0	37	34
Delta Grow 5000	90.2		58.2		0	34	31
Terral TV8558	90.0		58.7		0	38	34
USG 3350	90.0	83.9	58.8	56.2	0	40	34
SS 8309	89.8	79.7	59.9	57.2	0	37	37
SYNGENTA W1377	89.7	82.5	61.0	58.0	0	39	36
Terral TV8589	89.7		56.3		3	39	36
SS MPV-57	89.4	84.4	58.6	55.8	1	39	37
PROGENY 185	89.1	78.9	58.8	56.3	0	38	34
KAS 5003	88.8	80.6	57.1	54.3	0	33	34
Cumberland	88.6	80.6	59.2	55.7	0	35	35
Delta Grow 1600	88.2	81.8	58.2	56.0	0	37	35
Milton	87.8	76.6	60.0	56.3	0	38	37
EXCEL 442	87.5		58.3		0	41	37
SC 1301	87.4		61.5		0	39	33
KAS 7700	87.4	78.8	58.9	54.9	0	37	35
SS 520	87.1	78.3	58.0	55.0	1	36	33
Bess	86.6	84.1	60.8	58.4	5	38	34
PROGENY 125	85.5		58.0		0	34	33
Terral LA821	84.5		57.4		4	38	33
Truman	84.2	80.9	59.4	57.0	1	41	44
SS 8641	83.2	64.5	59.3	53.7	0	36	36
PROGENY 166	83.1	75.7	59.6	56.5	0	40	34
Dixie 907	81.5	80.7	59.9	56.8	0	40	36
EXCEL 341	80.8	78.6	59.8	56.7	0	41	36
EXCEL 209	79.2		60.4		0	36	33
Clark	75.0	73.0	58.8	56.2	0	41	34
AVERAGE	**93.4**	**83.0**	**59.1**	**56.3**	**1**	**37**	**35**
C.V.	4.9	5.3					
LSD (0.10)	5.3	3.7					

Location: Hardin Co.; **Planting date:** 10-22-09; No-Till; **Harvest date:** 6-21-10; **Preceding crop** = corn; **Winter Survival** = 100%.

TABLE 12. 2010 Kentucky Barley Variety Test.

	Yield (Bu/A)*		Test Wt. (Lb/bu)	Lodging (%)	Height (In)	Heading Date
VARIETY	**2010**	**2001-10**	**2010**	**2010**	**2010**	**> April 1, 2010**
Price (Hulled)	103.0	100.5	43.5	19	27	25
Thoroughbred (Hulled)	99.8	102.3	44.5	0	30	30
Dan (Hull-less)	65.6		55.4	0	30	30
Eve (Hull-less)	61.2		53	8	30	26
AVERAGE	**82.4**	**101.4**	**40.1**	**7**	**29**	**28**

Location: Caldwell County, KY.; **Previous crop:** Corn; Conventional tillage;
Planting date: 10-26-09; **Harvest Date:** 6-8-10
* 48-lb standard bushel weight for traditional hulled barley; 60-lb standard bushel weight for Hulless barley. 2010 results reported are the average of 3 spring applied Nitrogen treatments (80, 100, &120 lbs N/A).

TABLE 13. 2010 Kentucky Barley Nitrogen Fertility Test.

	Yield (Bu/A)*					
N Rate - Lb/A	**0**	**40**	**60**	**80**	**100**	**120**
Price (Hulled)	76.0	89.6	84.6	110	94.6	104.5
Thoroughbred (Hulled)	62.1	86	97.4	100	95.1	104.6
Dan (Hull-less)	36.6	59.2	59.9	66	64.2	67
Eve (Hull-less)	35.7	54.8	59.9	61	61.2	61.1
AVERAGE	**52.6**	**72.4**	**75.5**	**84.2**	**78.8**	**84.3**

Overall mean = 74.6 Bu/A; LSD (0.05) = 9.3; C.V.= 8.8.
Location: Caldwell County, KY. **Previous crop:** Corn; Conventional tillage
Planting date: 10-26-09; **Harvest Date:** 6-8-10
* 48-lb standard bushel weight for traditional hulled barley; 60-lb standard bushel weight for hulless barley.
No fall N applied; N treatments applied in single spring application on 3-23-10 @ Feekes 5.

Table 14. 2010 Kentucky Wheat Disease Ratings.

VARIETY	Leaf Blotch	Head Scab	Powdery Mildew	Leaf Rust
ARMOR ARX 9304	5.5	3.3	6.3	4.0
ARMOR RENEGADE	2.8	3.5	1.3	2.8
BECK 113	3.5	3.8	3.3	5.0
BECK 122	4.5	5.3	5.0	4.8
BECK 134	3.8	4.5	2.0	4.8
BECK 135	4.8	3.3	3.3	3.3
BECK 87	3.8	5.8	4.3	4.3
Bess	5.3	3.5	4.0	5.8
Clark	4.5	4.8	5.5	5.3
Cumberland	4.5	4.0	4.0	6.3
Delta Grow 1600	5.8	5.3	2.0	4.3
Delta Grow 5000	7.3	6.3	4.3	4.8
Delta Grow 5900	4.0	3.8	1.5	2.8
Delta King 9577	5.8	5.5	4.3	3.8
Dixie 427	5.0	6.0	4.3	3.8
Dixie 454	4.0	3.5	1.8	2.8
Dixie 907	5.3	3.8	5.5	3.0
Dixie 940	4.5	5.3	4.0	4.5
DW Exp 106	2.5	4.0	2.5	5.0
DW Exp 109	3.8	4.0	4.0	5.0
Dyna-Gro 9911	3.0	3.8	4.0	5.0
Dyna-Gro 9922	3.0	4.0	1.5	3.0
Dyna-Gro V9723	4.3	5.3	5.0	5.8
Dyna-Gro 9012	3.5	4.0	4.5	3.3
Dyna-Gro 9042	4.0	3.8	2.3	4.5
EXCEL 170	4.5	3.8	5.3	4.0
EXCEL 209	5.5	4.0	3.5	4.0
EXCEL 234	4.5	2.8	1.5	2.5
EXCEL 242	4.5	3.5	4.5	5.8
EXCEL 341	5.5	3.3	7.3	3.0
EXCEL 442	3.5	3.0	6.0	3.8
Exsegen Anna	2.8	4.5	1.0	4.0
Exsegen Candace	4.5	5.3	3.8	6.0
Exsegen Dinah	4.5	3.3	2.0	2.5
Exsegen Lois	3.3	3.5	4.3	4.5
Exsegen Phebe	3.8	2.8	1.3	4.5
KAS 1200	5.5	3.0	2.8	2.8
KAS 5003	3.8	3.8	1.0	4.0
KAS 5058	4.3	3.5	2.5	2.5
KAS 7700	3.8	4.8	4.3	4.5
Merl	5.3	5.8	1.5	4.0
Milton	4.5	3.3	3.0	4.0
Pembroke	5.3	3.5	2.0	3.8
Pioneer variety 25R32	2.5	2.3	1.8	4.0
Pioneer variety 25R56	3.5	4.0	4.0	3.8
Pioneer variety 25R78	4.5	5.0	3.8	2.0
Pioneer variety 26R15	3.3	3.3	2.3	4.3
Pioneer variety 26R20	3.3	5.3	2.8	3.3
Pioneer variety 26R22	3.8	4.8	4.0	4.0
PROGENY 117	4.8	4.5	4.5	4.3
PROGENY 125	6.0	6.3	5.3	5.5
PROGENY 166	5.5	4.3	6.3	3.8
PROGENY 185	4.8	4.3	3.8	3.8
SC 1298	4.5	5.3	4.8	5.0
SC 1301	6.0	4.8	4.0	4.5
SC 1311	5.0	3.3	1.5	2.5
SC 1321	6.3	3.3	2.0	2.5
SC 1341	4.8	3.0	7.0	4.5
SS 520	4.5	7.3	1.0	4.0
SS 5205	3.8	5.8	1.3	2.0
SS 8302	4.3	3.3	4.3	5.0
SS 8309	3.5	3.5	3.5	3.8
SS 8404	4.3	4.0	3.0	2.5
SS 8641	2.8	6.8	1.5	2.0
SS EXP 8600	2.8	4.0	1.8	3.5
SS EXP 8700	2.8	2.8	1.8	4.0
SS MPV-57	3.0	3.5	3.8	4.0
SYNGENTA SY 9978	5.0	5.3	1.8	3.3
SYNGENTA BRANSON	3.5	5.5	2.0	3.8
SYNGENTA OAKES	3.5	3.8	5.0	3.0
SYNGENTA W1104	3.0	3.3	4.0	4.5
SYNGENTA W1377	3.0	4.3	6.0	4.8
SYNGENTA W1566	4.0	5.3	1.5	5.3
Terral LA821	5.3	5.8	1.5	2.3
Terral TV8558	6.5	5.8	3.8	4.5
Terral TV8589	5.5	4.5	3.0	4.3
Terral TVX8581	5.5	4.0	4.5	4.3
Terral TVX8861	3.5	3.5	1.8	3.3
Truman	4.8	1.5	4.3	5.3
USG 3251	4.0	3.0	2.3	3.3
USG 3350	6.0	4.0	5.5	3.0
USG 3555	4.5	5.0	1.8	3.8
USG 3770	5.3	4.5	4.5	4.5
AVERAGE	**4.4**	**4.2**	**3.4**	**4.0**

Rating scale: 1 = resistant; 9 = susceptible.
Leaf blotch, head scab, and powdery mildew rated at Logan Co., KY; Leaf rust at Lexington, KY; Leaf blotch complex - ~ 60% *Septoria tritici* and 40% *Stagonospora nodorum*.

NOTES

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