

# **Wheat Variety Performance Tests in Tennessee**

**2014**

**Fred L. Allen**, Coordinator, Agronomic Crop Variety Testing & Demonstrations

**Virginia R. Sykes**, Research Associate, Agronomic Crop Variety Testing & Demonstrations

**Robert C. Williams Jr.**, Extension Area Specialist, Grain Crops

**Agronomic Crop Variety Testing and Demonstrations  
Department of Plant Sciences  
University of Tennessee  
Knoxville**

Telephone: (865)974-8821  
FAX: (865)974-1947  
email: allenf@utk.edu

Variety test results are posted on UT's website at:

<http://varietytrials.tennessee.edu>

and

UTCrops.com

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### Dept. of Plant Sciences

**Dennis West**, Professor and Grains Breeder

**David Kincer**, Research Associate

**Ali DeSantis**, Graduate Research Assistant

**Victoria Knapp**, Graduate Research Assistant

### **Research and Education Centers:**

#### East Tennessee AgResearch and Education Center, Knoxville

**Robert Simpson**, Center Director

**BJ DeLozier**, Farm Manager, Plant Sciences Unit

**Derick Hopkins**, Agricultural Service Supervisor

#### Plateau AgResearch & Education Center, Crossville

**Walt Hitch**, Center Director

**Greg Blaylock**, Light Farm Equipment Operator

**Sam Simmons**, Light Farm Equipment Operator

#### Highland Rim AgResearch and Education Center, Springfield

**Barry Sims**, Center Director

**Brad S. Fisher**, Research Associate

#### Middle Tennessee AgResearch and Education Center, Spring Hill

**Kevin Thompson**, Center Director

**Roy Thompson**, Research Associate

#### AgResearch and Education Center at Milan, Milan

**Blake Brown**, Center Director

**Jason Williams**, Research Associate

**James McClure**, Research Associate

**Chris Bridges**, Research Associate

#### West Tennessee AgResearch and Education Center, Jackson

**Robert Hayes**, Center Director

**Randi Dunagan**, Research Associate

#### Agricenter International, Memphis

**Bruce Kirksey**, Director

## **County Standard Wheat Test:**

### Coordinator:

**Robert C. Williams, Jr.**, Extension Area Specialist, Grain Crops

### Carlisle, KY

**Bob Middleton**, Kentucky Full Time Adult Agriculture Teacher  
Lyle Martin Farm

### Dyer County

**Tim Campbell**, Extension Director  
Alan Sims Farm

### Fayette County

**Jeff Via**, Extension Agent  
Ames Plantation

### Franklin/Grundy County

**Ed Burns and Creig Kimbro**, Extension Agents  
Mike Robinson Farm  
David and Myron Denton Farm

### Gibson County

**Philip Shelby**, Extension Director  
Andrew Steele Farm

### Henry County

**Ranson Goodman**, Extension Agent  
Edwin Ables Farm

### Lake County

**Greg Allen**, Extension Director  
Jon Dickey Farm

### Madison County

**Jake Mallard**, Extension Agent  
David Martin Farm

### Moore County

**Larry Moorehead**, Extension Director  
Jerry Ray Farm

### Obion County

**Tim Smith**, Extension Director  
Bill Sellers Farm

### Tipton County

**Becky Muller**, Extension Agent  
Scott Johnson Farm

### Weakley County

**Jeff Lannom**, Extension Director  
Gary Hall Farm

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## **General Information**

**Research and Education Center Tests:** The 2014 variety performance tests were conducted on 90 soft, red winter wheat varieties in each of the physiographic regions of the state. Tests were conducted at the East TN (Knoxville), Plateau (Crossville), Highland Rim (Springfield), Middle TN (Spring Hill), Milan (Milan), and West TN (Jackson) AgResearch and Education Centers and at the Agricenter International Research Center in Memphis.

All varieties were seeded at rates from 28-32 seed per square foot (1.2–1.4 million seed per acre) (Table 1). Plots were seeded with drills using 7–7.5 inch row spacing. The plot size was six, seven, nine or ten rows, 25 to 30 feet in length depending on location equipment. Plots were replicated three times at each location. Seed of all varieties were treated with a fungicide.

**County Standard Tests:** The County Standard Wheat Test was conducted on 20 soft red winter wheat varieties across twelve counties in Kentucky, Middle and West Tennessee (Carlisle, Dyer, Fayette, Franklin/Grundy, Gibson, Henry, Lake, Madison, Moore, Obion, Tipton, and Weakley). Each variety was evaluated in a large strip-plot at each location, thus each county test was considered as one replication of the test in calculating the overall average yield and in conducting the statistical analysis to determine significant differences. At each location, plots were planted, sprayed, fertilized, and harvested with the equipment used by the cooperating producer in their farming operation. The width and length of strip-plots were different in each county; however, within a location in a county, the strips were trimmed on the ends so that the lengths were the same for each variety, or if the lengths were different then the harvested length was measured for each variety and appropriate harvested area adjustments were made to determine the yield per acre.

**Wheat Silage Tests:** In order to evaluate the 2014 wheat varieties for silage yield, a duplicate test with a different randomization was planted at the Middle Tennessee AgResearch and Education Center. These data will be presented in the UT Extension Silage Tests publication (SP 618) later this year.

**Growing Season:** Late row crop harvest due to frequent rain and early freezes in the fall delayed winter wheat planting in many areas. Cool temperatures and adequate moisture were observed throughout the early growing season. Spring conditions included above average temperatures and below average moisture. According to the Tennessee Agricultural Statistics Service (TASS), the crop rated mostly good (57%) to excellent (22%) condition in June. Estimated State yield average is 70 bu/a in 2014, a 1 bu/a decrease compared to 2013 yields. Tennessee producers planted approximately 560,000 acres of wheat in the fall of 2013. Approximately 480,000 acres are estimated to be harvested for grain. According to TASS, the total wheat production in Tennessee for 2014 is 35 million bushels, a decrease of nine percent from 2013 production.

**Sencor Injury:** The herbicide ‘Sencor’ (ai: Metribuzin) was applied at the Knoxville location on December 5, 2013 at a rate of 5 oz/ac to control grass weeds. Application was made during the recommended growth stage of wheat, but on the early side. The application resulted in damage to some varieties. Sencor injury ratings were taken on January 20, 2014 using a 1-9 scale, with 1 indicating no damage and 9 indicating complete death. By March, stands of some varieties were somewhat reduced; however by harvest time in June, most varieties had

recovered from damage. Yields and injury ratings for the Knoxville location appear in Table 4.

### **Interpretation of Data**

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, **LSD** values stand for **Least Significant Difference**. 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 5% level of probability of significance. For example, given that the LSD for a test is 8.0 bu/a and the mean yield of Variety A was 50 bu/a and the mean yield of Variety B was 55 bu/a, then the two varieties are not statistically different in yield because the difference of 5 bu/a is less than the minimum of 8 bu/a required for them to be significant. Similarly, if the average yield of Variety C was 63 bu/a then it is significantly higher yielding than both Variety B ( $63 - 55 = 8$  bu/a = LSD of 8) and Variety A ( $63 - 50 = 13$  bu/a > LSD of 8).

The **coefficient of variation (C.V.)** values are shown at the bottom of each table. This value is a measure of the error variability found within each experiment. It is the percentage that the square root of error mean square is of the overall test mean yield at that location. For example, a C.V. of 10% indicates that the size of the error variation is about 10% of the size of the test mean. Similarly, a C.V. of 30% indicates that the size of the error variation is nearly one-third as large as the test mean. A goal in conducting each yield test is to keep the C.V. as low as possible, preferably below 20%.

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## Wheat

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### **Results Summary**

**Yield and Agronomic Traits:** During 2014, 90 wheat varieties were evaluated in six agresearch and education center (REC) tests, and 20 varieties were evaluated in 12 county standard tests (CST). All 20 varieties in the CST were also present in the REC tests (Table 6). Sixteen companies and four universities entered varieties into the tests this year. The average yield of the 90 varieties in the 2014 REC tests was 68 bu/a (range from 54 to 78 bu/a, Table 2). The varieties ranged in maturity from 215 to 219 days after planting (DAP) with most of the varieties clustering around 217 DAP (Table 3). The average yield of the 20 varieties in the county tests was 76 bu/a, with individual varieties ranging from 70.4 to 79.7 bu/a (Table 5). The test weight values ranged from 45.3 to 52.2 lbs/bu in the REC tests (Table 3) and 52.4 to 55.8 lbs/bu in the CST (Table 5).

**Table 1. Location information from research and education centers where the wheat variety tests were conducted in 2014.**

Research and Education Center	Location	Planting Date	Harvest Date	Seeding Rate	Soil Type
Knoxville	Knoxville	10/21/2013	6/24/2014	28/ft <sup>2</sup>	1.2 mill./ac
Highland Rim	Springfield	10/30/2013	6/17/2014	28/ft <sup>2</sup>	1.2 mill./ac
Middle Tennessee	Spring Hill	11/20/2013	7/2/2014	28/ft <sup>2</sup>	1.2 mill./ac
West Tennessee	Jackson	11/20/2013	6/19/2014	28/ft <sup>2</sup>	1.2 mill./ac
Milan	Milan	11/14/2013	6/19/2014	32/ft <sup>2</sup>	1.4 mill./ac
Agricenter International	Memphis	10/24/2013	7/3/2014	28/ft <sup>2</sup>	1.2 mill./ac

**Table 2.** Mean yield<sup>st</sup> of 90 soft red winter wheat varieties evaluated at six locations in Tennessee during 2014.

Brand	Variety	Avg. Yield	Knoxville 10/21/13	Springfield 10/30/13	Spring			
		± Std Err. (n=6)‡			Hill 10/30/13	Jackson 11/20/13	Milan 11/14/13	Memphis 10/24/13
-----bu/a-----								
USG	3404	78 ± 2	92	81	47	82	80	86
Tennessee Farmers Co-Op	FFR 2407	78 ± 2	85	87	47	83	78	87
Armor	ARX1327	78 ± 2	86	82	53	86	72	86
Delta Grow	9700	75 ± 2	97	71	50	77	72	83
Steyer	Hunker	75 ± 2	91	81	35	81	80	82
Dyna-Gro	WX13622	75 ± 2	86	74	43	87	79	80
Cache River Valley Seed	DXEX 13-3	75 ± 2	86	77	56	80	71	78
Armor	ARX1325	74 ± 2	87	80	54	72	74	78
Beck's Hybrids	129	74 ± 2	88	74	50	77	79	75
Pioneer	26R41	74 ± 2	83	73	46	87	73	82
Croplan by Winfield	EXP 13-15	74 ± 2	89	84	48	75	72	73
Armor	Rampage	74 ± 2	90	71	41	77	82	81
Steyer	Dowell	74 ± 2	91	78	43	75	83	71
Warren Seed	McKenna 315	74 ± 2	81	78	48	83	70	81
USG	3013	73 ± 2	93	78	48	64	84	71
Warren Seed	McKay 110	73 ± 2	78	77	48	73	78	82
Terral	TV8848	72 ± 2	83	72	50	75	74	80
Steyer	Kidwell	72 ± 2	86	62	44	76	79	87
Warren Seed	McKenna 325	72 ± 2	79	77	57	70	74	76
Progeny	357	72 ± 2	84	74	49	68	70	87
Armor	Havoc	72 ± 2	76	64	46	77	77	90
Syngenta	SY Harrison	71 ± 2	78	78	47	73	79	74
Beck's Hybrids	125	71 ± 2	85	58	44	72	76	93
Delta Grow	7200	71 ± 2	77	66	53	69	74	84
Beck's Hybrids	120	71 ± 2	85	76	40	69	76	77
Dyna-Gro	9171	71 ± 2	78	72	47	83	71	73
Terral	TV8861	71 ± 2	87	75	40	78	69	74
USG	3251	71 ± 2	85	65	49	73	74	78
USG	3438	71 ± 2	81	71	39	72	78	82
Syngenta	SY 9978	71 ± 2	74	69	46	74	79	82
Delta Grow	7500	70 ± 2	84	72	45	71	68	83
Dyna-Gro	WX13631	70 ± 2	72	66	48	73	79	85
Cache River Valley Seed	Dixie Xtreme	70 ± 2	88	72	44	73	69	76

(continued)

Table 2. Mean yields† of 90 soft red winter wheat varieties evaluated at six locations in Tennessee during 2014

Brand	Variety	Avg. Yield	Spring					Milan 11/14/13	Memphis 10/24/13
		± Std Err. (n=6)‡	Knoxville 10/21/13	Springfield 10/30/13	Hill 10/30/13	Jackson 11/20/13			
Terral	TV8535	70 ± 2	79	64	47	74	76	81	
USG	3201	70 ± 2	72	71	39	77	74	85	
Armor	ARX1332	69 ± 2	83	66	50	69	71	78	
Pioneer	26R10	69 ± 2	80	68	48	72	75	72	
Pioneer	26R20	69 ± 2	83	56	50	68	76	81	
Pioneer	26R53	69 ± 2	73	79	41	73	69	80	
Armor	Vandal	69 ± 2	76	74	48	67	69	79	
Croplan by Winfield	9101	69 ± 2	87	70	42	75	70	69	
Armor	ARX1313	69 ± 2	82	74	53	67	71	64	
Dyna-Gro	9012	69 ± 2	77	65	38	80	73	80	
USG	3120	69 ± 2	80	75	42	72	73	71	
Cache River Valley Seed	Dixie McAlister	68 ± 2	88	72	44	71	65	70	
Armor	ARX1329	68 ± 2	77	72	40	71	79	73	
TN Exp.	TN 1201	68 ± 2	72	70	35	72	71	91	
Progeny	117	68 ± 2	79	74	38	77	72	70	
Pioneer	25R40	68 ± 2	78	68	43	71	69	78	
Terral	TV8525	68 ± 2	74	67	40	74	80	73	
Beck's Hybrids	113	68 ± 2	79	71	44	70	74	68	
Croplan by Winfield	9203	68 ± 2	81	81	47	71	70	57	
Progeny	870	68 ± 2	79	76	41	77	65	67	
VA Exp.	VA10W-119	67 ± 2	73	67	48	69	65	81	
Pioneer	25R32	67 ± 2	76	63	39	84	68	73	
VA EXP.	VA10W-21	67 ± 2	77	69	46	73	71	66	
Dyna-Gro	9223	67 ± 2	80	76	39	70	69	67	
USG	3024	67 ± 2	81	62	47	66	68	77	
Pioneer	25R78	66 ± 2	75	68	42	70	69	73	
USG	3993	66 ± 2	73	74	40	73	64	73	
Tennessee Farmers Co-Op	FFR 2366	66 ± 2	75	60	40	66	67	88	
Croplan by Winfield	EXP 13-34	66 ± 2	88	54	51	48	69	84	
Progeny	185	66 ± 2	80	66	41	59	68	79	
Kentucky Small Grain Growers Assoc.	Pembroke 2008	66 ± 2	75	63	46	64	63	82	
Limagrain Cereal Seeds	L-343	65 ± 2	76	66	49	58	68	75	
Limagrain Cereal Seeds	L-448	65 ± 2	90	67	32	67	69	65	

(continued)

Table 2. Mean yields† of 90 soft red winter wheat varieties evaluated at six locations in Tennessee during 2014

Brand	Variety	Avg. Yield	Spring					
		± Std Err. (n=6)‡	Knoxville 10/21/13	Springfield 10/30/13	Hill 10/30/13	Jackson 11/20/13	Milan 11/14/13	
bu/a								
Kentucky Small Grain Growers Assoc.	KY03C-1002-02	65 ± 2	69	57	43	73	67	81
Progeny	PGX 13-2	65 ± 2	74	56	44	74	71	68
MO	Bess	65 ± 2	79	74	37	76	71	52
TN Exp.	TN 1401	64 ± 2	70	70	47	67	71	61
Dyna-Gro	9373	64 ± 2	77	59	47	57	60	84
GA Exp.	GA-041052-11E51	64 ± 2	69	67	41	74	66	68
MO	Milton	64 ± 2	75	62	37	66	59	83
Armor	Octane	64 ± 2	88	60	44	49	70	71
USG	3833	63 ± 2	84	53	40	61	73	69
VA	Jamestown	63 ± 2	72	68	27	68	70	75
TN Exp.	TN 1303	63 ± 2	71	67	32	69	59	82
MO	Truman	63 ± 2	77	70	34	63	65	71
Kentucky Small Grain Growers Assoc.	KY03C-1237-32	63 ± 2	64	53	43	67	71	79
VA EXP.	VA08MAS-369	62 ± 2	76	68	35	60	57	79
TN Exp.	TN 1402	62 ± 2	67	64	41	67	68	62
Dyna-Gro	Yorktown	61 ± 2	71	65	41	68	67	56
Tennessee Farmers Co-Op	FFR 2239	61 ± 2	74	61	36	63	60	74
Progeny	PGX 13-1	61 ± 2	81	50	39	51	66	78
Cache River Valley Seed	DXEX 14-1	60 ± 2	86	56	41	49	60	66
TN Exp.	TN 1102	59 ± 2	72	56	30	60	61	76
GA Exp.	GA-04434-11E44	59 ± 2	66	58	39	54	53	84
GA Exp.	GA-041293-11LE37	59 ± 2	61	48	48	55	51	88
TN Exp.	TN 1202	58 ± 2	78	66	42	45	56	64
GA Exp.	GA-041293-11E54	54 ± 2	64	46	41	51	55	68
<b>Average (bu/a)</b>		<b>68</b>	<b>79</b>	<b>68</b>	<b>44</b>	<b>70</b>	<b>70</b>	<b>76</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>5</b>	<b>7</b>	<b>12</b>	<b>12</b>	<b>13</b>	<b>11</b>	<b>17</b>
<b>C.V. (%)</b>		<b>11.1</b>	<b>5.7</b>	<b>11.2</b>	<b>16.5</b>	<b>11.1</b>	<b>9.2</b>	<b>13.8</b>

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

§ Planting date

**Table 3. Mean yields† and agronomic characteristics of 90 soft red winter wheat varieties evaluated at six locations in Tennessee during 2014.**

Brand	Variety	Avg. Yield ± Std Err. (n=6)‡	Test					Sencor Injury Rating§	
		bu/a	Moisture (n=7)	Weight# (n=1)	Maturity (n=4)	Height (n=5)	Lodging (n=2)	Protein* (n=1)	Score (n=1)
USG	3404	78 ± 2	14.6	55	218	32	1.2	9.1	3
Tennessee Farmers Co-Op	FFR 2407	78 ± 2	14.8	54	218	32	1	8.7	3
Armor	ARX1327	78 ± 2	15.2	54	218	32	1	8.4	3
Delta Grow	9700	75 ± 2	15.7	54	218	33	1.2	8.7	3
Steyer	Hunker	75 ± 2	14.5	54	218	35	1.2	8.5	3
Dyna-Gro	WX13622	75 ± 2	14.8	54	218	32	1	8.9	3
Cache River Valley Seed	DXEX 13-3	75 ± 2	15.6	53	218	33	1.3	9.1	4
Armor	ARX1325	74 ± 2	14.7	54	217	31	1.2	8.8	3
Beck's Hybrids	129	74 ± 2	14.6	54	218	34	1.2	8.6	4
Pioneer	26R41	74 ± 2	14.8	55	215	30	1.2	9	4
Croplan by Winfield	EXP 13-15	74 ± 2	14.4	55	217	31	1.3	8.7	3
Armor	Rampage	74 ± 2	14.5	53	217	33	1.7	8.5	3
Steyer	Dowell	74 ± 2	14.9	54	217	33	1.8	8.7	3
Warren Seed	McKenna 315	74 ± 2	14.5	53	217	31	1	8.7	3
USG	3013	73 ± 2	14.9	54	218	34	1.2	8.7	3
Warren Seed	McKay 110	73 ± 2	15.3	53	218	33	1.3	8.9	3
Terral	TV8848	72 ± 2	15.7	54	218	32	1	8.8	3
Steyer	Kidwell	72 ± 2	14.1	52	216	31	1.2	8.8	3
Warren Seed	McKenna 325	72 ± 2	14.6	53	216	31	1.2	9.1	3
Progeny	357	72 ± 2	14.1	52	216	32	1.3	9	4
Armor	Havoc	72 ± 2	14.7	53	216	32	1.3	9.1	4
Syngenta	SY Harrison	71 ± 2	14.5	54	218	32	1.5	8.7	4
Beck's Hybrids	125	71 ± 2	14.8	54	216	32	1	8.8	3
Delta Grow	7200	71 ± 2	14.9	54	216	31	1.3	8.8	3
Beck's Hybrids	120	71 ± 2	13.9	53	216	30	1	8.8	4
Dyna-Gro	9171	71 ± 2	14.2	52	217	30	1	8.8	4
Terral	TV8861	71 ± 2	15.4	54	218	32	1.3	8.8	4
USG	3251	71 ± 2	15.0	54	218	34	1.2	8.9	3
USG	3438	71 ± 2	14.1	53	215	30	1	8.7	4
Syngenta	SY 9978	71 ± 2	14.1	54	217	35	1.6	8.8	6
Delta Grow	7500	70 ± 2	14.8	53	218	31	1.2	8.7	3
Dyna-Gro	WX13631	70 ± 2	15.0	55	218	32	1	9.1	3
Cache River Valley Seed	Dixie Xtreme	70 ± 2	14.7	53	218	34	1.2	8.6	3

(continued)

**Table 3. Mean yields† and agronomic characteristics of 90 soft red winter wheat varieties evaluated at six locations in Tennessee during 2014.**

Brand	Variety	Avg. Yield ± Std Err. (n=6)‡	Test					Sencor
		bu/a	% (n=7)	lbs/bu	DAP	in.	Score (n=1)	Injury Rating§ (n=1)
Terral	TV8535	70 ± 2	14.0	52	216	30	1	8.8
USG	3201	70 ± 2	14.7	56	215	32	1	9.2
Armor	ARX1332	69 ± 2	14.5	54	216	30	1.2	9.1
Pioneer	26R10	69 ± 2	15.2	53	216	31	1.2	9
Pioneer	26R20	69 ± 2	15.1	55	216	33	1.2	8.7
Pioneer	26R53	69 ± 2	15.4	55	217	30	1.3	9.3
Armor	Vandal	69 ± 2	14.4	54	218	32	1	9.1
Croplan by Winfield	9101	69 ± 2	14.6	54	216	32	1	8.7
Armor	ARX1313	69 ± 2	14.5	52	215	31	1.2	9.9
Dyna-Gro	9012	69 ± 2	14.6	56	216	31	1.3	9.4
USG	3120	69 ± 2	15.0	56	216	34	1	8.9
Cache River Valley Seed	Dixie McAlister	68 ± 2	13.6	52	217	30	1	8.8
Armor	ARX1329	68 ± 2	14.7	55	217	31	1.1	9
TN Exp.	TN 1201	68 ± 2	14.3	54	217	32	1.8	9.1
Progeny	117	68 ± 2	14.8	55	215	35	1.7	8.6
Pioneer	25R40	68 ± 2	14.8	55	218	30	1.2	8.9
Terral	TV8525	68 ± 2	14.9	56	217	31	1.5	8.9
Beck's Hybrids	113	68 ± 2	14.6	55	216	32	1	9.1
Croplan by Winfield	9203	68 ± 2	15.3	55	218	33	1	8.5
Progeny	870	68 ± 2	14.1	52	216	31	1	8.6
VA Exp.	VA10W-119	67 ± 2	14.5	56	217	33	1.7	10
Pioneer	25R32	67 ± 2	15.2	54	217	33	1.3	9.1
VA EXP.	VA10W-21	67 ± 2	15.3	56	217	32	1	9.3
Dyna-Gro	9223	67 ± 2	14.8	54	218	33	1.3	8.5
USG	3024	67 ± 2	14.5	57	216	31	1	8.8
Pioneer	25R78	66 ± 2	15.1	54	216	31	1.2	9.3
USG	3993	66 ± 2	15.6	54	219	33	1	9
Tennessee Farmers Co-Op	FFR 2366	66 ± 2	14.4	53	218	32	1.2	9.2
Croplan by Winfield	EXP 13-34	66 ± 2	15.1	54	219	31	1	8.9
Progeny	185	66 ± 2	14.9	55	216	35	1.7	8.9
Kentucky Small Grain Growers Assoc.	Pembroke 2008	66 ± 2	14.6	55	217	32	1	9.2
Limagrain Cereal Seeds	L-343	65 ± 2	14.4	57	217	30	1.2	8.9
Limagrain Cereal Seeds	L-448	65 ± 2	15.0	54	218	33	1.8	8.1

(continued)

**Table 3. Mean yields† and agronomic characteristics of 90 soft red winter wheat varieties evaluated at six locations in Tennessee during 2014.**

Brand	Variety	Avg. Yield ± Std Err. (n=6)‡	Test					Sencor	
		bu/a	% (n=7)	Moisture (n=1)	Weight# (n=1)	Maturity (n=4)	Height (n=5)	Lodging (n=2)	Protein* (n=1)
Kentucky Small Grain Growers Assoc.	KY03C-1002-02	65 ± 2	14.9	54	216	31	1	9.7	4
Progeny	PGX 13-2	65 ± 2	14.8	54	216	29	1	9.2	3
MO	Bess	65 ± 2	15.1	56	217	34	1.5	8.7	4
TN Exp.	TN 1401	64 ± 2	15.3	55	217	31	1.3	9.1	5
Dyna-Gro	9373	64 ± 2	15.6	54	219	32	1	9.2	3
GA Exp.	GA-041052-11E51	64 ± 2	15.0	57	218	31	1.2	9.1	6
MO	Milton	64 ± 2	14.4	55	217	33	1	9.6	3
Armor	Octane	64 ± 2	15.1	54	218	33	1	8.8	3
USG	3833	63 ± 2	15.3	54	218	33	1.2	8.9	4
VA	Jamestown	63 ± 2	14.1	56	216	30	1.1	9.3	7
TN Exp.	TN 1303	63 ± 2	14.2	53	217	34	1.3	9	5
MO	Truman	63 ± 2	15.2	55	219	35	1	8.3	3
Kentucky Small Grain Growers Assoc.	KY03C-1237-32	63 ± 2	14.6	54	216	30	1.2	9.8	4
VA EXP.	VA08MAS-369	62 ± 2	15.3	57	219	32	1.5	9	5
TN Exp.	TN 1402	62 ± 2	13.9	53	216	31	1.7	9.7	5
Dyna-Gro	Yorktown	61 ± 2	14.8	55	218	31	1	9.5	4
Tennessee Farmers Co-Op	FFR 2239	61 ± 2	14.5	54	218	32	1.2	9.3	7
Progeny	PGX 13-1	61 ± 2	14.8	54	218	33	1.3	8.9	3
Cache River Valley Seed	DXEX 14-1	60 ± 2	15.2	54	219	32	1.2	8.9	3
TN Exp.	TN 1102	59 ± 2	14.2	53	217	32	1.3	8.8	5
GA Exp.	GA-04434-11E44	59 ± 2	14.4	55	218	31	1	8.9	7
GA Exp.	GA-041293-11LE37	59 ± 2	13.8	55	218	33	1	9.7	6
TN Exp.	TN 1202	58 ± 2	14.3	52	217	33	1.5	8.7	5
GA Exp.	GA-041293-11E54	54 ± 2	14.2	55	218	32	1	9.7	7
<b>Average</b>		<b>68</b>	<b>14.7</b>	<b>54</b>	<b>217</b>	<b>32</b>	<b>1.2</b>	<b>9.0</b>	<b>4</b>

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

# Official test weight of No. 2 wheat = 58 lbs/bu.

Maturity (DAP) = Days after planting

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle  $\geq 45^\circ$ ; 5 = 95+% of plants leaning at an angle  $\geq 45^\circ$ .

\* Protein on dry weight basis.

§ Sencor Injury rating = 1 to 9 scale; where 1 = no injury and 9 = complete death, taken at the East TN REC (Knoxville) where Sencor was applied on 12/5/13 at 5 oz/ac

**Table 4. Mean yields and Sencor injury rating of 90 soft red winter wheat varieties evaluated at the Knoxville location during 2014.**

Brand	Variety	Knoxville	Sencor
		10/21/13	Injury Rating§
		Score 1-9	
Armor	Rampage	90	3
Armor	Octane	88	3
Armor	ARX1325	87	3
Armor	ARX1327	86	3
Armor	ARX1332	83	4
Armor	ARX1313	82	3
Armor	ARX1329	77	3
Armor	Vandal	76	4
Armor	Havoc	76	4
Beck's Hybrids	129	88	4
Beck's Hybrids	120	85	4
Beck's Hybrids	125	85	3
Beck's Hybrids	113	79	3
Cache River Valley Seed	Dixie McAlister	88	3
Cache River Valley Seed	Dixie Xtreme	88	3
Cache River Valley Seed	DXEX 14-1	86	3
Cache River Valley Seed	DXEX 13-3	86	4
Croplan by Winfield	EXP 13-15	89	3
Croplan by Winfield	EXP 13-34	88	4
Croplan by Winfield	9101	87	3
Croplan by Winfield	9203	81	4
Delta Grow	9700	97	3
Delta Grow	7500	84	3
Delta Grow	7200	77	3
Dyna-Gro	WX13622	86	3
Dyna-Gro	9223	80	3
Dyna-Gro	9171	78	4
Dyna-Gro	9373	77	3
Dyna-Gro	9012	77	3
Dyna-Gro	WX13631	72	3
Dyna-Gro	Yorktown	71	4

(continued)

**Table 4. Mean yields and Sencor injury rating of 90 soft red winter wheat varieties evaluated at the Knoxville location during 2014.**

Brand	Variety	Knoxville	Sencor
		10/21/13	Injury Rating§
		Score 1-9	
GA Exp.	GA-041052-11E51	69	6
GA Exp.	GA-04434-11E44	66	7
GA Exp.	GA-041293-11E54	64	7
GA Exp.	GA-041293-11LE37	61	6
Kentucky Small Grain Growers Assoc.	Pembroke 2008	75	4
Kentucky Small Grain Growers Assoc.	KY03C-1002-02	69	4
Kentucky Small Grain Growers Assoc.	KY03C-1237-32	64	4
Limagrain Cereal Seeds	L-448	90	3
Limagrain Cereal Seeds	L-343	76	5
MO	Bess	79	4
MO	Truman	77	3
MO	Milton	75	3
Pioneer	26R41	83	4
Pioneer	26R20	83	4
Pioneer	26R10	80	4
Pioneer	25R40	78	3
Pioneer	25R32	76	3
Pioneer	25R78	75	3
Pioneer	26R53	73	3
Progeny	357	84	4
Progeny	PGX 13-1	81	3
Progeny	185	80	3
Progeny	870	79	4
Progeny	117	79	4
Progeny	PGX 13-2	74	3
Steyer	Dowell	91	3
Steyer	Hunker	91	3
Steyer	Kidwell	86	3
Syngenta	SY Harrison	78	4
Syngenta	SY 9978	74	6

(continued)

**Table 4. Mean yields and Sencor injury rating of 90 soft red winter wheat varieties evaluated at the Knoxville location during 2014.**

Brand	Variety	Knoxville	Sencor
		10/21/13	Injury Rating§
		Score 1-9	
Tennessee Farmers Co-Op	FFR 2407	85	3
Tennessee Farmers Co-Op	FFR 2366	75	5
Tennessee Farmers Co-Op	FFR 2239	74	7
Terral	TV8861	87	4
Terral	TV8848	83	3
Terral	TV8535	79	3
Terral	TV8525	74	3
TN Exp.	TN 1202	78	5
TN Exp.	TN 1201	72	5
TN Exp.	TN 1102	72	5
TN Exp.	TN 1303	71	5
TN Exp.	TN 1401	70	5
TN Exp.	TN 1402	67	5
USG	3013	93	3
USG	3404	92	3
USG	3251	85	3
USG	3833	84	4
USG	3438	81	4
USG	3024	81	5
USG	3120	80	5
USG	3993	73	6
USG	3201	72	3
VA EXP.	VA10W-21	77	4
VA EXP.	VA08MAS-369	76	5
VA Exp.	VA10W-119	73	5
VA	Jamestown	72	7
Warren Seed	McKenna 315	81	3
Warren Seed	McKenna 325	79	3
Warren Seed	McKay 110	78	3
<b>Average (bu/a)</b>		<b>79</b>	<b>4</b>

§ Sencor Injury rating = 1 to 9 scale; where 1 = no injury and 9 = complete death, taken at the East TN REC (Knoxville) where Sencor was applied on 12/5/13 at 5 oz/ac

**Table 5. Yield† of 20 soft red winter wheat varieties evaluated in 12 County Standard Test in Tennessee/Kentucky during 2014.**

MS	Brand/Variety			Test												Avg. Yield	Moisture	Weight‡	Carlisle	Dyer	Fayette	Frank1	Frank2	Henry	Lake	Madison	Moore	Obion	Tipton	Weakley
		bu/a	%	lbs/bu	11/5/13§	11/5/13	11/14/13	11/6/13	11/4/13	10/28/13	10/28/13	10/30/13	11/5/13	10/29/13	11/6/13	10/25/13														
A	Croplan 9203	79.7	14.0	55.5	82	72	88	105	100	62	76	55	82	99	61	75														
A	Terral TV8848	79.7	13.1	54.8	67	72	95	101	104	63	73	58	95	101	65	63														
A	*Dyna-Gro 9223	79.2	13.8	53.2	90	77	70	104	107	61	69	57	88	98	63	69														
A	Progeny P870	78.7	12.6	54.4	77	75	86	103	101	57	65	48	110	102	62	59														
A	Beck's 129	78.2	13.6	53.8	70	70	81	103	102	64	77	60	95	94	62	61														
AB	Armor Havoc	78.2	13.0	55.4	88	59	92	108	89	58	68	53	95	96	72	58														
AB	USG 3013	78.0	13.5	52.9	72	72	87	109	95	65	71	58	81	102	59	66														
AB	Warren Seed McKenna 315	77.8	12.8	53.9	75	76	88	99	101	59	65	56	104	101	55	57														
ABC	Warren Seed McKenna 325	77.3	12.8	52.9	64	72	86	105	111	56	72	57	111	89	60	45														
ABC	*AgriPro/Coker SY Harrison	77.2	13.1	53.6	80	61	95	104	96	61	73	48	89	100	63	58														
ABCD	*Armor Rampage	75.1	13.5	53.4	64	68	76	100	102	57	70	55	88	95	56	69														
ABCD	Beck's 120	74.9	12.6	54.4	83	62	84	98	97	60	70	61	79	91	60	55														
ABCD	Warren Seed McKay 110	74.8	13.2	55.8	64	72	89	105	93	56	67	60	102	84	62	46														
ABCD	Progeny P357	74.8	12.7	52.4	76	60	78	101	93	55	70	58	95	97	68	48														
ABCD	**Dyna-Gro 9171	74.8	12.7	54.4	73	62	75	107	88	59	66	61	90	89	70	58														
BCD	Dyna-Gro 9373	73.3	13.3	53.2	58	69	81	101	95	56	66	51	96	90	59	57														
CD	Croplan 9101	72.5	12.5	53.0	70	57	86	105	98	50	61	58	83	90	59	52														
CD	Terral TV8861	72.5	13.2	53.6	67	61	89	98	97	48	62	51	102	86	66	44														
D	USG 3833	72.0	13.4	53.7	61	70	79	98	102	54	71	51	78	91	50	61														
D	Pembroke 2008	70.4	13.1	55.6	76	55	73	100	90	55	64	50	87	90	55	50														
	<b>Average</b>	<b>76.0</b>	<b>13.1</b>	<b>54.0</b>	<b>73</b>	<b>67</b>	<b>84</b>	<b>103</b>	<b>98</b>	<b>58</b>	<b>69</b>	<b>55</b>	<b>93</b>	<b>94</b>	<b>61</b>	<b>57</b>														

† Yields have been adjusted to 13.5% moisture. Each variety was evaluated in a large strip-plot at each location,

thus each county test was considered as one replication of the test in calculating the average yield and in

conducting the statistical analysis to determine significant differences (MS).

Official test weight of No. 2 wheat=58 lbs/bu. TWT. = Avg. Test Wt. lbs./bu. @ 9 locations.

MS = Varieties that have any MS letter in common are not statistically different in yield at the 5% level of probability.

Varieties denoted with an asterisk (\*) or (\*\*) were in the top performing group in 2013 and 2012, or 2013, 2012 and 2011, respectively.

Data provided by Robert C. Williams, Ext. Area Specialist, Grain Crops, and extension agents in counties shown above.

§ Planting date

**Table 6. Average yields†, moistures, and test weights of 20 soft red winter wheat varieties that were in common to both the County Standard (CST) Tests (n=12) and the Research and Education Center (REC) Tests (n=6) in Tennessee during 2014.**

Brand	Variety	Averages of CST & REC Tests			County Standard Tests			R E C Tests		
		Avg. Yield	Moisture	Test Weight‡	Avg. Yield	Moisture	Test Weight	Avg. Yield	Moisture	Test Weight
Beck's Hybrids	129	76	14	54.0	78	13.6	53.8	74	14.6	54.2
Terral	TV8848	76	14	54.3	80	13.1	54.8	72	15.7	53.9
Warren Seed	McKenna 315	76	14	53.5	78	12.8	53.9	74	14.5	53.1
USG	3013	75	14	53.5	78	13.5	52.9	73	14.9	54.2
Armor	Havoc	75	14	54.3	78	13.0	55.4	72	14.7	53.2
Warren Seed	McKenna 325	75	14	52.9	77	12.8	52.9	72	14.6	53.0
Armor	Rampage	74	14	53.4	75	13.5	53.4	74	14.5	53.4
Syngenta	SY Harrison	74	14	53.6	77	13.1	53.6	71	14.5	53.6
Croplan by Winfield	9203	74	15	55.4	80	14.0	55.5	68	15.3	55.2
Warren Seed	McKay 110	74	14	54.4	75	13.2	55.8	73	15.3	53.1
Progeny	357	73	13	52.3	75	12.7	52.4	72	14.1	52.2
Progeny	870	73	13	53.4	79	12.6	54.4	68	14.1	52.4
Dyna-Gro	9223	73	14	53.5	79	13.8	53.2	67	14.8	53.7
Beck's Hybrids	120	73	13	53.5	75	12.6	54.4	71	13.9	52.7
Dyna-Gro	9171	73	13	53.4	75	12.7	54.4	71	14.2	52.3
Terral	TV8861	72	14	53.7	72	13.2	53.6	71	15.4	53.8
Croplan by Winfield	9101	71	14	53.5	73	12.5	53.0	69	14.6	53.9
Dyna-Gro	9373	69	14	53.6	73	13.3	53.2	64	15.6	54.0
Kentucky Small Grain Growers Assoc.	Pembroke 2008	68	14	55.2	70	13.1	55.6	66	14.6	54.9
USG	3833	68	14	53.6	72	13.4	53.7	63	15.3	53.6
<b>Average</b>		<b>73</b>	<b>13.9</b>	<b>53.8</b>	<b>76</b>	<b>13.1</b>	<b>54.0</b>	<b>70</b>	<b>14.8</b>	<b>53.5</b>

† All yields are adjusted to 13.5% moisture.

‡ Official test weight of No. 2 wheat = 58 lbs/bu.

**Table 7. Mean yields† of 47 soft red winter wheat varieties evaluated at five locations (n=10) in Tennessee for two years, 2013 and 2014.**

Brand	Variety	Avg. Yield ± Std Err. (n=10)‡	Spring				bu/a
			Springfield	Hill	Jackson	Milan	
USG	3404	79 ± 1	74	76	81	86	78
Steyer	Hunker	77 ± 1	77	68	81	81	81
Warren Seed	McKay 110	77 ± 1	76	71	78	81	78
Armor	Havoc	76 ± 1	68	76	75	82	79
Terral	TV8848	75 ± 1	72	71	77	81	76
Progeny	357	75 ± 1	69	68	80	75	79
Syngenta	SY Harrison	74 ± 1	73	67	76	82	74
Steyer	Dowell	74 ± 1	78	61	78	85	71
Cache River Valley Seed	Dixie Xtreme	74 ± 1	70	76	79	75	71
Armor	Rampage	74 ± 1	70	60	82	78	80
USG	3438	74 ± 1	74	65	76	77	80
USG	3013	74 ± 1	75	72	70	83	71
Pioneer	26R10	74 ± 1	68	72	77	79	73
Pioneer	26R53	73 ± 1	76	61	76	75	79
Pioneer	26R41	73 ± 1	70	62	80	77	77
Armor	Vandal	73 ± 1	72	71	75	75	75
Delta Grow	7200	73 ± 1	68	68	73	77	77
USG	3201	72 ± 1	70	59	78	75	79
Terral	TV8861	72 ± 1	78	55	77	76	76
USG	3251	72 ± 1	64	68	74	78	77
Dyna-Gro	9171	72 ± 1	70	63	81	76	71
Delta Grow	7500	72 ± 1	68	64	75	75	78
VA Exp.	VA10W-119	72 ± 1	71	63	75	72	76
Pioneer	26R20	72 ± 1	64	67	74	79	74
Dyna-Gro	9012	71 ± 1	64	59	80	77	78
Terral	TV8535	71 ± 1	64	60	75	77	79
Terral	TV8525	71 ± 1	67	61	76	78	73
Dyna-Gro	9223	71 ± 1	78	61	74	74	67
TN Exp.	TN 1201	71 ± 1	70	55	74	73	82
Pioneer	25R32	71 ± 1	65	64	80	72	72
Pioneer	25R78	71 ± 1	68	65	74	73	73
USG	3993	70 ± 1	73	56	75	72	76
MO	Milton	70 ± 1	68	63	74	69	79

(continued)

**Table 7. Mean yield<sup>†</sup> of 47 soft red winter wheat varieties evaluated at five locations (n=10) in Tennessee for two years, 2013 and 2014.**

Brand	Variety	Avg. Yield	Spring				bu/a
		± Std Err. (n=10) <sup>‡</sup>	Springfield	Hill	Jackson	Milan	
Progeny	870	70 ± 1	71	63	77	72	67
USG	3833	69 ± 1	62	65	71	77	71
USG	3120	69 ± 1	68	57	72	76	72
Cache River Valley Seed	Dixie McAlister	69 ± 1	67	60	74	72	72
Armor	Octane	69 ± 2	62	65	66	77	73
USG	3024	69 ± 1	63	59	75	73	73
Progeny	117	68 ± 1	72	51	77	71	70
Dyna-Gro	Yorktown	68 ± 1	69	61	74	71	65
Progeny	185	68 ± 1	67	57	68	74	74
TN Exp.	TN 1102	68 ± 1	66	56	70	73	76
TN Exp.	TN 1303	67 ± 1	65	55	69	69	79
MO	Bess	67 ± 1	70	54	80	70	61
VA	Jamestown	67 ± 1	66	50	73	71	74
TN Exp.	TN 1202	65 ± 1	72	57	59	70	69
<b>Average (bu/a)</b>		<b>72</b>	<b>70</b>	<b>63</b>	<b>75</b>	<b>76</b>	<b>75</b>
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>5</b>	<b>10</b>	<b>12</b>	<b>11</b>	<b>9</b>	<b>13</b>
<b>C.V. (%)</b>		<b>10.5</b>	<b>10.1</b>	<b>12.7</b>	<b>9.8</b>	<b>8.3</b>	<b>11.6</b>

<sup>†</sup> All yields are adjusted to 13.5% moisture.

<sup>‡</sup> n = number of environments

**Table 8. Mean yields† and agronomic characteristics of 47 soft red winter wheat varieties evaluated at five locations (n=10) in Tennessee for two years, 2013 and 2014.**

Brand	Variety	Avg. Yield	Moisture (n=10)	Maturity (n=6)	Height (n=8)	Lodging (n=8)
		± Std Err. (n=10)‡				
		bu/a	%	DAP	in.	Score
USG	3404	79 ± 1	13.4	217	34	1
Steyer	Hunker	77 ± 1	13.1	217	35	2
Warren Seed	McKay 110	77 ± 1	13.9	217	34	1
Armor	Havoc	76 ± 1	13.6	214	34	2
Terral	TV8848	75 ± 1	14.1	216	33	1
Progeny	357	75 ± 1	12.8	216	33	2
Syngenta	SY Harrison	74 ± 1	13.3	217	33	2
Steyer	Dowell	74 ± 1	13.4	217	33	2
Cache River Valley Seed	Dixie Xtreme	74 ± 1	13.4	217	35	2
Armor	Rampage	74 ± 1	13.3	217	34	2
USG	3438	74 ± 1	13.0	214	32	1
USG	3013	74 ± 1	13.2	217	35	2
Pioneer	26R10	74 ± 1	13.9	216	33	1
Pioneer	26R53	73 ± 1	13.9	215	32	1
Pioneer	26R41	73 ± 1	13.7	215	32	1
Armor	Vandal	73 ± 1	13.5	217	33	1
Delta Grow	7200	73 ± 1	13.7	217	33	1
USG	3201	72 ± 1	13.6	216	34	1
Terral	TV8861	72 ± 1	14.0	217	33	1
USG	3251	72 ± 1	13.3	218	34	1
Dyna-Gro	9171	72 ± 1	13.4	216	32	1
Delta Grow	7500	72 ± 1	13.6	217	32	1
VA Exp.	VA10W-119	72 ± 1	13.0	216	33	2
Pioneer	26R20	72 ± 1	13.7	216	34	2
Dyna-Gro	9012	71 ± 1	13.7	216	33	1
Terral	TV8535	71 ± 1	13.0	216	31	1
Terral	TV8525	71 ± 1	13.8	216	32	1
Dyna-Gro	9223	71 ± 1	13.3	216	35	2
TN Exp.	TN 1201	71 ± 1	13.2	219	34	2
Pioneer	25R32	71 ± 1	13.6	216	34	2
Pioneer	25R78	71 ± 1	13.5	216	32	1
USG	3993	70 ± 1	14.4	219	34	1
MO	Milton	70 ± 1	13.3	215	34	1

(continued)

**Table 8. Mean yields† and agronomic characteristics of 47 soft red winter wheat varieties evaluated at five locations (n=10) in Tennessee for two years, 2013 and 2014.**

Brand	Variety	Avg. Yield		Moisture (n=10)	Maturity (n=6)	Height (n=8)	Lodging (n=8)
		± Std Err. (n=10)‡	bu/a				
Progeny	870	70 ± 1	12.8	215	32	1	
USG	3833	69 ± 1	13.5	218	34	1.3	
USG	3120	69 ± 1	13.5	216	34	1.7	
Cache River Valley Seed	Dixie McAlister	69 ± 1	12.9	216	32	1	
Armor	Octane	69 ± 2	14.0	207	35	1.4	
USG	3024	69 ± 1	13.3	215	32	1.3	
Progeny	117	68 ± 1	13.4	214	35	1.8	
Dyna-Gro	Yorktown	68 ± 1	13.5	217	32	1.3	
Progeny	185	68 ± 1	13.4	218	35	1.3	
TN Exp.	TN 1102	68 ± 1	13.3	216	33	1.9	
TN Exp.	TN 1303	67 ± 1	12.9	216	34	1.4	
MO	Bess	67 ± 1	13.7	216	35	1.7	
VA	Jamestown	67 ± 1	13.2	215	31	1.3	
TN Exp.	TN 1202	65 ± 1	13.3	216	34	2	
<b>Average</b>		<b>72</b>	<b>13.5</b>	<b>216</b>	<b>33</b>	<b>1.4</b>	

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

Maturity (DAP) = Days after planting

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle  $\geq 45^\circ$ ; 5 = 95+% of plants leaning at an angle  $\geq 45^\circ$ .

**Table 9. Mean yields† of 32 soft red winter wheat varieties evaluated at five locations (n=15) in Tennessee for three years, 2012 - 2014.**

Brand	Variety	Avg. Yield ± Std Err. (n=15)‡	Spring Hill				Milan	Memphis
			Springfield	Hill	Jackson	bu/a		
Warren Seed	McKay 110	80 ± 1	79	69	85	85	80	
USG	3251	77 ± 1	72	69	83	83	75	
Terral	TV8848	76 ± 1	72	69	84	85	73	
Armor	Havoc	76 ± 1	67	72	80	84	79	
Progeny	357	76 ± 1	70	66	86	78	80	
Pioneer	26R10	75 ± 1	68	71	85	81	70	
Armor	Rampage	75 ± 1	76	61	85	83	70	
Terral	TV8861	74 ± 1	78	59	79	81	75	
Pioneer	26R41	74 ± 1	67	63	83	83	74	
TN Exp.	TN 1201	74 ± 1	76	57	81	79	75	
USG	3438	74 ± 1	72	61	82	81	72	
Pioneer	26R53	73 ± 1	71	63	81	79	73	
USG	3120	73 ± 1	74	61	79	83	70	
Pioneer	26R20	73 ± 1	68	66	82	83	68	
Terral	TV8535	73 ± 1	67	59	82	82	76	
USG	3201	73 ± 1	67	61	83	81	74	
Dyna-Gro	9171	73 ± 1	70	60	85	79	70	
TN Exp.	TN 1102	73 ± 1	76	61	76	78	71	
Dyna-Gro	9223	72 ± 1	76	62	81	79	64	
Progeny	870	72 ± 1	70	60	80	77	72	
Delta Grow	7500	72 ± 1	67	59	81	80	72	
MO	Milton	72 ± 1	68	66	81	75	69	
Dyna-Gro	9012	71 ± 1	65	58	82	79	71	
Terral	TV8525	71 ± 1	67	60	81	77	69	
Pioneer	25R32	70 ± 1	67	62	81	77	65	
Dyna-Gro	Yorktown	70 ± 1	70	62	78	75	64	
Cache River Valley Seed	Dixie McAlister	70 ± 1	67	59	80	77	67	
TN Exp.	TN 1202	69 ± 1	79	55	74	72	64	
Progeny	185	69 ± 1	70	57	72	78	67	
MO	Bess	69 ± 1	74	54	82	73	59	
VA	Jamestown	68 ± 1	66	55	75	74	70	
Progeny	117	67 ± 1	75	52	80	75	55	
<b>Average (bu/a)</b>		<b>73</b>	<b>71</b>	<b>62</b>	<b>81</b>	<b>79</b>	<b>70</b>	
<b>L.S.D.<sub>.05</sub> (bu/a)</b>		<b>4</b>	<b>8</b>	<b>11</b>	<b>10</b>	<b>9</b>	<b>11</b>	
<b>C.V. (%)</b>		<b>9.9</b>	<b>9.8</b>	<b>12.3</b>	<b>8.8</b>	<b>8</b>	<b>11.1</b>	

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

**Table 10. Mean yields† and agronomic characteristics of 32 soft red winter wheat varieties evaluated at five locations (n=15) for three years, 2012 - 2014.**

Brand	Variety	Avg. Yield		Moisture (n=18)	Maturity (n=14)	Height (n=14)	Lodging (n=21)
		± Std Err. (n=18)‡	bu/a				
Warren Seed	McKay 110	80 ± 1	14.2	213	34	1	
USG	3251	77 ± 1	13.7	213	34	1.1	
Terral	TV8848	76 ± 1	14.3	212	34	1.1	
Armor	Havoc	76 ± 1	13.7	209	33	1.3	
Progeny	357	76 ± 1	13.1	212	32	1.3	
Pioneer	26R10	75 ± 1	14.0	211	33	1.1	
Armor	Rampage	75 ± 1	13.7	212	34	1.3	
Terral	TV8861	74 ± 1	14.2	213	33	1.1	
Pioneer	26R41	74 ± 1	13.9	210	32	1.1	
TN Exp.	TN 1201	74 ± 1	13.4	213	34	1.5	
USG	3438	74 ± 1	13.2	210	32	1	
Pioneer	26R53	73 ± 1	13.9	210	31	1.1	
USG	3120	73 ± 1	13.7	210	34	1.3	
Pioneer	26R20	73 ± 1	13.9	212	34	1.3	
Terral	TV8535	73 ± 1	13.1	211	31	1	
USG	3201	73 ± 1	13.8	211	33	1	
Dyna-Gro	9171	73 ± 1	13.5	211	32	1	
TN Exp.	TN 1102	73 ± 1	13.4	210	33	1.5	
Dyna-Gro	9223	72 ± 1	13.6	212	35	1.5	
Progeny	870	72 ± 1	13.1	211	32	1	
Delta Grow	7500	72 ± 1	13.6	212	32	1.2	
MO	Milton	72 ± 1	13.6	210	34	1	
Dyna-Gro	9012	71 ± 1	13.9	211	33	1.1	
Terral	TV8525	71 ± 1	14.1	211	32	1.1	
Pioneer	25R32	70 ± 1	13.8	211	34	1.5	
Dyna-Gro	Yorktown	70 ± 1	13.9	211	32	1.1	
Cache River Valley Seed	Dixie McAlister	70 ± 1	13.1	211	32	1	
TN Exp.	TN 1202	69 ± 1	13.2	211	34	1.5	
Progeny	185	69 ± 1	13.7	213	35	1.2	
MO	Bess	69 ± 1	13.9	211	35	1.3	
VA	Jamestown	68 ± 1	13.5	210	31	1.2	
Progeny	117	67 ± 1	13.7	210	35	1.4	
<b>Average</b>		<b>73</b>	<b>13.7</b>	<b>211</b>	<b>33</b>	<b>1.2</b>	

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

Maturity (DAP) = Days after planting

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle  $\geq 45^\circ$ ; 5 = 95+% of plants leaning at an angle  $\geq 45^\circ$ .

**Table 11. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2013-14.**

Company	Contact	Phone	Email	Web site	Address
Armor Seed	Lane Dill	901-233-0274	<a href="mailto:lanedill@armorseed.com">lanedill@armorseed.com</a>	<a href="http://www.armorseed.com">www.armorseed.com</a>	P.O. Box 9, Waldenburg, AR 72475
Beck's Hybrids	Doug Closer	800-937-2325	<a href="mailto:dougc@beckshybrids.com">dougc@beckshybrids.com</a>	<a href="http://www.beckshybrids.com">www.beckshybrids.com</a>	6767 E. 276th St., Atlana, IN 46031
Cache River Valley Seed	Ted Holt	870-477-5427	<a href="mailto:tedh@crvseed.com">tedh@crvseed.com</a>	<a href="http://www.crvseed.com">www.crvseed.com</a>	P.O. Box 10, Cash, AR 72421
Croplan by Winfield	Paul Gregor	218-686-4122	<a href="mailto:psgregor@landolakes.com">psgregor@landolakes.com</a>	<a href="http://www.winfield.com/Farmer/Croplan">www.winfield.com/Farmer/Croplan</a>	10515 115th St. NW, Thief River Falls, MN 56701
Delta Grow Seed	Lee Hughes	501-842-2572	<a href="mailto:leehughes19@hotmail.com">leehughes19@hotmail.com</a>	<a href="http://www.deltagrow.com">www.deltagrow.com</a>	P O Box 219, England, AR 72046
Dyna-Gro	Dewain Riley Todd Theobald	731-223-9876 765-623-1382	<a href="mailto:dewain.riley@cpsagu.com">dewain.riley@cpsagu.com</a> <a href="mailto:todd.theobald@cpsagu.com">todd.theobald@cpsagu.com</a>	<a href="http://www.dynagroseed.com">www.dynagroseed.com</a>	6221 Riverside Dr., Suite 1N, Dublin OH 43017
University of Georgia	Jerry Johnson	770-228-7345	<a href="mailto:jjohnson@griffin.uga.edu">jjohnson@griffin.uga.edu</a>		UGA, Griffin Campus 1109 Experiment St. Griffin, GA 30223
Kentucky Small Grain Growers Assn.	Adam Andrews	502-974-1121	<a href="mailto:adam@kycorn.org">adam@kycorn.org</a>		PO Box 90, Eastwood, KY 40018
Limagrain Cereal Seeds	Ken McClintock	309-569-0008	<a href="mailto:ken.mcclintock@limagrain.com">ken.mcclintock@limagrain.com</a>	<a href="http://www.limagrain.com">www.limagrain.com</a>	257 E. Hail, Bushnell, IL 61422
University of Missouri	Mary Ann Quade	573-884-7333	<a href="mailto:quadem@missouri.edu">quadem@missouri.edu</a>		Missouri Crop Improvement 3211 Lemone Columbia, MO 65201
Pioneer Hi-Bred Int.	George Stabler	803-308-1003	<a href="mailto:george.stabler@pioneer.com">george.stabler@pioneer.com</a>	<a href="http://www.pioneer.com">www.pioneer.com</a>	59 Greif Parkway, Suite 200, Deleware, OH 43015
Progeny	Hillary Spain	870-208-6032		<a href="http://www.progenyag.com">www.progenyag.com</a>	1529 Hwy 193, Wynne, AR 72396
Steyer Seeds	Joe Steyer	800-231-4274	<a href="mailto:joesteyer@yahoo.com">joesteyer@yahoo.com</a>	<a href="http://www.steyerseeds.com">www.steyerseeds.com</a>	PO Box 209, Old Fort, OH 44861
Syngenta	Gary Moore	901-262-4958	<a href="mailto:gary.m.moore@syngenta.com">gary.m.moore@syngenta.com</a>	<a href="http://www.syngenta.com">www.syngenta.com</a>	7099 Parkbrook Ln., Cordova, TN 38018
Tennessee Farmers Co-Op	Bryan Johnson	615-793-8506	<a href="mailto:bjohnson@ourcoop.com">bjohnson@ourcoop.com</a>		180 Old Nashville Hwy, LaVergne, TN 37086
Terral Seed Inc	Phil Michener	800-551-4852 662-822-8242	<a href="mailto:pmichener@terralseed.com">pmichener@terralseed.com</a>	<a href="http://www.terralseed.com">www.terralseed.com</a>	111 Ellington Dr., Rayville, LA 71269
University of Tennessee	Dennis West	865-974-8826	<a href="mailto:dwest3@utk.edu">dwest3@utk.edu</a>		3421 Joe Johnson Dr, Knoxville, TN 37996-4561

(continued)

Table 11. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2013-14.

Company	Contact	Phone	Email	Web site	Address
Unisouth Genetics (USG)	Stacy Burwick David Fandrich Mark Huffstetler Trey Hurt Wes Miller Billy Sellers	800-505-3133 931-967-3377 731-235-2167 731-836-7574 731-536-6251 731-538-2990	<a href="mailto:sburwick@bellsouth.net">sburwick@bellsouth.net</a> <a href="mailto:fandrichsupply@aol.com">fandrichsupply@aol.com</a> <a href="mailto:huffy1@crunet.com">huffy1@crunet.com</a> <a href="mailto:hurto@bellsouth.net">hurto@bellsouth.net</a> <a href="mailto:wes@obiongrain.com">wes@obiongrain.com</a>	<a href="http://www.usgseed.com">www.usgseed.com</a>	3205-C HWY 46 S, Dickson, TN 37055 Fandrich Supply Co, Belvidere, TN Huffstetler & Sons Seed Inc, Greenfield, TN Hurt Seed Co. Inc, Halls, TN Obion Grain Co. Inc, Obion, TN Sellers Seed, Obion, TN
Virginia Crop Improvement	Tom Hardiman	804-746-4884	<a href="mailto:rmarkham@vt.edu">rmarkham@vt.edu</a>	<a href="http://www.virginiacrop.org">www.virginiacrop.org</a>	Virginia Crop Improvement Assoc. 9225 Atlee Branch Lane Mechanicsville, VA 23116
Warren Seed	Lanny Warren	731-234-2921	<a href="mailto:lanny.warren@charter.net">lanny.warren@charter.net</a>		P.O. Box 10, Woodland Mills, TN 38721