

Wheat Variety Performance Tests in Tennessee

2013

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

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

Richard D. Johnson, 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

Acknowledgments

This research was funded by the Tennessee Agricultural Experiment Station and UT Extension with partial funding from participating companies.

We gratefully acknowledge the assistance of the following individuals in conducting these experiments:

Dept. of Plant Sciences

Dennis West, Professor and Grains Breeder

David Kincer, Research Associate

Eifion Hughes, Graduate Research Assistant

Matthew Bobbitt, Graduate Research Assistant

Victoria Knapp, Graduate Research Assistant

Ali Desantis, Graduate Research Assistant

AgResearch and Education Centers:

East Tennessee AgResearch and Education Center, Knoxville

Robert Simpson, Center Director

Lee Ellis, Research Associate

Derick Hopkins, Agricultural Service Supervisor

Plateau AgResearch and 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

Christopher 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

Ballard, KY

Bob Middleton, Kentucky Full Time Adult Agriculture Teacher
Foster Farms

Dyer County

Tim Campbell, Extension Director
Allen and Keith Sims Farm

Franklin/Grundy County

Ed Burns and Creig Kimbro, Extension Agents
Larry Williams Farm

Gibson County

Philip Shelby, Extension Director
Ken and Rege Luckey and Sons Farm

Henry County

Ranson Goodman, Extension Agent
Edwin Ables Farm

Madison County

Jake Mallard, Extension Agent
David Martin Farm

Lake County

Greg Allen, Extension Director
Jon Dickey Farm

Moore County

Larry Moorehead, Extension Director
Jerry Ray Farm

Obion County

Tim Smith, Extension Director
Bill Sellers Farm

Shelby County

Becky Muller, Extension Agent
Scott Johnson Farm

Weakley County

Jeff Lannom, Extension Director
Gary Hall Farm

Table of Contents

General Information.....	5
Interpretation of Data.....	6
Wheat Tests Results.....	6
Location information from AgResearch & Education Centers (REC) where the Wheat Variety Tests were Conducted in 2013.....	6
AgResearch and Education Center Wheat Performance Data 2013.....	7
County Standard (CST) Wheat Performance Data 2013.....	13
Combined REC & CST Wheat Performance Data 2013.....	14
Two year AgResearch & Education Center Wheat Performance Data 2012 - 2013.....	15
Three year AgResearch & Education Center Wheat Performance Data 2011 - 2013.....	19
Seed Company Contact Information.....	21

General Information

AgResearch and Education Center Tests: The 2013 variety performance tests were conducted on 84 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 spacings. 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.

In Knoxville, cool, wet temperatures during head development resulted in severe lodging caused by an infestation of foot rot disease (aka, eyespot and strawbreaker) caused by *Oculimacula yallundae*. Lesions form on the base of the stems just above the soil line and cause the stems to weaken and collapse, thus resulting in lodging. According to the APS “Compendium of Wheat Diseases” the organism is fairly wide spread throughout wheat growing regions but is usually not a significant widespread problem. The disease is most severe during maturing conditions of high moisture and cool temperatures, the type of weather conditions experienced at Knoxville during jointing and heading. Fifty percent of plots at Knoxville had lodging scores of 4 or greater on a scale of 1 to 5, where 1= erect and 5= prostrate. A sample of plots was harvested and a high correlation between lodging and yield was observed. Knoxville yield data were not included in the overall analysis to prevent bias in variety evaluations due to the effects of lodging.

Average yield per lodging score category for a sample of thirty-six plots at the East TN Research and Education Center in Knoxville, TN.

Lodging Score	1 (n=9)	2 (n=2)	3 (n=3)	4 (n=12)	5 (n=8)
Yield	94.1	85.3	70.5	65.2	44.8

*n=number of plots per lodging category



County Standard Tests: The County Standard Wheat Test was conducted on 18 soft red winter wheat varieties across ten counties in Kentucky, Middle and West Tennessee (Ballard, Dyer, Franklin, Gibson, Henry, Madison, Moore, Obion, Shelby, 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 2013 wheat varieties for silage yield, a duplicate test with differing randomization was planted at the Middle Tennessee AgResearch and Education Center. These data will be presented in the UT Extension Silage Tests publication SP618 later this year.

Growing Season: Mild conditions and adequate moisture during the fall of 2012 allowed for timely planting. Temperatures and moisture were below average during the early growing season. Spring conditions included average temperatures and above average moisture. According to the Tennessee Agricultural Statistics Service (TASS), the crop rated mostly good to excellent conditions in June with high winds causing some lodging. The wheat crop experienced a low incidence of disease and insect pressure. Above average moisture delayed harvest by two weeks. Yields were 63 bu/a state average in 2013. Tennessee producers planted approximately 420,000 acres of wheat in the fall of 2012. Approximately 340,000 acres were harvested for grain, which was 10,000 acres less than in 2012. The remaining 80,000 acres were utilized for hay, silage, cover crop or abandoned. According to TASS, the total wheat production in Tennessee for 2013 is 21.4 million bushels, a decrease of seven percent from the production of 2012.

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%.

Wheat

Results

Yield and Agronomic Traits: During 2013, 84 wheat varieties were evaluated in seven AgResearch and Education Center (REC) tests, and 18 varieties were evaluated in ten county standard tests (CST). All eighteen varieties in the CST were also present in the REC tests (Table 5). Ten companies and five universities entered varieties into the tests this year. The average yield of the 84 varieties in the 2013 REC tests was 68 bu/a (range from 61 to 79 bu/a, Table 2). The varieties ranged in maturity from 201 to 224 days after planting (DAP) with most of the varieties clustering around 220. The average yield of the 18 varieties in the county tests was 85.6 bu/a with individual varieties ranging from 73.5 to 93.5 bu/a. The test weight values ranged from 55 to 59.3 lbs/bu (Table 4).

Table 1. Location information from research and education centers where the wheat variety tests were conducted in 2013.

AgResearch and Education Center	Location	Planting	Harvest	Seeding		Soil Type
		Date	Date	Rate		
Knoxville	Knoxville	10/17/2012	6/21/2013	28/ft ²	1.2 mill./ac	Huntington Silt Loam
Plateau	Crossville	10/23/2012	7/15/2013	28/ft ²	1.2 mill./ac	Hendon Silt Loam
Highland Rim	Springfield	10/22/2012	6/22/2013	28/ft ²	1.2 mill./ac	Dickson Silt Loam
Middle Tennessee	Spring Hill	10/26/2012	6/26/2013	28/ft ²	1.2 mill./ac	Maury Silt Loam
West Tennessee	Jackson	11/1/2012	6/21/2013	28/ft ²	1.2 mill./ac	Freeland Silt Loam
West Tennessee PM	Jackson	11/2/2012	6/22/2013	28/ft ²	1.2 mill./ac	Freeland Silt Loam
Milan	Milan	11/8/2012	6/21/2013	32/ft ²	1.4 mill./ac	Loring Silt Loam
Agricenter International	Memphis	10/17/2012	6/21/2013	28/ft ²	1.2 mill./ac	Falaya Silt Loam

Table 2. Mean yields† of 84 soft red winter wheat varieties evaluated at seven locations in Tennessee during 2013.

Brand	Variety	Avg. Yield	Spring					
		± Std Err. (n=7)‡	Crossville 10/23/2012	Springfield 10/22/12	Hill 10/26/12	Jackson 11/1/12	Jackson 2 11/2/12	Milan 11/8/12
-----bu/a-----								
Steyer	Hunker	82 ± 2	61	72	101	81	96	81
USG	3404	82 ± 2	67	67	104	81	91	92
Dyna-Gro	9053	81 ± 2	56	77	101	79	93	78
Warren Seed	McKay 110	81 ± 2	61	76	94	84	91	84
Terral	TV8848	80 ± 2	68	71	93	78	91	88
Cache River Valley Seed	Dixie Xtreme	80 ± 2	59	68	109	85	92	80
Progeny	PGX12-10	80 ± 2	60	75	79	81	96	88
USG	3013	79 ± 2	66	72	95	77	95	81
Armor	ARX 1107	79 ± 2	55	72	105	73	92	88
Pioneer	26R10	79 ± 2	62	68	96	81	89	83
USG	3833	79 ± 2	59	72	90	81	94	81
Pioneer	26R53	79 ± 2	59	72	82	80	98	81
AgriPro/Coker (Syngenta)	SY Harrison	78 ± 2	60	68	87	79	94	85
TN Exp.	TN 1102	78 ± 2	61	76	82	79	89	84
Progeny	357	77 ± 2	61	65	87	93	83	81
Dyna-Gro	9223	77 ± 2	63	80	84	78	93	79
Armor	ARX 1270	77 ± 2	55	75	78	84	95	83
USG	3555	77 ± 2	56	70	82	86	88	78
Cache River Valley Seed	Dixie DXEX13-2	77 ± 2	57	66	87	81	89	85
TN Exp.	TN 1202	77 ± 2	57	77	73	72	99	85
Steyer	Dowell	77 ± 2	59	77	80	81	85	86
Delta Grow	7300	77 ± 2	62	68	90	76	87	87
Armor	Rampage	76 ± 2	60	70	79	87	86	74
MO	Milton	76 ± 2	54	74	89	81	84	78
USG	3993	76 ± 2	48	72	72	78	105	80
Terral	TV8535	76 ± 2	57	65	73	77	106	78
Armor	ARX 1206	76 ± 2	57	70	93	82	79	80
AgriPro/Coker (Syngenta)	W1104	76 ± 2	59	65	94	77	90	74
USG	3438	76 ± 2	53	76	90	80	80	75
GA Exp.	GA-04570-10E46	76 ± 2	58	66	66	93	88	83
AgriPro/Coker (Syngenta)	SY 9978	76 ± 2	68	63	94	77	80	80
Warren Seed	McKenna 300	76 ± 2	54	70	81	82	95	83
Terral	TV8861	75 ± 2	56	81	70	76	85	82

(continued)

Table 2. Mean yields† of 84 soft red winter wheat varieties evaluated at seven locations in Tennessee during 2013.

Brand	Variety	Avg. Yield	Spring						Milan 11/8/12	Memphis 10/17/12
		± Std Err. (n=7)‡	Crossville 10/23/2012	Springfield 10/22/12	Hill 10/26/12	Jackson 11/1/12	Jackson 2 11/2/12			
Armor	ARX 1204	75 ± 2	65	65	86	82	70	85	75	
USG	3251	75 ± 2	66	63	87	76	78	81	76	
Pioneer	26R20	75 ± 2	59	73	84	80	83	82	66	
Progeny	PGX12-03	75 ± 2	63	71	80	78	83	77	75	
Delta Grow	7200	75 ± 2	56	70	83	77	90	80	70	
Steyer	Pierson	75 ± 2	51	68	73	78	95	83	76	
Delta Grow	7500	75 ± 2	55	63	83	79	90	82	72	
FFR	EX 2370	75 ± 2	53	70	91	80	76	77	76	
USG	3201	74 ± 2	55	69	80	80	86	76	73	
VA Exp.	VA09W-73	74 ± 2	57	69	85	82	84	73	69	
FFR	EX 2366	74 ± 2	54	67	82	77	83	88	68	
Michigan Crop Improvement	Red Ruby	74 ± 2	51	72	81	74	92	80	67	
VA Exp.	VA10W-119	74 ± 2	56	76	78	82	75	79	72	
Dyna-Gro	Yorktown	74 ± 2	52	74	81	80	81	75	74	
Pioneer	25R32	74 ± 2	45	67	88	77	91	76	71	
Terral	TV8525	74 ± 2	50	68	83	78	89	76	72	
Progeny	PGX12-12	74 ± 2	64	72	77	83	77	74	71	
Pioneer	XW11G	74 ± 2	54	71	72	78	92	78	70	
Dyna-Gro	9171	73 ± 2	54	67	80	79	84	81	68	
Cache River Valley Seed	Dixie McAlister	73 ± 2	60	63	77	76	87	78	73	
Dyna-Gro	9012	73 ± 2	52	64	79	79	83	80	75	
FFR	2239	73 ± 2	57	65	79	82	79	74	76	
Pioneer	26R41	73 ± 2	55	67	79	74	84	82	72	
Pioneer	25R78	73 ± 2	44	68	87	78	85	77	74	
Progeny	185	73 ± 2	59	67	73	76	86	80	70	
Progeny	870	73 ± 2	59	66	84	77	80	78	67	
Armor	Ricochet	73 ± 2	42	64	83	75	94	79	74	
Warren Seed	McKenna 200	73 ± 2	51	76	81	84	72	74	71	
TN Exp.	TN 1301	73 ± 2	51	64	75	81	89	70	78	
TN Exp.	TN 1302	72 ± 2	58	74	66	73	85	77	74	
GA Exp.	GA-031257-10LE34	72 ± 2	57	63	72	84	82	78	70	
Progeny	117	72 ± 2	62	70	64	77	91	71	70	

(continued)

Table 2. Mean yields† of 84 soft red winter wheat varieties evaluated at seven locations in Tennessee during 2013.

Brand	Variety	Avg. Yield	Spring					
		± Std Err. (n=7)‡	Crossville 10/23/2012	Springfield 10/22/12	Hill 10/26/12	Jackson 11/1/12	Jackson 2 11/2/12	Milan 11/8/12
-----bu/a-----								
VA Exp.	VA07W-415	72 ± 2	61	65	74	78	87	66
TN Exp.	TN 1303	72 ± 2	59	64	78	70	76	78
USG	3120	71 ± 2	57	62	71	73	84	80
Cache River Valley Seed	Dixie Kelsey	71 ± 2	54	57	75	78	80	75
GA Exp.	GA-031086-10E29	71 ± 2	56	65	75	76	77	74
NC Exp.	NC08-23089	70 ± 2	46	67	60	82	81	72
Pioneer	26R22	70 ± 2	51	65	68	78	84	76
Progeny	308	70 ± 2	52	68	71	78	77	75
AgriPro/Coker (Syngenta)	Oakes	70 ± 2	52	76	64	86	84	66
TN Exp.	TN 1201	70 ± 2	48	69	76	75	73	75
NC Exp.	NC09-22402	70 ± 2	52	65	64	72	84	76
VA	Jamestown	70 ± 2	49	64	72	77	81	73
MO	Bess	70 ± 2	46	67	71	83	83	68
Armor	Rocket	70 ± 2	30	70	83	82	83	66
Steyer	Heilman	69 ± 2	51	63	72	81	65	79
USG	3244	68 ± 2	54	52	86	74	73	73
Michigan Crop Improvement	Red Devil	68 ± 2	51	63	66	84	73	69
Progeny	125	68 ± 2	58	61	73	75	79	57
NC Exp.	NC08-23324	67 ± 2	40	70	53	78	82	75
Average (bu/a)		75	56	69	81	79	86	79
L.S.D. _{.05} (bu/a)		6	13	10	14	11	17	9
C.V. (%)		14.2	14.2	9.0	10.5	8.5	12.1	7.4
								8.5

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

§ Planting date

Table 3. Mean yields† and agronomic characteristics of 84 soft red winter wheat varieties evaluated at eight locations in Tennessee during 2013.

Brand	Variety	Avg. Yield				
		± Std Err. (n=7)‡	Moisture (n=7)	Maturity (n=4)	Height (n=8)	Lodging (n=8)
		bu/a	%	DAP	in.	Score
Steyer	Hunker	82 ± 2	13.2	226	37	1.6
USG	3404	82 ± 2	13.1	225	36	1.1
Dyna-Gro	9053	81 ± 2	13.2	225	36	1.5
Warren Seed	McKay 110	81 ± 2	13.4	226	36	1.2
Terral	TV8848	80 ± 2	13.4	224	35	1.6
Cache River Valley Seed	Dixie Xtreme	80 ± 2	13.7	225	37	1.6
Progeny	PGX12-10	80 ± 2	12.8	223	34	1.5
USG	3013	79 ± 2	13.2	226	37	1.6
Armor	ARX 1107	79 ± 2	13.7	222	37	1.4
Pioneer	26R10	79 ± 2	13.5	225	35	1.0
USG	3833	79 ± 2	13.0	227	37	1.4
Pioneer	26R53	79 ± 2	13.7	223	34	1.2
AgriPro/Coker (Syngenta)	SY Harrison	78 ± 2	13.6	225	35	1.6
TN Exp.	TN 1102	78 ± 2	13.1	223	35	1.9
Progeny	357	77 ± 2	13.0	226	35	1.6
Dyna-Gro	9223	77 ± 2	13.2	225	38	1.5
Armor	ARX 1270	77 ± 2	13.9	227	37	1.4
USG	3555	77 ± 2	13.1	224	33	1.3
Cache River Valley Seed	Dixie DXEX13-2	77 ± 2	13.6	224	35	1.3
TN Exp.	TN 1202	77 ± 2	13.1	225	35	1.8
Steyer	Dowell	77 ± 2	13.2	226	36	1.6
Delta Grow	7300	77 ± 2	12.8	226	35	1.3
Armor	Rampage	76 ± 2	13.5	226	35	1.5
MO	Milton	76 ± 2	12.9	223	36	1.3
USG	3993	76 ± 2	14.2	228	37	1.3
Terral	TV8535	76 ± 2	12.8	225	33	1.1
Armor	ARX 1206	76 ± 2	13.8	225	35	1.3
AgriPro/Coker (Syngenta)	W1104	76 ± 2	13.5	227	36	1.6
USG	3438	76 ± 2	12.6	223	35	1.2
GA Exp.	GA-04570-10E46	76 ± 2	13.1	224	36	1.2
AgriPro/Coker (Syngenta)	SY 9978	76 ± 2	13.9	224	38	1.8
Warren Seed	McKenna 300	76 ± 2	12.9	223	36	1.5
Terral	TV8861	75 ± 2	13.4	226	35	1.3

(continued)

Table 3. Mean yields† and agronomic characteristics of 84 soft red winter wheat varieties evaluated at eight locations in Tennessee during 2013.

Brand	Variety	Avg. Yield					
		± Std Err. (n=7)‡	Moisture (n=7)	Maturity (n=4)	Height (n=8)	Lodging (n=8)	Score
Armor	ARX 1204	75 ± 2	14.1	211	38	1.7	
USG	3251	75 ± 2	12.9	226	36	1.3	
Pioneer	26R20	75 ± 2	13.0	225	36	1.6	
Progeny	PGX12-03	75 ± 2	13.4	225	34	1.1	
Delta Grow	7200	75 ± 2	13.1	225	35	1.5	
Steyer	Pierson	75 ± 2	13.5	227	37	1.5	
Delta Grow	7500	75 ± 2	13.1	226	35	1.2	
FFR	EX 2370	75 ± 2	13.2	227	37	1.5	
USG	3201	74 ± 2	13.1	225	36	1.3	
VA Exp.	VA09W-73	74 ± 2	13.2	224	35	1.4	
FFR	EX 2366	74 ± 2	13.0	225	35	1.4	
Michigan Crop Improvement	Red Ruby	74 ± 2	13.0	224	36	1.3	
VA Exp.	VA10W-119	74 ± 2	12.3	224	34	1.4	
Dyna-Gro	Yorktown	74 ± 2	13.2	224	34	1.3	
Pioneer	25R32	74 ± 2	12.9	225	36	1.8	
Terral	TV8525	74 ± 2	13.8	225	34	1.4	
Progeny	PGX12-12	74 ± 2	12.9	224	36	1.5	
Pioneer	XW11G	74 ± 2	13.9	225	35	1.8	
Dyna-Gro	9171	73 ± 2	12.9	224	34	1.1	
Cache River Valley Seed	Dixie McAlister	73 ± 2	12.8	225	34	1.1	
Dyna-Gro	9012	73 ± 2	13.4	224	36	1.1	
FFR	2239	73 ± 2	13.3	225	34	1.2	
Pioneer	26R41	73 ± 2	13.1	224	34	1.1	
Pioneer	25R78	73 ± 2	12.6	224	35	1.2	
Progeny	185	73 ± 2	13.0	228	37	1.3	
Progeny	870	73 ± 2	12.5	225	34	1.1	
Armor	Ricochet	73 ± 2	13.4	225	34	1.5	
Warren Seed	McKenna 200	73 ± 2	13.4	224	36	1.0	
TN Exp.	TN 1301	73 ± 2	12.5	223	33	1.5	
TN Exp.	TN 1302	72 ± 2	13.0	227	37	1.7	
GA Exp.	GA-031257-10LE34	72 ± 2	12.8	223	34	1.1	
Progeny	117	72 ± 2	13.2	223	36	1.6	
VA Exp.	VA07W-415	72 ± 2	13.1	223	34	1.2	

(continued)

Table 3. Mean yields† and agronomic characteristics of 84 soft red winter wheat varieties evaluated at eight locations in Tennessee during 2013.

Brand	Variety	Avg. Yield				
		± Std Err. (n=7)‡	Moisture (n=7)	Maturity (n=4)	Height (n=8)	Lodging (n=8)
		bu/a	%	DAP	in.	Score
TN Exp.	TN 1303	72 ± 2	12.7	225	36	1.4
USG	3120	71 ± 2	12.6	224	36	1.7
Cache River Valley Seed	Dixie Kelsey	71 ± 2	13.7	224	35	1.1
GA Exp.	GA-031086-10E29	71 ± 2	13.1	224	34	3.4
NC Exp.	NC08-23089	70 ± 2	12.6	222	33	1.2
Pioneer	26R22	70 ± 2	13.5	226	35	1.4
Progeny	308	70 ± 2	13.5	226	35	1.3
AgriPro/Coker (Syngenta)	Oakes	70 ± 2	14.4	225	35	1.5
TN Exp.	TN 1201	70 ± 2	12.9	228	36	1.8
NC Exp.	NC09-22402	70 ± 2	12.6	223	34	1.4
VA	Jamestown	70 ± 2	12.9	223	33	1.4
MO	Bess	70 ± 2	13.3	224	37	1.5
Armor	Rocket	70 ± 2	19.4	226	36	1.4
Steyer	Heilman	69 ± 2	13.0	227	40	1.4
USG	3244	68 ± 2	13.1	222	36	1.5
Michigan Crop Improvement	Red Devil	68 ± 2	12.9	227	36	1.2
Progeny	125	68 ± 2	12.8	222	33	1.4
NC Exp.	NC08-23324	67 ± 2	12.9	223	34	1.5
Average		75	13.3	225	35	1.4

† 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 4. Yields† of 18 soft red winter wheat varieties evaluated in 10 County Standard Test in Tennessee/Kentucky during 2013.

MS	Brand/Variety			Test										
		Avg. Yield bu/a	Moisture %	Weight‡ lbs/bu	Ballard	Dyer	Franklin	Gibson	Henry	Madison	Moore	Obion	Shelby	Weakley
A	Armor Rampage	93.5	13.1	55.6	84.6	104.7	100.9	77.4	88.1	95.3	108.6	95.9	80.8	98.6
AB	**Dyna-Gro 9053	92.4	12.6	55.0	88.1	112.9	84.3	78.3	96.8	97.5	89.8	100.0	83.9	92.9
AB	Dyna-Gro 9223	92.1	13.1	57.0	78.5	95.6	90.9	82.1	88.6	96.5	105.1	97.1	87.7	99.2
ABC	AgriPro/Coker SY Harrison	89.1	13.0	56.8	72.2	97.5	95.9	88.2	98.6	96.6	88.7	88.8	70.5	94.3
ABC	*Dyna-Gro 9171	87.8	12.4	56.5	85.1	101.0	94.1	71.0	91.7	101.5	94.4	82.6	64.7	92.0
BC	Terral TV8535	86.6	12.6	56.8	84.1	103.0	88.8	73.6	92.3	98.4	95.3	84.7	59.3	86.7
BC	Terral TV8848	86.5	13.1	57.9	72.3	94.0	94.4	85.3	81.7	87.3	85.0	90.4	77.1	97.2
BC	Terral TV8861	86.3	13.3	58.6	83.9	93.6	82.2	83.1	90.1	90.9	86.4	96.0	71.9	85.4
BC	USG 3833	86.1	12.8	57.9	69.0	95.1	88.5	81.0	81.2	92.3	96.6	88.6	82.6	86.4
BC	Progeny 357	86.1	12.3	55.9	75.9	102.4	84.3	75.2	92.3	93.7	77.2	92.5	79.6	88.0
CD	Warren Seed McKay 110	85.5	13.2	58.5	82.2	99.3	89.9	78.0	90.3	91.3	79.8	72.6	77.4	94.0
CD	Progeny 870	85.4	12.7	57.1	72.4	87.5	85.0	70.4	94.2	98.5	99.9	96.5	56.5	93.2
CD	Warren Seed McKenna 200	84.9	13.3	59.3	87.0	94.8	99.6	62.7	94.9	97.7	92.1	73.8	59.8	87.1
CD	USG 3251	84.5	13.0	58.8	74.8	96.7	96.6	69.8	99.8	92.6	75.1	79.4	71.8	88.5
CD	AgriPro/Coker Oakes	83.8	13.7	58.5	80.6	112.7	78.4	76.8	79.6	87.5	73.7	86.5	75.0	87.3
DE	Progeny 117	79.6	12.9	56.9	90.0	100.7	66.8	57.6	79.1	80.0	91.9	82.8	68.8	78.2
E	Warren Seed McKenna 300	77.2	12.8	58.3	57.9	83.2	70.9	63.7	78.7	90.0	86.6	92.1	65.6	83.6
E	USG 3120	73.5	12.8	56.9	62.4	87.8	61.1	63.3	70.0	78.2	74.1	86.3	68.3	84.1
Average		85.6	12.9	57.3	77.8	97.9	86.3	74.3	88.2	92.5	88.9	88.1	72.3	89.8

† 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. @ 8 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 5. Yields†, moistures, and test weights of 18 soft red winter wheat varieties that were in common to both the County Standard (CST) Tests (n=10) and the Research and Education Center (REC) Tests (n=7) in Tennessee during 2013.

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
Dyna-Gro	9053	87	13	55	92	12.6	55.0	81	13.2	.
Armor	Rampage	85	13	56	93	13.1	55.6	76	13.5	.
Dyna-Gro	9223	85	13	57	92	13.1	57.0	77	13.2	.
AgriPro/Coker	SY Harrison	84	13	57	89	13.0	56.8	78	13.6	.
Terral	TV8848	83	13	58	86	13.1	57.9	80	13.4	.
Warren Seed	McKay 110	83	13	59	85	13.2	58.5	81	13.4	.
USG	3833	83	13	58	86	12.8	57.9	79	13.0	.
Progeny	357	82	13	56	86	12.3	55.9	77	13.0	.
Terral	TV8535	81	13	57	87	12.6	56.8	76	12.8	.
Terral	TV8861	81	13	59	86	13.3	58.6	75	13.4	.
Dyna-Gro	9171	80	13	57	88	12.4	56.5	73	12.9	.
USG	3251	80	13	59	85	13.0	58.8	75	12.9	.
Progeny	870	79	13	57	85	12.7	57.1	73	12.5	.
Warren Seed	McKenna 200	79	13	59	85	13.3	59.3	73	13.4	.
AgriPro/Coker	Oakes	77	14	59	84	13.7	58.5	70	14.4	.
Warren Seed	McKenna 300	77	13	58	77	12.8	58.3	76	12.9	.
Progeny	117	76	13	57	80	12.9	56.9	72	13.2	.
USG	3120	72	13	57	74	12.8	56.9	71	12.6	.
Average		81	13.1	57.3	86	12.9	57.3	76	13.2	.

† All yields are adjusted to 13.5% moisture.

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

Table 6. Mean yields† of 44 soft red winter wheat varieties evaluated at six locations (n=12) in Tennessee for two years, 2012 and 2013.

Brand	Variety	Avg. Yield ± Std Err. (n=12)‡	Spring					bu/a
			Crossville	Springfield	Hill	Jackson	Milan	
Warren Seed	McKay 110	80 ± 1	62	80	79	91	88	78
USG	3251	78 ± 1	64	75	80	89	88	73
TN Exp.	TN 1102	78 ± 1	64	86	77	83	87	69
Terral	TV8848	78 ± 1	68	71	79	88	90	70
Pioneer	26R10	77 ± 1	64	69	83	91	84	70
Dyna-Gro	9053	77 ± 1	59	76	83	89	79	74
Delta Grow	7300	76 ± 1	62	73	76	86	88	74
Progeny	357	76 ± 1	60	69	74	95	82	76
Armor	ARX 1107	75 ± 1	56	68	85	82	88	73
Armor	Rampage	75 ± 1	61	78	71	90	84	65
USG	3555	75 ± 1	57	71	77	89	87	67
AgriPro/Coker (Syngenta)	SY Harrison	74 ± 1	59	67	73	88	86	73
Dyna-Gro	9223	74 ± 1	63	77	73	86	84	62
Pioneer	26R20	74 ± 1	59	74	73	89	86	62
Pioneer	26R53	74 ± 1	61	66	75	84	85	70
AgriPro/Coker (Syngenta)	W1104	74 ± 1	59	78	74	90	80	60
Terral	TV8861	73 ± 1	52	79	68	80	87	75
USG	3120	73 ± 1	56	74	70	83	88	69
MO	Milton	73 ± 1	57	71	81	88	82	61
AgriPro/Coker (Syngenta)	SY 9978	73 ± 1	63	68	74	80	81	73
TN Exp.	TN 1201	73 ± 1	56	79	68	85	84	67
TN Exp.	TN 1202	73 ± 1	57	86	62	89	80	64
FFR	2239	73 ± 1	58	77	75	85	78	64
Dyna-Gro	Yorktown	73 ± 1	60	72	73	84	79	68
Terral	TV8535	72 ± 1	55	68	65	87	86	73
USG	3438	72 ± 1	52	72	72	87	82	67
Pioneer	26R41	72 ± 1	56	64	71	82	87	70
Progeny	870	72 ± 1	55	67	69	82	83	74
USG	3201	72 ± 1	55	64	72	86	84	68
Warren Seed	McKenna 200	72 ± 1	52	71	67	85	80	74
Dyna-Gro	9171	71 ± 1	55	69	66	87	83	68
Michigan Crop Improvemer	Red Ruby	70 ± 1	53	71	67	89	80	62
Delta Grow	7500	70 ± 1	52	65	66	86	86	66

(continued)

Table 6. Mean yields† of 44 soft red winter wheat varieties evaluated at six locations (n=12) in Tennessee for two years, 2012 and 2013.

Brand	Variety	Avg. Yield ± Std Err. (n=12)‡	Spring					bu/a
			Crossville	Springfield	Hill	Jackson	Milan	
Progeny	308	70 ± 1	52	66	68	81	79	74
Dyna-Gro	9012	70 ± 1	54	66	68	84	82	66
Cache River Valley Seed	Dixie McAlister	70 ± 1	56	64	66	84	82	65
Terral	TV8525	69 ± 1	53	66	70	84	76	67
Pioneer	25R32	69 ± 1	50	69	73	79	81	61
Armor	Ricochet	69 ± 1	45	64	68	85	79	72
Progeny	185	68 ± 1	52	71	65	78	83	61
MO	Bess	68 ± 1	49	75	63	85	75	63
Cache River Valley Seed	Dixie Kelsey	68 ± 1	54	62	63	81	79	67
VA Exp.	VA07W-415	68 ± 1	59	63	68	85	73	58
Pioneer	26R22	67 ± 1	51	60	63	81	81	68
VA	Jamestown	67 ± 1	47	65	70	79	76	68
Progeny	117	66 ± 1	58	76	59	81	77	47
USG	3244	66 ± 1	50	69	69	86	78	42
Progeny	125	64 ± 1	52	67	67	77	69	53
Average (bu/a)		72	56	71	71	85	82	67
L.S.D._{.05} (bu/a)		4	10	9	11	9	4	3
C.V. (%)		9.0	12.0	9.0	10.7	7.5	7.3	8.3

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

Table 7. Mean yields† and agronomic characteristics of 44 soft red winter wheat varieties evaluated at seven locations (n=14) in Tennessee for two years, 2012 and 2013.

Brand	Variety	Avg. Yield	Test					Barley Yellow	
		± Std Err. (n=12)‡	Moisture (n=12)	Weight# (n=1)	Maturity (n=10)	Height (n=14)	Lodging (n=12)	Protein* (n=1)	Dwarf Virus (n=1)
Warren Seed	McKay 110	bu/a	%	lbs/bu	DAP	in.	Score	%	Score
USG	3251	80 ± 1	14.4	57.1	216.0	35	1	9.5	2.5
TN Exp.	TN 1102	78 ± 1	13.9	57.2	216.0	35	1	9.4	2.3
Terral	TV8848	78 ± 1	13.6	53.9	212.0	34	2	9.2	3.3
Pioneer	26R10	77 ± 1	14.0	56.5	215.0	34	1	9.5	2.8
Dyna-Gro	9053	77 ± 1	13.6	54.5	215.0	34	1	9.1	1.8
Delta Grow	7300	76 ± 1	13.5	53.9	216.0	34	1	9.0	2.5
Progeny	357	76 ± 1	13.4	53.8	216.0	33	1	9.0	2
Armor	ARX 1107	75 ± 1	14.0	55.6	212.0	35	1	9.3	2.3
Armor	Rampage	75 ± 1	14.1	54.7	216.0	35	1	9.4	1.8
USG	3555	75 ± 1	13.8	56.2	214.0	32	1	9.9	1.5
AgriPro/Coker (Syngenta)	SY Harrison	74 ± 1	14.1	55.5	215.0	33	1	9.3	2.8
Dyna-Gro	9223	74 ± 1	14.0	56.6	215.0	36	1	9.6	2.8
Pioneer	26R20	74 ± 1	13.7	57.5	215.0	35	1	9.9	2
Pioneer	26R53	74 ± 1	13.9	56.4	213.0	33	1	9.4	2.5
AgriPro/Coker (Syngenta)	W1104	74 ± 1	14.1	54.8	217.0	35	1	9.7	2.3
Terral	TV8861	73 ± 1	14.2	56.6	217.0	34	1	9.2	2
USG	3120	73 ± 1	13.6	57.9	213.0	35	2	9.4	3.3
MO	Milton	73 ± 1	13.7	56.6	214.0	35	1	9.9	1
AgriPro/Coker (Syngenta)	SY 9978	73 ± 1	14.1	55.9	215.0	36	2	9.5	2.5
TN Exp.	TN 1201	73 ± 1	13.5	56.7	217.0	35	2	9.8	2
TN Exp.	TN 1202	73 ± 1	13.3	53.0	215.0	35	2	9.4	3.5
FFR	2239	73 ± 1	13.8	56.8	214.0	33	1	10.0	2.3
Dyna-Gro	Yorktown	73 ± 1	14.1	56.8	214.0	33	1	9.7	1.3
Terral	TV8535	72 ± 1	13.2	53.5	215.0	32	1	10.0	3.8
USG	3438	72 ± 1	13.2	53.9	214.0	33	1	9.8	4.3
Pioneer	26R41	72 ± 1	13.8	55.7	214.0	32	1	10.0	2.5
Progeny	870	72 ± 1	13.2	53.9	215.0	32	1	9.9	3.3
USG	3201	72 ± 1	13.8	57.4	215.0	34	1	9.9	2.3
Warren Seed	McKenna 200	72 ± 1	13.9	57.4	214.0	34	1	10.1	3
Dyna-Gro	9171	71 ± 1	13.4	53.7	214.0	32	1	9.9	3.8
Michigan Crop Improvem	Red Ruby	70 ± 1	13.4	56.1	214.0	35	1	9.9	2.3
Delta Grow	7500	70 ± 1	13.5	53.6	215.0	33	1	10.0	2.5

(continued)

Table 7. Mean yields† and agronomic characteristics of 44 soft red winter wheat varieties evaluated at seven locations (n=14) in Tennessee for two years, 2012 and 2013.

Brand	Variety	Avg. Yield ± Std Err. (n=12)‡	Test						Barley Yellow Dwarf Virus	
		bu/a	Moisture (n=12)	Weight# (n=1)	Maturity (n=10)	Height (n=14)	Lodging (n=12)	Protein* (n=1)	(n=1)	
Progeny	308	70 ± 1	14.0	57	216	33.0	1.2	9.7	2.8	
Dyna-Gro	9012	70 ± 1	14.0	58	214	34.0	1	10.1	2	
Cache River Valley Seed	Dixie McAlister	70 ± 1	13.3	54	215	32.0	1.1	9.5	3.8	
Terral	TV8525	69 ± 1	14.2	57	215	33.0	1.3	9.5	3	
Pioneer	25R32	69 ± 1	13.8	57	215	34.0	1.6	10.5	3.5	
Armor	Ricochet	69 ± 1	13.9	55	215	32.0	1.3	9.3	2.5	
Progeny	185	68 ± 1	13.8	55	218	35.0	1.2	9.2	2.5	
MO	Bess	68 ± 1	13.9	57	214	36.0	1.3	9.5	3	
Cache River Valley Seed	Dixie Kelsey	68 ± 1	14.2	58	214	34.0	1.1	9.8	3	
VA Exp.	VA07W-415	68 ± 1	13.7	56	213	34.0	1.1	9.8	3	
Pioneer	26R22	67 ± 1	14.0	58	215	34.0	1.2	9.6	2.8	
VA	Jamestown	67 ± 1	13.7	58	213	32.0	1.3	10.1	2.5	
Progeny	117	66 ± 1	13.9	56	214	35.0	1.4	9.2	3.3	
USG	3244	66 ± 1	13.5	55	213	36.0	1.3	9.6	3.5	
Progeny	125	64 ± 1	13.6	55	213	32.0	1.3	9.7	3	
Average		72	13.8	56	215	33.9	1.3	9.6	2.7	

† 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 a dry weight basis.

Barley Yellow Dwarf Virus = 1 to 5 scale; where 1 = no disease; 2.5 = ~50% plant tissue diseased; 5 = 95+% of plant tissue diseased, taken at the East TN REC (Knoxville) in 2012.

Table 8. Mean yields† of 34 soft red winter wheat varieties evaluated at six locations (n=18) in Tennessee for three years, 2011 - 2013.

Brand	Variety	Avg. Yield		Spring				bu/a
		± Std Err. (n=18)‡	Crossville	Springfield	Hill	Jackson	Milan	
Terral	TV8848	77 ± 1	68	70	76	93	85	73
USG	3251	77 ± 1	62	72	75	90	83	80
Pioneer	26R10	77 ± 1	66	70	79	93	81	71
Progeny	357	76 ± 1	64	71	71	96	80	77
TN Exp.	TN 1102	76 ± 1	63	82	71	88	83	70
Dyna-Gro	9053	75 ± 1	59	74	76	91	77	75
Terral	TV8861	75 ± 1	58	79	67	85	82	76
AgriPro/Coker (Syngenta)	SY 9978	74 ± 1	65	70	71	88	78	73
Pioneer	26R20	73 ± 1	60	74	72	90	80	62
Progeny	870	72 ± 1	58	67	67	89	80	73
Dyna-Gro	9171	72 ± 1	57	70	64	95	80	68
MO	Milton	72 ± 1	60	68	78	90	77	62
USG	3120	72 ± 1	57	72	70	84	82	69
AgriPro/Coker (Syngenta)	W1104	72 ± 1	60	74	73	90	74	62
USG	3555	72 ± 1	60	69	70	92	78	65
Delta Grow	7500	72 ± 1	56	65	65	94	82	67
USG	3438	71 ± 1	55	71	69	88	79	68
USG	3201	71 ± 1	59	65	70	87	78	69
Cache River Valley See Dixie	McAlister	71 ± 1	59	68	62	90	81	68
Terral	TV8535	71 ± 1	58	65	66	87	79	70
Warren Seed	McKenna 200	71 ± 1	55	69	66	87	76	72
Cache River Valley See Dixie	Kelsey	70 ± 1	59	62	66	88	77	68
Dyna-Gro	9012	70 ± 1	57	63	67	86	78	68
FFR	2239	69 ± 1	57	72	70	81	72	65
Armor	Ricochet	69 ± 1	49	66	68	89	76	68
Pioneer	25R32	69 ± 1	51	68	70	82	76	66
Pioneer	26R22	69 ± 1	55	65	64	85	78	66
Terral	TV8525	68 ± 1	54	66	70	83	73	65
Progeny	185	68 ± 1	55	67	65	80	78	62
USG	3244	68 ± 1	55	71	70	90	78	44
MO	Bess	67 ± 1	51	72	63	87	71	61
VA	Jamestown	67 ± 1	51	63	66	82	72	69
Progeny	117	67 ± 1	59	72	60	85	75	47
Progeny	125	64 ± 1	55	66	69	76	66	55
Average (bu/a)		71	58	69	70	86	77	66
L.S.D. .05 (bu/a)		4	9	9	11	10	8	9
C.V. (%)		9.4	11.5	9.0	10.9	8.5	7.3	9.8

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

Table 9. Mean yields† and agronomic characteristics of 34 soft red winter wheat varieties evaluated at seven locations (n=21) for three years, 2011 - 2013.

Brand	Variety	Avg. Yield ± Std Err. (n=18)‡	Test Moisture (n=18)	Weight# (n=2)	Emergence (n=1)	Vigor (n=1)	Heading (n=1)	Maturity (n=14)	Height (n=14)	Lodging (n=21)	Protein* (n=2)	Barley Yellow Dwarf Virus (n=1)
		bu/a	%	lbs/bu	Score	Score	DAP	DAP	in.	Score	%	Score
Terral	TV8848	77 ± 1	14.5	56	1	3	189	216	34.0	1	10.7	2.8
USG	3251	77 ± 1	14.2	56	2	3	191	217	35.0	1.1	10.1	2.3
Pioneer	26R10	77 ± 1	14.3	56	2	3	188	216	33.0	1	10.4	2.8
Progeny	357	76 ± 1	13.9	53	2	3	190	216	33.0	1.3	9.8	2
TN Exp.	TN 1102	76 ± 1	14.1	54	1	2	188	215	34.0	1.5	10.3	3.3
Dyna-Gro	9053	75 ± 1	13.9	53	1	3	190	216	34.0	1.2	10.2	1.8
Terral	TV8861	75 ± 1	14.6	56	1	3	187	217	33.0	1.2	10.1	2
AgriPro/Coker (Syngenta)	SY 9978	74 ± 1	14.3	55	1	2	190	216	36.0	1.6	10.9	2.5
Pioneer	26R20	73 ± 1	14.2	56	1	3	190	216	35.0	1.4	10.7	2
Progeny	870	72 ± 1	13.5	54	2	3	186	216	32.0	1.1	10.4	3.3
Dyna-Gro	9171	72 ± 1	13.8	54	1	3	186	215	32.0	1.1	10.3	3.8
MO	Milton	72 ± 1	14.1	56	2	2	188	215	35.0	1.1	10.6	1
USG	3120	72 ± 1	14.1	57	1	2	188	215	35.0	1.5	10.6	3.3
AgriPro/Coker (Syngenta)	W1104	72 ± 1	14.5	54	2	3	192	217	34.0	1.4	10.9	2.3
USG	3555	72 ± 1	14.3	55	2	2	189	215	31.0	1.2	10.7	1.5
Delta Grow	7500	72 ± 1	13.7	53	2	3	186	216	33.0	1.1	10.3	2.5
USG	3438	71 ± 1	13.6	53	1	3	186	215	32.0	1.1	10.6	4.3
USG	3201	71 ± 1	14.2	57	2	3	190	216	33.0	1.1	10.8	2.3
Cache River Valley Seed	Dixie McAlister	71 ± 1	13.7	53	2	3	186	215	32.0	1.1	10.1	3.8
Terral	TV8535	71 ± 1	13.7	53	1	3	186	216	32.0	1.1	10.5	3.8
Warren Seed	McKenna 200	71 ± 1	14.2	56	1	3	190	216	34.0	1	11	3
Cache River Valley Seed	Dixie Kelsey	70 ± 1	14.6	57	1	2	189	215	33.0	1.1	10.7	3
Dyna-Gro	9012	70 ± 1	14.4	57	2	3	189	215	33.0	1	10.8	2
FFR	2239	69 ± 1	14.1	56	1	3	190	216	32.0	1.1	11.1	2.3
Armor	Ricochet	69 ± 1	14.2	54	1	3	190	216	32.0	1.2	10.1	2.5
Pioneer	25R32	69 ± 1	14.2	56	1	3	191	216	34.0	1.4	11	3.5
Pioneer	26R22	69 ± 1	14.2	56	1	3	187	216	34.0	1.2	10.2	2.8
Terral	TV8525	68 ± 1	14.4	56	1	2	188	216	33.0	1.2	10.8	3
Progeny	185	68 ± 1	14.1	55	2	3	188	218	35.0	1.2	10.2	2.5
USG	3244	68 ± 1	13.9	54	1	2	189	214	36.0	1.3	10.5	3.5
MO	Bess	67 ± 1	14.2	56	1	3	188	215	36.0	1.3	10.7	3
VA	Jamestown	67 ± 1	14.0	58	1	2	187	214	32.0	1.3	11	2.5
Progeny	117	67 ± 1	14.2	56	1	2	188	215	35.0	1.3	10.1	3.3
Progeny	125	64 ± 1	13.7	55	2	2	188	213	32.0	1.2	10.4	3
Average		71	14.1	55	1	2	188	216	33.5	1.2	10.5	2.7

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

Emergence = 1 to 5 scale; where 1 = 95%+ plants emerged; 2.5 = ~50% plants emerged; 5 = <5% of plants emerged - taken at Knoxville on 3/8/11.

Vigor = 1 to 5 visual scale; where 1 = very vigorous growth; 2.5 = normal or average growth; 5 = low growth rate - taken at Knoxville on 3/8/11.

Maturity (DAP) = Days after planting

Lodging = 1 to 5 scale; where 1 = 95% of plants erect; 2.5 = ~50% of plants leaning at angle ≥ 45°; 5 = 95%+ of plants leaning at an angle ≥ 45°.

BYDV = Barley Yellow Dwarf Virus = 1 to 5 scale; where 1 = no disease; 2.5 = ~50% plant tissue diseased; 5 = 95%+ of plant tissue diseased, taken at East TN REC (Knoxville) in 2012.

Table 10. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2012-13.

Company	Contact	Phone	Email	Web site	Address
AgriPro/Coker (Syngenta)	Barton Fogleman	870-483-7691	barton.fogleman@syngenta.com	www.agriprowheat.com	778 CR 680, Bay, AR 72411
Armor Seed	Lane Dill	901-233-0274	lanedill@armorseed.com	www.armorseed.com	P.O. Box 178, Fisher, AR 72429
Dixie (Cache River Valley Seed)	Jim Bigger	870-477-5233	jimb@crvseed.com	www.crvseed.com	P.O. Box 10, Cash, AR 72421
Croplan Genetics (available at TN Farmers locations)	Jesse Witt	256-221-5932	JBWitt@landolakes.com	www.croplangenetics.com	DSM Middle & East TN
	Keith Saum	731-610-7006	kdsau@landolakes.com		DSM West TN
	Ashley Plymale	270-719-1570			Agronomist
	Jim Payne	901-652-0903	jpayne@ourcoop.com	www.ourcoop.com	West TN
	Matt Sowder	901-355-7267			East & Middle TN
Delta Grow Seed	Lee Hughes	800-530-7933	leehughes19@hotmail.com	www.deltagrow.com	P O Box 219, England, AR 72046
Dyna-Gro	Dewain Riley	731-223-9876	dewain.riley@cpsagu.com	www.dynagroseed.com	710 South First Street, Union City, TN 38621
University of Georgia	Jerry Johnson	770-228-7345	jjohnson@griffin.uga.edu		UGA, Griffin Campus 1109 Experiment St. Griffin, GA 30223
Michigan Crop Improvement Association	C.J. Palmer	517-332-3546	palmerj@michcrop.com		Michigan Crop Improvement Association P.O. Box 21008 Lansing, MI 48909
University of Missouri	Mary Ann Quade	573-884-7333	quadem@missouri.edu		University of MO Foundation Seed 3600 New Haven Rd Columbia, MO 65201
North Carolina State University	Paul Murphy	919-610-0100	paul_murphy@ncsu.edu		North Carolina State University 840 Method Rd, Unit 3 Raleigh, NC 27695
Pioneer Hi-Bred Int.	Dan Poston	622-820-0893	dan.poston@pioneer.com	www.pioneer.com	700 Boulevard South, Suite 302, Huntsville, AL 35802
Progeny	Brian Murray	870-238-2079	bmurray@progenyag.com	www.progenyag.com	1529 Hwy 193, Wynne, AR 72396
Steyer Seeds	Joe Steyer	800-231-4274	joesteyer@yahoo.com	www.steyerseeds.com	6154 N. County Rd. 33, Tiffin, OH 44883
Terral Seed Inc	Larry Mullen	318-282-3681	lmullen@terralseed.com	www.terralseed.com	P O Box 826, Lake Providence, LA 71254
Tennessee Farmers Co-Op	Matt Henderson	731-836-7739	mhenderson@ourcoop.com		P.O. Box 126, Halls, TN 38040

(continued)

Table 10. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2011-12.

Company	Contact	Phone	Email	Web site	Address
University of Tennessee	Dennis West	865-974-8826	dwest3@utk.edu		3421 Joe Johnson Dr, Knoxville, TN 37996-4561
Unisouth Genetics (USG)	Stacy Burwick	800-505-3133	sburwick@bellsouth.net	www.usgseed.com	2640-C Nolensville Rd., Nashville, TN 37211
	David Fandrich	931-967-3377	fandrichsupply@aol.com		Fandrich Supply Co, Belvidere, TN
	Mark Huffstetler	731-235-2167	huffy1@crunet.com		Huffstetler & Sons Seed Inc, Greenfield, TN
	Trey Hurt	731-836-7574	hurtco@bellsouth.net		Hurt Seed Co. Inc, Halls, TN
	Wes Miller	731-536-6251	wes@obiongrain.com		Obion Grain Co. Inc, Obion, TN
	Billy Sellers	731-538-2990			Sellers Seed, Obion, TN
Virginia Crop Improvement	Robin Markham	804-333-3485	rmarkham@vt.edu	www.virginiacrop.org	Virginia Crop Improvement Assoc. 9225 Atlee Branch Lane Mechanicsville, VA 23116
Warren Seed	Lanny Warren	731-234-2921	lanny.warren@charter.net		P.O. Box 10, Woodland Mills, TN 38721