

Wheat Variety Performance Tests in Tennessee

2021

Dennis West, Professor, Plant Science Department

David Kincer, Research Associate, Plant Science Department

Ryan Blair, Extension Area Grains & Cotton Specialist

Tyson Raper, Associate Professor, UT Extension Cotton and
Wheat Specialist

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

Telephone: (865)974-8826
FAX: (865)974-1947
email: dwest3@utk.edu

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

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:

Research and Education Centers:

East Tennessee Research and Education Center, Knoxville

Robert Simpson, Center Director

BJ DeLozier, Farm Manager, Plant Sciences Unit

Derick Hopkins, Agricultural Service Supervisor

Plateau Research & Education Center, Crossville

Walt Hitch, Center Director

Greg Blaylock, Light Farm Equipment Operator

Sam Simmons, Light Farm Equipment Operator

Highland Rim Research and Education Center, Springfield

Robert Ellis, Center Director

Brad S. Fisher, Research Associate

Middle Tennessee Research and Education Center, Spring Hill

Kevin Thompson, Center Director

David Plunk, Research Associate

Research and Education Center at Milan, Milan

Blake Brown, Center Director

Jason Williams, Research Associate

Chris Bridges, Research Associate

Weston Bracey, Research Associate

West Tennessee Research and Education Center, Jackson

Scott Stewart, Center Director

Randi Dunagan, Research Associate

County Standard Wheat Test:

Coordinator:

Ryan Blair, Extension Area Specialist, Grains & Cotton Variety Testing

Carroll County

Kenny Herndon, County Director
Jeremy Morris Farm

Fayette County

Jeff Via, Extension Director
Ames Plantation

Gibson County

Philip Shelby, Extension Agent
Keith Steele Farm

Henry County

Ranson Goodman, County Agent
Cane Creek Farms, Edwin & Brenda Ables

Madison County

Jake Mallard, Extension Agent
Matt Griggs Farm

West TN Research and Education Center (WTREC)
Andrew Wood

Moore County

Larry Moorehead, Extension Director
Jerry Ray Farm

Weakley County

Jeff Lannom, Extension Director
Gary Hall Farm

Table of Contents

	page
General Information.....	5
Interpretation of Data.....	6
Wheat Test Results.....	6
Location information from Research & Education Centers (REC) where the Wheat Variety Tests were Conducted in 2020-2021.....	7
Research and Education Center Wheat Performance Data 2021.....	8
County Standard (CST) Wheat Performance Data 2021.....	14
Combined REC & CST Wheat Performance Data 2021.....	15
Two year Research & Education Center Wheat Performance Data 2020 - 2021...	16
Three year Research & Education Center Wheat Performance Data 2019 - 2021.	20
Seed Company Contact Information.....	22

General Information

Research and Education Center Tests: The 2020-21 variety performance tests were conducted on 68 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) Research and Education Centers (REC), and at the Agricenter in Memphis. Data from the test at the Agricenter in Memphis is not reported due to feeding damage by deer.

All varieties were seeded at rates of 35 seed per square foot (1.5 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, 20 to 25 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 13 soft red winter wheat varieties across eight locations in West Tennessee (Carroll, Fayette, Gibson, Henry, Madison, Moore, Weakley counties, and the West Tennessee Ag Research and Education Center). 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. 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 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.

Growing Season: Planting of the winter wheat crop was timely at most locations. Wetter than normal winter weather caused stand loss where soils were saturated for extended periods. From heading to harvest, dry conditions resulted in light disease pressure, and harvest was completed in a timely manner.

According to the Tennessee Agricultural Statistics Service (TASS), Estimated State yield average was 74 bu/a in 2021. Tennessee producers planted approximately 400,000 acres of wheat for all purposes in the fall of 2020. Approximately 320,000 acres are estimated to be harvested for grain. According to TASS, the total wheat production in Tennessee for 2021 is projected to be 23.7 million bushels, an increase of 75 percent from 2020 production.

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 64 bu/a then it is significantly higher yielding than both Variety B ($64 - 55 = 9 \text{ bu/a} = \text{LSD of } 8$) and Variety A ($63 - 50 = 13 \text{ bu/a} > \text{LSD of } 8$).

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 Summary

Yield and Agronomic Traits: During 2021, 68 wheat varieties were evaluated in six Research and Education Center (REC) tests, and 13 varieties were evaluated in 8 county standard tests (CST). Twelve varieties in the CST were also present in the REC tests (Table 5). Eleven companies and four universities entered varieties into the tests this year. The average yield of the 68 varieties in the 2021 REC tests was 85 bu/a (range from 79 to 95 bu/a, Table 2). The varieties ranged in heading date from 118 to 125 days after January 1 (Julian date) with most of the varieties clustering around 121 days (Table 3). The average yield of the 13 varieties in the county tests was 94 bu/a, with individual varieties ranging from 101 to 87 bu/a (Table 4). The test weight values ranged from 55.1 to 59.4 lbs/bu in the REC tests (Table 3) and 56.5 to 60.4 lbs/bu in the CST (Table 4).

Table 1. Location information from research and education centers where the wheat variety tests were conducted in 2021.							
Research and Education Center	Location	Planting Date	Harvest Date	Seeding Rate		Soil Type	Previous crop
East Tennessee	Knoxville	11/4/2020	6/17/2021	35/ft ²	1.5 mill./ac	Huntington Silt Loam	Fallow
Plateau	Crossville	10/23/2020	7/8/2021	35/ft ²	1.5 mill./ac	Hendon Silt Loam	Sudan grass
Highland Rim	Springfield	10/22/2020	6/17/2021	35/ft ²	1.5 mill./ac	Mountview Silt Loam	Soybean
Middle Tennessee	Spring Hill	10/22/2020	6/24/2021	35/ft ²	1.5 mill./ac	Maury Silt Loam	Corn
West Tennessee	Jackson	10/21/2020	6/15/2021	35/ft ²	1.5 mill./ac	Loring Silt loam	Corn
Milan	Milan	11/13/2020	6/22/2021	35/ft ²	1.5 mill./ac	Grenada Silt Loam	Cotton

Table 2. Mean yields[†] of 68 soft red winter wheat varieties evaluated at six locations in Tennessee during 2021

Brand	Variety	Avg. Yield						Spring
		(n=6) [‡]	Knoxville	Crossville	Springfield	Jackson*	Milan	Hill
-----bu/a-----								
Dyna-gro	9002	95.0	86.4	55.6	111.8	130.6	98.1	87.8
Progeny	#Chad	92.8	84.7	54.2	123.4	114.3	98.5	78.0
UK/KySGGA	Pembroke2021	92.8	88.6	58.1	108.3	121.7	88.6	91.2
AgriMAXX	492	91.9	74.4	46.4	122.4	121.8	103.5	83.0
AgriPro/Syngenta	SY Viper	90.8	95.4	53.3	97.5	130.8	92.8	73.5
AgriMAXX	514	90.4	79.5	46.5	119.7	118.8	95.0	83.2
USG	3472	90.2	79.9	46.0	109.6	117.7	98.6	89.2
Dyna-gro	9120	90.1	79.2	55.0	107.6	120.0	92.6	86.1
USG	3329	90.1	85.4	45.0	117.7	112.4	97.9	82.0
Progeny	PGX19-12	90.0	87.8	42.4	101.9	122.0	103.0	83.2
USG	3352	89.8	69.9	57.8	114.2	124.9	91.0	81.6
USG	3536	89.8	72.7	44.4	100.2	137.5	101.1	82.9
USG	3895	89.6	78.1	59.9	124.5	109.6	94.8	71.1
USG	3316	89.5	73.4	60.7	104.8	121.3	93.8	82.7
Va Tech	Liberty 5658	89.1	66.6	53.4	104.1	122.4	91.9	96.3
Dyna-gro	WX20734	89.0	79.6	50.0	109.9	120.6	97.5	76.3
KWS	KWS291	88.9	81.7	46.7	115.5	124.4	93.0	72.4
Dyna-gro	9692	88.6	72.9	36.8	118.6	123.0	88.1	92.2
AgriMAXX	454	88.4	69.3	55.6	110.1	121.2	90.5	83.9
Dyna-gro	9172	88.4	80.5	39.5	103.1	123.0	94.5	89.5
Va Tech	VA17W-74	88.3	77.2	56.1	108.4	118.3	83.3	86.6
Dyna-gro	9152	88.0	86.2	44.1	105.9	120.7	98.7	72.3
Progeny	PGX19-10	87.9	63.9	51.8	117.8	122.6	102.6	70.9
AgriMAXX	513	87.5	74.8	51.3	100.1	122.3	99.8	76.5
Progeny	#Blaze	87.4	82.4	46.8	98.2	120.4	99.5	77.4

(continued)								
Table 2. Mean yields [†] of 68 soft red winter wheat varieties evaluated at six locations in Tennessee during 2021								
Brand	Variety	Avg. Yield						Spring
		(n=6)	Knoxville	Crossville	Springfield	Jackson	Milan	Hill
-----bu/a-----								
Pioneer	26R10	87.2	69.1	52.5	113.9	109.5	97.4	80.9667
Univ. of Arkansas	AR 15V31-26-2285N	87.1	66.8	53.5	108.4	120.9	95.8	77.4667
Va Tech	VA17W-75	86.7	77.2	39.1	104.7	114.8	95.4	88.9667
Dyna-gro	WX21741	86.4	82.1	47.0	98.3	129.1	92.2	69.4667
TN Exp.	TN 2103	86.3	73.4	41.9	119.5	114.7	92.7	75.8333
AgriMAXX	503	86.3	72.1	53.0	112.8	118.9	80.2	72.2
Stratton	AGS 2055	85.6	73.5	48.8	110.9	106.3	96.5	77.9333
TN Exp.	TN 1902	85.4	77.7	46.2	102.1	122.7	83.7	76.9
Northern Star	NSS X24	85.3	78.2	36.8	108.7	117.1	103.4	67.3667
Univ. of Arkansas	AR 091370C-17-2	85.1	81.2	46.5	105.0	108.7	93.7	75.6333
TN Exp.	TN 2001	85.1	79.6	47.7	111.2	116.3	79.1	76.4
KWS	KWS340	85.0	75.5	46.7	100.9	123.4	93.6	69.8
Univ. of Ga	GA10127-18E26	84.5	64.3	47.1	113.2	119.7	93.4	69.5667
Pioneer	26R36	84.5	72.1	32.6	101.8	108.8	108.2	83.5667
AgriMAXX	505	84.2	74.5	39.2	106.6	122.1	83.8	78.9667
Va Tech	13VTK429-3	84.1	74.1	51.2	90.8	120.4	97.8	70.3667
USG	3539	83.6	71.5	51.8	107.0	118.8	89.9	62.7
AgriPro/Syngenta	SY 547	83.5	70.3	41.3	94.5	130.3	93.0	71.5667
TN Exp.	TN 2101	83.4	82.0	48.0	95.5	108.3	86.5	80.0333
AgriPro/Syngenta	SREXP117	83.4	68.6	42.1	95.4	122.7	93.3	78
Local Seed Company	LW2068	83.3	67.8	42.4	101.4	121.8	97.2	69.0333
Local Seed Company	LW2169	83.2	75.9	47.9	96.1	115.5	90.3	73.7333
Univ. of Ga	GA15VDH-FHB-MAS30-18ESc43F	83.2	62.4	42.7	110.1	121.7	88.6	73.4333
USG	3640	82.7	77.7	41.7	92.0	109.1	100.9	76.0561
AgriMAXX	473	82.7	59.2	40.8	101.8	127.9	95.2	71.2667

(continued)								
Table 2. Mean yields [†] of 68 soft red winter wheat varieties evaluated at six locations in Tennessee during 2021								
Brand	Variety	Avg. Yield						Spring
		(n=6)	Knoxville	Crossville	Springfield	Jackson	Milan	Hill
-----bu/a-----								
Pioneer	26R10	87.2	69.1	52.5	113.9	109.5	97.4	80.9667
Univ. of Arkansas	AR 15V31-26-2285N	87.1	66.8	53.5	108.4	120.9	95.8	77.4667
Va Tech	VA17W-75	86.7	77.2	39.1	104.7	114.8	95.4	88.9667
Dyna-gro	WX21741	86.4	82.1	47.0	98.3	129.1	92.2	69.4667
TN Exp.	TN 2103	86.3	73.4	41.9	119.5	114.7	92.7	75.8333
AgriMAXX	503	86.3	72.1	53.0	112.8	118.9	80.2	72.2
Stratton	AGS 2055	85.6	73.5	48.8	110.9	106.3	96.5	77.9333
TN Exp.	TN 1902	85.4	77.7	46.2	102.1	122.7	83.7	76.9
Northern Star	NSS X24	85.3	78.2	36.8	108.7	117.1	103.4	67.3667
Univ. of Arkansas	AR 091370C-17-2	85.1	81.2	46.5	105.0	108.7	93.7	75.6333
TN Exp.	TN 2001	85.1	79.6	47.7	111.2	116.3	79.1	76.4
KWS	KWS340	85.0	75.5	46.7	100.9	123.4	93.6	69.8
Univ. of Ga	GA10127-18E26	84.5	64.3	47.1	113.2	119.7	93.4	69.5667
Pioneer	26R36	84.5	72.1	32.6	101.8	108.8	108.2	83.5667
AgriMAXX	505	84.2	74.5	39.2	106.6	122.1	83.8	78.9667
Va Tech	13VTK429-3	84.1	74.1	51.2	90.8	120.4	97.8	70.3667
USG	3539	83.6	71.5	51.8	107.0	118.8	89.9	62.7
AgriPro/Syngenta	SY 547	83.5	70.3	41.3	94.5	130.3	93.0	71.5667
TN Exp.	TN 2101	83.4	82.0	48.0	95.5	108.3	86.5	80.0333
AgriPro/Syngenta	SREXP117	83.4	68.6	42.1	95.4	122.7	93.3	78
Local Seed Company	LW2068	83.3	67.8	42.4	101.4	121.8	97.2	69.0333
Local Seed Company	LW2169	83.2	75.9	47.9	96.1	115.5	90.3	73.7333
Univ. of Ga	GA15VDH-FHB-MAS30-18ESc43F	83.2	62.4	42.7	110.1	121.7	88.6	73.4333
USG	3640	82.7	77.7	41.7	92.0	109.1	100.9	76.0561
AgriMAXX	473	82.7	59.2	40.8	101.8	127.9	95.2	71.2667

Table 3. Mean yields† and agronomic characteristics of 68 soft red winter wheat varieties evaluated at six locations in Tennessee during 2021

		Avg.	Test	Heading	
		Yield	Weight#	Date	Height
Brand	Variety	(n6)‡	(n=2)	(n=3)	(n=4)
		bu/a	lbs/bu	julian	in.
Dyna-gro	9002	95.0	55.9	121	32
Progeny	#Chad	92.8	56.1	120	30
UK/KySGGA	Pembroke2021	92.8	57.9	119	33
AgriMAXX	492	91.9	58.0	118	33
AgriPro/Syngenta	SY Viper	90.8	58.3	119	35
AgriMAXX	514	90.4	55.5	122	32
USG	3472	90.2	56.1	123	30
Dyna-gro	9120	90.1	58.1	120	32
USG	3329	90.1	55.8	121	33
Progeny	PGX19-12	90.0	55.7	123	31
USG	3352	89.8	56.3	123	32
USG	3536	89.8	56.9	122	33
USG	3895	89.6	56.2	122	31
USG	3316	89.5	56.1	123	29
Va Tech	Liberty 5658	89.1	57.5	120	33
Dyna-gro	WX20734	89.0	56.9	125	31
KWS	KWS291	88.9	56.4	124	31
Dyna-gro	9692	88.6	55.8	124	32
AgriMAXX	454	88.4	56.1	123	31
Dyna-gro	9172	88.4	56.2	123	32
Va Tech	VA17W-74	88.3	58.3	120	32
Dyna-gro	9152	88.0	58.9	122	32
Progeny	PGX19-10	87.9	56.8	123	29
AgriMAXX	513	87.5	56.5	121	32
Progeny	#Blaze	87.4	56.5	120	32

(continued)					
Table 3. Mean yields† and agronomic characteristics of 68 soft red winter wheat varieties evaluated at six locations in Tennessee during 2021					
		Avg	Test	Heading	
Brand	Variety	Yield (n=6)‡	Weight# (n=2)	date (n=3)	Height (n=4)
		bu/a	lbs/bu	julian	in.
Pioneer	26R10	87.2	56.5	123	32
Univ. of Arkansas	AR 15V31-26-2285N	87.1	58.9	119	35
Va Tech	VA17W-75	86.7	58.4	120	31
Dyna-gro	WX21741	86.4	57.8	122	33
TN Exp.	TN 2103	86.3	56.9	122	33
AgriMAXX	503	86.3	56.7	122	33
Stratton	AGS 2055	85.6	54.4	122	33
TN Exp.	TN 1902	85.4	56.7	120	34
Northern Star	NSS X24	85.3	57.9	122	30
Univ. of Arkansas	AR 091370C-17-2	85.1	57.6	120	35
TN Exp.	TN 2001	85.1	55.2	124	31
KWS	KWS340	85.0	58.1	123	31
Univ. of Ga	GA10127-18E26	84.5	57.8	124	32
Pioneer	26R36	84.5	55.8	123	31
AgriMAXX	505	84.2	58.9	122	32
Va Tech	13VTK429-3	84.1	59.0	123	32
USG	3539	83.6	57.8	122	31
AgriPro/Syngenta	SY 547	83.5	57.6	119	34
TN Exp.	TN 2101	83.4	55.5	120	35
AgriPro/Syngenta	SREXP117	83.4	55.9	120	30
Local Seed Company	LW2068	83.3	55.5	122	31
Local Seed Company	LW2169	83.2	55.9	122	31
Univ. of Ga	GA15VDH-FHB-MAS30-18ESc43F	83.2	56.8	119	31
USG	3640	82.7	59.4	119	34
AgriMAXX	473	82.7	56.4	121	34

(continued)					
Table 3. Mean yields† and agronomic characteristics of 68 soft red winter wheat varieties evaluated at six locations in Tennessee during 2021.					
		Avg	Test	Heading	
Brand	Variety	Yield (n=6)‡	Weight# (n=2)	date (n=3)	Height (n=4)
		bu/a	lbs/bu	julian	in.
Stratton	Go Wheat 2058	82.7	57.2	122	29
Progeny	#Bullet	82.4	57.5	122	33
USG	3562	82.0	55.1	122	33
KWS	KWS338	81.9	57.3	120	30
Univ. of Ga	GA10268-17 LE16	81.9	56.9	124	35
Local Seed Company	LW2148	81.8	56.3	122	33
KWS	KWS375	81.7	57.6	124	31
AgriPro/Syngenta	SREXP119	81.5	57.0	120	30
Pioneer	26R59	81.4	56.0	122	28
Pioneer	26R41	81.4	56.6	122	29
Progeny	#Buster	81.4	57.8	122	31
TN Exp.	TN 2102	81.2	56.2	122	34
Local Seed Company	LW2848	81.2	57.2	121	33
Univ. of Ga	GA15VDH-FHB-MAS23-18LE43F	80.5	57.2	121	26
Univ. of Arkansas	AR 11051-15-3	79.7	57.6	121	34
Pioneer	26R45	79.2	55.6	121	33
Stratton	Go Wheat 4059S	79.1	57.6	123	30
AgriPro/Syngenta	SYRichie	78.9	56.7	118	32
	mean	85.3	56.9	121	32
	C.V. (%)		1.7	2	7
† All yields are adjusted to 13.5% moisture.					
‡ n = number of environments					
# Official test weight of No. 2 wheat = 58 lbs/bu.					
Heading date = Days from Jan 1 to heading.					

Table 4. Yields† of 13 soft red winter wheat varieties evaluated in 8 County Standard test in Tennessee during 2021													
MS	Variety	Avg Yld bu/ac	MOIST %	TWT lb/bu	County								% ≥ Avg.
					Carroll 20-Nov	Fayette 9-Nov	Gibson 14-Nov	Henry Nov	Madison 13-Nov	Moore 4-Nov	Weakley 5-Nov	WTREC 14-Oct	
A	USG 3329	100.8	14.2	58.1	70	124	67	89	132	108	92	124	88
AB	Progeny #BUSTER	98.5	14.3	59.4	70	105	58	93	132	101	104	125	88
AB	Dyna-Gro 9151	98.4	13.8	60.4	68	104	60	97	136	116	81	126	75
ABC	Progeny #CHAD	97.1	14.5	57.5	82	88	71	99	125	100	89	123	75
ABCD	Progeny #BLAZE	96.9	13.7	58.9	61	109	63	94	133	106	86	123	75
ABCD	Dyna-Gro 9002	95.3	13.9	59.4	62	112	58	87	130	105	87	122	50
ABCDE	Dyna-Gro 9172	94.1	13.6	60.1	58	99	72	83	130	100	88	123	63
BCDE	Dyna-Gro 9692	92.7	13.7	59.3	70	79	62	91	135	94	91	118	63
BCDE	AgriPro SY Viper	91.5	13.9	59.1	61	77	55	100	131	102	78	128	38
BCDE	AgriPro SR 1421	91.1	14.3	56.5	66	92	52	96	134	89	87	113	38
CDE	USG 3472	90.2	13.5	58.4	53	97	51	87	133	90	95	117	38
DE	USG 3562	89.0	14.4	59.0	66	90	68	82	124	104	69	109	38
E	AgriPro SY Richie	86.8	13.8	58.3	65	68	67	82	131	78	85	117	25
Averages		94.0	14.0	58.8	65.6	95.6	61.7	90.8	131.2	99.5	87.1	120.7	
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													
Statistical analysis was not conducted on this data due to the lack of replication.													
Official test weight of No. 2 wheat=58 lbs/bu. TWT = Avg. Test Wt. lbs./bu @ 3 locations.													
(-) denotes complete loss to deer damage (awnless varieties)													
Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development													
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.													
UT Extension provides equal opportunities in programs and employment.													

Table 5. Average yields† and test weights of 12 soft red winter wheat varieties that were in common to both the County Standard (CST) Tests (n=8) and the Agricultural Research and Education Center (REC) Tests (n=6) in Tennessee during 2021.

Brand	Variety	County Standard Tests		REC Tests	
		Avg. Yield	Test Weight	Avg. Yield	Test Weight
		bu/a	lbs/bu	bu/a	lbs/bu
USG	3329	100.8	58.1	90.1	55.8
Progeny	#Buster	98.5	59.4	81.4	57.8
Dyna-Gro	9152	98.4	60.4	88.0	58.9
Progeny	#Chad	97.1	57.5	92.8	56.1
Progeny	#Blaze	96.9	58.9	87.4	56.5
Dyna-Gro	9002	95.3	59.4	95.0	55.9
Dyna-Gro	9172	94.1	60.1	88.4	56.2
Dyna-Gro	9692	92.7	59.3	88.6	55.8
AgriPro	SY Viper	91.5	59.1	90.8	58.3
USG	3472	90.2	58.4	90.2	56.1
USG	3562	89.0	59.0	82.0	55.1
AgriPro	SY Richie	86.8	58.3	78.9	56.7
Average		94.3	59.0	87.8	56.6

Table 6. Mean yields† of 38 soft red winter wheat varieties evaluated at five locations (n=10) in Tennessee for two years, 2020 and 2021.								
Brand	Variety	Avg. Yield (n=10)‡	Knoxville	Crossville	Springfield	Milan	Jackson	
			-----bu/a-----					
Progeny	#Chad	98.4	75.6	72.2	135.1	91.6	113.9	
USG	3329	93.6	73.0	70.2	129.6	91.5	103.7	
Dyna-gro	9002	92.5	74.9	68.1	115.6	90.3	112.4	
Progeny	PGX19-12	91.6	75.8	64.1	111.5	93.7	112.6	
Dyna-gro	9692	91.3	71.5	61.7	126.8	86.4	111.6	
USG	3316	90.7	69.2	70.1	113.7	90.1	110.4	
AgriMAXX	505	90.7	68.9	68.4	113.4	85.5	115.2	
Dyna-gro	9151	90.6	75.7	65.1	107.9	91.6	112.5	
Progeny	#Blaze	89.7	75.7	63.5	107.3	92.0	109.2	
USG	3539	89.4	66.0	67.3	115.8	87.9	110.1	
AgriMAXX	503	89.2	63.4	63.0	118.5	81.1	105.1	
AgriMAXX	492	88.4	69.9	58.1	108.7	89.4	113.5	
AgriMAXX	454	88.3	64.9	69.7	113.9	86.1	107.1	
Dyna-gro	9172	88.2	75.0	61.7	114.8	82.6	106.2	
AgriPro/Syngenta	SY Viper	87.8	80.8	65.6	107.6	87.0	99.5	
Univ. of Ga	GA10268-17 LE16	87.7	70.1	70.2	107.8	85.6	103.3	
USG	3536	87.6	66.2	57.9	104.4	91.3	115.2	
Pioneer	26R10	87.5	66.6	67.6	116.0	87.6	97.7	
Pioneer	26R36	87.0	67.7	53.3	108.0	96.0	110.6	
continued								

(continued)							
Table 6. Mean yields† of 38 soft red winter wheat varieties evaluated at five locations (n=10) in Tennessee for two years, 2020 and 2021.							
Brand	Variety	Avg. Yield (n=10)‡	Knoxville	Crossville	Springfield	Milan	Jackson
-----bu/a-----							
TN Exp.	TN 2001	86.4	64.3	64.8	113.8	79.1	108.8
Va Tech	13VTK429-3	86.4	71.8	66.5	95.9	86.7	111.0
Local Seed Company	LW2068	85.7	63.2	60.8	99.8	93.5	109.2
AgriPro/Syngenta	SY 547	85.3	63.3	61.2	100.8	86.7	113.8
Pioneer	26R59	84.9	61.7	69.1	112.7	87.3	86.2
Local Seed Company	LW2848	84.7	70.7	60.6	90.3	91.4	108.5
Progeny	#Bullet	84.5	66.2	62.2	96.3	86.4	111.1
Va Tech	Liberty 5658	84.5	61.5	68.2	98.1	88.4	106.5
Progeny	#Buster	84.5	70.2	62.5	87.3	86.3	113.9
USG	3640	84.4	68.4	65.8	92.6	89.6	102.0
Stratton	AGS 2055	83.8	63.5	60.5	105.8	88.5	98.9
Local Seed Company	LW2169	83.4	71.0	65.5	96.0	82.4	99.0
TN Exp.	TN 1902	83.0	76.4	63.0	103.7	70.7	99.9
AgriMAXX	473	83.0	54.8	60.1	99.5	88.3	109.3
Pioneer	26R41	82.7	52.8	58.8	105.1	93.5	100.7
Univ. of Arkansas	AR 091370C-17-2	81.5	62.6	58.2	101.8	83.1	99.8
Pioneer	26R45	79.8	65.4	61.6	114.7	73.0	83.9
Stratton	Go Wheat 4059S	79.4	67.9	51.1	97.1	70.9	104.7
AgriPro/Syngenta	SY Richie	76.1	65.3	65.1	90.6	68.3	88.4
Average (bu/a)		86.6	68.7	63.7	107.1	86.7	106.7
L.S.D._{.05} (bu/a)		11.9	13.6	10.7	16.7	9.1	15.6
C.V. (%)		18.8	17.1	14.5	13.5	9.1	12.6
† All yields are adjusted to 13.5% moisture.							
‡ n = number of environments							

Table 7. Mean yields† and agronomic characteristics of 38 soft red winter wheat varieties evaluated at five locations (n=10) in Tennessee for two years, 2020 and 2021.

Brand	Variety	Avg. Yield (n=10)‡	Test Weight# (n=6)	Date Headed (n=6)	Height (n=6)	
		bu/a	lbs/bu	Julian	in.	
USG	3329	90.9	55.8	111	31	
Dyna-gro	9941	89.4	54.6	113	32	
Dyna-gro	9522	88.7	56.1	113	32	
Dyna-gro	9002	88.6	54.9	112	32	
Progeny	#Blaze	87.8	55.4	110	32	
AgriMAXX	454	87.2	56.5	112	31	
Pioneer	26R36	86.8	56.6	112	32	
Progeny	#Buster	85.8	56.9	113	32	
Local Seed Company	LW2848	84.7	56.6	112	33	
Progeny	#Bullet	84.7	56.4	113	34	
Pioneer	26R10	84.6	55.5	113	31	
Local Seed Company	LW2937	84.4	55.6	113	31	
Stratton	Go Wheat 4010	83.6	55.3	112	31	
Progeny	PGX18-8	83.6	56.2	111	30	
TN Exp.	TN 1901	82.5	55.5	110	32	
Pioneer	26R41	81.8	56.3	113	30	
AgriPro/Syngenta	SY 547	81.5	56.4	110	33	
Va Tech	Liberty 5658	81.4	57.6	111	33	
Stratton	AGS 2038	81.4	56.9	113	36	
Limagrain	L11719	81.4	56.0	112	30	
AgriPro/Syngenta	SY Viper	81.4	56.2	109	32	
AgriMAXX	492	81.2	56.6	111	30	
Pioneer	26R45	80.6	55.7	112	32	

(continued)

(continued)

Table 7. Mean yields† and agronomic characteristics of 39 soft red winter wheat varieties evaluated at five locations (n=10) in Tennessee for two years, 2019 and 2020.

Brand	Variety	Avg. Yield (n=10)‡	Test Weight# (n=6)	Date Headed (n=6)	Height (n=6)	
		bu/a	lbs/bu	Julian	in.	
Pioneer	26R59	80.4	54.7	113	29	
USG	3536	80.4	56.0	113	33	
AgriMAXX	495	80.2	56.0	112	32	
AgriMAXX	473	80.2	55.7	114	33	
TN Exp.	TN 1903	80.1	57.4	113	34	
Stratton	AGS 2055	79.9	55.4	112	33	
Progeny	#Turbo	79.2	56.7	112	29	
Texas A&M	TX15D9253	79.0	54.7	110	30	
Univ. of Arkansas	AR 06146E-1-4	79.0	58.0	109	34	
TN Exp.	TN 1702	78.9	57.2	111	30	
Texas A&M	TX15D9597	76.9	57.2	111	32	
Progeny	#Fury	76.3	57.0	111	31	
Stratton	Go Wheat 4059S	75.6	56.3	112	31	
TN Exp.	TN 1902	75.3	58.0	111	31	
USG	3228	75.2	54.4	110	30	
Texas A&M	TX15D9579	75.1	56.3	110	30	
	Average	82.2	55.9	114	32	
	C.V. (%)	8.8	2.1	2	8	

† All yields are adjusted to 13.5% moisture.

‡ n = number of environments

Table 8. Mean yields† of 11 soft red winter wheat varieties evaluated at four locations (n=12) in Tennessee for three years, 2019 - 2021.						
Brand	Variety	Avg. Yield (n=12)‡	Knoxville	Spring Field	Milan	Jackson
		-----bu/a-----				
Pioneer	26R36	92.9	78.2	101.9	89.2	102.0
Progeny	#Blaze	92.7	81.2	98.3	89.6	102.1
AgriPro/Syngenta	SY Viper	90.0	87.3	103.4	85.9	86.1
Pioneer	26R10	89.9	75.8	105.0	83.6	95.4
USG	3536	89.7	70.1	98.9	85.3	103.4
Progeny	#Bullet	89.3	77.7	92.0	86.1	102.2
Stratton	AGS 2055	88.3	73.5	96.5	88.1	95.0
AgriPro/Syngenta	SY 547	88.1	70.4	94.9	86.0	102.1
Pioneer	26R41	87.2	64.0	96.2	90.0	97.5
Pioneer	26R45	84.7	74.4	107.0	77.6	76.0
Pioneer	26R59	83.8	64.6	105.6	86.8	76.4
	Average (bu/a)	89.5	76.1	99.4	86.3	96.7
	L.S.D. _{.05} (bu/a)	14.4	15	11.3	9.3	16.5
	C.V. (%)	6.1	10.8	10.6	7.5	15
† All yields are adjusted to 13.5% moisture.						
‡ n = number of environments						

Table 9. Mean yields† and agronomic characteristics of 11 soft red winter wheat varieties evaluated at four locations (n=12) for three years, 2019 - 2021.						
			Test	Date		
		Avg. Yield	Weight	Headed	Height	
Brand	Variety	(n=15)‡	(n=8)	(N=6)	(n=10)	
		bu/a	lbs/bu	julian	in.	
Pioneer	26R36	92.9	56.1	116	33	
Progeny	#Blaze	92.7	55.2	113	34	
AgriPro/Syngenta	SY Viper	90.0	56.2	113	35	
Pioneer	26R10	89.9	55.4	116	32	
USG	3536	89.7	55.7	116	34	
Progeny	#Bullet	89.3	56.2	117	35	
Stratton	AGS 2055	88.3	54.8	115	34	
AgriPro/Syngenta	SY 547	88.1	56.2	114	35	
Pioneer	26R41	87.2	55.9	116	31	
Pioneer	26R45	84.7	55.3	115	34	
Pioneer	26R59	83.8	54.4	116	30	
Average		89.5	55.8	116	33	
C.V. (%)		14.4	2.9	5	10	
† All yields are adjusted to 13.5% moisture.						
‡ n = number of environments						
Date headed = no. of days after January 1.						

Table 10. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2021.					
Company	Contact	Phone	Email	Web site	Address
AgriMAXX Seed Co	James Yarber	855-629-9432	james.yarber@agrimaxwheat.com		7167 Highbanks Rd., Mascoutah, IL 62258
AgriPro/Syngenta	Ken Davis	815-953-2041	kenneth.davis@syngenta.com		
Cache River Valley Seed	Ted Holt	870-477-5427	tedh@crvseed.com	www.crvseed.com	P.O. Box 10, 12470 Hwy 226 E., Cash, AR 72421
Dyna-Gro	Jonathan Fant	731-885-1212	Jonathan.Fant@cpsagu.com	www.dynagroseed.com	710 South First St., Union City, TN 38261
Local Seed Co	Charlie Robinette	662-820-2035	Charlie.Robinette@localseed.com		802 Rozelle St., Memphis, TN 38109
Northern Star	Jason Hinton		jason@northernstar.com		
Pioneer Hi-Bred Int.	Suzannah Wiggins	731-443-0512	suzannah.wiggins@corteva.com	pioneer.com	
Progeny	Bret Mize	870-208-4423	bret@progeny.com	www.progeny.com	1529 Hwy 193, Wynne, AR 72396
Stratton Seed Company	Heath North	800-264-4433	hnorth@strattonseed.com	www.gostrattonseed.com	1530 Hwy 79, South Stuttgart AR 72160
Texas A&M University continued	Russell Sutton	214-718-1602	r-sutton@tamu.edu		Commerce, TX 75429

(continued)					
Table 10. Contact information for wheat seed companies evaluated in yield tests in Tennessee during 2016-17.					
Company	Contact	Phone	Email	Web site	Address
University of Arkansas	Esten Mason	479-387-8899	esten@uark.edu		
University of Tennessee	Dennis West	865-974-8826	dwest3@utk.edu		3421 Joe Johnson Dr, Knoxville, TN 37996-4561
University of Georgia	Mohamed Mergoum		mmergoum@uga.edu		Griffin, GA 30223
Unisouth Genetics (USG)	Stacy Burwick	645-504-1595	sburwick@usgseed.com	www.usgseed.com	3205-C HWY 46 South, Dickson, TN 37055
	David Fandrich	931-967-3377	fandrichsuplv@aol.com		
	Mark Huffstetter	731-235-2167	huffv1@crunet.com		
	Trey Hurt	731-836-7574	hurtco@bellsouth.net		
	Wes Miller	731-536-6251	wes@obiongrain.com		
	Billy Sellers	731-538-2990			Obion Grain Co. Inc, Obion, TN Sellers Seed, Obion, TN
Virginia Crop Improvement	Tom Hardiman	804-746-4884	rmarkham@vt.edu	www.virginiacrop.org	Virginia Crop Improvement Assoc. 9225 Atlee Branch Lane Mechanicsville, VA 23116