Winter Wheat

Missouri Crop Performance

2010



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Missouri 2010 Soft Red Winter Wheat Performance Tests

This report is a contribution of the Division of Plant Sciences, University of Missouri College of Agriculture, Food and Natural Resources. The work was supported by fees provided by companies submitting hybrids for evaluation. The large number of commercial varieties available makes selection of a superior variety difficult. To select intelligently, producers need a reliable, unbiased, up-to-date source of information that will permit valid comparisons among available varieties. The objective of the University of Missouri's Performance testing program is to provide this information. The tests are conducted under the most uniform conditions possible. Small plots are used to reduce the chance of soil and climatic variations occurring between one variety plot and another. Results obtained should aid the individual grower in judging the relative merits of many of the commercial wheat varieties available in Missouri today.

Comparing Hybrids

The performance of a variety cannot be measured with absolute precision. Uncontrolled variability is involved in the determination of each yield average. This variability exists in all field experimentation; statistics are used as a tool to assist in making decisions. The statistical tool used in these tests is the test of least significant difference (LSD). The LSD is simple to apply. When two entries are compared and the difference between them is greater than the LSD, the entries are considered to be significantly different. Differences smaller than the LSD may have occurred by chance and are considered non-significant.

Crop performance may seem inconsistent from location to location and from year to year. The factors for these differences are rainfall, temperatures, soil fertility, diseases, insects, and other factors. To obtain an improved estimate of relative variety performance, readers should consider results from more than one location or year. In this publication, the authors have tried to facilitate comparisons across years and locations. In each test, the "top yielding" varieties have been identified. These lines are those that did not yield significantly less than the highest yielding line in the test. They are denoted in the tables by an asterisk (*) next to their yields. Thus, by going down a column, readers can readily identify the highest yielding varieties in a test or in a region. From the standpoint of yield, the most desirable hybrids will be those that are among the "top yielding" varieties the greatest number of times.

Although yield usually receives first consideration, other agronomic characteristics may be equally important when selecting a wheat variety. Stalk strength, maturity, and resistance to diseases are among the variety characteristics that deserve careful consideration. The maturity classification listed for each hybrid in this bulletin is based solely on information supplied by the entry's sponsor. Poor stalk strength and susceptibility to diseases may decrease harvestable yield because of lodging or stand loss.

The Missouri Variety Testing Program does not make specific recommendations for varieties. Farmers growing a new line for the first time should consider all the information available and then grow a small acreage to determine adaptability. This should be the practice for all new varieties regardless of origin.

The Authors

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Acknowledgments

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Experimental Procedures for Wheat Tests

Test Descriptions:

Entries: All producers of wheat varieties were eligible to enter the 2010 wheat evaluation tests. Participation was voluntary and the test coordinators exercised no control over which or how many varieties were entered. To help finance the evaluation program, the participants paid \$100 per location for each variety entered.

<u>Plot Management</u>: All test plots were planted and harvested with commercial equipment modified for small plot work. Row spacing for the wheat experiments was 7.5 inches with a seeding rate of 1,500,000 seeds/acre. Fertilizer was applied at each location at the discretion of the farmer or the station manager. Weed control was achieved with commercial herbicides and additional hand weeding was done as required. Management details varied from location to location and are specified in the regional crop management summaries.

<u>Data Recorded:</u> Maturity classification, disease resistance, and seed treatment information is provided by the entry sponsor and this information will be provided in the report. Lodging and height are determined immediately before harvest. A scale of 1 to 5 is used to score lodging. Interpretation of the scale is as follows: 1 = all plants leaning moderately or 20% to 50% down, 5 = all plants down.

Data on plant height, lodging, grain yield, test weight, and grain moisture are given for each entry and location. Yield is measured in bushels (60 pounds) per acre at a moisture content of 13.0 percent. An electronic moisture tester is used for all moisture readings.

Accessibility of Data: The results of the 2010 crop performance tests are additionally available online at: http://www.plantsci.missouri.edu/varietytesting.

<u>Field Plot Design</u>. Statistical designs used to analyze the field data were randomized lattice with three replications. Individual plots were six rows wide with a row length of 25 feet. All rows of each plot were harvested determine yield.

Locations: On the basis of geographical characteristics, the state was divided into regions. Test locations are shown on the adjacent map.

North

- 1. Peter Brewer farm, Trenton (Grundy Co.)
- 2. Greenley Memorial Center, Novelty (Knox Co.)
- 3. Bradford Research & Extension Ctr, Columbia (Boone Co.)

West

- 4. Frank Swisher farm, Marshall (Saline Co.)
- 5. Kenny Tevis farm, Hughesville (Pettis Co.)
- 6. David Sheat farm, Lamar (Barton Co.)

Southeast

- 7. Martin Eftink farm, Chaffee (Scott Co.)
- 8. Don Deline farm, Charleston (Mississippi Co.)
- 9. Delta Research Center, Portageville (Pemiscot Co.)



North Region Crop Management Summary

There are three locations in the North Region for the Wheat Variety Test. They are located in counties where a significant number of acres of wheat are grown according to the Missouri Agricultural Statistics Service. Cultural practices vary slightly between locations, but tend to reflect those followed by farmers in the area.

The experiments at Trenton and Novelty were planted timely, October 5 and September 30 respectively. The experiment at Columbia was planted October 7, but because of heavy rain over the next couple of weeks, the test had to be replanted on November 5. Yields for these 3 sites were fair, averaging 42 bushels per acre for the 49 varieties.

Climatological information for the growing season (October 1 - May 30) for the North Region is summarized below and cultural practices for each site are listed below in Table 1.

Average temperature = 41.9 degrees, 0.5 degrees below normal Average precipitation = 30.4", 8.3" above normal

Table 1. North Region location crop management summary.

	Planting	Harvest]	Fertilize	er		Pestic	ides
Location	date	date	N	$P_{2}O_{5}$	K_20	Tillage	Pre	Post
Trenton	10-05	6-29	126	92	180	Notill	Roundup Power Max	Harmony
Novelty	09-30	6-30	110	52	60	Notill.	None	Harmony
Columbia	11-05	6-27	120	40	60	Notill	Roundup Power Max	Harmony + 2,4-D

Table 2 **Soft Red Winter Wheat**

North Region: Columbia, MO (Boone County)

Soil Type: Mexico Silt Loam Soil Test: pH=6.7, OM=2.3%, P=32, K=272 Rainfall: Oct=9.8,Nov=1.6,Dec=2.7,Jan=1.8,Feb=2.3,Mar=3.0,Apr=7.7,May=4.2 Total season rainfall = 33.1

Brand-Variety	Yield bu/A		Test Weight	Height	Lodging
	2010		lb/bu	in	~
Dyna-Gro WXO9602	55.9	**	53.5	33	1
MFA 2525	55.3	*	51.3	39	1
Excel 442	54.2	*	51.9	38	1
Syngenta Oakes	52.0	*	54.9	33	1
JGL Ex72562	50.5		49.7	33	1
Excel 302	50.1		50.7	34	1
Dyna-Gro WXO9501	48.9		55.5	35	1
MO exp080104	48.7		54.5	34	1
Lewis 835	48.7		54.7	35	1
Pioneer 25R39	48.7		50.0	34	1
Milton	48.5		51.7	35	1
MFA 2631	48.1		55.3	34	1
JGL Ex60172	47.8		50.2	30	1
Truman	47.8		51.1	37	1
Excel 341	47.5		52.3	36	1
Excel 234	47.0		54.0	34	1
Excel 180	46.6		55.2	33	1
MO exp050921	46.4		50.8	36	1
Syngenta W1377	46.3		55.2	34	1
Direct DW Ex109	46.1		49.4	33	1
Excel 357	45.8		53.6	34	1
Bess	45.6		53.3	34	1
Excel 173	45.3		52.2	35	1
Syngenta W1104	45.1		51.7	34	1
Dyna-Gro WXO9612	44.7		49.2	33	1
Direct DW Ex106	43.5		50.6	36	1
Dyna-Gro 9922	43.5		48.2	35	1
Excel 242	43.3		51.2	33	1
Excel 410TW	43.3		51.2	34	1
Excel 163	42.7		53.3	33	1
Excel 286	42.7		51.9	35	1
Excel 170	42.6		51.9	33	1
Excel 400-1	42.5		52.0	36	1
JGL Ex51585	42.1		48.8	33	1
VA O5W-258	41.7		47.9	34	1

Syngenta Coker 9553	41.5	48.4	32	1
Syngenta W1566	41.5	45.6	35	1
Syngenta Cooper	41.3	49.3	34	1
MO exp041687	40.7	49.5	35	1
Willcross 740	39.9	49.4	33	1
Pioneer 25R56	39.2	50.6	31	1
Lewis 830	39.1	49.2	35	1
Syngenta Branson	38.6	49.5	32	1
Pioneer 25R78	38.6	49.2	32	1
Syngenta SY 9978	37.2	45.2	36	1
Syngenta Beretta	37.0	48.0	31	1
Jamestown	36.3	51.9	30	1
Willcross 748	36.3	48.8	37	1
Merl	29.4	48.7	31	1
Test Average	44.4	51.1		
L.S.D. AT .10	4.8	1.2		
C.V.%	7.9	1.8		

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Data not available.
Highest yielding variety in the test.
Yield not significantly less than the highest yielding variety in the test.
Lodging rated on a 1 to 5 scale where 1 = no lodging and 5 = plants are completely flat.

Table 3 **Soft Red Winter Wheat**

North Region: Novelty, MO (Knox County)

Soil Type: Putnam Silt Loam Soil Test: pH=5.4, OM=2.7%, P=76, K=438 Rainfall: Oct=8.8,Nov=2.6,Dec=1.7,Jan=1.7,Feb=0.9,Mar=2.1,Apr=5.3,May=5.4 Total season rainfall = 28.5

Brand-Variety	Yield bu/A	A	Test Weight	Height	Lodging
•	2010		lb/bu	in	~
MFA 2525	40.4	**	54.2	42	1
Excel 442	39.2	*	54.5	43	1
Direct DW Ex109	38.6	*	52.6	36	1
JGL Ex60172	37.1	*	50.0	34	1
JGL Ex72562	37.0	*	51.4	33	1
Excel 242	36.9	*	53.9	36	1
Excel 234	36.5	*	55.2	38	1
Direct DW Ex106	36.3		52.3	34	1
Syngenta Oakes	35.5		56.4	34	1
Syngenta W1104	35.4		52.7	37	1
Excel 180	35.3		54.7	36	1
MO exp050921	35.3		56.4	38	1
Syngenta Beretta	35.3		52.3	33	1
Syngenta SY 9978	35.2		49.0	35	1
Jamestown	35.1		55.7	33	1
Willcross 748	35.1		51.5	40	1
Excel 173	34.9		52.4	34	1
Pioneer 25R56	34.9		51.6	35	1
Excel 341	34.7		53.7	36	1
Dyna-Gro WXO9501	34.6		55.3	39	1
Lewis 835	34.5		54.9	35	1
MFA 2631	34.5		56.0	38	1
Dyna-Gro WXO9612	34.4		54.1	36	1
Excel 286	34.4		54.6	40	1
MO exp080104	34.1		56.8	34	1
Dyna-Gro WXO9602	33.9		54.5	31	1
MO exp041687	33.6		52.4	38	1
Excel 400-1	33.4		53.6	41	1
Pioneer 25R39	33.3		53.1	37	1
Syngenta W1377	33.3		55.9	33	1
Excel 410TW	33.0		53.9	40	1
Pioneer 25R78	32.4		52.0	36	1
Dyna-Gro 9922	32.3		52.5	37	1
Syngenta Cooper	32.2		53.4	31	1
Lewis 830	32.1		52.0	38	1

Milton	31.9	53.9	36	1
Excel 163	31.6	54.1	35	1
Truman	31.6	56.2	38	1
VA O5W-258	31.4	50.6	35	1
Syngenta Branson	31.1	51.6	34	1
Bess	30.9	54.0	36	1
Excel 170	30.4	53.4	32	1
Excel 357	29.7	54.6	36	1
JGL Ex51585	29.7	51.0	35	1
Excel 302	29.6	53.2	33	1
Syngenta Coker 9553	29.3	51.9	37	1
Syngenta W1566	29.2	49.0	36	1
Willcross 740	26.9	54.3	36	1
Merl	25.5	52.2	34	1
Test Average	33.5	53.4		
L.S.D. AT .10	3.9	0.7		
C.V.%	8.5	0.9		

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Data not available.
Highest yielding variety in the test.
Yield not significantly less than the highest yielding variety in the test.
Lodging rated on a 1 to 5 scale where 1 = no lodging and 5 = plants are completely flat.

Table 4 **Soft Red Winter Wheat**

North Region: Trenton, MO (Grundy County)

Soil Type: Lagonda Silty Clay Loam Soil Test: pH=6.2, OM=2.6%, P=38, K=280 Rainfall: Oct=6.8,Nov=3.3,Dec=3.1,Jan=0.8,Feb=1.7,Mar=2.7,Apr=3.7,May=7.6 Total season rainfall = 29.7

Brand-Variety	Yield bu/A	A	Test Weight	Height	Lodging
	2010		lb/bu	in	~
Dyna-Gro WXO9602	55.2	**	56.1	35	1
JGL Ex60172	52.9	*	51.9	35	1
Excel 442	52.6	*	54.1	43	1
Direct DW Ex109	52.2	*	52.1	39	1
Excel 180	51.9	*	56.4	38	1
Syngenta W1377	51.9	*	56.6	37	1
Lewis 835	51.8	*	55.8	37	1
Dyna-Gro WXO9501	51.5	*	56.5	34	1
MFA 2525	51.4	*	54.0	40	1
Excel 410TW	50.7	*	54.0	41	1
Jamestown	50.7	*	56.8	36	1
Excel 286	50.5	*	53.4	42	1
Pioneer 25R56	50.5	*	52.8	36	1
Excel 163	50.0	*	56.5	41	2
Excel 357	50.0	*	55.5	38	1
MFA 2631	49.5		55.5	37	1
Syngenta Branson	49.5		52.5	36	1
Direct DW Ex106	49.3		51.7	37	1
JGL Ex72562	49.2		49.9	35	1
Excel 400-1	49.1		53.9	38	1
Excel 341	48.4		53.2	39	1
Pioneer 25R39	48.4		53.2	34	1
MO exp050921	47.9		56.6	36	1
Excel 234	47.7		54.6	40	3
Bess	47.6		54.8	35	1
Lewis 830	47.6		52.0	38	1
Dyna-Gro WXO9612	47.5		52.7	35	1
JGL Ex51585	47.4		53.1	36	1
Willcross 748	47.4		52.8	38	1
Syngenta W1104	47.2		52.9	36	1
Dyna-Gro 9922	47.1		51.5	37	1
MO exp080104	47.1		56.2	37	1
Pioneer 25R78	46.6		53.9	36	1
Syngenta Cooper	46.6		52.6	34	1
Excel 242	46.5		54.0	37	1

Truman	46.5	56.1	39	1
Merl	46.4	54.4	37	1
Milton	46.4	54.2	37	1
Excel 173	46.2	53.5	38	1
Syngenta Oakes	45.8	55.5	38	1
Syngenta W1566	44.3	48.9	42	1
Syngenta SY 9978	43.7	49.5	39	2
Syngenta Coker 9553	43.0	53.9	37	1
VA O5W-258	42.4	51.0	39	1
Syngenta Beretta	42.2	51.1	36	1
Willcross 740	42.2	55.0	38	1
Excel 302	41.8	53.7	34	1
Excel 170	41.0	53.3	39	2
MO exp041687	39.8	52.3	36	1
Test Average	47.8	53.7		
L.S.D. AT .10	5.2	1.0		
C.V.%	7.9	1.3		

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Data not available.
Highest yielding variety in the test.
Yield not significantly less than the highest yielding variety in the test.
Lodging rated on a 1 to 5 scale where 1 = no lodging and 5 = plants are completely flat.

Table 6 Soft Red Winter Wheat Performance Summary of varieties evaluated at three North Missouri locations during 2010.

ColumbiaNoveltyTrentonPlanted: 11-5Planted: 9-30Planted: 10-5Harvested: 6-23Harvested: 6-30Harvested: 6-29

Growing Season Rain: 33.1 Growing Season Rain: 28.5 Growing Season Rain: 29.7

	Yield (Bu/Acre)						
Brand-Variety	Columbia	Novelt	у	Trento	1	Mean	
MFA 2525	55.3 *	40.4	**	51.4	*	49.0	**
Excel 442	54.2 *		*	52.6	*	48.7	*
Dyna-Gro WXO9602	55.9 **			55.2	**	48.3	*
JGL Ex60172	47.8	37.1	*	52.9	*	45.9	
Direct DW Ex109	46.1	38.6	*	52.2	*	45.6	
YOY T. 201 50							
JGL Ex72562	50.5	37.0	*	49.2		45.6	
Dyna-Gro WXO9501	48.9	34.6		51.5	*	45.0	
Lewis 835	48.7	34.5		51.8	*	45.0	
Excel 180	46.6	35.3		51.9	*	44.6	
Syngenta Oakes	52.0 *	35.5		45.8		44.4	
MFA 2631	48.1	34.5		49.5		44.0	
Syngenta W1377	46.3	33.3		51.9	*	43.8	
Excel 234	47.0	36.5	*	47.7		43.7	
Excel 341	47.5	34.7		48.4		43.5	
Pioneer 25R39	48.7	33.3		48.4		43.5	
MO exp080104	48.7	34.1		47.1		43.3	
MO exp050921	46.4	35.3		47.9		43.2	
Direct DW Ex106	43.5	36.3		49.3		43.0	
Syngenta W1104	45.1	35.4		47.2		42.6	
Excel 286	42.7	34.4		50.5	*	42.5	
Exect 200	12.7	31.1		30.3		12.3	
Excel 410TW	43.3	33.0		50.7	*	42.3	
Milton	48.5	31.9		46.4		42.3	
Excel 242	43.3	36.9	*	46.5		42.2	
Dyna-Gro WXO9612	44.7	34.4		47.5		42.2	
Excel 173	45.3	34.9		46.2		42.1	
Truman	47.8	31.6		46.5		42.0	
Excel 357	45.8	29.7		50.0	*	41.8	
Excel 400-1	42.5	33.4		49.1		41.7	
Pioneer 25R56	39.2	34.9		50.5	*	41.5	
Excel 163	42.7	31.6		50.0	*	41.4	
Dagg	15 6	20.0		47.6		41.4	
Bess Dame Cre 0022	45.6	30.9		47.6			
Dyna-Gro 9922	43.5	32.3		47.1 50.7	*	41.0	
Jamestown	36.3	35.1		50.7	*	40.7	
Excel 302	50.1	29.6		41.8		40.5	
Syngenta Cooper	41.3	32.2		46.6		40.0	

C.V.%	7.9	8.5	7.9	7.5
L.S.D. AT .10	4.8	3.9	5.2	2.5
Average	44.4	33.5	47.8	41.9
				30.0
Merl	29.4	25.5	46.4	33.8
Willcross 740	39.9	26.9	42.2	36.3
Syngenta Coker 9553	41.5	29.3	43.0	37.9
Excel 170	42.6	30.4	41.0	38.0
MO exp041687	40.7	33.6	39.8	38.0
Syngenta Beretta	37.0	35.3	42.2	38.2
Syngenta W1566	41.5	29.2	44.3	38.3
VA O5W-258	41.7	31.4	42.4	38.5
Syngenta SY 9978	37.2	35.2	43.7	38.7
Pioneer 25R78	38.6	32.4	46.6	39.2
Willcross 748	36.3	35.1	47.4	39.6
Lewis 830	39.1	32.1	47.6	39.6
Syngenta Branson	38.6	31.1	49.5	39.7
JGL Ex51585	42.1	29.7	47.4	39.7

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Data not available. Highest yielding variety in the test. Yield not significantly less than the highest yielding variety in the test.

West Region Crop Management Summary

There are three locations in the West Region for the Wheat Variety Test. They are located in counties where a significant number of acres of wheat are grown according to the Missouri Agricultural Statistics Service. Cultural practices vary slightly between locations, but tend to reflect those followed by farmers in the area.

Excessive rainfall during September and October in West Missouri delayed planting of all sites until November and even until December 1 for Hughesville. The tests at Hughesville and Lamar were abandoned because stands were so poor and the test intended for Adrian had to be moved to Marshall. That experiment was harvested, but the yields were so low that we could not justify publishing the results.

Climatological information for the growing season (October 1 –May 31) for the West Region is summarized below and cultural practices for each site are listed below.

Average temperature = 42.4 degrees, 0.7 degrees below normal Average precipitation = 30.7", 7.3" above normal

Table 6. West Region Crop Management Summary

	Planting	Harvest		Fertilize	er		Pesticide	
Location	date	date	N	$P_{2}O_{5}$	K_20	Tillage	Pre	Post
Hughesville	12-01	Abandoned		NA		Conv.	None	None
Marshall	11-13	07-01	125	0	0	Notill	Roundup Power Max	Harmony + 2,4-D
Lamar	11-10	Abandoned		NA		Conv.	None	None

Southeast Region Crop Management Summary

There are three locations in the Southeast Region for the Wheat Test. They are located in counties where a significant number of acres of wheat are grown according to the Missouri Agricultural Statistics Service. Cultural practices vary slightly between locations, but tend to reflect those followed by farmers in the area.

Despite excessive rainfall throughout the growing season, the wheat experiments in the Southeast Region were planted and harvested very timely. Yields were good at all locations, averaging 64 bushels per acre for the 64 varieties.

Climatological information for the growing season (October 1 –May 31) for the Southeast Region is summarized below and cultural practices for each site are listed below.

Average temperature = 49.3 degrees, 1.2 degrees above normal Average precipitation = 37.1", 3.6" above normal

Table 7. Southeast Region Crop Management Summary

	Planting	Harvest	I	Fertilize	er		Pes	sticide	
Location	date	date	N	$P_{2}O_{5}$	K_20	Tillage	Pre	Post	
Chaffee	10-20	06-14	130	0	0	Conv.	None	None	
Charleston	10-21	06-15	162	46	62	Conv.	None	Harmony + 2,4-D Folicur	
Portageville	10-20	06-08	130	0	0	Conv.	None	None	

Table 8 **Soft Red Winter Wheat**

Southeast Region: Chaffee, MO (Scott County)

Soil Type: Commerce Silt Loam Soil Test: pH=6.6; OM=1.9; P=266; K=398 Rainfall: Oct=10.2,Nov=2.1,Dec=6.6,Jan=3.4,Feb=1.7,Mar=5.7,Apr=4.7,May=6.4 Total season rainfall = 40.8

Brand-Variety	Yield bu/2010	A	Test Weight lb/bu	Height in	Lodging ~
JGL Ex60172	74.6	**	56.6	34	1
		*	55.5	3 4 35	1
JGL Ex72562	74.6	*	55.3 55.3	33 39	1
Dyna-Gro WXO9603 USG 3438	71.4	*	55.5 56.4	39 34	1
	71.1	*	56.6	34 36	
Armor ARX9304	71.0	•	30.0	30	1
Excel 442	70.6	*	57.2	44	1
Excel 180	70.1	*	58.9	38	1
MFA 2525	70.0	*	56.7	41	1
Syngenta W1104	70.0	*	55.1	37	1
Excel 173	69.5		57.7	38	1
Pioneer 25R78	69.0		57.5	34	1
JGL Ex51585	68.7		57.4	38	1
Dixie 907	67.6		57.9	44	1
Pioneer 26R15	67.6		57.2	38	1
USG 3409	67.0		58.0	39	1
Dixie 454	66.7		59.2	40	1
Delta Grow 8300	66.7		57.3	36	1
MO exp080104	66.5		56.3	37	1
USG 3770	66.2		57.5	39	1
Dixie 940	66.1		56.2	41	1
Excel 302	65.5		56.5	37	1
Milton	65.4		58.4	37	1
MFA 2631	65.2		59.2	38	1
Dixie 427	65.2		56.5	37	1
Delta Grow 5900	65.2		58.1	38	1
Direct DW Ex106	64.7		56.4	39	1
Syngenta Branson	64.7		56.3	36	1
Syngenta W1566	64.7		55.9	42	1
Dyna-Gro WXO9602	64.6		58.8	36	1
MO exp041687	64.1		56.5	37	1
Progeny 117	64.0		57.3	39	1
Dyna-Gro WXO9501	63.8		58.9	38	1
Delta Grow 5000	63.8		56.4	36	1
Syngenta Oakes	63.7		58.4	38	1
Pioneer 26R20	63.6		57.1	36	1

Progeny 185	63.5	57.8	38	1
Excel 410TW	63.4	58.3	39	1
Jamestown	62.9	59.6	36	1
Excel 234	62.6	58.2	39	1
	62.5	56.7	39 37	
Syngenta Cooper	62.3	30.7	31	1
Bess	62.4	58.4	40	1
Excel 400-1	61.4	57.5	42	1
Excel 163	61.1	59.7	40	1
Progeny 166	60.9	56.4	40	1
Pioneer 26R22	60.9	55.9	38	1
Excel 242	60.7	58.1	37	1
USG 3555	60.7	57.7	35	1
Merl	60.6	58.1	36	1
Excel 341	60.1	57.1	38	1
Syngenta SY 9978	60.0	55.4	39	1
Syngenta W1377	59.4	59.6	36	1
VA O5W-258	59.4	55.8	40	1
Excel 286	59.3	57.9	38	1
Syngenta Coker 9553	59.0	58.3	37	1
Direct DW Ex109	58.8	55.0	39	1
Dyna-Gro 9922	58.5	57.7	37	1
Excel 357	58.4	58.0	39	1
Syngenta Beretta	58.3	55.5	38	1
Excel 170	58.0	56.9	36	1
Armor Renegade	56.4	57.6	38	1
Timor remegade		27.0		•
Pioneer 25R32	56.3	58.1	37	1
Delta Grow 1600	56.1	56.3	41	1
Progeny 125	56.1	59.1	41	1
Truman	47.9	56.0	42	1
Test Average	63.7	57.3		
L.S.D. AT .10	4.9	0.5		
C.V.%	5.7	.7		

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Data not available. Highest yielding variety in the test. Yield not significantly less than the highest yielding variety in the test. Lodging rated on a 1 to 5 scale where 1 = no lodging and 5 = plants are completely flat.

Table 9 **Soft Red Winter Wheat**

Southeast Region: Charleston, MO (Mississippi County)

Soil Type: Dundee Silt Loam Soil Test: pH=5.3, OM=1.3, P=40, K=266 Rainfall: Oct=9.8, Nov=0.9, Dec=4.9, Jan=2.9, Feb=1.2, Mar=4.7, Apr=4.4, May=4.9 Total season rainfall = 33.7

Brand-Variety	Yield bu/A	A	Test Weight	Lodging	
<u> </u>	2010		lb/bu	in	~
MFA 2525	75.9	**	58.6	39	3
Dixie 454	74.6	*	59.1	37	2
JGL Ex72562	73.6	*	55.4	33	1
Dixie 940	71.7	*	57.2	35	1
Dyna-Gro WXO9603	71.7	*	55.9	32	1
Direct DW Ex106	70.3	*	56.8	39	1
Excel 410TW	70.2	*	58.4	36	1
Pioneer 25R78	68.6	*	57.9	30	1
JGL Ex51585	68.3	*	57.5	33	1
JGL Ex60172	68.3	*	56.7	32	1
Excel 180	68.1	*	58.2	34	2
Syngenta W1566	67.9		55.7	37	2
Syngenta SY 9978	67.8		56.4	35	1
Delta Grow 8300	66.7		57.0	36	1
USG 3438	66.7		55.6	29	1
USG 3555	66.2		56.4	31	1
Dyna-Gro WXO9602	65.8		58.8	34	1
Pioneer 26R20	65.7		58.8	32	1
Syngenta Oakes	65.6		58.3	34	1
Syngenta Cooper	64.9		56.0	31	1
Dixie 907	64.4		58.0	37	1
Pioneer 26R15	64.3		56.3	35	1
Syngenta Beretta	64.1		56.2	33	1
Delta Grow 5900	63.9		58.0	36	1
Direct DW Ex109	63.9		55.6	33	1
Pioneer 26R22	63.8		57.7	34	1
Dyna-Gro 9922	63.6		57.0	33	1
Excel 234	63.5		58.2	35	3
Pioneer 25R32	63.4		58.7	31	1
Excel 163	63.2		59.5	28	1
Excel 442	63.1		58.4	35	1
Progeny 166	62.8		58.5	34	1
Excel 286	62.5		58.3	36	1
Progeny 117	62.5		57.7	35	1
Dixie 427	62.4		55.1	31	1

Milton	62.4	59.0	34	1
USG 3409	62.4	56.9	33	1
Excel 170	62.3	59.4	35	1
Progeny 125	61.4	59.6	37	2
Bess	60.5	59.1	35	1
MFA 2631	60.3	59.9	34	2
Excel 341	59.9	57.1	33	1
Armor ARX9304	59.3	54.4	29	1
Delta Grow 5000	59.3	56.6	30	1
Excel 242	59.3	56.7	36	3
Merl	59.2	58.0	34	1
USG 3770	58.6	57.8	36	2
Excel 400-1	58.4	58.0	37	1
Excel 173	57.5	57.0	34	1
Syngenta Branson	57.1	55.1	31	1
Syngenta Dianson	37.1	33.1	31	1
Delta Grow 1600	56.9	54.5	34	1
Syngenta W1377	56.8	61.0	32	1
MO exp041687	56.6	57.6	36	2
Armor Renegade	56.3	59.2	32	1
MO exp080104	55.7	55.6	29	1
Progeny 185	55.5	57.9	33	3
Excel 357	55.0	59.1	36	1
Excel 302	54.9	56.8	33	1
Syngenta W1104	54.9	56.9	31	1
VA O5W-258	54.4	55.9	35	1
Jamestown	53.7	58.8	31	1
Truman	53.7	55.5	38	1
	52.1	59.8	38 33	3
Dyna-Gro WXO9501 Syngenta Coker 9553	50.1	59.8 59.8	33 30	3 1
Syngenia Coker 9333	50.1	39.0	30	1
Test Average	62.4	57.5		
L.S.D. AT .10	7.8	1.2		
C.V.%	9.2	1.6		

^{**}

Data not available.
Highest yielding variety in the test.
Yield not significantly less than the highest yielding variety in the test.
Lodging rated on a 1 to 5 scale where 1 = no lodging and 5 = plants are completely flat.

Table 10 **Soft Red Winter Wheat**

Southeast Region: Portageville, MO (Pemiscot County)

Soil Type: Tiptonville Silt Loam Soil Test: pH=5.8, OM=1.2, P=72, K=242 Rainfall: Oct=10.0, Nov=1.1, Dec=5.0, Jan=2.8, Feb=1.6, Mar=4.8, Apr=3.6, May=7.8 Total Season rainfall = 36.7

Brand-Variety	Yield bu/A	Test Weight	Lodging		
	2010	lb/bu	in	~	
JGL Ex60172	76.3 **	57.5	34	1	
USG 3438	75.0 *	57.7	31	1	
JGL Ex72562	74.5 *	55.4	37	1	
Dixie 454	73.0 *	59.8	38	2	
Dyna-Gro WXO9603	71.9	55.4	38	1	
USG 3555	70.3	57.0	35	1	
Excel 234	69.7	59.6	41	2	
MFA 2525	69.7	58.5	45	2	
Syngenta W1566	69.5	56.8	45	1	
Dixie 907	69.3	57.7	45	1	
Excel 173	68.8	58.8	41	3	
USG 3409	68.5	57.7	41	2	
Excel 410TW	68.2	58.6	43	1	
Milton	67.8	58.8	40	1	
Dyna-Gro WXO9501	67.3	60.3	42	3	
MFA 2631	67.0	59.8	40	3	
Dixie 427	67.0	56.8	40	2	
Dyna-Gro WXO9602	66.7	59.1	40	2	
Dixie 940	66.4	57.0	44	2	
Excel 180	66.3	59.8	43	3	
JGL Ex51585	66.1	58.2	39	1	
Pioneer 26R15	66.1	57.0	37	1	
Pioneer 26R22	65.8	56.4	40	1	
Delta Grow 8300	65.7	58.0	39	1	
Merl	65.4	59.4	38	1	
Pioneer 25R78	65.3	58.1	36	2	
USG 3770	65.3	58.2	41	3	
Syngenta W1377	65.0	60.7	40	1	
Armor ARX9304	64.8	55.4	34	1	
Syngenta Cooper	64.7	58.4	37	2	
Direct DW Ex106	64.5	56.6	43	2	
Delta Grow 5900	64.4	58.5	38	2	
Excel 286	64.1	57.8	42	1	
Excel 400-1	64.0	57.6	44	2	
Syngenta SY 9978	63.9	56.0	38	1	

Syngenta W1104	63.8	54.7	36	2
Progeny 166	63.6	57.8	40	1
Excel 302	63.5	57.3	36	2
Bess	63.4	58.2	37	2
Progeny 125	63.3	59.1	38	2
1108011 120	00.0	0,11		_
Delta Grow 5000	63.2	57.1	37	1
MO exp041687	63.1	56.9	41	2
Armor Renegade	62.6	57.6	37	2
Excel 341	62.2	57.3	41	1
Syngenta Beretta	61.9	56.1	38	2
F 1162	C1.7	60.0	20	2
Excel 163	61.7	60.0	38	3
Excel 442	61.4	57.3	40	2
Syngenta Coker 9553	61.3	60.7	38	1
Progeny 117	61.0	57.3	42	3
Dyna-Gro 9922	60.9	57.5	38	2
Syngenta Branson	60.8	56.3	36	1
Direct DW Ex109	60.6	55.1	40	1
Syngenta Oakes	60.3	58.1	39	2
Jamestown	60.1	60.4	37	2
Pioneer 25R32	60.1	57.8	38	1
Pioneer 26R20	60.0	56.5	38	1
MO exp080104	59.7	57.2	34	1
Excel 170	59.6	58.6	37	2
Excel 357	59.5	58.5	40	2
Delta Grow 1600	59.4	56.9	42	3
114 O 5 W 2 5 O	5 0.4	55.5	20	
VA O5W-258	58.4	55.7	38	1
Progeny 185	58.2	58.1	40	3
Excel 242	56.0	57.5	35	2
Truman	53.7	54.3	40	1
T4 A				
Test Average	64.6	57.7		
L.S.D. AT .10	4.0	0.8		
C.V.%	4.6	1.1		

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Data not available. Highest yielding variety in the test. Yield not significantly less than the highest yielding variety in the test. Lodging rated on a 1 to 5 scale where 1 = no lodging and 5 = plants are completely flat.

Table 11 **Soft Red Winter Wheat** Performance Summary of varieties evaluated at three Southeast Missouri locations during 2010.

Chaffee Planted: 10-20 Harvested: 6-14

Growing Season Rain: 40.8

Charleston Planted: 10-21 Harvested: 6-15

Growing Season Rain: 33.7

Portageville Planted: 10-20 Harvested: 6-8

Growing Season Rain: 36.7

Brand-Variety	Chaffee	Charleston	Portageville	Mean	
ICL E-705(2)	746 **	73.6 *	745 *	74.2 **	
JGL Ex72562 JGL Ex60172	74.6 ** 74.6 *	73.6 * 68.3 *	74.5 * 76.3 **	74.2 ** 73.1 *	
MFA 2525	70.0 *	75.9 **	69.7	71.9	
Dyna-Gro WXO9603	70.0 * 71.4 *	71.7 *	71.9	71.7	
Dixie 454	66.7	74.6 *	73.0 *	71.7	
DIAIC 434	00.7	74.0	73.0	/1.4	
USG 3438	71.1 *	66.7	75.0 *	70.9	
Excel 180	70.1 *	68.1 *	66.3	68.2	
Dixie 940	66.1	71.7 *	66.4	68.1	
JGL Ex51585	68.7	68.3 *	66.1	67.7	
Pioneer 25R78	69.0	68.6 *	65.3	67.6	
Syngenta W1566	64.7	67.9	69.5	67.4	
Excel 410TW	63.4	70.2 *	68.2	67.3	
Dixie 907	67.6	64.4	69.3	67.1	
Direct DW Ex106	64.7	70.3 *	64.5	66.5	
Delta Grow 8300	66.7	66.7	65.7	66.4	
Pioneer 26R15	67.6	64.3	66.1	66.0	
USG 3409	67.0	62.4	68.5	66.0	
USG 3555	60.7	66.2	70.3	65.7	
Dyna-Gro WXO9602	64.6	65.8	66.7	65.7	
Excel 234	62.6	63.5	69.7	65.3	
Excel 173	69.5	57.5	68.8	65.3	
Milton	65.4	62.4	67.8	65.2	
Armor ARX9304	71.0 *	59.3	64.8	65.0	
Excel 442	70.6 *	63.1	61.4	65.0	
Dixie 427	65.2	62.4	67.0	64.9	
Delta Grow 5900	65.2	63.9	64.4	64.5	
MFA 2631	65.2	60.3	67.0	64.2	
Syngenta Cooper	62.5	64.9	64.7	64.0	
Syngenta SY 9978	60.0	67.8	63.9	63.9	
Pioneer 26R22	60.9	63.8	65.8	63.5	
USG 3770	66.2	58.6	65.3	63.4	
Syngenta Oakes	63.7	65.6	60.3	63.2	
Pioneer 26R20	63.6	65.7	60.0	63.1	

C.V.%	5.7	9.2	4.6	6.4
Average L.S.D. AT .10	63.7 4.9	62.4 7.8	64.6	63.6 3.1
Truman	71.7	55.1	33.1	31.0
Truman	39.0 47.9	53.7	53.7	51.8
Syngenta Coker 9553	59.4 59.0	54.4 50.1	58.4 61.3	57.4 56.8
Delta Grow 1600 VA O5W-258	56.1 59.4	56.9 54.4	59.4 58.4	57.5 57.4
D.k. C 1600	56.1	F.C. 0	50.4	57. F
Excel 357	58.4	55.0	59.5	57.6
Armor Renegade	56.4	56.3	62.6	58.4
Excel 242	60.7	59.3	56.0	58.7
Jamestown	62.9	53.7	60.1	58.9
Progeny 185	63.5	55.5	58.2	59.1
Pioneer 25R32	56.3	63.4	60.1	59.9
Excel 170	58.0	62.3	59.6	60.0
Progeny 125	56.1	61.4	63.3	60.3
Syngenta W1377	59.4	56.8	65.0	60.4
MO exp080104	66.5	55.7	59.7	60.6
Excel 341	60.1	59.9	62.2	60.7
Syngenta Branson	64.7	57.1	60.8	60.9
Dyna-Gro 9922	58.5	63.6	60.9	61.0
Dyna-Gro WXO9501	63.8	52.1	67.3	61.1
Direct DW Ex109	58.8	63.9	60.6	61.1
MO exp041687	64.1	56.6	63.1	61.3
Excel 400-1	61.4	58.4	64.0	61.3
Excel 302	65.5	54.9	63.5	61.3
Syngenta Beretta	58.3	64.1	61.9	61.4
Merl	60.6	59.2	65.4	61.7
Excel 286	59.3	62.5	64.1	62.0
Excel 163	61.1	63.2	61.7	62.0
Delta Grow 5000	63.8	59.3	63.2	62.1
Bess	62.4	60.5	63.4	62.1
Progeny 166	60.9	62.8	63.6	62.4
Progeny 117	64.0	62.5	61.0	62.5
Syngenta W1104	70.0 *	54.9	63.8	

Data not available. Highest yielding variety in the test. Yield not significantly less than the highest yielding variety in the test.

Characteristics for Varieties Entered in the 2010 Missouri Wheat Tests

Variety Name	Mat E,M,L	Head A,U	Hrdy ,G,F	Ht S,M,T	Fly S,R,I	FHB 1-9	St.Rst 1-9	Lf.Rst 1-9	BYDV 1-9	Seed Treat	Table N	lumbers
Armor ARX9304	M	A	Е	M	NA	3	NA	8	NA	3		8,9,10,11
Armor Renegade	M	A	E	M	I	2	8	8	7	3		8,9,10,11
Bess	E	U	G	M	S	2	9	9	6	5.6	2,3,4,5	8,9,10,11
Delta Grow 1600	E	Ü	G	T	S	5	2	2	3	0	2,5,1,5	8,9,10,11
Delta Grow 5000	VE	U	E	M	I	3	3	4	3	3		8,9,10,11
Delia Glow 3000	V L	O	L	171	1	3	3	-	3	3		0,7,10,11
Delta Grow 5900	M	U	E	M	I	2	5	5	2	1.3		8,9,10,11
Delta Grow 8300	ME	A	E	M	I	3	4	4	3	1.3		8,9,10,11
Direct DW Ex106	Е	A	G	M	MS	NA	NA	MR	NA	3	2,3,4,5	8,9,10,11
Direct DW Ex109	Е	A	G	M	MR	NA	MR	MR	NA	3	2,3,4,5	8,9,10,11
Dixie 427	M	U	E	M	NA	NA	NA	3	3	1.2	, , ,	8,9,10,11
												, , ,
Dixie 454	M	A	E	M	NA	NA	NA	3	3	1.2		8,9,10,11
Dixie 907	ME	U	E	MS	NA	NA	NA	3	2	1.2		8,9,10,11
Dixie 940	M	U	E	MT	NA	NA	NA	4	4	1.2		8,9,10,11
Dyan-Gro WXO9612	M	U	E	M	NA	4	NA	3	6	1.3	2,3,4,5	
Dyna-Gro 9922	M	A	E	M	S	5	4	2	4	1.3	2,3,4,5	8,9,10,11
·												
Dyna-Gro WXO9501	E	U	G	M	NA	2	6	5	4	1.3	2,3,4,5	8,9,10,11
Dyna-Gro WXO9602	M	A	E	M	NA	3	NA	4	5	1.3	2,3,4,5	8,9,10,11
Dyna-Gro WXO9603	L	A	E	M	NA	4	NA	4	5	1.3		8,9,10,11
Excel 163	E	A	E	S	I	1	NA	2	1	3	2,3,4,5	8,9,10,11
Excel 170	E	U	G	S	I	2	NA	2	4	3	2,3,4,5	8,9,10,11
Excel 173	E	U	G	M	I	1	NA	2	2	3	2,3,4,5	8,9,10,11
Excel 180	E	U	E	M	I	1	NA	3	3	3	2,3,4,5	8,9,10,11
Excel 234	E	U	E	M	I	1	NA	3	2	3	2,3,4,5	8,9,10,11
Excel 242	E	U	G	M	I	1	NA	2	2	3	2,3,4,5	8,9,10,11
Excel 286	E	U	G	M	I	2	NA	2	3	3	2,3,4,5	8,9,10,11
Excel 302	M	U	E	M	I	3	NA	1	1	3	2,3,4,5	8,9,10,11
Excel 341	M	U	E	M	I	1	NA	2	2	3	2,3,4,5	8,9,10,11
Excel 357	M	U	E	M	I	1	NA	1	2	3	2,3,4,5	8,9,10,11
Excel 400-1	M	U	E	M	I	3	NA	3	3	3	2,3,4,5	
Excel 410TW	M	U	E	M	I	3	NA	3	3	3	2,3,4,5	8,9,10,11
E 1440	3.6		Е	TD.	τ.	2	NT A		2	2	2245	0.0.10.11
Excel 442	M	A	E	T	I	2	NA	1	3	3	2,3,4,5	8,9,10,11
Jamestown	E	A	G	M	NA	8	NA	4	NA	7.8	2,3,4,5	8,9,10,11
JGL Ex51585	M	A	Е	M	I	5	4	4	3	1.3	2,3,4,5	8,9,10,11
JGL Ex60172	E	A	Е	M	I	3	3	2	3	1.3	2,3,4,5	8,9,10,11
JGL Ex72562	M	A	E	M	I	4	3	4	3	1.3	2,3,4,5	8,9,10,11
Lewis 830	E	U	Е	T	I	4	4	3	4	4.6.7	2,3,4,5	
Lewis 835	E	U	E	M	I	2	3	3	4	4.6.7	2,3,4,5	
Merl	M	U	G	M	NA	3	NA	2	NA	7.8	2,3,4,5	8,9,10,11
IVICII	171	U	U	171	11/1	5	11/1	4	11/1	7.0	4,5,4,5	0,9,10,11

MFA 2525	M	A	E	T	S	5	3	2	4	1.2	2,3,4,5	8,9,10,11
MFA 2631	Е	U	G	M	S	5	3	6	4	1.2	2,3,4,5	8,9,10,11
Milton	E	A	G	M	S	6	6	6	3	5.6	2,3,4,5	8,9,10,11
Pioneer 25R32	M	A	G	M	S	3	NA	5	NA	3		8,9,10,11
Pioneer 25R39	M	U	G	M	S	5	NA	3	NA	3	2,3,4,5	
Pioneer 25R56	E	U	E	S	R	5	NA	4	NA	3	2,3,4,5	
Pioneer 25R78	E	A	G	S	I	7	NA	2	NA	3	2,3,4,5	8,9,10,11
Pioneer 26R15	M	A	G	M	I	5	NA	3	NA	3		8,9,10,11
Pioneer 26R20	M	A	G	M	I	7	NA	3	NA	3		8,9,10,11
Pioneer 26R22	M	A	G	M	S	7	NA	6	NA	3		8,9,10,11
Progeny 117	E	U	E	T	NA	1	1	2	3	3		8,9,10,11
Progeny 125	M	U	E	M	NA	NA	4	4	NA	1.3		8,9,10,11
Progeny 166	M	U	E	T	R	4	1	1	2	3		8,9,10,11
Progeny 185	M	U	E	T	NA	4	3	1	2	3		8,9,10,11
Syngenta Beretta	M	U	G	MS	S	7	1	3	4	1.3	2,3,4,5	8,9,10,11
Syngenta Branson	ME	U	G	M	I	3	1	6	4	1.3	2,3,4,5	8,9,10,11
Syngenta Coker 9553	E	A	G	M	S	6	4	4	4	1.3	2,3,4,5	8,9,10,11
Syngenta Cooper	M	U	E	M	S	6	1	5	4	1.3	2,3,4,5	8,9,10,11
Syngenta Oakes	ME	U	G	MS	S	6	1	3	3	1.3	2,3,4,5	8,9,10,11
Syngenta SY 9978	M	A	G	MT	R	7	1	4	3	1.3	2,3,4,5	8,9,10,11
Syngenta W1104	M	U	G	M	S	3	5	5	3	1.3	2,3,4,5	8,9,10,11
Syngenta W1377	M	U	E	M	I	6	1	6	3	1.3	2,3,4,5	8,9,10,11
Syngenta W1566	M	U	E	MT	S	5	5	5	3	1.3	2,3,4,5	8,9,10,11
Truman	L	U	G	M	S	2	9	9	6	5.6	2,3,4,5	8,9,10,11
USG 3409	E	A	E	M	NA	4	NA	2	3	1.2		8,9,10,11
USG 3438	ME	A	E	MS	NA	4	NA	3	NA	1.2		8,9,10,11
USG 3555	E	A	F	S	NA	5	1	4	3	1.2		8,9,10,11
USG 3770	E	A	F	MT	NA	1	NA	NA	2	1.2		8,9,10,11
VA O5W-258	M	U	G	M	NA	3	NA	1	NA	7.8	2,3,4,5	8,9,10,11
Willcross 740	E	U	E	M	S	6	2	2	4	3	2,3,4,5	
Willcross 748	E	U	E	MT	S	5	5	4	4	8	2,3,4,5	

Maturity (Mat)=Early, Medium, or Late for Missouri

Head Type (Head)=Awned or Unawned

Winter Hardiness (Hrdy)=Excellent, Goor, Fair

Height (Ht)=Short, Medium, Tall

Hessian fly (Fly)=Susceptable,Resistant, Intermediate

Fusarium head blight (FHB)=Resistance 1-9 (1 = excellent, 9 = poor)

Stem Rust (St.Rst)=Resistance 1-9 (1 = excellent, 9 = poor)

Leat Rust (Lf.Rst)=Resistance 1-9 (1 = excellent, 9 = poor)

Barley yellow dwarf virus (BYDV)=Resistance 1-9 (1 = excellent, 9 = poor)

Seed Treatment: 0=None 2=Dividend (Difenoconazole) 3=Divident Extreme (Difenoconazle, Mefenoxam)

 $4 = Gaucho \ (Imidacloprid) \quad 5 = Nitro \ Shield \ (Imidacloprid) \quad 6 = Raxil XT \ (Tebuconazole, \ Metalaxyl)$

7=Storicide 2 (Cyfluthrin, Deltamethrin) 8=Raxil/Thiram (Tebuconazole, Thiram)

SOURCES

Brand	Company	Address	Phone	Company Web Site
Dixie	Cache River Valley Seed, LLC	P.O. Box 10 Cash, AR 72421	870-477-5427	srvseed.com
Armor	Cullum Seeds LLC	PO Box 178 Hwy. 49 Fisher, AR 72429	870-579-2286	cullumseeds.com
Delta Grow	Delta Grow Seed	220 NW 2nd England, AR 72046	501-842-2572	
DW	Direct Enterprises	P.O. Box 978 Westfield, IN 46073	888-895-7333	
Dyna-Gro	Dyna-Gro	6221 Riverside Dr. Dublin, OH 43017	614-761-4110	dyna-growseed.com
Excel	Excel Brand Seed	257 E Hail Bushnell, IL 61422	888-593-7707	
Willcross	Green Valley Seed, LLC	PO Box 35/121 W. College Kahoka, MO 63445	660727-3341	gvseed.com
Excel	Gremaud AG	287 Racoon Lane Perryville, MO 63775	573-547-7214	
JGL	JGL Inc	3540 S VS 231 Greencastle, IN 46135	765-653-5402	
Lewis	Lewis Hybrids, INC	530 W. Maple Ave., PO Box 38 Ursa, IL 62376	217-964-2131	lewishybrids.com
MFA	MFA Incorporated	201 Ray Young Dr. Columbia, MO 65201	573-876-5363	mfa-inc.com
U of MO	Missouri Crop Improvement	3211 Lemone Indust. Blvd. Columbia, MO 65201	573-449-0586	moseed.org
Pioneer	Pioneer Hi-Bred	8700 NW 62nd, PO Box 7020 Johnston, IA 50131	515-270-4238	pioneer.com
Pioneer	Pioneer Hi-Bred	700 Boulevard S., Ste 302 Huntsville, AL 35802	800-331-2475	pioneer.com
Progeny	Progeny Ag Products	1529 Hwy 193 S. Wynne, AR 72396	870-238-2079	progenyag.com
Excel	River Bend Custom Seeds	Rt 5 Box 146 Carrollton, MO 64633	660-542-0435	
Excel	Service and Supply Co-op	P.O. Box 176 New Florence, MO 63363	573-835-2485	
Excel	Stephens Seed Service	7480 CR 717 Dexter, MO 63841	573-624-5999	
Syngenta	Syngenta	778 CR 680 Bay, AR 72411	870-483-7691	agriprowheat.com
USG	UniSouth Genetics, Inc.	2640-C Nolensville Rd. Nashville, TN 37211	615-242-3397	usgseed.com
U of MO	University of Missouri	106 Curtis Hall Columbia, MO 65211	573-882-7708	
VA Tech	VA Tech/EVAREC/VCIA	2229 Menokin Rd. Warsaw, VA 22572	804-333-3485	