Performance of Small Grain Varieties for Grain in Alabama, 2012-13

Agronomy and Soils Departmental Series No. 330
Alabama Agricultural Experiment Station
William Batchelor, Director
Auburn University, Auburn, Alabama,
August 2013

Printed in cooperation with the Alabama Cooperative Extension System
(Alabama A&M University and Auburn University)

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ACKNOWLEDGMENTS

Appreciation is expressed to the following supervisory personnel of the outlying units whose support is gratefully acknowledged:

Northern Alabama

Tennessee Valley Research and Extension Center, Belle Mina.....B.E. Norris, Director

Sand Mountain Research and Extension Center, Crossville.....J. Treadaway Ducar, Act. Director

Central Alabama

Black Belt Research and Extension Center, Marion Junction .....J.L. Holliman, Director

Prattvile Experiment Field, Prattville.....D.P. Moore, Director

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THE 2013 ALABAMA PERFORMANCE COMPARISON OF SMALL GRAIN VARIETIES

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Introduction

The large number of commercially available varieties of wheat, oat, barley, and triticale makes it difficult for growers to select varieties most suited for their particular area of the State. Making this decision requires up-to-date, unbiased, reliable information on varietal yields and characteristics. This report is published annually to provide Alabama growers with this information.

Entries in each experiment are determined by the companies or institutes which control each variety or line, not by experiment station personnel. Data from tests conducted at eight locations were used to compile this report and they represent the varied growing conditions farmers experience around the State.

Procedure

The experimental design for the tests was a split plot design with species as the main plot and varieties as subplots. Plots were 5 feet by 20 feet with rows spaced 7 inches apart. A cone drill was used to plant all tests in the State. Each variety was replicated three times in each test.

Grain only: These tests are normally planted during late October to early November, which is approximately one month later than the forage tests. Planting dates for all tests in 2012 are shown in Table 1. All tests were fertilized with P and K according to soil test, plus 20 pounds N per acre at planting. A top dressing of 60 pounds N per acre was made in late February or early March, just prior to jointing. The plots were not sprayed to control disease, so that the varieties could be rated for their inherent disease resistance. The grain was allowed to mature and was harvested with a plot combine, then cleaned and weighed. Moisture and bushel test weight were measured.

Forage only: A forage test was not conducted during the 2012-2013 crop year.

Data Explanation

Grain yields were calculated by weighing air-dried grain and using 60 pounds per bushel for wheat, 32 pounds per bushel for oat, 48 pounds per bushel for barley, 50 pounds per bushel for triticale. Lodging was measured as the percent of plants in the stand broken or leaning that would likely be missed by a combine. Height was measured from the ground to the top of the grain head. The 1/10 headed date is the date when approximately 10 percent of a plot showed fully emerged heads.

Disease ratings for the 2012-2013 variety trials for wheat, oats, and barley are summarized by region in Tables ___. Diseases were rated by members of the Dept. of Entomology and Plant Pathology; specifically, R. Trey Prevatt, Graduate Assistant, rated diseases at Headland, and helped at other sites. At all other sites in the south (Fairhope and Brewton), central (Tallassee, Marion Junction, and Prattville) and northern (Belle Mina and Crossville) regions, diseases were rated by Dr. K. L. Bowen, Professor of Plant Pathology, with additional assistance from Andrea Nelson. Rust diseases are rated on a severity scale ranging from 0 to 100, indicating the proportion of the flag leaves that are affected across the plot. All other diseases are rated on a scale of 0 to 9, where 0 indicates no disease, 4-5 reflects about half of the plants are moderately affected, and 9 = severe disease affecting all plants in plot. Diseases were rated as close to soft dough as could be scheduled.

Discussion

Growing conditions and variety performance often vary among locations and years. Growing season conditions in the 2012-13 were good for small grain production at almost all locations.

Disease pressure across Alabama was variable in the spring of 2013, with generally highest disease levels noted at Fairhope. This report does not include observations on wheat at Marion Junction. Leaf and glume blotch, caused by the same pathogen, were rated separately this year and were the most common and consistently found disease. Taken together, leaf and glume blotch occurred at slightly lower intensities at central and northern locations in 2013 than in 2012; however, these blotches were slightly higher at southern locations, especially at Fairhope. Powdery mildew is generally an early season disease, but was found in 2013 during grain fill at sometimes heavy intensities, especially at Crossville. This occurrence of powdery mildew is likely attributable to lower than normal temperatures throughout the region. Powdery mildew was not noticed at southern locations. Leaf rust was found at all locations, and was generally noted at lower intensities than in 2012. However, leaf rust was becoming problematic at Fairhope on five cultivars. Stripe rust was more prevalent than leaf rust and was more severe at northern and central locations than in 2012. No stripe rust was noted at Fairhope or Brewton. Intensity of barley yellow dwarf was lower than in the previous year, while Fusarium head blight (=scab) averaged greater intensity in 2013 than in 2012, especially at northern locations. Fusarium head blight was also found at Fairhope. Fusarium head blight occurrence is related to rain events at the time of wheat flowering.

Disease ratings on oats are not reported from Fairhope due to overmaturity of plants at the time of our visit. Crown rust was not found at northern locations, while at central and southern locations, this disease was more severe in 2013 than in 2012, particularly at Brewton. Low levels of Helminthosporium leaf spot, lower than in 2012, were found at northern and central locations, while higher levels were found at southern locations. Barley yellow dwarf, which affects most small grain species, was minimal across the state with only a few oats plots having disease intensities of 1 or 2. Loose smut was noted fairly consistently at Belle Mina, with trace amounts found at Tallassee and Headland.

TABLE 1. LOCATION, PLANTING AND HARVESTING DATES FOR THE 2012-13 SMALL GRAIN TESTS.

Location	Date planted	Date harvested
Northern Alabama		
Tennessee Valley Res. & Ext. Ctr. (Belle Mina)		
Small grain - grain only	November 9	June 26
Sand Mountain Res. & Ext. Ctr. (Crossville)		
Small grain - grain only	October 25	June 20
Central Alabama		
Black Belt Res. & Ext. Ctr. (Marion Junction)	November 19	Not harvested
Small grain - grain only		
E.V. Smith Res. Ctr., Plant Breeding Unit (Tallassee)		
Small grain - grain only	November 12	June 13
Prattville Research Field (Prattville)		
Small grain - grain only	November 9	June 4
Southern Alabama		
Wiregrass Res. & Ext. Ctr. (Headland)		
Small grain - grain only	November 30	May 31
Brewton Research Field (Brewton)		
Small grain - grain only	November 16	June 14
Gulf Coast Res. & Ext. Ctr. (Fairhope)		
Small grain - grain only	November 14	May 28

TABLE 2. NORTH ALABAMA REGIONAL AVERAGES OF WHEAT VARIETY PERFORMANCE.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
Terral TV 8848	55.6	104	91	99
Terral TV 8861	55.5	103	91	95
Dyna Gro 9053	51.7	99	86	93
Terral TV 8525	55.0	103	87	92
USG 3438	52.9	101	86	91
SS 8500	54.4	96	86	90
SS 8340	56.5	101	88	90
SS 8308	55.5	92	86	90
Terral TV 8535	52.9	95	82	90
Oakes	57.3	100	87	89
AGS 2035	53.5	85	84	89
Baldwin	52.1	88	83	89
Jamestown	57.1	91	82	88
Progeny 117	55.0	91	83	88
Oglethorpe	53.8	93	79	86
USG 3555	53.9	93	82	86
SS 8404	56.4	85	80	86
SS 8641	54.3	96	84	86
Progeny 125	53.7	88	79	85
SS 520	53.1	86	76	81
Terral LA 841	50.2	77	73	78
Progeny 185	55.1	88	76	77
SY Harrison	53.5	105	94	
Progeny 357	52.5	99	87	
Progeny 870	53.3	94	87	
LA 01110D-150	53.6	92	85	
Progeny 308	55.6	96	84	
LA 02015E201	54.9	90	75	

continued

TABLE 2. CONTINUED.

Brand-Variety	2013 Test wt	2013 Avg.	2012-2013 Avg.	2011-2013 Avg.
	lbs/bu	bu/acre		
Progeny PGX 12-10	52.9	106		
USG 3251	55.4	106		
USG 3833	54.4	98		
GA 04570-10E46	55.2	92		
USG 3120	55.3	92		
Progeny PGX 12-3	53.0	89		
VA10W-119	54.1	89		
USG 3209	53.8	89		
AGS 2038	53.3	88		
GA 031086-10E29	54.5	88		
GA 031257-10LE34	55.2	87		
Test Mean		94	84	88
C.V.(%)		8	12	12
LSD(0.10)		6	5	4

TABLE 3. TENNESSEE VALLEY RESEARCH AND EXTENSION CENTER WHEAT VARIETY TRIAL, BELLE MINA.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
USG 3438	55.2	106	80	81
Terral TV 8861	56.8	109	86	81
Terral TV 8848	56.8	104	82	80
Terral TV 8535	54.5	99	80	80
SS 8340	58.4	101	79	79
Baldwin	56.8	96	78	77
Terral TV 8525	57.3	103	80	77
Dyna Gro 9053	53.9	97	79	77
Jamestown	57.5	92	77	77
SS 8308	57.2	95	78	75
AGS 2035	56.2	89	75	74
Progeny 125	55.5	99	78	73
Oglethorpe	55.1	103	77	73
SS 8641	54.9	97	80	72
USG 3555	55.6	92	74	72
SS 8500	56.1	95	77	70
Terral LA 841	52.4	88	74	68
Oakes	57.9	94	75	68
Progeny 117	55.6	92	73	68
SS 8404	56.9	80	68	67
SS 520	53.1	80	67	63
Progeny 185	55.7	88	70	63
SY Harrison	55.3	104	85	
LA 01110D-150	55.0	97	80	
Progeny 357	54.4	99	80	
Progeny 308	57.5	99	79	
Progeny 870	54.5	97	78	
LA 02015E201	57.2	99	76	

continued

TABLE 3. CONTINUED.

Brand-Variety	2013 Test wt	2013 Avg.	2012-2013 Avg.	2011-2013 Avg.
	lbs/bu	bu/acre		
Progeny PGX 12-10	54.8	105		
USG 3833	55.9	102		
GA 04570-10E46	57.2	101		
USG 3251	57.4	98		
AGS 2038	57.1	94		
GA 031257-10LE34	56.2	92		
Progeny PGX 12-3	55.1	92		
USG 3120	56.1	91		
VA10W-119	56.6	91		
USG 3209	55.3	87		
GA 031086-10E29	54.8	87		
Test Mean		96	77	73
C.V.(%)		7	7	9
LSD(0.10)		7	4	4

TABLE 4. SAND MOUNTAIN RESEARCH AND EXTENSION CENTER WHEAT VARIETY TRIAL, CROSSVILLE.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
Terral TV 8848	55.6	105	99	117
SS 8500	54.4	97	95	110
Oakes	57.3	105	99	110
Terral TV 8861	55.5	97	95	109
Progeny 117	55.0	89	92	108
Dyna Gro 9053	51.7	102	92	108
Terral TV 8525	55.0	103	94	106
SS 8404	56.4	90	92	105
AGS 2035	53.5	81	92	105
SS 8308	55.5	89	93	104
USG 3438	52.9	97	91	102
SS 8340	56.5	101	96	101
USG 3555	53.9	93	90	101
Baldwin	52.1	80	87	100
Oglethorpe	53.8	82	81	100
Jamestown	57.1	90	87	99
SS 8641	54.3	94	88	99
Terral TV 8535	52.9	91	84	99
SS 520	54.0	93	85	98
Progeny 125	53.7	77	79	97
Progeny 185	55.1	89	82	91
Terral LA 841	50.2	66	71	87
SY Harrison	53.5	106	102	
Progeny 870	53.3	91	96	
Progeny 357	52.5	99	94	
LA 01110D-150	53.6	87	91	
Progeny 308	55.6	93	89	
LA 02015E201	54.9	81	73	

continued

TABLE 4. CONTINUED.

Brand-Variety	2013 Test wt	2013 Avg.	2012-2013 Avg.	2011-2013 Avg.
	lbs/bu	---------- bu/acre ----------		
USG 3251	55.4	114		
Progeny PGX 12-10	52.9	107		
USG 3833	54.4	94		
USG 3120	55.3	92		
USG 3209	53.8	91		
GA 031086-10E29	54.5	89		
VA10W-119	54.1	87		
Progeny PGX 12-3	53.0	86		
GA 04570-10E46	55.2	83		
AGS 2038	53.3	82		
GA 031257-10LE34	55.2	81		
Test Mean		92	90	103
C.V.(%)		7	15	13
LSD(0.10)		7	10	8

TABLE 5. CENTRAL ALABAMA REGIONAL AVERAGES OF WHEAT VARIETY PERFORMANCE.

	2013		2012-2013†	2011-2013†
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
Baldwin	56.4	104	85	89
AGS 2035	58.0	101	84	89
Jamestown	58.0	105	82	87
Oglethorpe	56.4	106	82	86
Terral LA 841	54.9	101	81	82
Progeny 125	53.8	100	75	81
Terral TV 8525	54.5	99	69	77
Progeny 117	54.5	89	68	74
Progeny 185	54.0	78	57	67
Terral TV 8535	52.8	79	51	64
LA 01110D-150	56.4	110	89	
LA 02015E201	56.8	93	76	
Progeny 308	54.8	98	71	
Progeny 357	56.3	85	60	
Progeny 870	53.0	80	57	
AGS 2038	56.9	111		
GA 031257-10LE34	57.6	109		
VA10W-119	56.5	104		
GA 031086-10E29	55.2	97		
USG 3120	57.2	93		
Progeny PGX 12-10	51.5	92		
GA 04570-10E46	56.6	91		
USG 3833	54.4	89		
Progeny PGX 12-3	52.1	87		
Test Mean		96	73	80
C.V.(%)		12	17	14
LSD(0.10)		9	6	5

† Multi-year averages based on Prattvile and Tallassee data only

TABLE 6. AVERAGES OF WHEAT VARIETY PERFORMANCE BLACK BELT RESEARCH AND EXTENSION CENTER.

† This trial was infested with annual ryegrass and not harvested.

TABLE 7. AVERAGES OF WHEAT VARIETY PERFORMANCE PRATTVILLE EXPERIMENT FIELD.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
Oglethorpe	62.1	110	83	90
Baldwin	60.8	100	81	87
AGS 2035	61.6	89	81	87
Jamestown	63.6	99	78	87
Terral LA 841	60.5	93	80	83
Progeny 125	61.1	101	76	83
Progeny 117	59.4	86	62	72
Terral TV 8525	59.0	95	59	72
Progeny 185	58.1	77	46	61
Terral TV 8535	56.6	73	39	57
LA 01110D-150	61.4	102	85	
LA 02015E201	63.1	98	80	
Progeny 308	58.7	92	63	
Progeny 357	56.3	90	51	
Progeny 870	56.9	73	43	
GA 031257-10LE34	62.3	110		
AGS 2038	61.3	101		
VA10W-119	61.2	100		
GA 031086-10E29	59.1	100		
USG 3120	62.2	97		
GA 04570-10E46	62.6	96		
Progeny PGX 12-10	56.2	94		
Progeny PGX 12-3	57.9	92		
USG 3833	56.5	89		
Test Mean		94	67	78
C.V.(%)		12	15	12
LSD(0.10)		12	8	6

TABLE 8. AVERAGES OF WHEAT VARIETY PERFORMANCE PLANT BREEDING UNIT, TALLASSEE.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
AGS 2035	58.0	113	88	92
Baldwin	56.4	109	89	91
Jamestown	58.0	112	86	86
Terral TV 8525	54.5	103	78	82
Progeny 125	53.8	100	74	80
Terral LA 841	54.9	108	82	80
Oglethorpe	56.4	102	82	79
Progeny 117	54.5	91	73	76
Progeny 185	54.0	79	68	75
Terral TV 8535	52.8	86	62	73
LA 01110D-150	56.4	117	93	
Progeny 308	54.8	103	80	
LA 02015E201	56.8	89	72	
Progeny 357	59.4	81	69	
Progeny 870	53.0	87	69	
AGS 2038	56.9	121		
VA10W-119	56.5	108		
GA 031257-10LE34	57.6	107		
GA 031086-10E29	55.2	94		
Progeny PGX 12-10	51.5	90		
USG 3833	54.4	88		
USG 3120	57.2	88		
GA 04570-10E46	56.6	87		
Progeny PGX 12-3	52.1	82		
Test Mean		98	78	81
C.V.(%)		14	13	8
LSD(0.10)		14	7	5

TABLE 9. SOUTH ALABAMA REGIONAL AVERAGES OF WHEAT VARIETY PERFORMANCE.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
AGS 2035	57.1	84	70	78
Baldwin	57.3	76	62	69
Jamestown	57.3	75	57	66
AGS 2026	57.2	72	54	65
Terral LA 841	57.8	70	54	63
Progeny 117	56.5	54	42	54
Progeny 125	55.1	54	38	54
Terral TV 8525	52.8	25	17	40
Progeny 185	53.1	22	17	38
Terral TV 8535	48.1	13	9	35
LA 01110D-150	57.3	78	61	
LA 02015E201	58.0	69	55	
Progeny 308	52.3	26	20	
Progeny 357	48.1	17	9	
Progeny 870	48.3	15	9	
AGS 2038	57.6	87		
GA 04570-10E46	56.7	82		
USG 3120	57.2	78		
Oglethorpe	57.3	76		
VA10W-119	57.4	74		
GA 031086-10E29	56.4	70		
GA 031257-10LE34	57.5	60		
Progeny PGX 12-3	49.9	33		
Progeny PGX 12-10	48.9	18		
Test Mean		55	38	56
C.V.(%)		16	26	23
LSD(0.10)		5	4	4

TABLE 10. AVERAGES OF WHEAT VARIETY PERFORMANCE AT BREWTON EXPERIMENT FIELD.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
AGS 2035	57.1	76	60	64
AGS 2026	57.2	71	53	60
Baldwin	57.3	67	52	59
Terral LA 841	58.4	64	50	55
Jamestown	57.3	64	44	53
Progeny 125	58.3	56	32	44
Progeny 117	57.2	48	32	44
Progeny 185	57.5	28	16	32
Terral TV 8525	56.6	29	15	32
Terral TV 8535		12	7	29
LA 01110D-150	57.3	71	48	
LA 02015E201	58.0	57	45	
Progeny 308	57.4	28	15	
Progeny 357	60.0	23	12	
Progeny 870	54.1	18	10	
AGS 2038	57.6	84		
Oglethorpe	57.8	77		
VA10W-119	57.4	72		
GA 04570-10E46	56.7	70		
USG 3120	57.2	68		
GA 031086-10E29	58.2	68		
GA 031257-10LE34	57.5	54		
Progeny PGX 12-3	57.2	34		
Progeny PGX 12-10	59.1	22		
Test Mean		52	33	47
C.V.(%)		12	19	12
LSD(0.10)		7	5	4

TABLE 11. AVERAGES OF WHEAT VARIETY PERFORMANCE AT WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
AGS 2035	59.1	83	78	87
Jamestown	60.5	81	66	78
Baldwin	58.8	78	72	77
AGS 2026	57.4	73	59	70
Terral LA 841	57.8	74	59	69
Progeny 117	56.5	47	42	57
Progeny 125	55.1	42	36	56
Terral TV 8525	52.8	24	19	45
Progeny 185	53.1	17	17	42
Terral TV 8535	48.1	9	8	34
LA 01110D-150	59.3	85	68	
LA 02015E201	60.5	62	56	
Progeny 308	52.3	25	19	
Progeny 357	48.1	15	11	
Progeny 870	48.3	9	8	
GA 04570-10E46	60.9	85		
AGS 2038	61.0	82		
VA10W-119	59.2	76		
USG 3120	60.3	74		
Oglethorpe	57.3	67		
GA 031086-10E29	56.4	66		
GA 031257-10LE34	60.8	62		
Progeny PGX 12-3	49.9	29		
Progeny PGX 12-10	48.9	14		
Test Mean		53	41	61
C.V.(%)		21	22	15
LSD(0.10)		12	7	6

TABLE 12. AVERAGES OF WHEAT VARIETY PERFORMANCE AT GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
AGS 2035	59.2	93	73	82
Baldwin	59.3	83	62	72
Jamestown	59.7	81	61	68
AGS 2026	58.2	71	50	65
Terral LA 841	59.0	73	53	64
Progeny 117	58.8	68	52	63
Progeny 125	59.4	63	45	62
Terral TV 8525	59.5	23	17	42
Terral TV 8535	59.3	18	13	41
Progeny 185	59.2	21	17	41
LA 01110D-150	58.2	79	67	
LA 02015E201	59.0	89	65	
Progeny 308	59.4	25	26	
Progeny 870	59.7	19	12	
Progeny 357	60.1	14	10	
AGS 2038	60.2	94		
GA 04570-10E46	61.6	92		
USG 3120	59.1	91		
Oglethorpe	59.6	84		
GA 031086-10E29	59.3	76		
VA10W-119	58.4	74		
GA 031257-10LE34	59.6	65		
Progeny PGX 12-3	57.5	36		
Progeny PGX 12-10	59.9	19		
Test Mean		60	42	60
C.V.(%)		10	16	10
LSD(0.10)		6	5	4

TABLE 13. NORTH ALABAMA REGIONAL AND LOCATION AVERAGES OF OAT VARIETY PERFORMANCE.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
Regional Averages				
LA 05006-65-S1	30.3	143	130	130
Florida 501	34.7	124	106	104
Soil Saver	27.9	75	67	63
LA 04004-7-S1	36.3	150		
Test Mean		123	101	99
C.V.(%)		11	12	12
LSD(0.10)		10	6	5
Tennessee Valley Research and Extension Center, Belle Mina, AL				
LA 05006-65-S1	35.3	142	126	126
Florida 501	34.7	133	110	108
Soil Saver	27.9	77	66	60
LA 04004-7-S1	36.3	159		
Test Mean		128	100	98
C.V.(%)		21	22	20
LSD(0.10)		31	18	12
Sand Mountain Research and Extension Center, Crossville, AL.				
LA 05006-65-S1	30.3	144	134	134
Florida 501	35.5	115	102	101
Soil Saver	36.4	73	67	67
LA 04004-7-S1	36.8	141		
Test Mean		118	101	100
C.V.(%)		15	15	14
LSD(0.10)		20	12	9

TABLE 14. CENTRAL ALABAMA REGIONAL AND LOCATION AVERAGES OF OAT VARIETY PERFORMANCE.

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
Regional Averages				
LA 05006-65-S1	35.3	144	125	118
Florida 501	30.4	64	76	80
Soil Saver	25.0	60	46	44
LA 04004-7-S1	35.1	90		
Test Mean		90	82	81
C.V.(%)		19	25	28
LSD(0.10)		13	11	10
Prattville Research Field, Prattville, AL.				
LA 05006-65-S1	35.4	160	121	133
Florida 501	37.8	103	89	109
Soil Saver	25.7	81	49	56
LA 04004-7-S1	36.6	134		
Test Mean		120	86	99
C.V.(%)		11	17	14
LSD(0.10)		15	12	9
E.V. Smith Research and Extension Center, Plant Breeding Unit, Tallassee, AL.				
LA 05006-65-S1	35.3	127	128	103
Florida 501	30.4	25	64	51
Soil Saver	25.0	40	44	32
LA 04004-7-S1	35.1	46		
Test Mean		59	79	62
C.V.(%)		21	13	30
LSD(0.10)		14	8	12

TABLE 15. SOUTH ALABAMA REGIONAL AND LOCATION AVERAGES OF OAT VARIETY PERFORMANCE .

	2013		2012-2013	2011-2013
Brand-Variety	Test wt	Avg.	Avg.	Avg.
	lbs/bu	---------- bu/acre ----------		
Regional Averages				
LA 05006-65-S1	24.9	80	78	103
Florida 501	23.6	83	68	81
Soil Saver	24.2	67	56	62
LA 04004-7-S1	32.4	90		
Test Mean		80	67	82
C.V.(%)		20	25	24
LSD(0.10)		10	7	7
Brewton Research Field, Brewton, AL.				
LA 05006-65-S1		124	91	109
Florida 501		100	68	77
Soil Saver		78	63	67
LA 04004-7-S1		106		
Test Mean		102	74	85
C.V.(%)		16	19	15
LSD(0.10)		19	11	8
Gulf Coast Research and Extension Center, Fairhope, AL.				
LA 05006-65-S1	24.9	59	82	110
Florida 501	23.6	83	87	101
Soil Saver	24.2	64	56	70
LA 04004-7-S1	39.9	91		
Test Mean		74	75	94
C.V.(%)		19	16	12
LSD(0.10)		16	10	7
Wiregrass Research and Extension Center, Headland, AL.				
LA 05006-65-S1	28.0	58	61	89
Florida 501	29.8	65	48	64
Soil Saver	25.4	59	47	48
LA 04004-7-S1	32.4	73		
Test Mean		64	52	67
C.V.(%)		26	21	24
LSD(0.10)		19	8	10

TABLE 16. LEVELS OF DISEASES ON WHEAT VARIETIES AVERAGED ACROSS NORTHERN ALABAMA SITES (BELLE MINA AND CROSSVILLE), 2012-2013.

Brand-Variety	Powdery Mildew[1]	Leaf Rust[2]	Stripe Rust[2]	Leaf Blotch[1]	Glume Blotch[1]	Barley yellow dwarf[1]	Fusarium Head Blight[1]
AGS 2035	0.2	0	1.5	1.1	0.4	0	0
AGS 2038	0	0	0	0.8	0	0	0
Baldwin	0.2	0	1.0	1.4	0	0	0
Dyna Gro 9053	1.2	0	0	0.9	0	0	0
GA 031086-10E29	0	0	0	1.5	1.5	0	0
GA 031257-10LE34	0.2	0	0	1.8	0.2	0	1.0
GA 04570-10E46	0	0	0	0.9	0.1	0	0
Jamestown	0	0	0.2	1.6	0.1	0	0
LA 01110D-150	1.0	0.2	0.2	1.8	0	0	0
LA 02015E201	0	0	0	1.8	0	0	0.8
Oakes	1.2	0	0.1	1.4	0.8	0	0
Oglethorpe	1.0	0	0	1.8	0.5	0	0.5
Progeny 117	0.1	0.2	11.2	1.8	0.2	0	0
Progeny 125	0	0	0	2.6	2.1	0	0
Progeny 185	1.2	0	7.5	1.0	0	0.5	0
Progeny 308	0	0	0	0.9	0.3	0	0
Progeny 357	1.8	0	0.3	0.6	0	0.2	0
Progeny 870	0	0	0	0.9	0	1.2	0
Progeny PGX 12-10	0.2	0	0	0.4	0.1	0.1	0
Progeny PGX 12-3	0.5	0	0	0.8	0.5	0	0
SS 520	0.1	0	36.5	2.0	0.8	0.6	0.4
SS 8308	0	0	0.2	1.1	0	0.2	0
SS 8340	0.2	0	0	1.5	0	0	0
SS 8404	0.1	0	9.2	2.0	0.2	0	0.2
SS 8500	0	0	1.2	1.2	0	0.6	0
SS 8641	0	0	0	1.8	0.8	0	0.2
SY Harrison	0.5	0	0.1	0.1	0	0	0
Terral LA 841	0.5	0	0	1.2	0	0	1.0
Terral TV 8525	0	0	0	0.9	0.1	0.5	0
Terral TV 8535	0	0	0	1.1	0.2	0.4	0
Terral TV 8848	0.2	0	0	0.8	0	0	0
Terral TV 8861	0.5	0	0	1.1	0	0	0
USG 3120	0	0	0.2	2.0	0	0	0.2
USG 3209	0	0	0.5	1.6	0.8	0	0.2
USG 3251	0.2	0	0	0.5	0	0	0
USG 3438	0	0	0	0.5	0	0.3	0
USG 3555	0	0	0	1.5	0.2	0	0
USG 3833	2.5	0	0	0.5	0	0.4	0
VA10W-119	0.2	0	3.5	2.1	0	0.4	0.2
LSD ($P = 0.05$)	1.1	0.2	9.4	1.1	0.6	0.5	0.6

[1]Disease rated on a scale of 0 to 9 where 0 = no disease, 9 = severe disease throughout plot.

[2]Rust diseases are rated on the flag leaves as a proportion of affected leaf, 0 to 100%.

TABLE 17. LEVELS OF DISEASES ON WHEAT VARIETIES AVERAGED ACROSS CENTRAL ALABAMA SITES (PRATTVILLE AND TALLASSEE), 2012-2013.

Brand-Variety	Powdery Mildew[1]	Leaf Rust[2]	Stripe Rust[2]	Leaf Blotch[1]	Glume Blotch[2]	Barley Yellow Dwarf[2]
AGS 2035	0	0.1	6.7	0.5	0.6	0
AGS 2038	0	0	0.1	0.5	0.2	1.1
Baldwin	0	0	11.9	0.3	0	0
GA 031086-10E29	0	0	0	1	0.7	0.1
GA 031257-10LE34	0	0	0.9	0.4	0.6	0
GA 04570-10E46	0	0	0	0.9	0.2	0
Jamestown	0	2.5	0	0.7	0.6	0
LA 01110D-150	0	0.2	3	1	0.6	0
LA 02015E201	0	0	0	2	0.2	0
Oglethorpe	0	0	0	0.6	0.4	0.1
Progeny 117	0	5.2	15.1	0.5	0.4	0
Progeny 125	0	6.5	0	2.1	2.2	0
Progeny 185	0	0.3	11.2	0.6	0	0.1
Progeny 308	0	0.7	0.3	0.2	0.2	0.3
Progeny 357	0.3	0.1	1.3	0	0	0.3
Progeny 870	0	0.5	0	0.3	0	0.2
Progeny PGX 12-10	0	9.8	0	0.2	0.1	0.4
Progeny PGX 12-3	0.1	0	0.1	0	0.3	0
Terral LA 841	0	0	0.2	0.6	1.1	0.1
Terral TV 8525	0	0.4	0	0.4	0.2	0.2
Terral TV 8535	0	1	0	0	0	1
USG 3120	0	0.2	3.4	0.8	0.2	0
USG 3833	0.3	0.1	0.2	0	0	0
VA10W-119	0	0	10.2	0.3	0	0.1
LSD ($P = 0.05$)	0.2	5.6	6.4	0.75	0.57	0.57

[1]Disease rated on a scale of 0 to 9 where 0 = no disease, 9 = severe disease throughout plot.

[2]Rust diseases are rated on the flag leaves as a proportion of affected leaf, 0 to 100%.

TABLE 18. LEVELS OF DISEASES ON WHEAT VARIETIES AVERAGED ACROSS SOUTHERN ALABAMA SITES (FAIRHOPE AND HEADLAND), 2012-2013.

Brand-Variety	Leaf Rust[2]	Stripe Rust[2, 3]	Leaf Blotch[1]	Glume Blotch[1]	Fusarium Head Blight[1, 4]	Barley Yellow Dwarf[2]
AGS 2026	0	0.3	0.7	0.9	0	0.6
AGS 2035	0	0.7	1	0.9	0.1	0.1
AGS 2038	0	0.3	0.9	1	0.1	0.1
Baldwin	0	1	1.4	0.4	0	0
GA 031086-10E29	0.3	0.7	0.8	0.9	0	0
GA 031257-10LE34	0	0.01	1.1	0.3	0	0.6
GA 04570-10E46	0	0.3	1	0.5	0.3	0
Jamestown	7.5	1.7	1.3	0.7	0	0
LA 01110D-150	1.1	0.7	1.2	0.5	0.1	0.2
LA 02015E201	0	1	2.3	1.5	0.2	0
Oglethorpe	0	0	0.7	1.2	0	0.1
Progeny 117	21.7	3	1	0.9	0	0
Progeny 125	9.5	2.3	1.3	1.5	0	0.4
Progeny 185	12.2	1.3	0.5	0	0	0.2
Progeny 308	1	1	0.2	0.3	0	0.4
Progeny 357	24.4	2.3	0.1	0.1	0	0
Progeny 870	2.3	0.3	0.1	0.1	0	0.4
Progeny PGX 12-10	20.9	0	0.3	0.2	0	0.1
Progeny PGX 12-3	0	0	0.2	0.6	0	0
Terral LA 841	0	0	1.1	1.7	0.4	0.4
Terral TV 8525	1.9	2	0.1	0.1	0	0.3
Terral TV 8535	2.1	0.3	0.2	0	0	0.7
USG 3120	0.1	0.7	1.4	0.7	0.3	0
VA10W-119	0.8	0.3	0.8	0.7	0	0.4
LSD ($P = 0.05$)	*10.6*	*1.8*	*0.7*	*0.7*	*0.3*	*0.6*

[1]Disease rated on a scale of 0 to 9 where 0 = no disease, 9 = severe disease throughout plot.

[2]Rust diseases are rated on the flag leaves as a proportion of affected leaf, 0 to 100%.

[3] Stripe rust was seen only at Headland in 2013; cultivar ratings from this single location.

[4] Fusarium head blight (=scab) was seen only at Fairhope; scab ratings from this location only.

TABLE 19. LEVELS OF DISEASES ON OAT VARIETIES AVERAGED ACROSS TWO SITES PER REGION (SEE WHEAT TABLES FOR SITES), 2012-2013.

	Northern Alabama[1]		Central Alabama[1]			Southern Alabama[1]		
Brand-variety	Leaf spot[2]	Barley Yellow Dwarf[3]	Leaf spot[2]	Crown Rust[3]	Barley Yellow Dwarf[2]	Leaf spot[2]	Crown Rust[3]	Barley Yellow Dwarf[2]
Florida 501	0.1	0.8	1.4	0.4	0.4	1.8	9.0	0.2
LA 04004-7-S1	0	0	1.2	0.5	0.2	1.4	3.8	0
LA 05006-65-S1	0.7	0	1.2	0.9	0	2.0	10.0	0
Soil Saver	0.2	0.2	0.6	2.9	0.2	1.2	1.0	0.6

[1] Northern locations were Belle Mina and Crossville; Central locations were Marion Junction, Tallassee, and Prattville; Southern locations were Brewton and Headland.

[2] Disease rated on a scale of 0 to 9 where 0 = no disease, 9 = severe disease throughout plot.

[3] Rust diseases are rated on the flag leaves as a proportion of affected leaf, 0 to 100%.

SOURCES OF SEED

Cultivar	Source
Wheat	
AGS 2026, AGS 2035, AGS 2038	AGSouth Genetics Albany, Georgia
DynaGro 9053 DynaGro Baldwin DynaGro Oglethorpe	Crop Production Services Dublin, Ohio
LA 01110D-150* LA 02015E201*	Louisiana State University Baton Rouge, Louisiana
Progeny 117, Progeny 125, Progeny 185, Progeny 357, Progeny 870, Progeny 308, PGX 12-10*, PGX 12-3*	Progeny Ag Products Wynne, Arkansas
SS 520, SS 8308, SS 8340, SS 8404, SS 8500, SS 8641	Southern States Coop. Richmond, Virginia
Oakes, SY Harrison (formerly B050154)	Syngenta Seeds, Inc. Bay, Arkansas
Terral LA 841, Terral TV 8525, Terral TV 8535, Terral TV 8848, Terral TV 8861	Terral Seed Co. Lake Providence, Louisiana
USG 3209, USG 3438, USG 3555, USG 3251, USG 3120, USG 3833	UniSouth Genetics, Inc. Nashville, Tennessee
GA 04570-10E46*, GA 031257-10LE34*, GA 031086-10E29*	University of Georgia Griffin, Georgia
Jamestown, VA 10W-119*	Virginia Crop Improvement, Assn. Warsaw, Virginia

* Experimental line; not yet commercially available.

continued

Cultivar	Source
Oat	
Florida 501, SoilSaver	Alabama Crop Improvement Assn. Headland, Alabama
LA 05006-65-S1*	Loiuisiana State University
LA 04004-7-S1*	Baton Rouge, Louisiana

* Experimental line; not yet commercially available.