

*Performance
of Small Grain
Varieties for
Grain in
Alabama,
2010-11*

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Southern Alabama

Brewton Experiment Field, Brewton.....J.R. Akridge, Director

Gulf Coast Research and Extension Center, Fairhope.....M.D. Pegues, Act. Director
J.R. Jones, Assoc. Director

Wiregrass Research and Extension Center, Headland.....L.W. Wells, Director
B.E. Gamble, Assoc. Director

THE 2011 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 2010 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 2010-2011 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 2010-2011 variety trials for wheat, oats, barley and a variety of rye, are summarized by region on pages 25-28. Diseases were rated by members of the Dept. of Entomology and Plant Pathology; Specifically, H. Lee Campbell, Research Associate, rated diseases at southern sites (Gulf Coast and Wiregrass), and in the central (PBU and Prattville) and northern (Tennessee Valley and Sand Mountain) regions, diseases were rated by Dr. K. L. Bowen, Professor, and A. Subedi, Graduate Research Assistant. Rust diseases are rated on a severity scale ranging from 0 to 100 and 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 indicates severe disease affecting all plants in plot. A "T" indicates that a trace of the disease was noted.

DISCUSSION

Growing conditions and variety performance often vary among locations and years. Growing season conditions in the 2010-11 were good for small grain production at almost all locations. The exception was the Tennessee Valley Research and Extension Center which was hit by a tornado resulting in severe lodging in all plots and a delayed harvest.

In general, disease pressure throughout the state was minimal in the spring of 2011. Leaf rust and stripe rust was observed on wheat throughout the state; onset of both of these rusts was relatively late in the season. Leaf rust developed to levels similar to that seen in 2010. Stripe rust, which was seen at low levels in the Wiregrass area in 2010, was observed at Tennessee Valley in 2011. Septoria leaf and glume blotch remained low and was slightly lower than seen in the preceding year. Fusarium head blight (= scab) was noted at northern locations, as well as in Tallasee on wheat. Scab intensity was about equal to that seen in 2010. Minimal disease developed on any oat varieties; low to moderate levels of Helminthosporium leaf spot was noted throughout the state. Crown rust was observed on oats in Tallasee. On barley, scald was observed at moderately low levels. Barley yellow dwarf, which affects most small grain species, was minimal across the state.

TABLE 1. LOCATION, PLANTING AND HARVESTING DATES FOR THE 2010-11 SMALL GRAIN TESTS.

Location	Date planted	Date harvested
<u>Northern Alabama</u>		
Tennessee Valley Res. & Ext. Ctr. (Belle Mina)		
Small grain - grain only	November 2	June 13
Sand Mountain Res. & Ext. Ctr. (Crossville)		
Small grain - grain only	November 8	June 8
<u>Central Alabama</u>		
Black Belt Res. & Ext. Ctr. (Marion Junction)		
Small grain - grain only	November 10	June 2
E.V. Smith Res. Ctr., Plant Breeding Unit (Tallassee)		
Small grain - grain only	November 2	June 2
Prattville Research Field (Prattville)		
Small grain - grain only	November 1	May 25
<u>Southern Alabama</u>		
Wiregrass Res. & Ext. Ctr. (Headland)		
Small grain - grain only	November 11	May 19
Brewton Research Field (Brewton)		
Small grain - grain only	November 22	May 13
Gulf Coast Res. & Ext. Ctr. (Fairhope)		
Small grain - grain only	November 8	May 11

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
AGS 2060	61.1	104	93	88
Jamestown	62.3	100	94	86
Oglethorpe	59.1	101	93	83
SS 8308	61.3	97	89	83
SS 520	57.0	90	91	82
USG 3555	58.2	95	87	80
SS 8404	61.1	97	91	79
Progeny 117	58.4	99	92	79
USG 3209	58.0	95	88	79
SS 8641	59.1	90	82	79
Baldwin	59.7	101	89	78
Merl	59.8	88	84	78
Terral TV 8558	58.5	93	87	77
Terral LA 841	57.9	87	84	77
Terral TV 8589	56.0	94	86	77
Coker 9553	60.0	83	80	76
Magnolia	58.3	95	82	74
Progeny 185	57.4	78	82	73
Progeny 166	57.3	85	82	70
USG 3438	57.7	103	93	
Terral TV 8861	58.9	103	93	
Progeny 125	59.3	97	92	
Oakes	59.7	93	90	
USG 3452	57.7	95	90	
USG 3201	60.0	95	89	
USG 3409	58.4	94	89	
Terral LA 821	58.5	94	89	
Baretta	58.1	93	85	

continued

TABLE 2. CONTINUED.

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
Terral TVX 8848	58.7	115		
Terral TVX 8626	56.5	109		
Dyna Gro 9053	56.7	106		
Terral TVX 8535	57.9	105		
Progeny PGX 10-7	56.5	105		
GA 00067-8E35	58.8	103		
Terral TVX 8525	59.1	102		
Syngenta SY 9978	57.4	101		
GA 001138-8E36	59.9	100		
AGS 2035	60.5	100		
SS Exp 8500	57.7	98		
Progeny PGX 10-5	57.7	97		
AGS 2026	58.4	96		
SS Exp 8340	60.4	95		
Arcadia	60.2	92		
Progeny PGX 10-2	59.6	88		
Terral TVX 8460	57.1	76		
Test Mean		96	88	79
C.V.(%)		12	11	14
LSD(0.10)		9	5	5

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
Jamestown	62.3	77	69	65
SS 8308	61.3	70	59	63
AGS 2060	61.1	54	52	62
Oglethorpe	59.1	63	57	61
Terral TV 8558	58.9	64	59	61
USG 3555	58.2	67	59	60
Baldwin	59.7	76	61	60
Merl	59.8	65	58	58
Progeny 117	58.4	58	57	58
Magnolia	58.3	65	56	58
Coker 9553	60.0	62	56	57
SS 8404	61.1	65	57	57
Progeny 185	57.4	48	52	57
SS 520	57.0	55	58	57
USG 3209	58.4	70	60	57
Terral LA 841	58.4	58	52	55
SS 8641	59.1	57	47	55
Progeny 166	57.3	56	56	54
Terral TV 8589	56.0	56	51	54
USG 3438	58.6	83	72	
USG 3201	60.0	73	63	
Terral TV 8861	58.9	70	61	
Progeny 125	59.3	63	60	
USG 3452	57.7	60	59	
USG 3409	58.4	60	58	
Terral LA 821	58.5	61	57	
Baretta	58.2	62	56	
Oakes	59.7	54	56	

continued

TABLE 3. CONTINUED.

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu		----- bu/acre -----	
Terral TVX 8535	58.1	81		
SS Exp 8340	60.4	78		
Progeny PGX 10-7	56.8	77		
Terral TVX 8848	58.7	77		
Terral TVX 8626	56.5	76		
Progeny PGX 10-5	58.4	74		
Dyna Gro 9053	56.8	73		
GA 00067-8E35	58.8	73		
Terral TVX 8525	59.1	72		
AGS 2035	60.5	70		
GA 001138-8E36	59.9	70		
Arcadia	60.2	67		
Syngenta SY 9978	57.4	66		
AGS 2026	58.4	63		
Terral TVX 8460	58.2	57		
SS Exp 8500	57.7	57		
Progeny PGX 10-2	59.6	56		
Test Mean		66	58	58
C.V.(%)		12	12	10
LSD(0.10)		9	5	4

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
AGS 2060	63.8	153	133	114
SS 520	58.5	125	125	108
Jamestown	62.3	124	119	107
Oglethorpe	61.1	139	128	105
SS 8641	60.0	122	116	103
SS 8308	62.3	125	118	103
USG 3209	58.0	121	117	102
SS 8404	62.3	129	124	102
Progeny 117	59.7	140	126	101
USG 3555	58.4	124	114	100
Terral TV 8589	59.1	131	120	99
Terral LA 841	57.9	117	116	99
Merl	60.5	110	110	98
Baldwin	59.7	127	117	97
Coker 9553	60.7	105	104	95
Terral TV 8558	58.5	122	114	94
Progeny 185	58.9	109	111	90
Magnolia	59.4	125	109	90
Progeny 166	58.3	114	108	85
Terral TV 8861	60.8	136	125	
Oakes	61.0	132	124	
Progeny 125	60.4	131	124	
USG 3452	59.0	130	121	
Terral LA 821	59.8	128	120	
USG 3409	59.8	127	119	
USG 3438	57.7	123	115	
USG 3201	60.9	117	115	
Baretta	58.1	124	114	

continued

TABLE 4. CONTINUED.

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu		----- bu/acre -----	
Terral TVX 8848	59.8	153		
Terral TVX 8626	56.6	141		
SS Exp 8500	60.0	140		
Dyna Gro 9053	56.7	139		
Syngenta SY 9978	59.0	137		
GA 00067-8E35	59.4	133		
Progeny PGX 10-7	56.5	132		
Terral TVX 8525	59.2	132		
GA 001138-8E36	60.9	131		
AGS 2035	60.8	129		
AGS 2026	60.7	129		
Terral TVX 8535	57.9	129		
Progeny PGX 10-5	57.7	121		
Progeny PGX 10-2	61.2	120		
Arcadia	60.2	116		
SS Exp 8340	60.4	111		
Terral TVX 8460	57.1	94		
Test Mean		127	118	99
C.V.(%)		13	10	13
LSD(0.10)		17	9	8

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

Brand-Variety	2011		2010-2011 [†]	2009-2011 [†]
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
Baldwin	58.4	94	77	75
USG 3555	56.0	88	74	72
Terral TV 8558	56.5	86	71	71
Progeny 185	56.7	88	70	71
Jamestown	58.0	89	75	70
AGS 2060	59.9	91	74	67
Merl	57.5	88	71	66
Terral TV 8589	54.1	79	65	65
Progeny 166	55.9	85	66	64
Progeny 117	56.9	88	68	63
Terral LA 841	54.3	78	71	63
USG 3209	56.5	87	72	63
AGS 2026	55.7	88	68	61
Oglethorpe	55.5	89	69	61
USG 3438	55.2	95	80	
USG 3201	58.2	94	77	
USG 3409	56.7	93	73	
USG 3452	55.9	90	70	
Terral LA 821	55.4	80	70	
Progeny 125	54.9	88	67	
Progeny PGX 10-5	54.8	99		
Terral TVX 8626	54.6	98		
Progeny PGX 10-7	53.3	97		
Terral TVX 8535	55.3	96		
Dyna Gro 9053	54.5	95		
Terral TVX 8525	57.7	89		
AGS 2035	58.1	89		
GA 001138-8E36	58.8	88		
GA 00067-8E35	57.0	87		
Progeny PGX 10-2	58.8	86		
Terral TVX 8460	55.9	80		
Test Mean		89	71	67
C.V.(%)		8	10	17
LSD(0.10)		4	4	5

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

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

Brand-Variety	2011		2010-2011 [†]	2009-2011 [†]
	Test wt	Avg.	Avg.	Avg.
	lbs/bu		----- bu/acre -----	
Terral TVX 8535	56.6	99		
USG 3409	58.0	96		
Progeny PGX 10-5	56.3	95		
Dyna Gro 9053	54.9	93		
Terral TVX 8626	54.6	93		
Progeny PGX 10-7	54.9	92		
AGS 2026	57.3	89		
USG 3201	58.8	88		
Progeny 117	56.9	87		
Baldwin	58.4	87		
GA 001138-8E36	59.2	87		
Progeny 185	56.7	86		
AGS 2060	59.9	84		
Oglethorpe	56.6	84		
Terral TV 8558	56.8	83		
USG 3438	56.1	83		
USG 3452	55.9	82		
Terral TVX 8525	57.8	82		
Progeny 166	55.9	81		
GA 00067-8E35	58.7	80		
USG 3209	58.2	80		
Merl	57.5	79		
Progeny PGX 10-2	58.8	78		
Terral TV 8589	54.1	77		
USG 3555	57.6	77		
Progeny 125	56.1	77		
Jamestown	58.0	74		
Terral LA 821	56.5	74		
AGS 2035	58.7	73		
Terral TVX 8460	56.8	71		
Terral LA 841	55.9	69		
Test Mean		83		
C.V.(%)		8		
LSD(0.10)		7		

[†] Multi-year averages are not available for this location.

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
Baldwin	60.2	101	81	78
Jamestown	59.6	106	78	77
AGS 2060	60.9	94	75	72
Terral LA 841	55.3	90	73	72
Oglethorpe	56.9	105	72	71
AGS 2026	56.1	94	69	70
USG 3555	57.6	95	75	69
Progeny 185	57.4	92	71	68
Progeny 117	57.0	93	69	68
Terral TV 8558	56.5	92	71	68
USG 3209	57.4	90	71	64
Merl	59.2	95	72	64
Terral TV 8589	56.2	81	66	62
Progeny 166	57.3	87	65	61
USG 3438	55.2	102	81	
USG 3201	58.2	97	79	
Terral LA 821	56.4	96	75	
USG 3409	56.7	95	74	
USG 3452	57.0	100	71	
Progeny 125	54.9	95	64	
Terral TVX 8626	56.2	106		
Progeny PGX 10-7	56.2	105		
Progeny PGX 10-5	55.7	101		
AGS 2035	58.9	99		
Dyna Gro 9053	55.7	99		
GA 00067-8E35	58.5	98		
Terral TVX 8525	57.7	97		
Progeny PGX 10-2	60.4	95		
GA 001138-8E36	60.7	93		
Terral TVX 8535	55.4	93		
Terral TVX 8460	56.8	87		
Test Mean		96	73	69
C.V.(%)		5	9	9
LSD(0.10)		6	5	4

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
USG 3555	56.0	93	73	76
Terral TV 8558	56.7	82	70	73
Progeny 185	56.8	88	70	73
Baldwin	58.6	94	73	72
Merl	58.5	91	72	69
Progeny 166	56.6	87	68	67
Terral TV 8589	55.5	79	64	67
AGS 2060	60.0	97	74	63
USG 3209	56.5	93	75	63
Jamestown	58.6	85	71	62
Progeny 117	57.0	82	66	58
Terral LA 841	54.3	76	67	54
AGS 2026	55.7	78	66	52
Oglethorpe	55.5	72	63	50
USG 3438	55.4	104	80	
USG 3201	58.8	97	76	
Progeny 125	56.0	93	73	
USG 3409	56.9	85	72	
USG 3452	56.3	86	69	
Terral LA 821	55.4	66	62	
Progeny PGX 10-5	54.8	103		
AGS 2035	58.1	99		
Terral TVX 8535	55.3	96		
Terral TVX 8626	54.6	93		
Dyna Gro 9053	54.5	91		
Progeny PGX 10-7	53.3	90		
Terral TVX 8525	57.8	90		
Terral TVX 8460	55.9	86		
Progeny PGX 10-2	59.0	83		
GA 00067-8E35	57.0	83		
GA 001138-8E36	58.8	81		
Test Mean		88	70	64
C.V.(%)		6	6	11
LSD(0.10)		7	3	5

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt lbs/bu	Avg. -----	Avg. bu/acre -----	Avg. -----
Baldwin	55.8	83	75	71
AGS 2060	58.7	82	75	69
AGS 2026	54.4	87	78	69
Oglethorpe	54.1	86	78	69
Terral LA 841	52.9	80	75	66
Jamestown	57.4	85	76	64
Magnolia	53.3	75	67	60
Terral TV 8558	52.1	83	76	59
Progeny 117	54.5	79	75	57
Terral TV 8589	52.9	76	71	57
Progeny 166	55.0	72	68	56
Progeny 185	54.0	81	73	54
Merl	56.2	82	72	52
Terral LA 821	55.0	83	77	
Progeny 125	53.1	87	76	
AGS 2035	56.0	93		
GA 001138-8E36	58.2	89		
GA 00067-8E35	55.1	86		
Terral TVX 8525	54.9	85		
Terral TVX 8535	53.0	85		
Progeny PGX 10-5	52.9	84		
Arcadia	55.5	83		
Progeny PGX 10-7	50.6	78		
Terral TVX 8626	51.7	76		
Progeny PGX 10-2	56.9	75		
Terral TVX 8460	54.3	71		
Test Mean		82	74	62
C.V.(%)		9	10	18
LSD(0.10)		4	3	4

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
AGS 2060	58.7	75	60	65
Baldwin	57.6	72	59	62
AGS 2026	54.4	75	59	60
Terral LA 841	52.9	65	56	59
Oglethorpe	54.1	71	56	59
Jamestown	57.4	71	56	56
Magnolia	54.3	61	51	56
Progeny 117	54.5	67	55	51
Terral TV 8558	52.1	74	61	50
Progeny 166	55.0	66	54	50
Terral TV 8589	52.9	67	55	50
Progeny 185	54.0	65	54	46
Merl	56.2	67	56	44
Terral LA 821	55.9	66	54	
Progeny 125	53.1	68	53	
Terral TVX 8535	53.0	73		
AGS 2035	56.0	72		
GA 00067-8E35	55.1	70		
GA 001138-8E36	58.8	67		
Progeny PGX 10-2	56.9	67		
Progeny PGX 10-5	52.9	67		
Progeny PGX 10-7	51.9	66		
Terral TVX 8525	54.9	65		
Terral TVX 8626	52.3	64		
Terral TVX 8460	54.3	62		
Arcadia	57.3	62		
Test Mean		68	56	55
C.V.(%)		6	8	11
LSD(0.10)		4	3	4

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	-----	bu/acre	-----
Oglethorpe	54.7	93	83	66
AGS 2026	55.3	91	82	64
Baldwin	55.8	87	79	64
Jamestown	57.7	103	85	62
AGS 2060	59.5	83	77	60
Terral LA 841	53.8	89	79	59
Terral TV 8558	55.3	83	77	57
Terral TV 8589	54.0	76	71	53
Progeny 185	57.0	90	77	53
Progeny 166	56.2	74	69	51
Progeny 117	56.0	85	76	51
Merl	57.8	91	76	50
Magnolia	53.3	73	66	49
Progeny 125	55.8	98	85	
Terral LA 821	55.0	96	84	
AGS 2035	56.6	107		
GA 00067-8E35	56.5	102		
Terral TVX 8525	57.1	97		
GA 001138-8E36	58.2	93		
Arcadia	55.5	91		
Progeny PGX 10-5	54.5	88		
Terral TVX 8535	54.8	86		
Progeny PGX 10-7	50.6	80		
Progeny PGX 10-2	57.6	79		
Terral TVX 8626	51.7	78		
Terral TVX 8460	54.9	71		
Test Mean		88	78	57
C.V.(%)		9	8	11
LSD(0.10)		8	4	4

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
Baldwin	59.9	92	87	87
AGS 2026	58.9	96	94	84
AGS 2060	63.0	88	89	83
Oglethorpe	59.7	94	94	83
Terral LA 841	58.6	87	92	80
Magnolia	57.0	91	85	75
Jamestown	61.7	82	85	73
Progeny 117	58.0	85	93	71
Terral TV 8558	59.4	91	91	69
Terral TV 8589	56.3	87	87	68
Progeny 166	56.8	76	82	66
Progeny 185	57.7	87	87	62
Merl	59.5	87	85	61
Terral LA 821	59.1	86	91	
Progeny 125	58.0	97	89	
GA 001138-8E36	61.5	107		
AGS 2035	61.2	101		
Progeny PGX 10-5	57.9	98		
Arcadia	59.7	96		
Terral TVX 8535	57.7	95		
Terral TVX 8525	58.8	93		
Progeny PGX 10-7	55.6	87		
GA 00067-8E35	59.7	86		
Terral TVX 8626	55.6	85		
Terral TVX 8460	56.5	81		
Progeny PGX 10-2	59.0	79		
Test Mean		90	89	74
C.V.(%)		8	12	12
LSD(0.10)		7	8	5

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu		bu/acre	
<u>Regional Averages</u>				
Thoroughbred	42.5	108	96	87
Dan	51.3	84	71	
VA06B-19	39.3	108		
Price	41.0	106		
Test Mean		101	83	87
C.V.(%)		19	12	24
LSD(0.10)		15	6	6
<u>Tennessee Valley Research and Extension Center, Belle Mina, AL</u>				
Thoroughbred	41	111	92	79
Dan	51	75	64	
VA06B-19	39	90		
Price	41	84		
Test Mean		90	78	79
C.V.(%)		34	39	35
LSD(0.10)		35	24	24
<u>Sand Mountain Research and Extension Center, Crossville, AL.</u>				
Thoroughbred	43.9	104	101	96
Dan		92	77	
Price		128		
VA06B-19		125		
Test Mean		112	89	96
C.V.(%)		10	13	11
LSD(0.10)		13	10	10

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	----- bu/acre -----		
<u>Regional Averages</u>				
FL 0522-92-S1	33	131	†	†
LA 05006-65-S1	33	131		
LA 03063-S4	30	106		
Florida 501	34	101		
NOATS-2	40	61		
L111-9-MXD	30	58		
Soil Saver	26	57		
Test Mean		92		
C.V.(%)		10		
LSD(0.10)		7		
<u>Tennessee Valley Research and Extension Center, Belle Mina, AL</u>				
LA 05006-65-S1	33	128		
FL 0522-92-S1	35	127		
LA 03063-S4	32	107		
Florida 501	34	104		
NOATS-2	40	54		
L111-9-MXD	30	53		
Soil Saver	26	49		
Test Mean		89		
C.V.(%)		11		
LSD(0.10)		11		
<u>Sand Mountain Research and Extension Center, Crossville, AL.</u>				
FL 0522-92-S1	33	136		
LA 05006-65-S1	34	133		
LA 03063-S4	30	106		
Florida 501	34	99		
NOATS-2	43	68		
Soil Saver	28	65		
L111-9-MXD	30	64		
Test Mean		96		
C.V.(%)		10		
LSD(0.10)		11		

† this is the first year for the oat test, hence no multi-year averages are available.

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt lbs/bu	Avg.	Avg. ----- bu/acre -----	Avg.
<u>Regional Averages</u>				
LA 05006-65-S1	35	115		
LA 03063-S4	34	105		
FL 0522-92-S1	36	99		
Florida 501	34	86		
Soil Saver	28	47		
Test Mean		90		
C.V.(%)		21		
LSD(0.10)		13		
<u>Black Belt Research and Extension Center, Marion Junction, AL</u>				
LA 05006-65-S1	35	136		
LA 03063-S4	35	122		
FL 0522-92-S1	36	119		
Florida 501	34	85		
Test Mean		115		
C.V.(%)		10		
LSD(0.10)		13		
LSD(0.10)		108		
<u>Prattville Research Field, Prattville, AL.</u>				
LA 05006-65-S1	37	157		
FL 0522-92-S1	36	151		
Florida 501	37	149		
LA 03063-S4	34	148		
Soil Saver	28	70		
Test Mean		135		
C.V.(%)		7		
LSD(0.10)		10		
<u>E.V. Smith Research and Extension Center, Plant Breeding Unit, Tallassee, AL.</u>				
LA 05006-65-S1	35	52		
LA 03063-S4	34	45		
FL 0522-92-S1	36	28		
Florida 501	37	25		
Soil Saver	31	9		
Test Mean		32		
C.V.(%)		92		
LSD(0.10)		33		

† this is the first year for the oat test, hence no multi-year averages are available.

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

Brand-Variety	2011		2010-2011	2009-2011
	Test wt	Avg.	Avg.	Avg.
	lbs/bu	-----	bu/acre -----	
<u>Regional Averages</u>				
LA 05006-65-S1	33	151		
FL 0522-92-S1	33	136		
LA 03063-S4	31	126		
Florida 501	33	107		
Soil Saver	25	74		
Test Mean		119		
C.V.(%)		13		
LSD(0.10)		9		
<u>Brewton Research Field, Brewton, AL.</u>				
LA 05006-65-S1	33	145		
LA 03063-S4	32	134		
FL 0522-92-S1	34	131		
Florida 501	33	97		
Soil Saver	25	75		
Test Mean		116		
C.V.(%)		8		
LSD(0.10)		11		
<u>Gulf Coast Research and Extension Center, Fairhope, AL.</u>				
LA 05006-65-S1	36	165		
FL 0522-92-S1	37	159		
Florida 501	35	130		
LA 03063-S4	34	126		
Soil Saver	27	97		
Test Mean		135		
C.V.(%)		7		
LSD(0.10)		11		
<u>Wiregrass Research and Extension Center, Headland, AL.</u>				
LA 05006-65-S1	34	144		
FL 0522-92-S1	33	118		
LA 03063-S4	31	118		
Florida 501	35	96		
Soil Saver	26	49		
Test Mean		105		
C.V.(%)		20		
LSD(0.10)		23		

† this is the first year for the oat test, hence no multi-year averages are available.

TABLE 16. LEVELS OF DISEASES ON WHEAT VARIETIES AVERAGED ACROSS NORTHERN ALABAMA SITES (BELLE MINA AND CROSSVILLE), 2010-2011.

Brand-Variety	Leaf Rust ¹	Stripe Rust ¹	Septoria Blotch ²	Barley Yellow Dwarf ²	Fusarium head blight ²
AGS 2026	0	0	1	0.7	2.5
AGS 2035	0	0	1	0.3	1
AGS 2060	0	0	T	0.3	1.5
Arcadia	0	1	0.7	0.3	1
Baldwin	0	0	0.3	T	0
Baretta	T	0	1	0.3	0
Coker 9553	0.7	0	1.3	0.3	0.5
GA 00067-8E35	T	0	2	0.7	3
GA 001138-8E36	0	0	0.3	0.3	T
Jamestown	0	0	0.7	1.3	0.5
Magnolia	0	0	0.7	0.7	0.5
Merl	T	0	1.7	0.3	1
Oakes	T	0	1	0.7	0
Oglethorpe	0	T	1	0.3	2.5
Progeny 117	T	0.5	1	0.3	0.5
Progeny 125	0.3	0	2.3	2	0.5
Progeny 166	0	0	2	0.3	T
Progeny 185	0.3	0	1.7	1	1
Progeny PGX 10-2	1	0	1	0.7	0
Progeny PGX 10-5	0.3	0.5	1.3	1	1
Progeny PGX 10-7	T	0	0.7	0.3	T
SS 520	0	27.5	1.7	2.7	1
SS 8308	1.7	0	1	1	2.5
SS 8404	T	11.5	1	0.7	0.5
SS 8641	T	0.5	0.7	1.7	1
SS Exp 8340	0	0	1	0.3	0
SS Exp 8500	0	0	1	1	0
Syngenta SY 9978	0.3	0	1.7	0.7	1
Terral LA 821	T	0	2.3	1	2
Terral LA 841	0	0	1	1	2
Terral TV 8558	T	0	1	0.3	T
Terral TV 8589	0.3	0	1	0.3	T
Terral TV 8861	t	0	0.7	T	0.5
Terral TVX 8460	T	0	0.7	0.7	T
Terral TVX 8525	0	0	0.7	1.7	0.5
Terral TVX 8535	0.7	0	0.7	0.7	T
Terral TVX 8626	0	0	1	1	T
Terral TVX 8848	T	0	1.7	0.3	T
USG 3201	0	0	1	0.7	0
USG 3209	0	T	1.3	1	2.5
USG 3409	T	0	1.7	0.3	1
USG 3438	0	0	1.3	1	0
USG 3452	0.3	3.5	1	1.3	0.5
USG 3555	0	0	0.7	0.7	0.5

¹ Rust diseases are rated on the flag leaves as a proportion of affected leaf, 0 to 100%.

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

TABLE 17. LEVELS OF DISEASES ON WHEAT VARIETIES AVERAGED ACROSS CENTRAL ALABAMA SITES (PRATTVILLE AND TALLASSEE), 2010-2011.

Brand-Variety	Leaf Rust ¹	Stripe Rust ¹	Septoria Blotch ²	Barley Yellow Dwarf ²	Fusarium head blight ²
AGS 2026	0.1	0	2.2	1.8	0.5
AGS 2035	0.8	0	0.8	0.8	0.2
AGS 2060	T	0	T	1.2	0
Baldwin	0.7	0	T	0.2	T
GA 00067-8E35	0.2	0	3.2	0.8	T
GA 001138-8E36	T	0	1.4	1.2	0.2
Jamestown	0.8	0	1.2	0.7	T
Merl	1.3	0	1.6	1.7	T
Oglethorpe	0.5	0	1.8	2	T
Progeny 117	3.7	0	2	0.3	T
Progeny 125	7.5	0	3.7	1	T
Progeny 166	0.3	0	1.5	1.3	T
Progeny 185	4.8	0	0.5	0.3	T
Progeny PGX 10-2	1	0	0.8	0.5	0
Progeny PGX 10-5	2.2	0	0.2	1.5	T
Progeny PGX 10-7	0.3	0	0.5	1.5	0
Terral LA 821	0.2	0	1.2	0.2	T
Terral LA 841	0.3	0	2.7	0.3	0.2
Terral TV 8558	8	0	1.1	1.2	T
Terral TV 8589	5.2	0	1	0.5	0
Terral TVX 8460	1.2	0	2.2	t	0
Terral TVX 8525	1.5	0	0.7	1.3	0
Terral TVX 8535	1.3	0	0.3	1.2	0
Terral TVX 8626	0.2	0	0.2	1.2	T
USG 3201	1.8	0	1.8	0.7	0
USG 3209	5.2	0	3.5	1	T
USG 3409	11	0	2.5	1.4	T
USG 3438	2	0	0.2	1	0
USG 3452	5.3	0	1.5	0.7	T
USG 3555	1	0	2.3	2.2	0

¹ Rust diseases are rated on the flag leaves as a proportion of affected leaf, 0 to 100%.

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

TABLE 18. LEVELS OF DISEASES ON WHEAT VARIETIES AVERAGED ACROSS CENTRAL ALABAMA SITES (FAIRHOPE AND HEADLAND), 2010-2011.

Brand-Variety	Leaf Rust ¹	Stripe Rust ¹	Septoria Blotch ²	Barley Yellow Dwarf ²	Fusarium head blight ²
AGS 2026	1.6	16.7	0.5	0	0
AGS 2035	1.7	8.3	2	0	0
AGS 2060	0	11	0.1	0	0
Arcadia	0	6.7	2.5	0	0
Baldwin	0	1.7	0.8	0	0
GA 00067-8E35	0	6.7	1.2	0	0
GA 001138-8E36	0	8.3	0.8	0	0
Jamestown	0	16.7	0	0	0
Magnolia	0	0	2.3	0	0
Merl	21.7	3.3	0.5	0	0
Oglethorpe	0	23	1.5	0	0
Progeny 117	50	1.2	0	0	0
Progeny 125	38.3	1.7	1.7	0	0
Progeny 166	28.3	0	0	0	0.7
Progeny 185	16.7	5	0.3	0	0
Progeny PGX 10-2	13.3	0	1	0	0
Progeny PGX 10-5	1.7	0	0.2	0	0
Progeny PGX 10-7	0	1.7	0.2	0	0
Terral LA 821	0	5	3	0	0
Terral LA 841	0	3.7	1.1	0	0
Terral TV 8558	21.7	3.3	0.5	0	0
Terral TV 8589	16	2	0.8	0	0
Terral TVX 8460	15	3.3	1.3	0	0
Terral TVX 8535	3.3	3.3	0.2	0	0
Terral TVX 8626	0	3.3	0	0	0

¹ Rust diseases are rated on the flag leaves as a proportion of affected leaf, 0 to 100%.

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

TABLE 19. LEVELS OF DISEASES ON BARLEY VARIETIES AVERAGED ACROSS NORTHERN ALABAMA SITES (BELLE MINA AND CROSSVILLE), 2010-2011.

Brand-variety	Spot Blotch ¹	Scald ¹	Barley Yellow Dwarf ¹
Thoroughbred	0.7	0	0.7
Price	T	3	0.7
VA06B-19	0.5	3.5	1
Dan	0.3	0	0
Rye, Wrens' Abruzzi AL	.	.	33.3

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

TABLE 20. LEVELS OF DISEASES ON OAT VARIETIES AVERAGED ACROSS TWO SITES PER REGION (SEE WHEAT TABLES FOR SITES), 2010-2011.

Brand-variety	North Alabama			Central Alabama		South Alabama	
	Leaf spot ¹	Barley Yellow Dwarf ¹	Crown Rust ²	Leaf spot ¹	Crown Rust ²	Leaf spot ¹	Barley Yellow Dwarf ²
Florida 501	2	0.3	0	1	.	1.3	6.7
FL 0522-92-S1	0.3	0	0	0	2	1.2	0
LA 03063-S4	2	0.3	0	1	3.5	3.7	1
LA 05006-65-S1	0.7	0.3	0	0.5	2.5	1.7	1.3
Soil Saver	T	0	0	0	2	0.8	0
L111-9-MXD	0.3	0.3	T
NOATS-2	1	0.3	0

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%.

SOURCES OF SEED

Cultivar	Source
Wheat	
AGS 2026, AGS 2035, AGS 2060	AGSouth Genetics Albany, Georgia
DynaGro Baldwin DynaGro Oglethorpe DynaGro 9053	Crop Production Services Dublin, Ohio
Progeny 117, Progeny 125, Progeny 166, Progeny 185, PGX 10-2*, PGX 10-5*, PGX 10-7*	Progeny Ag Products Wynne, Arkansas
SS 520, SS 8308, SS 8404, SS 8641, SS EXP 8340*, SS EXP 8500*	Southern States Coop. Richmond, Virginia
Coker 9553, Coker 9804, SY 9978* Arcadia, Beretta, Magnolia, Oakes	Syngenta Seeds, Inc. Bay, Arkansas
Terral LA 821, Terral LA 841, Terral TV 8558, Terral TV 8589, Terral TV 8581, Terral TV 8861, TVX 8460*, TVX 8535*, TVX 8626*, TVX 8525*, TVX 8848*	Terral Seed Co. Lake Providence, Louisiana
USG 3201, USG 3209, USG 3409, USG 3438, USG 3452, USG 3555	UniSouth Genetics, Inc. Nashville, Tennessee
GA 00067-8E35*, GA 00138-8E36*	University of Georgia Griffin, Georgia
Jamestown, Merl	Virginia Crop Improvement, Assn. Warsaw, Virginia

continued

* Experimental line; not yet commercially available.

Cultivar	Source
Oat	
Florida 501	Alabama Crop Improvement Assn. Headland, Alabama
FL0522-92-S1*, LA03063-S4*, LA05006-65-S1*	Louisiana State University Baton Rouge, Louisiana
L111-9-MXD*, NOATS-2*	Buck Buster Seed Co. Vidalia, Louisiana
Barley	
Dan, Price, Thoroughbred, VA06B-19*	Virginia Crop Improvement Assn. Warsaw, Virginia

* Experimental line; not yet commercially available.