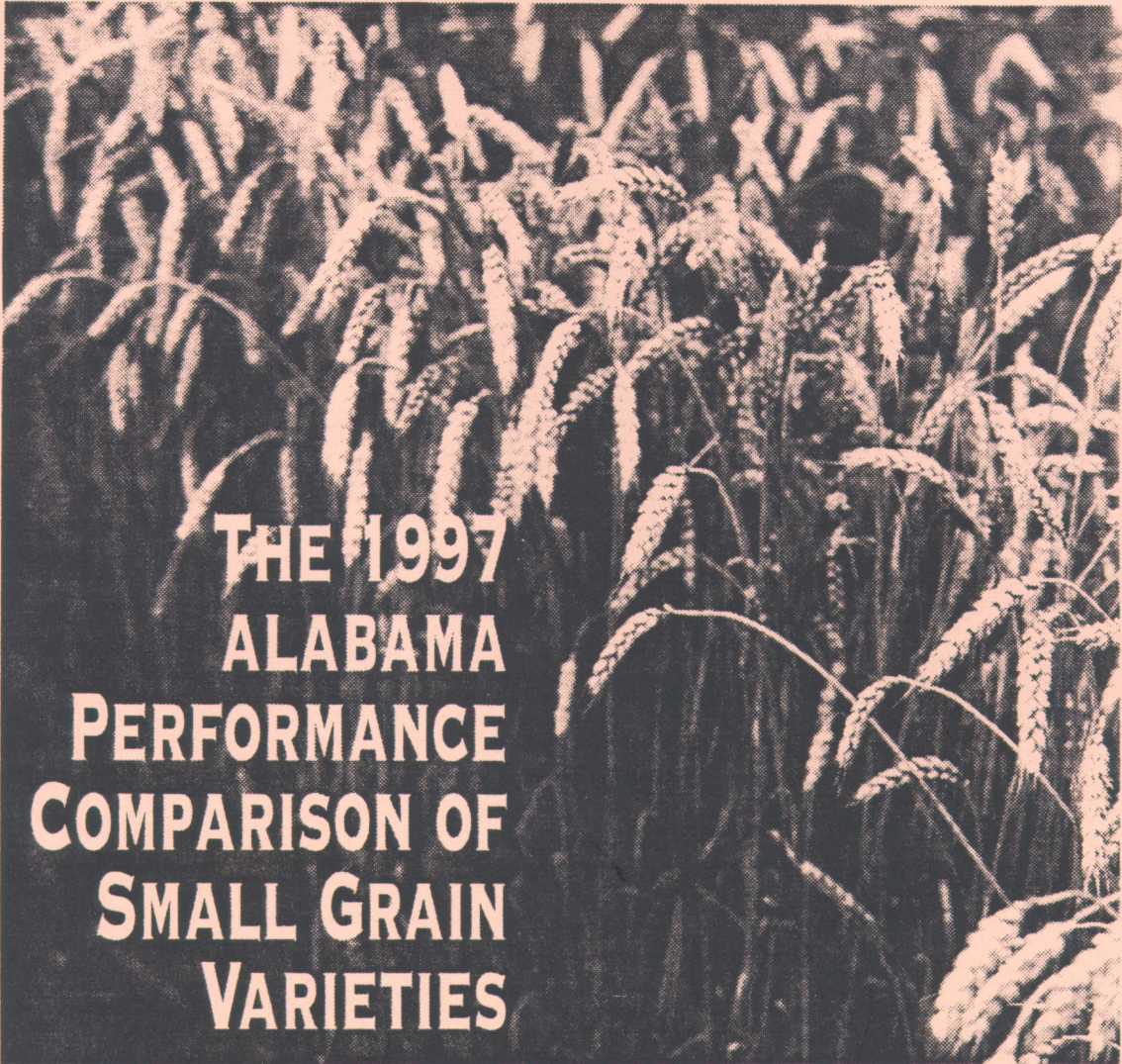




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**THE 1997
ALABAMA
PERFORMANCE
COMPARISON OF
SMALL GRAIN
VARIETIES**

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Information contained herein is available to all regardless of race, gender, or national origin.

The 1997 Alabama Performance Comparison Of Small Grain Varieties

KATHRYN M. GLASS, PAUL L. MASK AND DAVID L. BRANSBY

INTRODUCTION

The large number of commercially available varieties of wheat, oat, rye, 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 10 locations were used to compile this report and they represent the varied growing conditions farmers have 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.

The trials were divided into two management systems: grain only and forage only.

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 1996 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 with a top dressing of 60 pounds N per acre 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. The grain was cleaned and weighed. Moisture and bushel test weight were measured.

Forage only: These tests are normally planted in late September to early October. Tests were fertilized at planting with 100 pounds N per acre and clipped with a flail-type mower each time they reached 6 inches in height. A sample was weighed green from each plot, then dried and reweighed. The percent dry matter figure from these weights was used to calculate dry forage matter per acre. The test was topdressed in February with 60 pounds N per acre and clipping was continued until no regrowth occurred.

DATA EXPLANATION

Grain yields were calculated by weighing air-dried grain and using 60 pounds per bushel for wheat, 32 pounds per bushel for oats, 48 pounds per bushel for barley, and 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 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 all 1996-97 variety trials are summarized by region in tables 15 through 20. Katherine Burch, Research Assistant, Plant Pathology, made disease ratings at all locations. At the time of mid-season ratings, disease incidence and severity were generally higher across the state than in 1996. On wheat, incidence of leaf rust and powdery mildew and the viral disease, barley yellow dwarf, was higher throughout the state. Levels of Septoria leaf blotch remained mostly unchanged from the previous year. On oats, Helminthosporium leaf spot and Septoria blotch occurred at low levels while incidence of barley yellow dwarf was higher throughout the state than in 1996. Crown rust was only detected in the southern region. On triticale, low levels of leaf rust and Septoria blotch were observed on entries at most locations while increased levels of barley yellow dwarf were observed compared to 1996. On barley, disease pressure was very low. Spot blotch and Septoria blotch developed at low levels in most varieties, however, barley yellow dwarf was also present in the barley varieties at the Sand Mountain Substation.

DISCUSSION

Growing conditions and variety performance often vary among locations and years. Regional averages and multiple-year averages are given here to use as a better indicator for performance comparison. In the 1994-95 growing season, a mild winter may have affected vernalization in some varieties. Bird damage was moderate to severe in oats at most central and southern locations. The 1995-96 growing season was much colder than normal which severely reduced yields on some varieties at all locations. Oat varieties were especially affected and several varieties were winter killed. In the 1996-97 growing season, all locations had wet conditions causing delayed harvest at some locations and may have reduced yields in some varieties. Both lodging and bird damage was moderate to severe in oats at most central and southern locations.

ACKNOWLEDGMENTS

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Table 1. Location, Planting and Harvest Dates for 1996-97 Small Grain Tests

Location	Date planted	Date harvested
Northern Alabama		
Tennessee Valley Substation (Belle Mina)		
Small grain forage only	October 10	
Small grain grain only	October 31	June 25
Sand Mountain Substation (Crossville)		
Small grain forage only	October 7	
Small grain grain only	October 22	June 19
Upper Coastal Plain Substation (Winfield)		
Small grain forage only	October 15	
Small grain grain only	November 13	July 14
Central Alabama		
Black Belt Substation (Marion Junction)		
Small grain forage only	October 10	
Small grain grain only	November 6	June 4
E.V. Smith Res. Ctr., Plant Breeding Unit (Tallassee)		
Small grain forage only	October 17	
Small grain grain only	November 18	June 5
Prattville Experiment Field (Prattville)		
Small grain forage only	October 17	
Small grain grain only	November 13	June 12
Southern Alabama		
Gulf Coast Substation (Fairhope)		
Small grain forage only	October 15	
Small grain grain only	November 11	May 23
Monroeville Experiment Field (Monroeville)		
Small grain forage only	October 17	
Small grain grain only	October 30	June 4
Lower Coastal Plain Substation (Camden)		
Small grain forage only	October 9	
Small grain grain only	November 15	June 6
Wiregrass Substation (Headland)		
Small grain forage only	October 16	
Small grain grain only	November 20	June 9

Table 2. Characteristics of Small Grains Tested in Northern Alabama, Three-Year Summary

Brand-variety	Average Yield/Acre Grain Only			Average Yield/Acre Forage Only			Lodging Pct.	1997 Average		
	1997	2-Yr.	3-Yr.	1997	2-Yr.	3-Yr.		Height	1/10 Headed	Test Wt.
	Bu.	Bu.	Bu.	Lb.	Lb.	Lb.		In.	Date	Lb./Bu.
Wheat										
Pioneer 2580	56	55	51	-	-	-	3	34	4-8	52.2
Pioneer 2628	54	55	50	-	-	-	1	36	4-11	53.1
Jackson	59	56	50	2,567	2,416	2,318	0	37	4-13	55.3
Madison	56	55	48	3,031	2,675	2,408	0	36	4-5	53.5
Pioneer 2643	56	46	47	-	-	-	0	29	4-8	54.7
Pioneer 2684	51	49	46	-	-	-	0	33	4-6	53.2
Pioneer 2691	58	46	45	-	-	-	0	32	4-2	53.2
Terral 101	52	51	44	-	-	-	0	36	4-13	52.9
Clemson 201	61	43	44	-	-	-	0	36	4-7	54.6
GA GORE	49	46	43	-	-	-	0	34	4-5	52.1
GA Dozier	47	47	43	2,869	2,600	2,397	0	34	4-15	53.3
Wakefield	48	48	43	2,612	2,438	2,297	1	37	4-14	53.4
GA Stuckey	47	41	41	-	-	-	1	30	4-3	52.9
Morey	42	36	39	-	-	-	0	34	4-4	49.7
Florida 304	46	38	38	2,251	1,931	2,154	1	37	4-8	50.7
GA 871339	62	-	-	2,516	-	-	0	35	4-6	52.8
VA 93-52-60	59	-	-	-	-	-	0	36	4-12	53.5
Northrup King 9663	56	-	-	-	-	-	0	38	4-7	54.5
GA 87467	56	-	-	-	-	-	0	32	4-5	53.7
Northrup King XL 910097	53	-	-	-	-	-	3	34	4-12	55.1
GA 90078	49	-	-	-	-	-	0	32	4-3	54.5
Test Mean	53	47	45	2,641	2,412	2,315	0	34	-	53.3
L.S.D. (.10)	20	17	15	614	416	410	-	-	-	-
C.V. (%)	28	26	25	17	13	13	-	-	-	-
Oats										
Simpson	60	64	53	-	-	-	2	36	4-23	32.7
Chapman	34	40	38	1,466	1,844	1,780	0	32	4-21	31.8
Ga Mitchell	25	27	29	1,618	1,754	-	0	31	4-22	32.4
LA 85604-AB21-B-B	56	-	-	1,545	-	-	0	32	4-23	31.3
LA 85495-1-B2-AB2-B	56	-	-	1,762	-	-	7	33	4-22	32.2
GA 875C44-ES	44	-	-	1,698	-	-	6	33	4-16	33.5
Harrison	38	41	-	2,062	2,294	-	0	38	4-22	33.6
Florida 502	3	-	-	1,365	1,516	1,474	0	16	4-8	31.4
Iapar 61	0	-	-	-	-	-	0	0	-	-
Citation	-	-	-	1,324	1,619	1,624	-	-	-	-
Test Mean	35	43	40	1,605	1,805	1,626	2	28	-	32.4
L.S.D. (.10)	18	16	13	378	360	467	-	-	-	-
C.V. (%)	38	28	25	17	15	21	-	-	-	-
Barley										
GA Luttrell	82	66	64	-	-	-	5	37	4-3	39.2
Pamunkey	64	55	55	2,956	2,764	2,744	7	35	4-4	40.5
Callao	60	51	55	2,881	2,697	-	26	32	4-5	42.4
Nomini	64	52	51	2,941	2,699	2,564	2	37	4-7	42.7
Starling	63	52	50	2,835	2,757	2,569	7	37	4-13	41.9
Test Mean	66	55	55	2,903	2,729	2,626	9	36	-	41.3
L.S.D. (.10)	20	16	20	508	409	444	-	-	-	-
C.V. (%)	21	22	27	12	11	12	-	-	-	-

(Cont.)

Table 2(cont.). Characteristics of Small Grains Tested in Northern Alabama, Three-Year Summary

Brand-variety	Average Yield/Acre Grain Only			Average Yield/Acre Forage Only			Lodging Pct.	1997 Average Height In.	1/10 Headed Date	Test Wt. Lb./Bu.
	1997	2-Yr.	3-Yr.	1997	2-Yr.	3-Yr.				
	Bu.	Bu.	Bu.	Lb.	Lb.	Lb.				
Rye										
Oklon	-	-	-	4,126	4,155	4,054	-	-	-	-
Maton	-	-	-	4,271	4,493	3,987	-	-	-	-
Bonel	-	-	-	3,983	4,048	3,707	-	-	-	-
Wren's 96	-	-	-	3,069	3,053	3,224	-	-	-	-
Wren's Abruzzi AL	-	-	-	2,134	2,266	2,572	-	-	-	-
Florida 401	-	-	-	823	1,323	1,869	-	-	-	-
Bates	-	-	-	4,030	-	-	-	-	-	-
NF 94	-	-	-	3,847	-	-	-	-	-	-
Test Mean	-	-	-	3,285	3,223	3,236	-	-	-	-
L.S.D. (.10)	-	-	-	498	486	554	-	-	-	-
C.V. (%)	-	-	-	11	11	13	-	-	-	-
Triticale										
Trical 498	65	51	53	-	-	-	3	40	4-1	44.9
Sunland	55	39	45	1,077	1,127	1,588	0	40	4-1	48.1
Trical 2700	-	-	-	2,140	2,644	2,689	-	-	-	-
Test Mean	60	45	49	1,609	1,886	2,138	1	40	-	46.5
L.S.D. (.10)	11	9	9	377	247	314	-	-	-	-
C.V. (%)	12	14	13	13	9	10	-	-	-	-

Table 3. Performance of Small Grains at Belle Mina, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
GA 871339	71	56.4	-	2,932	-
GA Dozier	65	57.1	42	3,821	3,421
Madison	65	55.1	42	4,085	3,596
Jackson	65	57.2	43	3,334	3,175
Northrup King 9663	63	56.5	-	-	-
Terral 101	62	55.7	40	-	-
GA Stuckey	62	56.7	36	-	-
GA GORE	62	54.8	43	-	-
Pioneer 2643	60	56.9	43	-	-
Clemson 201	59	56.1	35	-	-
VA 93-52-60	59	56.5	-	-	-
Pioneer 2580	59	55.2	47	-	-
Northrup King XL 910097	58	57.4	-	-	-
Wakefield	57	56.3	37	3,382	3,371
Pioneer 2628	56	56.7	48	-	-
GA 87467	56	56.3	-	-	-
Pioneer 2691	55	56.5	41	-	-
GA 90078	54	57.3	-	-	-
Pioneer 2684	54	57.2	37	-	-
Morey	51	55.0	41	-	-
Florida 304	44	55.4	33	2,523	2,876
Test Mean	59	56.3	41	3,346	3,288
L.S.D. (.10)	26	-	-	743	-
C.V. (%)	33	-	-	15	-
Oats					
Simpson	106	33.4	57	-	-
LA 85495-1-B2-AB2-B	83	32.1	-	2,693	-
LA 85604-AB21-B-B	79	30.8	-	2,320	-
GA 875C44-ES	74	33.0	-	2,550	-
Harrison	57	33.2	-	2,572	-
Chapman	34	30.1	26	2,395	2,653
Ga Mitchell	23	30.9	22	1,893	-
Florida 502	0	-	-	1,012	1,392
Citation	-	-	-	1,537	2,556
Test Mean	57	31.9	35	2,121	2,200
L.S.D. (.10)	19	-	-	336	-
C.V. (%)	23	-	-	11	-
Barley					
GA Luttrell	108	37.5	67	-	-
Starling	108	41.7	58	4,165	4,068
Nomini	103	43.7	58	3,725	3,761
Callao	97	41.3	60	3,259	-
Pamunkey	85	38.1	59	3,902	4,186
Test Mean	100	40.5	60	3,763	4,005
L.S.D. (.10)	11	-	-	684	-
C.V. (%)	7	-	-	11	-

(Cont.)

Table 3(cont.). Performance of Small Grains at Belle Mina, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Rye					
Maton	-	-	-	6,238	5,450
Oklon	-	-	-	5,931	5,494
Bates	-	-	-	5,517	-
Bonel	-	-	-	5,490	5,129
NF 94	-	-	-	5,469	-
Wren's 96	-	-	-	3,957	4,451
Wren's Abruzzi AL	-	-	-	3,118	3,883
Florida 401	-	-	-	919	2,449
<i>Test Mean</i>	-	-	-	4,580	4,476
<i>L.S.D. (.10)</i>	-	-	-	420	-
<i>C.V. (%)</i>	-	-	-	6	-
Triticale					
Trical 498	77	47.8	52	-	-
Sunland	59	50.5	48	1,046	1,793
Trical 2700	-	-	-	3,429	4,271
<i>Test Mean</i>	68	49.2	50	2,237	3,032
<i>L.S.D. (.10)</i>	11	-	-	589	-
<i>C.V. (%)</i>	7	-	-	11	-

Table 4. Performance of Small Grains at Crossville, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
Jackson	60	55.9	51	2,196	1,965
Northrup King 9663	59	53.6	-	-	-
Northrup King XL 910097	56	55.7	-	-	-
Pioneer 2580	52	51.6	49	-	-
VA 93-52-60	49	53.7	-	-	-
Clemson 201	49	54.2	43	-	-
GA 871339	46	51.8	-	2,375	-
Madison	45	53.2	44	2,556	1,765
Pioneer 2684	45	52.4	45	-	-
GA 87467	43	52.7	-	-	-
Pioneer 2643	42	54.1	43	-	-
GA GORE	40	51.2	42	-	-
Pioneer 2628	40	53.5	41	-	-
Terral 101	39	51.9	41	-	-
GA Stuckey	39	50.5	40	-	-
Pioneer 2691	38	51.1	40	-	-
Morey	38	48.7	35	-	-
Wakefield	37	53.0	37	1,996	1,644
GA Dozier	37	53.6	39	2,297	1,804
GA 90078	31	52.2	-	-	-
Florida 304	29	50.0	33	2,100	1,800
Test Mean	44	52.6	42	2,253	1,796
L.S.D. (.10)	7	-	-	488	-
C.V. (%)	11	-	-	15	-
Oats					
LA 85495-1-B2-AB2-B	34	30.5	-	1,295	-
Simpson	29	31.2	48	-	-
Harrison	28	31.3	-	1,553	-
GA 875C44-ES	27	31.4	-	1,132	-
LA 85604-AB21-B-B	22	28.8	-	1,104	-
Ga Mitchell	20	30.9	33	1,342	-
Chapman	20	28.5	45	1,026	1,182
Florida 502	8	31.4	-	1,717	-
Citation	-	-	-	1,391	1,079
Test Mean	24	30.5	42	1,320	1,130
L.S.D. (.10)	10	-	-	465	-
C.V. (%)	30	-	-	25	-
Barley					
GA Luttrell	85	37.9	67	-	-
Nomini	71	40.8	58	2,730	1,919
Pamunkey	67	42.1	58	2,785	2,149
Starling	61	40.2	55	2,512	1,887
Callao	53	43.4	56	2,875	-
Test Mean	68	40.9	59	2,725	1,985
L.S.D. (.10)	28	-	-	536	-
C.V. (%)	27	-	-	12	-

(Cont.)

Table 4(cont.). Performance of Small Grains at Crossville, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Rye					
NF 94	-	-	-	3,522	-
Bonel	-	-	-	3,516	2,731
Bates	-	-	-	3,432	-
Maton	-	-	-	3,344	2,833
Oklon	-	-	-	3,204	2,954
Wren's 96	-	-	-	3,041	2,661
Wren's Abruzzi AL	-	-	-	1,591	1,869
Florida 401	-	-	-	933	1,670
<i>Test Mean</i>	-	-	-	2,823	2,453
<i>L.S.D. (.10)</i>	-	-	-	468	-
<i>C.V. (%)</i>	-	-	-	12	-
Triticale					
Trical 498	49	42.1	50	-	-
Sunland	42	45.8	40	1,108	1,492
Trical 2700	-	-	-	1,749	1,995
<i>Test Mean</i>	45	44.0	45	1,428	1,743
<i>L.S.D. (.10)</i>	11	-	-	431	-
<i>C.V. (%)</i>	11	-	-	13	-

Table 5. Performance of Small Grains at Winfield, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
Pioneer 2691	82	52.0	54	-	-
Clemson 201	77	53.4	54	-	-
VA 93-52-60	69	50.4	-	-	-
GA 87467	68	52.1	-	-	-
GA 871339	67	50.3	-	2,242	-
Pioneer 2643	64	53.1	56	-	-
Pioneer 2628	64	49.1	62	-	-
Florida 304	63	46.8	49	2,132	1,787
GA 90078	62	54.1	-	-	-
Madison	59	52.2	57	2,454	1,864
Pioneer 2580	57	49.9	56	-	-
Pioneer 2684	54	50.0	56	-	-
Terral 101	53	51.0	51	-	-
Jackson	51	52.7	55	2,171	1,814
Wakefield	50	50.9	54	2,459	1,876
Northrup King 9663	47	53.4	-	-	-
Northrup King XL 910097	46	52.2	-	-	-
GA GORE	43	50.3	45	-	-
GA Dozier	41	49.2	47	2,488	1,966
GA Stuckey	40	51.5	48	-	-
Morey	37	45.3	41	-	-
Test Mean	57	50.9	52	2,324	1,862
L.S.D. (.10)	23	-	-	707	-
C.V. (%)	29	-	-	21	-
Oats					
LA 85604-AB21-B-B	66	34.2	-	1,213	-
LA 85495-1-B2-AB2-B	50	33.9	-	1,299	-
Chapman	48	36.7	44	977	1,505
Simpson	44	33.5	54	-	-
GA 875C44-ES	32	36.1	-	1,412	-
Ga Mitchell	32	35.5	31	-	-
Harrison	29	36.3	-	-	-
Florida 502	0	-	-	-	-
Iapar 61	0	-	-	-	-
Citation	-	-	-	1,045	1,238
Test Mean	33	35.2	43	1,189	1,371
L.S.D. (.10)	25	-	-	363	-
C.V. (%)	52	-	-	19	-
Barley					
GA Luttrell	52	42.2	57	-	-
Pamunkey	38	41.2	48	2,182	1,899
Callao	30	42.5	48	2,509	-
Starling	20	43.8	36	1,828	1,752
Nomini	17	43.5	35	2,369	2,012
Test Mean	31	42.6	45	2,222	1,888
L.S.D. (.10)	22	-	-	467	-
C.V. (%)	46	-	-	13	-

(Cont.)

Table 5 (cont.). Performance of Small Grains at Winfield, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Rye					
Oklon	-	-	-	3,243	3,716
Maton	-	-	-	3,230	3,678
Bates	-	-	-	3,141	-
Bonel	-	-	-	2,944	3,262
NF 94	-	-	-	2,550	-
Wren's 96	-	-	-	2,210	2,561
Wren's Abruzzi AL	-	-	-	1,694	1,964
Florida 401	-	-	-	618	1,488
<i>Test Mean</i>	-	-	-	2,454	2,778
<i>L.S.D. (.10)</i>	-	-	-	661	-
<i>C.V. (%)</i>	-	-	-	19	-
Triticale					
Trical 498	70	44.7	58	-	-
Sunland	65	47.9	-	-	-
Trical 2700	-	-	-	1,243	1,800
<i>Test Mean</i>	68	46.3	58	1,243	1,800
<i>L.S.D. (.10)</i>	25	-	-	-	-
<i>C.V. (%)</i>	16	-	-	-	-

Table 6. Characteristics of Small Grains Tested in Central Alabama, Three-Year Summary

Brand-variety	Average Yield/Acre Grain Only			Average Yield/Acre Forage Only			1997 Average Lodging Height		1/10 Headed	Test Wt.
	1997	2-Yr.	3-Yr.	1997	2-Yr.	3-Yr.	Pct.	In.	Date	Lb./Bu.
	Bu.	Bu.	Bu.	Lb.	Lb.	Lb.				
Wheat										
Pioneer 2643	61	64	62	-	-	-	1	29	4-5	54.7
Jackson	50	66	58	3,390	3,131	3,365	8	32	4-10	54.1
GA Dozier	50	63	58	3,175	2,950	3,361	0	32	4-12	55.8
Pioneer 2628	41	60	55	-	-	-	8	31	4-6	52.3
Pioneer 2691	53	52	53	-	-	-	13	29	3-23	53.7
Wakefield	41	59	53	3,326	3,033	3,302	3	34	4-8	52.5
Madison	46	57	53	3,103	2,894	3,154	18	31	3-29	52.2
GA GORE	50	55	52	-	-	-	15	31	4-2	53.4
Clemson 201	53	49	51	-	-	-	4	32	3-25	55.2
Morey	54	49	51	-	-	-	1	32	3-25	52.4
Florida 304	44	49	46	3,246	2,826	3,113	10	32	4-1	51.3
GA Stuckey	45	45	45	-	-	-	42	30	3-25	51.7
Pioneer 2684	55	62	-	-	-	-	0	31	3-29	55.1
GA 87467	48	-	-	-	-	-	24	30	3-26	53.3
GA 871339	48	-	-	3,261	-	-	27	32	4-4	53.1
GA 90078	45	-	-	-	-	-	8	29	3-23	55.7
VA 93-52-60	44	-	-	-	-	-	9	32	4-8	53.4
Test Mean	49	56	53	3,250	2,967	3,259	11	31	-	53.5
L.S.D. (.10)	7	8	7	656	728	650	-	-	-	-
C.V. (%)	11	11	10	15	18	15	-	-	-	-
Oats										
Chapman	59	77	77	2,861	2,466	2,797	26	39	4-8	31.4
Ozark	49	77	67	-	-	-	61	43	4-14	33.9
Citation	55	70	67	2,640	2,310	2,777	59	44	4-10	31.6
Simpson	45	78	66	-	-	-	53	44	4-17	31.1
Ga Mitchell	54	70	66	2,313	2,060	-	22	40	4-10	32.4
Florida 502	46	44	47	2,088	1,471	2,239	19	41	4-3	33.5
LA 85495-1-B2-AB2-B	60	-	-	2,697	-	-	27	41	4-11	31.1
GA 875C44-ES	58	-	-	2,514	-	-	37	38	4-6	32.5
LA 85604-AB21-B-B	57	-	-	2,282	-	-	19	42	4-15	30.5
Harrison	50	68	-	2,773	2,534	-	26	47	4-9	33.4
Test Mean	53	69	65	2,521	2,168	2,604	35	42	-	32.2
L.S.D. (.10)	10	13	13	371	349	432	-	-	-	-
C.V. (%)	14	14	15	11	12	12	-	-	-	-

(Cont.)

Table 6(cont.). Characteristics of Small Grains Tested in Central Alabama, Three-Year Summary

Brand-variety	Average Yield/Acre Grain Only			Average Yield/Acre Forage Only			1997 Average Lodging Height		1/10 Headed	Test Wt.
	1997	2-Yr.	3-Yr.	1997	2-Yr.	3-Yr.	Pct.	In.	Date	Lb./Bu.
	Bu.	Bu.	Bu.	Lb.	Lb.	Lb.				
Rye										
Maton	-	-	-	3,446	3,923	4,131	-	-	-	-
Bonel	-	-	-	3,346	3,679	3,899	-	-	-	-
Gurley Grazer 2000	-	-	-	3,081	3,624	3,815	-	-	-	-
Oklon	-	-	-	2,984	3,470	3,780	-	-	-	-
Wren's 96	-	-	-	3,029	3,273	3,683	-	-	-	-
Wren's Abruzzi AL	-	-	-	2,846	2,918	3,429	-	-	-	-
Florida 401	-	-	-	2,362	2,586	3,073	-	-	-	-
Bates	-	-	-	3,648	-	-	-	-	-	-
NF 94	-	-	-	3,424	-	-	-	-	-	-
Test Mean	-	-	-	3,130	3,353	3,687	-	-	-	-
L.S.D. (.10)	-	-	-	587	507	525	-	-	-	-
C.V. (%)	-	-	-	14	11	11	-	-	-	-
Triticale										
Trical 498	66	54	58	-	-	-	18	37	3-18	46.8
Sunland	53	45	48	2,037	1,747	2,462	4	36	3-17	51.6
Trical 2700	-	-	-	2,669	2,666	3,062	-	-	-	-
Test Mean	60	49	53	2,353	2,207	2,762	11	37	-	49.2
L.S.D. (.10)	4	6	6	478	379	461	-	-	-	-
C.V. (%)	4	8	9	13	12	12	-	-	-	-

Table 7. Performance of Small Grains at Marion Junction, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
Pioneer 2643	41	54.2	42	-	-
GA GORE	41	52.0	40	-	-
Jackson	41	53.2	43	2,043	2,378
Pioneer 2691	40	53.3	35	-	-
Madison	40	52.8	41	2,127	2,330
VA 93-52-60	40	53.8	-	-	-
Florida 304	40	50.7	35	1,955	2,267
GA 90078	40	54.6	-	-	-
Pioneer 2684	39	53.4	-	-	-
Morey	39	50.4	33	-	-
Pioneer 2628	39	54.0	45	-	-
GA 871339	38	52.2	-	1,960	-
GA 87467	38	52.5	-	-	-
Wakefield	37	54.4	41	1,917	2,318
Clemson 201	36	55.1	30	-	-
GA Dozier	33	52.4	42	1,778	2,267
GA Stuckey	31	52.9	31	-	-
<i>Test Mean</i>	38	53.1	38	1,963	2,312
<i>L.S.D. (.10)</i>	4	-	-	247	-
<i>C.V. (%)</i>	8	-	-	9	-
Oats					
Chapman	83	28.3	64	1,908	2,281
Harrison	82	31.6	-	2,029	-
LA 85495-1-B2-AB2-B	74	28.0	-	1,940	-
Citation	74	29.1	60	1,741	2,275
GA 875C44-ES	72	28.8	-	1,717	-
Ga Mitchell	71	30.7	50	1,306	-
Florida 502	71	32.4	40	1,284	-
LA 85604-AB21-B-B	70	28.7	-	1,662	-
Ozark	69	33.2	60	-	-
Simpson	63	29.2	57	-	-
<i>Test Mean</i>	73	30.0	55	1,698	2,278
<i>L.S.D. (.10)</i>	5	-	-	121	-
<i>C.V. (%)</i>	5	-	-	5	-
Rye					
Wren's Abruzzi AL	-	-	-	2,122	2,377
Gurley Grazer 2000	-	-	-	1,989	2,291
Bates	-	-	-	1,983	-
Maton	-	-	-	1,975	2,319
Wren's 96	-	-	-	1,881	2,122
NF 94	-	-	-	1,806	-
Oklon	-	-	-	1,787	2,114
Bonel	-	-	-	1,544	1,999
Florida 401	-	-	-	1,515	2,084
<i>Test Mean</i>	-	-	-	1,845	2,187
<i>L.S.D. (.10)</i>	-	-	-	314	-
<i>C.V. (%)</i>	-	-	-	12	-
Triticale					
Trical 498	43	49.1	34	-	-
Sunland	29	49.2	21	1,488	2,263
Trical 2700	-	-	-	1,490	2,050
<i>Test Mean</i>	36	49.2	28	1,489	2,156
<i>L.S.D. (.10)</i>	4	-	-	260	-
<i>C.V. (%)</i>	5	-	-	7	-

Table 8. Performance of Small Grains at Prattville, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
Pioneer 2643	72	55.4	70	-	-
Pioneer 2684	62	56.0	-	-	-
GA Dozier	62	57.8	66	4,702	4,209
GA 87467	62	55.7	-	-	-
Morey	62	56.6	60	-	-
Madison	61	54.6	62	4,027	3,700
Clemson 201	59	55.7	61	-	-
Pioneer 2691	59	55.5	63	-	-
GA 871339	58	55.3	-	4,379	-
Jackson	57	55.4	63	4,735	4,092
Florida 304	55	54.8	55	4,653	3,835
Pioneer 2628	55	55.0	63	-	-
GA GORE	54	55.7	54	-	-
Wakefield	54	55.0	58	5,001	3,965
VA 93-52-60	53	54.7	-	-	-
GA Stuckey	53	54.9	52	-	-
GA 90078	46	58.2	-	-	-
Test Mean	58	55.7	61	4,583	3,960
L.S.D. (.10)	8	-	-	1,079	-
C.V. (%)	10	-	-	16	-
Oats					
GA 875C44-ES	87	35.8	-	3,882	-
LA 85495-1-B2-AB2-B	81	34.1	-	3,822	-
Citation	80	34.3	82	3,799	3,375
Chapman	76	35.6	99	4,447	3,553
Ga Mitchell	75	36.5	86	3,380	-
LA 85604-AB21-B-B	75	31.4	-	3,342	-
Harrison	60	36.4	-	4,036	-
Ozark	60	36.4	76	-	-
Florida 502	59	36.8	54	3,068	2,942
Simpson	52	32.5	80	-	-
Test Mean	70	35.0	80	3,722	3,290
L.S.D. (.10)	5	-	-	619	-
C.V. (%)	5	-	-	12	-
Rye					
Bonel	-	-	-	4,913	4,860
Bates	-	-	-	4,877	-
Maton	-	-	-	4,864	4,890
NF 94	-	-	-	4,862	-
Oklon	-	-	-	3,814	4,486
Gurley Grazer 2000	-	-	-	3,775	4,238
Wren's 96	-	-	-	3,614	4,078
Wren's Abruzzi AL	-	-	-	3,226	3,591
Florida 401	-	-	-	2,444	3,255
Test Mean	-	-	-	4,043	4,200
L.S.D. (.10)	-	-	-	961	-
C.V. (%)	-	-	-	17	-
Triticale					
Trical 498	80	48.5	71	-	-
Sunland	59	54.1	60	2,388	2,792
Trical 2700	-	-	-	3,155	3,328
Test Mean	69	51.3	65	2,772	3,060
L.S.D. (.10)	4	-	-	1,063	-
C.V. (%)	3	-	-	16	-

Table 9. Performance of Small Grains at Tallassee, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
Pioneer 2643	69	54.6	73	-	-
Pioneer 2684	65	55.9	-	-	-
Clemson 201	63	54.7	63	-	-
Morey	62	50.1	60	-	-
Pioneer 2691	59	52.2	63	-	-
GA GORE	56	52.5	63	-	-
GA Dozier	55	57.3	66	3,045	3,608
Jackson	52	53.7	69	3,394	3,625
GA Stuckey	50	47.4	52	-	-
GA 90078	49	54.3	-	-	-
GA 871339	48	51.7	-	3,443	-
GA 87467	45	51.8	-	-	-
VA 93-52-60	39	51.6	-	-	-
Madison	38	49.3	56	3,154	3,432
Florida 304	35	48.5	49	3,129	3,238
Wakefield	33	48.1	60	3,060	3,622
Pioneer 2628	30	48.0	57	-	-
Test Mean	50	51.9	61	3,204	3,505
L.S.D. (.10)	8	-	-	494	-
C.V. (%)	12	-	-	10	-
Oats					
LA 85604-AB21-B-B	27	31.3	-	1,841	-
LA 85495-1-B2-AB2-B	26	31.1	-	2,330	-
Simpson	19	31.5	62	-	-
Ozark	17	32.2	66	-	-
Chapman	17	30.4	67	2,229	2,558
Ga Mitchell	17	30.0	61	2,254	-
GA 875C44-ES	16	33.0	-	1,943	-
Citation	12	31.5	59	2,379	2,682
Florida 502	9	31.4	48	1,911	1,839
Harrison	8	32.3	-	2,253	-
Test Mean	17	31.5	61	2,142	2,360
L.S.D. (.10)	16	-	-	232	-
C.V. (%)	69	-	-	8	-
Rye					
Bates	-	-	-	4,085	-
NF 94	-	-	-	3,605	-
Wren's 96	-	-	-	3,590	4,849
Bonel	-	-	-	3,582	4,840
Maton	-	-	-	3,500	5,184
Gurley Grazer 2000	-	-	-	3,481	4,914
Oklon	-	-	-	3,351	4,741
Wren's Abruzzi AL	-	-	-	3,189	4,318
Florida 401	-	-	-	3,127	3,881
Test Mean	-	-	-	3,501	4,675
L.S.D. (.10)	-	-	-	314	-
C.V. (%)	-	-	-	6	-
Triticale					
Trical 498	76	42.7	68	-	-
Sunland	70	51.5	63	2,237	2,332
Trical 2700	-	-	-	3,363	3,809
Test Mean	73	47.1	66	2,800	3,071
L.S.D. (.10)	9	-	-	590	-
C.V. (%)	5	-	-	9	-

Table 10. Characteristics of Small Grains Tested in Southern Alabama, Three-Year Summary

Brand-variety	Average Yield/Acre Grain Only			Average Yield/Acre Forage Only			Lodging Pct.	1997 Average		Test Wt. Lb./Bu
	1997	2-Yr.	3-Yr.	1997	2-Yr.	3-Yr.		Height	1/10 Headed	
	Bu.	Bu.	Bu.	Lb.	Lb.	Lb.		In.	Date	
Wheat										
Pioneer 2643	42	45	43	-	-	-	0	30	3-31	50.1
Pioneer 2691	44	41	40	-	-	-	16	33	3-16	51.4
Northrup King Coker 9835	47	45	39	-	-	-	4	29	3-22	51.5
GA Dozier	42	46	39	4,682	4,418	4,627	8	33	4-6	54.2
GA GORE	40	40	38	-	-	-	15	33	3-30	51.1
GA Stuckey	38	37	36	-	-	-	35	31	3-17	49.4
Florida 304	42	41	36	4,528	4,313	4,476	8	38	3-27	50.3
Pioneer 2628	35	43	35	-	-	-	0	32	4-3	49.7
Morey	42	37	35	-	-	-	6	34	3-12	49.1
Madison	36	37	34	4,168	3,996	4,072	22	35	3-24	50.8
Wakefield	32	39	33	4,310	4,314	4,266	7	35	4-4	49.8
Jackson	32	36	32	4,094	4,117	4,114	5	34	4-4	50.5
Pioneer 2684	47	49	-	-	-	-	15	32	3-24	54.2
GA 87467	44	-	-	-	-	-	33	32	3-16	50.3
Northrup King Coker 9134	41	-	-	-	-	-	2	35	4-2	52.2
GA 90078	41	-	-	-	-	-	13	31	3-11	52.0
GA 871339	35	-	-	4,535	-	-	19	34	3-31	50.7
VA 93-52-60	32	-	-	-	-	-	3	33	4-3	50.7
<i>Test Mean</i>	40	41	37	4,386	4,232	4,311	11	33	-	51.0
<i>L.S.D. (.10)</i>	10	8	7	781	657	705	-	-	-	-
<i>C.V. (%)</i>	18	14	15	13	11	12	-	-	-	-
Oats										
Chapman	65	75	55	4,684	4,109	4,375	5	37	3-28	26.9
Citation	63	77	53	4,569	4,212	4,399	40	46	3-30	29.0
Ga Mitchell	48	66	49	4,449	3,963	-	24	39	3-31	30.2
Florida 502	58	56	42	4,344	3,435	3,845	39	40	3-23	31.5
GA 875C44-ES	70	-	-	4,592	-	-	38	40	3-27	31.4
LA 85495-1-B2-AB2-B	65	-	-	4,736	-	-	9	41	4-2	27.8
LA 85604-AB21-B-B	52	-	-	4,752	-	-	2	43	4-2	27.0
Harrison	49	63	-	4,574	4,129	-	13	46	3-29	28.8
<i>Test Mean</i>	59	67	50	4,588	3,970	4,206	21	41	-	29.1
<i>L.S.D. (.10)</i>	15	14	12	1,028	845	828	-	-	-	-
<i>C.V. (%)</i>	19	15	17	16	16	15	-	-	-	-
Rye										
Wren's 96	-	-	-	5,289	5,595	5,653	-	-	-	-
Oklon	-	-	-	5,282	4,992	5,283	-	-	-	-
Maton	-	-	-	5,214	4,951	5,226	-	-	-	-
Bonel	-	-	-	4,843	4,881	5,107	-	-	-	-
GI 87	-	-	-	4,773	4,683	5,039	-	-	-	-
Wren's Abruzzi AL	-	-	-	4,660	4,423	4,942	-	-	-	-
Florida 401	-	-	-	3,909	3,623	4,067	-	-	-	-
Bates	-	-	-	4,823	-	-	-	-	-	-
NF 94	-	-	-	4,742	-	-	-	-	-	-
<i>Test Mean</i>	-	-	-	4,837	4,736	5,045	-	-	-	-
<i>L.S.D. (.10)</i>	-	-	-	932	1,328	1,259	-	-	-	-
<i>C.V. (%)</i>	-	-	-	14	21	18	-	-	-	-
Triticale										
Trical 498	47	39	37	-	-	-	18	39	3-6	40.8
Sunland	47	35	34	4,038	3,586	3,912	11	39	3-6	45.6
Trical 2700	-	-	-	4,603	4,397	4,480	-	-	-	-
<i>Test Mean</i>	47	37	35	4,320	3,992	4,196	14	39	-	43.2
<i>L.S.D. (.10)</i>	15	11	9	669	838	947	-	-	-	-
<i>C.V. (%)</i>	22	20	17	10	15	16	-	-	-	-

Table 11. Performance of Small Grains at Camden, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
GA 87467	42	49.8	-	-	-
Pioneer 2691	37	50.5	37	-	-
Northrup King Coker 9835	37	50.3	31	-	-
Pioneer 2684	36	52.5	-	-	-
Morey	35	47.6	30	-	-
Florida 304	34	48.5	28	2,174	3,201
Madison	34	49.3	32	2,143	3,156
GA GORE	33	49.3	39	-	-
Pioneer 2643	33	50.0	40	-	-
GA Stuckey	32	48.8	34	-	-
GA 871339	32	49.5	-	2,790	-
Pioneer 2628	29	46.7	35	-	-
Northrup King Coker 9134	29	50.4	-	-	-
GA 90078	28	51.0	-	-	-
VA 93-52-60	28	49.3	-	-	-
GA Dozier	27	52.0	34	2,077	3,192
Jackson	24	47.4	39	2,115	3,109
Wakefield	15	45.8	29	1,933	3,214
Test Mean	31	49.4	34	2,206	3,174
L.S.D. (.10)	3	-	-	378	-
C.V. (%)	7	-	-	12	-
Oats					
LA 85495-1-B2-AB2-B	59	31.5	-	2,719	-
LA 85604-AB21-B-B	57	30.1	-	2,948	-
GA 875C44-ES	57	33.0	-	2,633	-
Florida 502	51	32.5	30	2,634	3,049
Chapman	48	26.4	36	2,780	3,284
Citation	45	31.3	40	2,834	3,585
Ga Mitchell	44	32.4	38	2,569	-
Harrison	40	31.0	-	2,687	-
Test Mean	50	31.0	36	2,725	3,306
L.S.D. (.10)	13	-	-	311	-
C.V. (%)	18	-	-	8	-
Rye					
Wren's 96	-	-	-	2,741	5,032
Maton	-	-	-	2,454	3,667
Bonel	-	-	-	2,362	3,750
Wren's Abruzzi AL	-	-	-	2,300	3,475
NF 94	-	-	-	2,299	-
Florida 401	-	-	-	2,287	3,175
Oklon	-	-	-	2,279	3,469
Bates	-	-	-	2,273	-
GI 87	-	-	-	2,004	3,716
Test Mean	-	-	-	2,333	3,755
L.S.D. (.10)	-	-	-	306	-
C.V. (%)	-	-	-	9	-
Triticale					
Trical 498	41	41.0	33	-	-
Sunland	39	47.3	29	2,146	2,994
Trical 2700	-	-	-	1,958	3,186
Test Mean	40	44.2	31	2,052	3,090
L.S.D. (.10)	2	-	-	267	-
C.V. (%)	2	-	-	5	-

Table 12. Performance of Small Grains at Monroeville, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
Pioneer 2643	77	50.7	60	-	-
Pioneer 2684	68	55.2	-	-	-
Pioneer 2628	68	52.8	51	-	-
Jackson	67	54.1	46	4,445	4,359
Northrup King Coker 9134	66	54.5	-	-	-
Northrup King Coker 9835	66	52.1	51	-	-
Pioneer 2691	66	51.3	47	-	-
Wakefield	63	53.0	52	4,389	4,057
VA 93-52-60	60	52.7	-	-	-
GA GORE	58	52.7	42	-	-
GA Dozier	58	53.6	56	3,928	4,082
GA 871339	55	54.1	-	4,160	-
GA 90078	54	53.2	-	-	-
GA Stuckey	53	48.9	45	-	-
Florida 304	53	50.5	45	4,743	4,257
Madison	52	52.0	44	4,632	4,182
GA 87467	52	50.0	-	-	-
Morey	47	47.0	39	-	-
Test Mean	60	52.1	48	4,383	4,188
L.S.D. (.10)	9	-	-	189	-
C.V. (%)	10	-	-	3	-
Oats					
GA 875C44-ES	85	32.7	-	3,413	-
LA 85495-1-B2-AB2-B	84	32.5	-	3,413	-
Chapman	83	29.5	70	3,876	3,497
Florida 502	64	34.1	43	2,195	2,405
Citation	59	28.8	57	2,942	3,430
Ga Mitchell	42	30.3	50	2,818	-
LA 85604-AB21-B-B	41	31.8	-	3,372	-
Harrison	34	31.3	-	3,239	-
Test Mean	61	31.4	55	3,159	3,110
L.S.D. (.10)	21	-	-	782	-
C.V. (%)	24	-	-	17	-
Rye					
Maton	-	-	-	4,793	4,742
Bonel	-	-	-	4,761	4,642
NF 94	-	-	-	4,671	-
Oklon	-	-	-	4,473	4,511
GI 87	-	-	-	4,461	4,217
Bates	-	-	-	4,447	-
Wren's 96	-	-	-	4,215	4,885
Wren's Abruzzi AL	-	-	-	4,081	4,358
Florida 401	-	-	-	2,228	2,800
Test Mean	-	-	-	4,237	4,308
L.S.D. (.10)	-	-	-	484	-
C.V. (%)	-	-	-	8	-
Triticale					
Trical 498	61	-	47	-	-
Sunland	51	42.9	39	2,070	2,645
Trical 2700	-	-	-	4,284	4,346
Test Mean	56	42.9	43	3,177	3,495
L.S.D. (.10)	20	-	-	693	-
C.V. (%)	15	-	-	9	-

Table 13. Performance of Small Grains at Headland, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
GA Dozier	64	56.3	39	7,367	5,939
Northrup King Coker 9134	60	51.7	-	-	-
Florida 304	57	51.9	40	6,165	5,638
Pioneer 2684	55	55.0	-	-	-
Morey	55	51.9	39	-	-
GA 90078	50	53.8	-	-	-
GA GORE	50	51.5	39	-	-
GA 87467	50	51.4	-	-	-
Pioneer 2643	45	49.7	39	-	-
Northrup King Coker 9835	44	49.6	35	-	-
GA 871339	42	49.6	-	6,103	-
Pioneer 2691	40	52.2	31	-	-
GA Stuckey	37	52.0	29	-	-
Pioneer 2628	36	48.5	32	-	-
Madison	34	50.2	25	5,257	4,261
Wakefield	34	48.3	21	6,633	5,382
VA 93-52-60	32	50.1	-	-	-
Jackson	22	47.4	20	5,255	4,433
Test Mean	45	51.2	32	6,130	5,131
L.S.D. (.10)	14	-	-	1,520	-
C.V. (%)	22	-	-	17	-
Oats					
Citation	114	32.4	67	7,438	5,989
Harrison	101	34.3	-	6,649	-
Chapman	101	29.4	66	6,493	5,868
LA 85495-1-B2-AB2-B	93	29.7	-	6,398	-
LA 85604-AB21-B-B	88	30.1	-	7,052	-
GA 875C44-ES	85	32.5	-	6,647	-
Ga Mitchell	79	33.2	58	6,842	-
Florida 502	78	34.0	57	7,164	5,802
Test Mean	92	32.0	62	6,835	5,887
L.S.D. (.10)	18	-	-	1,751	-
C.V. (%)	14	-	-	18	-
Rye					
Wren's 96	-	-	-	8,340	7,653
Maton	-	-	-	7,737	7,089
Oklon	-	-	-	7,600	7,548
Wren's Abruzzi AL	-	-	-	7,267	7,641
Florida 401	-	-	-	7,236	7,219
Bates	-	-	-	6,844	-
Bonel	-	-	-	6,383	7,018
NF 94	-	-	-	6,337	-
GI 87	-	-	-	6,268	6,956
Test Mean	-	-	-	7,112	7,304
L.S.D. (.10)	-	-	-	1,406	-
C.V. (%)	-	-	-	14	-
Triticale					
Sunland	67	49.2	49	7,149	6,541
Trical 498	59	44.5	42	-	-
Trical 2700	-	-	-	6,360	5,741
Test Mean	63	46.9	46	6,755	6,141
L.S.D. (.10)	27	-	-	1,646	-
C.V. (%)	18	-	-	10	-

Table 14. Performance of Small Grains at Fairhope, Alabama, 1997

Brand-variety	Grain Only Yield/Acre			Forage Only Yield/Acre	
	1997	Test Wt.	3-Yr. Av.	1997	3-Yr. Av.
	Bu.	Lb./Bu.	Bu.	Lb.	Lb.
Wheat					
Northrup King Coker 9835	40	53.9	39	-	-
GA 87467	32	49.9	-	-	-
Morey	32	49.9	34	-	-
Pioneer 2691	31	51.7	44	-	-
GA 90078	31	50.1	-	-	-
GA Stuckey	30	47.9	39	-	-
Pioneer 2684	29	54.2	-	-	-
Florida 304	23	50.2	33	5,030	5,454
Madison	22	51.7	34	4,637	5,397
Wakefield	18	51.9	30	4,286	5,161
GA GORE	18	50.8	31	-	-
GA Dozier	17	54.9	27	5,356	5,968
Pioneer 2643	15	50.0	33	-	-
Jackson	15	52.9	19	4,561	5,194
Northrup King Coker 9134	10	52.1	-	-	-
GA 871339	9	49.6	-	5,087	-
VA 93-52-60	9	50.6	-	-	-
Pioneer 2628	8	50.9	21	-	-
Test Mean	22	51.3	32	4,826	5,435
L.S.D. (.10)	11	-	-	582	-
C.V. (%)	36	-	-	8	-
Oats					
GA 875C44-ES	55	27.3	-	5,673	-
Florida 502	38	25.5	39	5,384	4,721
Citation	32	23.3	50	5,063	5,124
Chapman	30	22.1	49	5,588	5,378
Ga Mitchell	29	24.9	50	5,566	-
LA 85495-1-B2-AB2-B	25	17.4	-	6,414	-
Harrison	21	18.6	-	5,720	-
LA 85604-AB21-B-B	21	15.9	-	5,638	-
Test Mean	31	21.9	47	5,631	5,074
L.S.D. (.10)	12	-	-	954	-
C.V. (%)	27	-	-	12	-
Rye					
Oklon	-	-	-	6,774	6,165
GI 87	-	-	-	6,361	5,877
Maton	-	-	-	5,871	6,090
Bonel	-	-	-	5,865	5,638
Wren's 96	-	-	-	5,859	5,500
Bates	-	-	-	5,727	-
NF 94	-	-	-	5,659	-
Wren's Abruzzi AL	-	-	-	4,993	4,838
Florida 401	-	-	-	3,885	3,598
Test Mean	-	-	-	5,666	5,387
L.S.D. (.10)	-	-	-	1,223	-
C.V. (%)	-	-	-	15	-
Triticale					
Sunland	32	42.9	23	4,787	4,109
Trical 498	27	36.9	30	-	-
Trical 2700	-	-	-	5,809	5,252
Test Mean	29	39.9	26	5,298	4,680
L.S.D. (.10)	35	-	-	1,073	-
C.V. (%)	50	-	-	8	-

Table 15. Septoria Blotch Ratings for Wheat Varieties in Alabama, 1996-97¹

Brand-variety	Northern Alabama	Central Alabama	Southern Alabama
Clemson 201	1.8	2.7	-
Florida 304	3.0	1.9	2.9
GA 871339	2.2	1.3	2.1
GA 87467	2.0	2.2	1.8
GA 90078	3.0	3.3	3.6
GA Dozier	2.8	1.7	2.4
GA Gore	2.8	1.8	2.0
GA Stuckey	2.8	2.1	1.9
Jackson	2.2	2.0	2.4
Madison	2.5	2.0	2.5
Morey	3.0	2.8	3.9
Northrup King 9663	2.8	-	-
Northrup King 9134	-	-	1.6
Northrup King Coker 9704	2.7	-	-
Northrup King 9835	-	-	2.0
Pioneer 2580	2.7	-	-
Pioneer 2628	2.8	2.0	1.9
Pioneer 2643	1.8	1.2	1.6
Pioneer 2684	2.2	1.9	1.8
Pioneer 2691	3.3	2.6	2.3
Terral 101	2.5	-	-
VA 93-52-60	2.5	1.7	2.3
Wakefield	2.7	2.1	2.8

¹0-10 scale: 0=no disease, 10 = severe disease.

Table 16. Leaf Rust Ratings for Wheat Varieties in Alabama, 1996-97¹

Brand-variety	Northern Alabama	Central Alabama	Southern Alabama
Clemson 201	0.7	0.4	-
Florida 304	0.5	0.1	0.3
GA 871339	1.2	0.2	1.8
GA 87467	0.0	0.0	0.1
GA 90078	0.7	1.1	2.1
GA Dozier	1.3	0.7	1.8
GA Gore	0.8	0.9	1.6
GA Stuckey	0.7	1.3	0.5
Jackson	2.0	3.1	4.4
Madison	2.2	3.1	1.6
Morey	0.0	0.0	0.4
Northrup King 9663	0.0	-	-
Northrup King 9134	-	-	2.0
Northrup King Coker 9704 .	0.7	-	-
Northrup King 9835	-	-	0.5
Pioneer 2580	1.0	-	-
Pioneer 2628	2.3	3.7	3.5
Pioneer 2643	0.3	1.0	1.9
Pioneer 2684	0.5	2.7	1.6
Pioneer 2691	0.2	1.2	0.8
Terral 101	0.5	-	-
VA 93-52-60	1.0	3.2	2.9
Wakefield	2.5	4.6	3.0

¹ 0-10 scale: 0=no disease, 10 = severe disease.

Table 17. Powdery Mildew Ratings for Wheat Varieties in Alabama, 1996-97¹

Brand-variety	Northern Alabama	Central Alabama	Southern Alabama
Clemson 201	0.0	0.0	-
Florida 304	0.0	0.0	0.0
GA 871339	0.3	0.0	0.8
GA 87467	0.7	0.0	0.3
GA 90078	0.0	0.0	0.0
GA Dozier	0.0	0.0	0.0
GA Gore	1.2	0.0	0.5
GA Stuckey	0.0	0.0	0.3
Jackson	1.5	0.0	0.3
Madison	0.0	0.9	1.8
Morey	0.0	0.0	0.0
Northrup King 9663	0.8	-	-
Northrup King 9134	-	-	2.5
Northrup King Coker 9704	0.0	-	-
Northrup King 9835	-	-	1.3
Pioneer 2580	0.7	-	-
Pioneer 2628	1.0	0.0	0.0
Pioneer 2643	0.3	0.0	0.3
Pioneer 2684	0.0	0.2	0.5
Pioneer 2691	0.2	0.0	0.5
Terral 101	1.0	-	-
VA 93-52-60	0.5	0.0	0.0
Wakefield	2.7	1.1	2.8

¹0-10 scale: 0=no disease, 10 = severe disease.

Table 18. Barley Yellow Dwarf Ratings for Wheat Varieties in Alabama, 1996-97¹

Brand-variety	Northern Alabama	Central Alabama	Southern Alabama
Clemson 201	21.8	28.7	-
Florida 304	29.2	37.2	20.0
GA 871339	19.3	11.1	5.0
GA 87467	14.0	28.7	16.1
GA 90078	23.4	41.7	13.0
GA Dozier	29.2	24.4	17.5
GA Gore	18.5	22.8	7.1
GA Stuckey	39.2	48.9	43.1
Jackson	8.8	14.4	4.4
Madison	19.3	24.0	18.8
Morey	27.5	36.1	25.6
Northrup King 9663	15.5	-	-
Northrup King 9134	-	-	2.9
Northrup King Coker 9704	21.0	-	-
Northrup King 9835	-	-	14.6
Pioneer 2580	15.1	-	-
Pioneer 2628	24.3	19.4	7.5
Pioneer 2643	22.9	13.7	4.5
Pioneer 2684	30.3	21.4	18.1
Pioneer 2691	34.3	30.6	8.3
Terral 101	34.5	-	-
VA 93-52-60	21.3	13.3	10.6
Wakefield	30.1	37.8	11.4

¹ Percent symptomatic plants.

Table 19. Disease Ratings for Oat Varieties in Alabama, 1996-97

Brand-variety	Helminthosporium leaf spot ¹	Crown rust ¹	Barley yellow dwarf ²
Northern Alabama			
Chapman	1.2	0.0	35.1
Florida 502	0.5	0.0	87.5
GA 875C44-ES	0.8	0.0	34.2
GA Mitchell	0.9	0.0	48.7
Harrison	0.9	0.0	31.0
LA 85495-1-B2-AB2-B	1.3	0.0	28.6
LA 85604-AB21-B-B	1.6	0.0	25.9
Simpson	1.5	0.0	42.8
Central Alabama			
Chapman	1.0	0.0	29.0
Citation	1.9	0.0	41.1
Florida 502	1.3	0.0	27.8
GA 875C44-ES	1.2	0.0	30.6
GA Mitchell	1.3	0.0	41.1
Harrison	1.4	0.0	11.9
LA 85495-1-B2-AB2-B	1.2	0.0	33.3
LA 85604-AB-21-B-B	1.3	0.0	21.1
Ozark	1.4	0.0	31.7
Simpson	1.1	0.0	43.3
Southern Alabama			
Citation	2.8	0.0	23.8
FL 874-E55	2.3	0.3	25.6
Florida 502	2.0	0.0	28.8
GA 875C44-ES	0.9	0.1	36.3
GA Mitchell	2.5	2.4	20.3
Harrison	2.3	0.0	18.1
LA 85495-1-B2-AB2-B	2.0	0.0	23.1
LA 85604-AB-21-B-B	2.1	0.0	28.8

¹ 0-10 scale: 0=no disease, 10 = severe disease.

² Percent symptomatic plants.

Table 20. Disease Ratings for Triticale Varieties in Alabama, 1996-97

Brand-variety	Septoria blotch ¹	Leaf rust ¹	Barley yellow dwarf ²
Northern Alabama			
Sunland	2.0	0.0	14.2
Trical 498	2.7	0.5	13.5
Central Alabama			
Sunland	2.3	1.2	19.2
Trical 498	2.2	2.3	8.3
Southern Alabama			
Sunland	3.5	0.0	19.4
Trical 498	4.0	1.3	13.8

¹ 0-10 scale: 0 = no disease, 10 = severe disease

² Percent plants affected.

SOURCES OF SEED

WHEAT

Univ. Of Georgia, Georgia Station
Griffin, Georgia

GA Dozier
GA Stuckey
GA Gore
Morey
GA 87467
GA 90078

Novartis Seeds, Inc
Somerville, Tennessee
Coker (all varieties, brands and hybrids)

Univ. of Florida, Agric. Res. Ctr.,
Quincy, Florida
Florida 304

Department of Agronomy
Virginia Polytechnic Inst.
Blacksburg, Virginia
Jackson
Madison
Wakefield
VA 93-52-60

Pioneer Hi-Bred International, Inc
Tipton, Indiana
Pioneer (all varieties, brands, and hybrids)

South Carolina Crop Impr. Assoc.
Clemson, South Carolina
Clemson 201

Terral-Norris Seed Co.
Lake Providence, Louisiana
Terral 101

OATS

Univ. of Arkansas
Fayetteville, Arkansas
Ozark

Terral-Norris Seed Co.
Lake Providence, Louisiana
Citation

OATS (Continued)

Alabama Farmer's Coop
Decatur, Alabama
Harrison

Univ. of Florida Agric. Res. Ctr.
Quincy, Florida
Florida 502
Chapman (formerly FL 874-E55)

Alabama Crop Improvement Assoc.
Auburn, Alabama
GA Mitchell

South Carolina Crop Impr. Assoc.
Clemson, South Carolina
Simpson

Louisiana State University
Baton Rouge, Louisiana
LA 85604-AB21-B-B
LA 85495-1-B2-AB2-B

Univ. of Georgia, Georgia Station
Griffin, Georgia
GA 875C44-E3

BARLEY

Department of Agronomy
Virginia Polytechnic Institute
Blacksburg, Virginia
Pamunkey
Nomini
Starling
Callao

Univ. of Georgia, Georgia Station
Griffin, Georgia
GA Luttrell

TRITICALE

Resource Seeds, Inc.
Union, Kentucky
Trical 498, Trical 2700

Univ. of Florida Agric. Res. Ctr.
Quincy, Florida
Sunland

RYE

Alabama Crop Improvement Assoc.
Auburn, Alabama
Wren's Abruzzi AL

Univ. of Florida Agric. Res. Ctr.
Quincy, Florida
Florida 401

Carl R. Gurley, Inc.
Princeton, North Carolina
GI-87
Gurley's Grazer 2000

Green Seed Company
Athens, Alabama
Winter King

Samuel Roberts Noble Foundation, Inc.
Ardmore, Oklahoma
Bates
Bone
Maton
Oklon, NF 94

Univ. of Georgia, Georgia Station
Griffin, Georgia
Wren's 96
(formerly GA-WACL-7)

APPENDIX

CHARACTERISTICS OF SELECTED VARIETIES

Wheat

Resistance

Brand-Variety	Leaf Rust	Glume Blotch	Powdery Mildew	Hessian Fly	Test Weight	Maturity	Straw Strength
AgriPro Hickory	poor	good	fair	fair	fair	medium	fair
Florida 302	poor	fair	fair	poor	good	late	good
Florida 304	good	fair	fair	good	good	medium	good
GA-Andy	poor	fair	poor	good	good	early	good
GA-Dozier	good	good	fair	good	good	late	good
GA-Gore	poor	good	good	good	good	medium	fair
GA-Stuckey	poor	fair	good	good	fair	early	fair
Jackson	poor	fair	fair	poor	good	late	fair
Madison	poor	fair	good	poor	fair	medium	good
Morey	good	fair	good	good	good	early	good
NK Coker 9134	fair	good	fair	good	good	late	fair
NK Coker 9835	poor	good	fair	good	good	medium	good
NK Coker 9663	good	fair	fair	fair	good	medium	good
Pioneer 2580	fair	good	good	good	fair	late	fair
Pioneer 2628	poor	fair	good	good	good	medium	fair
Pioneer 2643	good	good	good	poor	good	late	good
Pioneer 2684	poor	good	good	good	good	early	fair
Saluda	poor	good	poor	good	good	late	good
Wakefield	fair	fair	fair	poor	good	late	fair

Oat

Brand-Variety	Crown Rust Resistance	Cold Hardiness	Maturity	Test Weight	Straw Strength
Citation	poor	good	medium	good	good
Florida 501	poor	poor	early	good	poor
Florida 502	fair	poor	early	good	good
GA-Mitchell	poor	fair	medium	fair	good
NK Coker 716	poor	good	medium	good	good
Ozark	poor	good	med-late	fair	poor
Simpson	poor	good	medium	good	fair

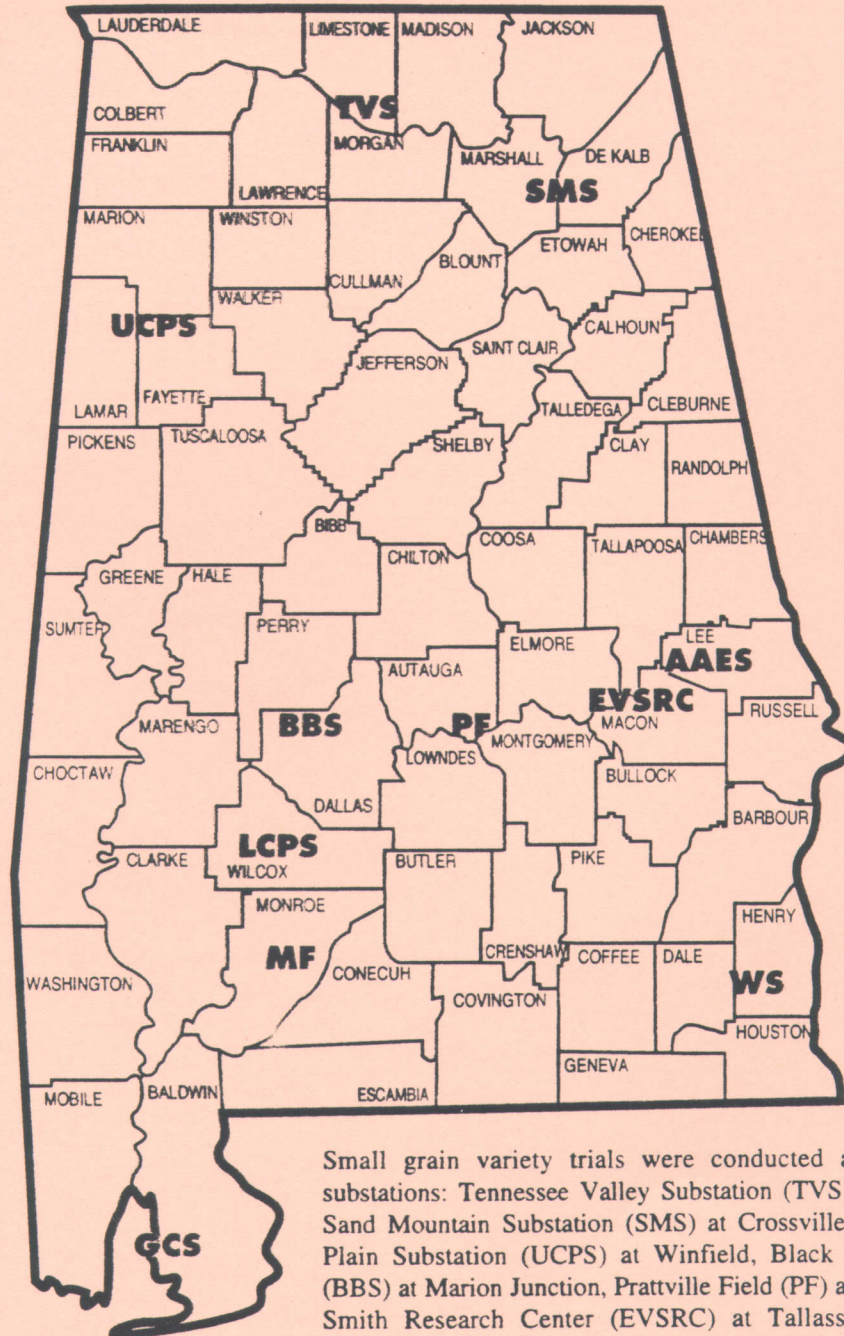
Barley Yellow Dwarf

Although Barley Yellow Dwarf is a significant problem in Alabama, no current oat or wheat varieties have adequate resistance to this disease. All oat and wheat varieties are susceptible.

Hessian fly

In the 1996/97 growing season biotype 'L' of hessian fly was found in Alabama. This biotype represented only a small portion of the population. The level of resistance to hessian fly as shown in the table is only valid for the biotypes other than biotype 'L' since none of the current commercial varieties are resistant to this new biotype.

Location of Participating Research Units



Small grain variety trials were conducted at these AAES substations: Tennessee Valley Substation (TVS) at Belle Mina, Sand Mountain Substation (SMS) at Crossville, Upper Coastal Plain Substation (UCPS) at Winfield, Black Belt Substation (BBS) at Marion Junction, Prattville Field (PF) at Prattville, E.V. Smith Research Center (EVSRC) at Tallassee, Gulf Coast Substation (GCS) at Fairhope, Monroeville Field (MF) at Monroeville, Wiregrass Substation (WS) at Headland, and Lower Coastal Plain Substation (LCPS) at Camden. Without the commitment of the substation personnel, results presented in this report would not have been presented in a timely manner.