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*Information contained herein is available to all persons regardless of race,
color, sex, or national origin.*

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The 1998 Alabama Performance Comparison of Small Grain Varieties

K. M. Glass and P. L. Mask¹

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 forage production in their particular area of Alabama. 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 nine locations were used to compile this report. These locations represent the varied growing conditions farmers have around Alabama.

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 1997 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 before 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 six 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 top dressed 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 oat, 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 1997-98 variety trials are summarized by region in tables 14 through 20. Katherine Burch, Research Associate, Plant Pathology, made disease ratings at all locations. At the time of mid-season ratings, disease incidence and severity were generally lower across the state than in 1997. On wheat, incidence of leaf rust and powdery mildew and the viral disease barley yellow dwarf was lower throughout the state, while levels of Septoria

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leaf blotch remained mostly unchanged from the previous year. On oat, levels of *Helminthosporium* leaf spot were higher in northern and central Alabama and unchanged from last year in the southern region. Barley yellow dwarf was observed to be lower throughout the state, while incidence of crown rust was higher. Stem rust on oat was present on most varieties at the Gulf Coast and Wiregrass Substations. On triticale, low levels of leaf rust and *Septoria* blotch were observed on entries at most locations while incidence of barley yellow dwarf was much lower compared to 1997. On barley, spot blotch and *Septoria* blotch developed at low to moderate levels on the entries at all locations. Leaf rust of barley was observed at moderate to high levels in all entries at the Upper Coastal Plain 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. 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 possibly reducing yields in some varieties. Both lodging and bird damage was moderate to severe in oats at most central and southern locations. The 1997-98 growing season was a mild, wet fall and winter with a dry spring. Both the forage- and grain-only trials were not planted at the Black Belt Substation, Marion Junction, due to dry then wet conditions during planting season. There was herbicide injury on the grain-only trial at Upper Coastal Plain Substation, Winfield. It was determined that the trial data were invalid and therefore not reported. Neither Marion Junction nor Winfield were included in the two- and three-year averages for their regions.

TABLE 1. LOCATION, PLANTING, AND HARVEST DATES FOR 1997-98 SMALL GRAIN TESTS

Location	Date planted	Date harvested
Northern Alabama		
Tennessee Valley Substation (Belle Mina)		
Small grain forage only	October 21	
Small grain grain only	November 20	June 17
Sand Mountain Substation (Crossville)		
Small grain forage only	October 23	
Small grain grain only	November 5	June 11
Upper Coastal Plain Substation (Winfield)		
Small grain forage only	October 16	
Small grain grain only	October 16	June 16
Central Alabama		
Black Belt Substation (Marion Junction)		
Small grain forage only	Not planted	
Small grain grain only	Not planted	Not harvested
E.V. Smith Res. Ctr., Plant Breeding Unit (Tallassee)		
Small grain forage only	October 8	
Small grain grain only	November 19	May 26
Prattville Experiment Field (Prattville)		
Small grain forage only	October 16	
Small grain grain only	November 18	May 28
Southern Alabama		
Gulf Coast Substation (Fairhope)		
Small grain forage only	October 23	
Small grain grain only	October 23	May 15
Monroeville Experiment Field (Monroeville)		
Small grain forage only	November 11	
Small grain grain only	November 11	May 28
Lower Coastal Plain Substation (Camden)		
Small grain forage only	November 10	
Small grain grain only	November 10	May 21
Wiregrass Substation (Headland)		
Small grain forage only	October 20	
Small grain grain only	November 20	May 21

TABLE 2. CHARACTERISTICS OF SMALL GRAINS TESTED IN NORTHERN ALABAMA, THREE-YEAR SUMMARY

Brand-Variety	Average yield/ac.			Average yield/ac.			1998 average			
	Grain only ¹			Forage only			Lodg- ing pct.	Height in.	1/10 headed date	Test wt. lb./bu.
	1998 bu.	2-yr. bu.	3-yr. bu.	1998 lb.	2-yr. lb.	3-yr. lb.				
Wheat										
Jackson	72	67	59	—	—	—	4	36	4-24	52.4
Madison	62	59	53	2,280	2,656	2,544	0	34	4-21	53.1
Wakefield	65	56	50	2,646	2,629	2,507	0	38	4-26	50.9
Clemson 201	72	63	50	—	—	—	0	36	4-24	52.9
Pioneer 2684	63	56	50	—	—	—	0	34	4-19	55.5
Pioneer 2643	65	58	48	—	—	—	0	29	4-21	54.5
Pioneer 2691	69	58	48	—	—	—	8	32	4-17	53.2
GA Dozier	51	51	46	2,462	2,665	2,554	10	33	4-23	52.1
Florida 304	52	45	38	2,305	2,278	2,056	2	36	4-22	51.3
FFR 518 W	74	62	—	—	—	—	0	33	4-21	52.3
Northrup King 9704	72	64	—	—	—	—	0	31	4-20	55.3
Jaypee	70	—	—	—	—	—	0	33	4-17	54.8
VA 94-54-479	70	—	—	—	—	—	0	31	4-19	53.1
Pocahontas	68	—	—	—	—	—	1	34	4-21	50.5
Roberts	67	63	—	2,436	2,476	—	5	32	4-18	51.9
Hartz H 1551	67	—	—	—	—	—	0	35	4-25	52.1
Northrup King 9663	66	63	—	—	—	—	0	40	4-24	55.7
Roane	65	—	—	—	—	—	0	34	4-27	56.1
AR 494B-2-2	65	—	—	—	—	—	0	39	4-27	54.7
Pioneer XW 662	63	—	—	—	—	—	0	36	4-22	52.4
AR 584A-3-1	62	—	—	2,527	—	—	3	37	4-22	53.6
Pioneer XW 663	62	—	—	—	—	—	0	37	4-22	53.9
Test Mean	65	59	49	2,443	2,541	2,415	1	34	—	53.3
L.S.D. (.10)	7	14	14	378	502	404	—	—	—	—
C.V. (%)	8	18	20	11	14	12	—	—	—	—
Oats										
Simpson	105	87	72	—	—	—	68	40	4-28	30.9
Harrison	87	65	53	1,920	1,991	2,169	45	42	4-27	34.0
Chapman	81	52	47	2,602	2,034	2,097	78	35	4-25	29.4
Ga Mitchell	97	60	46	2,134	1,876	1,881	40	36	4-28	33.8
Dallas	100	—	—	2,396	—	—	76	39	4-29	31.4
Ozark	98	—	—	2,587	—	—	83	40	4-28	32.8
Test Mean	95	66	55	2,328	1,967	2,049	65	39	—	32.1
L.S.D. (.10)	12	13	13	484	417	395	—	—	—	—
C.V. (%)	9	15	17	15	16	14	—	—	—	—
Barley										
Nomini	87	87	71	—	—	—	17	36	4-15	32.9
GA Luttrell	81	89	70	—	—	—	30	33	4-14	36.9
Starling	83	84	68	—	—	—	52	35	4-18	40.0
Callao	93	84	67	—	—	—	64	31	4-15	41.3
Test Mean	86	86	69	—	—	—	41	33	—	37.8
L.S.D. (.10)	15	18	16	—	—	—	—	—	—	—
C.V. (%)	12	15	17	—	—	—	—	—	—	—
Rye										
Maton	—	—	—	3,268	3,769	4,085	—	—	—	—
Oklon	—	—	—	3,114	3,620	3,808	—	—	—	—
Bonel	—	—	—	2,840	3,412	3,645	—	—	—	—
Wren's 96	—	—	—	2,928	2,999	3,011	—	—	—	—

¹ Belle Mina and Crossville on grain-only trial.

TABLE 2, CONTINUED. CHARACTERISTICS OF SMALL GRAINS TESTED IN NORTHERN ALABAMA, THREE-YEAR SUMMARY

Brand-Variety	Average yield/ac.			Average yield/ac.			—1998 average—			
	Grain only ¹			Forage only			Lodg- ing pct.	Height in.	1/10 headed date	Test wt. lb./bu.
	1998 bu.	2-yr. bu.	3-yr. bu.	1998 lb.	2-yr. lb.	3-yr. lb.				
Rye, continued										
Wren's Abruzzi AL	—	—	—	2,556	2,345	2,363	—	—	—	—
Wintergrazer 70	—	—	—	3,302	—	—	—	—	—	—
Elbon	—	—	—	3,189	—	—	—	—	—	—
GI 87	—	—	—	3,174	—	—	—	—	—	—
Bates	—	—	—	3,036	3,533	—	—	—	—	—
Test Mean	—	—	—	3,045	3,280	3,382	—	—	—	—
L.S.D. (.10)	—	—	—	493	490	485	—	—	—	—
C.V. (%)	—	—	—	12	11	11	—	—	—	—
Triticale										
Trical 498	77	70	60	—	—	—	16	40	4-16	42.8
Trical 2700	—	—	—	3,075	2,607	2,788	—	—	—	—
Test Mean	77	70	60	3,075	2,607	2,788	16	40	—	42.8
L.S.D. (.10)	—	—	—	—	—	—	—	—	—	—
C.V. (%)	—	—	—	—	—	—	—	—	—	—

¹Belle Mina and Crossville on grain-only trial.

TABLE 3. PERFORMANCE OF SMALL GRAINS AT BELLE MINA, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			—Forage-only yield/acre—	
	1998 bu.	Test wt. lb./bu	3-yr. av. bu.	1998 lb.	3-yr. av. lb.
Wheat					
FFR 518 W	70	55.8	—	—	—
Northrup King 9704	69	58.0	—	—	—
AR 584A-3-1	69	56.3	—	3,040	—
Jaypee	68	58.2	—	—	—
Clemson 201	68	56.3	44	—	—
Pioneer 2691	68	56.4	46	—	—
Jackson	67	56.9	54	—	—
VA 94-54-479	66	56.1	—	—	—
Roberts	65	56.8	—	2,760	—
Pioneer XW 662	65	56.4	—	—	—
Hartz H 1551	64	55.8	—	—	—
Pioneer 2643	63	56.4	46	—	—
AR 494B-2-2	62	58.1	—	—	—
Pioneer XW 663	62	57.9	—	—	—
Pocahontas	60	55.6	—	—	—
Wakefield	60	54.7	50	2,955	3,462
Pioneer 2684	60	58.2	45	—	—
Northrup King 9663	60	58.0	—	—	—
Roane	57	58.7	—	—	—
Madison	57	56.0	50	2,741	3,755
Florida 304	53	55.6	37	2,608	2,769
GA Dozier	47	55.9	46	2,818	3,490
Test Mean	63	56.7	46	2,820	3,369
L.S.D. (.10)	5	—	—	240	—
C.V. (%)	6	—	—	6	—

TABLE 3, CONTINUED. PERFORMANCE OF SMALL GRAINS AT BELLE MINA, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Oats					
Ga Mitchell	100	36.8	42	3,040	2,644
Dallas	99	31.8	—	3,673	—
Simpson	97	32.2	74	—	—
Ozark	90	34.2	—	3,507	—
Harrison	79	35.6	48	3,149	3,359
Chapman	71	31.7	36	3,195	3,121
Test Mean	89	33.7	50	3,313	3,041
L.S.D. (.10)	17	—	—	485	—
C.V. (%)	13	—	—	10	—
Barley					
GA Luttrell	95	40.5	70	—	—
Callao	92	46.8	65	—	—
Nomini	91	45.3	73	—	—
Starling	85	42.0	68	—	—
Test Mean	91	43.7	69	—	—
L.S.D. (.10)	12	—	—	—	—
C.V. (%)	8	—	—	—	—
Rye					
GI 87	—	—	—	4,045	—
Maton	—	—	—	4,009	5,292
Wintergrazer 70	—	—	—	3,813	—
Oklon	—	—	—	3,766	5,036
Elbon	—	—	—	3,730	—
Bonel	—	—	—	3,605	4,862
Bates	—	—	—	3,483	—
Wren's 96	—	—	—	3,405	3,926
Wren's Abruzzi AL	—	—	—	3,002	3,395
Test Mean	—	—	—	3,651	4,502
L.S.D. (.10)	—	—	—	372	—
C.V. (%)	—	—	—	7	—
Triticale					
Trical 498	77	45.4	59	—	—
Trical 2700	—	—	—	4,049	4,301
Test Mean	77	45.4	59	4,049	4,301
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

TABLE 4. PERFORMANCE OF SMALL GRAINS AT CROSSVILLE, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Wheat					
FFR 518 W	78	53.8	—	—	—
Clemson 201	77	54.1	56	—	—
Jackson	76	56.2	63	—	—
Pocahontas	76	54.2	—	—	—
Northrup King 9704	74	57.3	—	—	—
Roane	74	57.0	—	—	—
VA 94-54-479	74	55.4	—	—	—
Northrup King 9663	73	57.5	—	—	—
Jaypee	72	55.2	—	—	—
Roberts	69	51.5	—	1,824	—
Hartz H 1551	69	53.6	—	—	—
Pioneer 2691	69	53.8	50	—	—
Wakefield	69	54.5	50	1,671	1,660
AR 494B-2-2	68	57.4	—	—	—
Madison	68	54.8	55	1,430	1,721
Pioneer 2643	67	55.0	50	—	—
Pioneer 2684	66	57.7	54	—	—
Pioneer XW 663	62	54.7	—	—	—
Pioneer XW 662	61	53.6	—	—	—
AR 584A-3-1	55	55.1	—	1,771	—
GA Dozier	55	53.9	47	1,586	1,706
Florida 304	52	52.1	39	1,526	1,434
Test Mean	68	54.9	52	1,635	1,630
L.S.D. (.10)	9	—	—	296	—
C.V. (%)	10	—	—	12	—
Oats					
Simpson	113	33.2	70	—	—
Ozark	105	34.4	—	1,354	—
Dallas	101	34.1	—	1,383	—
Harrison	95	36.2	58	1,165	1,464
Ga Mitchell	93	35.7	49	1,329	—
Chapman	91	31.3	61	1,654	1,354
Test Mean	100	34.2	60	1,377	1,409
L.S.D. (.10)	7	—	—	304	—
C.V. (%)	5	—	—	15	—
Barley					
Callao	94	41.8	69	—	—
Nomini	82	43.2	70	—	—
Starling	81	38.0	69	—	—
GA Luttrell	67	38.3	71	—	—
Test Mean	81	40.3	70	—	—
L.S.D. (.10)	20	—	—	—	—
C.V. (%)	15	—	—	—	—

TABLE 4, CONTINUED. PERFORMANCE OF SMALL GRAINS AT CROSSVILLE, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Rye					
Wren's 96	—	—	—	2,509	2,506
GI 87	—	—	—	2,391	—
Bates	—	—	—	2,313	—
Maton	—	—	—	2,265	2,717
Elbon	—	—	—	2,235	—
Wren's Abruzzi AL	—	—	—	2,173	1,622
Oklon	—	—	—	2,098	2,542
Wintergrazer 70	—	—	—	2,065	—
Bonel	—	—	—	2,015	2,588
Test Mean	—	—	—	2,229	2,395
L.S.D. (.10)	—	—	—	317	—
C.V. (%)	—	—	—	10	—
Triticale					
Trical 498	78	45.6	60	—	—
Trical 2700	—	—	—	2,008	1,787
Test Mean	78	45.6	60	2,008	1,787
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

TABLE 5. PERFORMANCE OF SMALL GRAINS AT WINFIELD, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre ¹			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Wheat					
Northrup King 9663	—	—	—	—	—
Madison	—	—	—	2,671	2,155
Pioneer 2643	—	—	—	—	—
Northrup King 9704	—	—	—	—	—
VA 94-54-479	—	—	—	—	—
Pioneer 2684	—	—	—	—	—
Hartz H 1551	—	—	—	—	—
Pioneer XW 662	—	—	—	—	—
FFR 518 W	—	—	—	—	—
AR 584A-3-1	—	—	—	2,770	—
Pioneer XW 663	—	—	—	—	—
AR 494B-2-2	—	—	—	—	—
Roberts	—	—	—	2,723	—
Pioneer 2691	—	—	—	—	—
Jaypee	—	—	—	—	—
Pocahontas	—	—	—	—	—
Clemson 201	—	—	—	—	—
Wakefield	—	—	—	3,312	2,399
Roane	—	—	—	—	—
Jackson	—	—	—	—	—
GA Dozier	—	—	—	2,983	2,467
Florida 304	—	—	—	2,783	1,964
Test Mean	—	—	—	2,873	2,246
L.S.D. (.10)	—	—	—	586	—
C.V. (%)	—	—	—	14	—

¹Invalid data on the grain-only trial due to herbicide injury.

TABLE 5, CONTINUED. PERFORMANCE OF SMALL GRAINS AT WINFIELD, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre ¹			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Oats					
Simpson	—	—	—	—	—
Dallas	—	—	—	2,132	—
Chapman	—	—	—	2,956	1,815
Ga Mitchell	—	—	—	2,032	—
Harrison	—	—	—	1,446	—
Ozark	—	—	—	2,900	—
Test Mean	—	—	—	2,293	1,815
L.S.D. (.10)	—	—	—	709	—
C.V. (%)	—	—	—	20	—
Barley					
GA Luttrell	—	—	—	—	—
Callao	—	—	—	—	—
Nomini	—	—	—	—	—
Starling	—	—	—	—	—
Test Mean	—	—	—	—	—
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—
Rye					
Wintergrazer 70	—	—	—	4,029	—
Elbon	—	—	—	3,600	—
Maton	—	—	—	3,530	4,245
Oklon	—	—	—	3,478	3,846
Bates	—	—	—	3,313	—
GI 87	—	—	—	3,087	—
Bonel	—	—	—	2,901	3,486
Wren's 96	—	—	—	2,870	2,602
Wren's Abruzzi AL	—	—	—	2,493	2,071
Test Mean	—	—	—	3,256	3,250
L.S.D. (.10)	—	—	—	741	—
C.V. (%)	—	—	—	16	—
Triticale					
Trical 498	—	—	—	—	—
Trical 2700	—	—	—	3,167	2,275
Test Mean	—	—	—	3,167	2,275
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

¹ Invalid data on the grain-only trial due to herbicide injury.

TABLE 6. CHARACTERISTICS OF SMALL GRAINS TESTED IN CENTRAL ALABAMA, THREE-YEAR SUMMARY

Brand-Variety	Average yield/ac.			Average yield/ac.			1998 average			
	Grain only ¹			Forage only			Lodg- ing pct.	Height in.	1/10 headed date	Test wt. lb./bu.
	1998 bu.	2-yr. bu.	3-yr. bu.	1998 lb.	2-yr. lb.	3-yr. lb.				
Wheat										
Jackson	64	59	69	—	—	—	1	36	4-16	57.6
Pioneer 2684	63	63	69	—	—	—	0	35	4-11	60.2
GA Dozier	62	60	69	3,132	3,154	3,011	0	34	4-16	57.8
Pioneer 2643	59	65	68	—	—	—	0	30	4-13	57.7
Wakefield	56	49	62	3,390	3,358	3,152	0	39	4-15	54.3
Madison	60	55	61	3,226	3,164	3,005	1	35	4-11	57.2
Clemson 201	58	59	59	—	—	—	1	35	4-13	55.1
Pioneer 2691	45	52	55	—	—	—	0	31	4-8	55.3
Morey	48	55	54	—	—	—	0	32	4-11	54.9
Florida 304	46	45	51	3,549	3,397	3,067	0	35	4-13	55.5
GA Stuckey	47	49	50	—	—	—	2	29	4-10	54.5
AR 584A-3-1	67	—	—	3,498	—	—	1	39	4-17	55.9
Jaypee	66	—	—	—	—	—	3	32	4-11	58.9
Roberts	64	59	—	3,895	3,578	—	2	34	4-12	57.5
FFR 518 W	63	58	—	—	—	—	2	32	4-12	55.7
Roane	63	—	—	—	—	—	1	33	4-21	55.8
AR 494B-2-2	62	—	—	—	—	—	0	37	4-16	56.5
VA 94-54-479	61	—	—	—	—	—	0	33	4-16	54.9
Pocahontas	60	—	—	—	—	—	1	36	4-16	56.2
Fleming	49	—	—	—	—	—	0	32	4-11	58.4
Test Mean	58	56	61	3,448	3,330	3,059	1	34	—	56.5
L.S.D. (.10)	9	8	9	769	689	729	—	—	—	—
C.V. (%)	11	11	11	16	15	18	—	—	—	—
Oats										
Simpson	112	74	94	—	—	—	0	44	4-22	32.9
Ozark	117	78	93	2,492	—	—	3	44	4-19	35.6
Chapman	90	68	83	3,024	2,943	2,652	0	33	4-16	31.4
Ga Mitchell	98	72	83	2,744	2,528	2,288	1	36	4-20	35.9
Harrison	94	64	75	2,880	2,826	2,649	4	44	4-18	35.3
Dallas	107	—	—	2,739	—	—	0	40	4-21	33.8
Test Mean	103	71	86	2,776	2,766	2,530	1	40	—	34.1
L.S.D. (.10)	17	14	14	638	448	404	—	—	—	—
C.V. (%)	12	14	12	16	12	12	—	—	—	—
Rye										
Bonel	—	—	—	4,116	3,731	3,825	—	—	—	—
Maton	—	—	—	3,115	3,281	3,653	—	—	—	—
Oklon	—	—	—	3,533	3,259	3,491	—	—	—	—
Wren's 96	—	—	—	3,909	3,469	3,485	—	—	—	—
Wren's Abruzzi AL	—	—	—	3,812	3,329	3,216	—	—	—	—
GI 87	—	—	—	3,890	—	—	—	—	—	—
Bates	—	—	—	3,764	3,706	—	—	—	—	—
Wintergrazer 70	—	—	—	3,652	—	—	—	—	—	—
Elbon	—	—	—	3,455	—	—	—	—	—	—
Test Mean	—	—	—	3,694	3,462	3,534	—	—	—	—
L.S.D. (.10)	—	—	—	854	696	609	—	—	—	—
C.V. (%)	—	—	—	17	15	13	—	—	—	—
Triticale										
Trical 498	56	67	63	—	—	—	0	38	4-11	44.7
Trical 2700	—	—	—	3,186	2,928	2,840	—	—	—	—
Test Mean	56	67	63	3,186	2,928	2,840	0	38	—	44.7
L.S.D. (.10)	—	—	—	—	—	—	—	—	—	—
C.V. (%)	—	—	—	—	—	—	—	—	—	—

¹ Prattville and Tallassee on grain-only trial.

TABLE 7. PERFORMANCE OF SMALL GRAINS AT PRATTVILLE, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Wheat					
Jaypee	59	60.7	—	—	—
Roberts	59	59.4	—	3,627	—
Pioneer 2643	58	59.8	65	—	—
Roane	58	58.4	—	—	—
Jackson	57	59.7	65	—	—
GA Dozier	56	61.0	66	2,942	3,310
FFR 518 W	56	57.3	—	—	—
Wakefield	55	57.1	64	3,306	3,326
Madison	54	58.6	63	3,135	3,076
Pocahontas	54	59.4	—	—	—
Pioneer 2684	53	60.7	63	—	—
AR 494B-2-2	52	58.5	—	—	—
VA 94-54-479	49	56.7	—	—	—
AR 584A-3-1	48	59.6	—	3,293	—
GA Stuckey	48	59.0	51	—	—
Fleming	48	60.4	—	—	—
Florida 304	48	59.6	55	3,527	3,370
Clemson 201	46	54.1	54	—	—
Morey	45	58.2	53	—	—
Pioneer 2691	42	58.2	53	—	—
Test Mean	52	58.8	59	3,305	3,271
L.S.D. (.10)	7	—	—	697	—
C.V. (%)	10	—	—	14	—
Oats					
Ozark	105	37.1	95	2,124	—
Simpson	100	34.7	92	—	—
Dallas	96	33.8	—	2,230	—
Harrison	80	35.9	78	2,377	2,559
Ga Mitchell	79	35.6	88	2,952	2,499
Chapman	71	33.1	90	2,796	2,841
Test Mean	89	35.0	88	2,496	2,633
L.S.D. (.10)	15	—	—	729	—
C.V. (%)	11	—	—	19	—
Rye					
Wren's Abruzzi AL	—	—	—	4,297	3,209
Bates	—	—	—	3,815	—
GI 87	—	—	—	3,753	—
Wren's 96	—	—	—	3,726	3,439
Bonel	—	—	—	3,484	4,129
Oklon	—	—	—	3,351	3,725
Wintergrazer 70	—	—	—	3,197	—
Elbon	—	—	—	3,063	—
Maton	—	—	—	2,919	3,898
Test Mean	—	—	—	3,512	3,680
L.S.D. (.10)	—	—	—	788	—
C.V. (%)	—	—	—	16	—
Triticale					
Trical 498	44	48.0	61	—	—
Trical 2700	—	—	—	3,140	2,580
Test Mean	44	48.0	61	3,140	2,580
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

TABLE 8. PERFORMANCE OF SMALL GRAINS AT TALLASSEE, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Wheat					
AR 584A-3-1	86	52.2	—	3,703	—
Jaypee	74	57.1	—	—	—
Pioneer 2684	73	59.7	75	—	—
VA 94-54-479	73	53.1	—	—	—
Jackson	71	55.5	74	—	—
AR 494B-2-2	71	54.5	—	—	—
FFR 518 W	71	54.1	—	—	—
Clemson 201	69	56.0	63	—	—
Roberts	69	55.6	—	4,163	—
GA Dozier	69	54.5	71	3,323	3,481
Roane	68	53.2	—	—	—
Pocahontas	66	52.9	—	—	—
Madison	66	55.7	60	3,317	3,485
Pioneer 2643	60	55.5	71	—	—
Wakefield	56	51.4	60	3,474	3,696
Morey	52	51.5	55	—	—
Fleming	51	56.3	—	—	—
Pioneer 2691	48	52.3	57	—	—
GA Stuckey	47	50.0	49	—	—
Florida 304	44	51.3	48	3,570	3,392
Test Mean	64	54.1	62	3,592	3,513
L.S.D. (.10)	10	—	—	905	—
C.V. (%)	11	—	—	17	—
Oats					
Ozark	129	34.1	92	2,860	—
Simpson	123	31.0	96	—	—
Dallas	119	33.9	—	3,249	—
Ga Mitchell	116	36.2	78	2,535	2,492
Chapman	108	29.6	76	3,252	2,852
Harrison	107	34.7	73	3,383	3,086
Test Mean	117	33.3	83	3,056	2,810
L.S.D. (.10)	21	—	—	625	—
C.V. (%)	12	—	—	13	—
Rye					
Bonel	—	—	—	4,749	4,839
Wintergrazer 70	—	—	—	4,107	—
Wren's 96	—	—	—	4,091	4,508
GI 87	—	—	—	4,028	—
Elbon	—	—	—	3,847	—
Oklon	—	—	—	3,715	4,435
Bates	—	—	—	3,713	—
Wren's Abruzzi AL	—	—	—	3,328	3,883
Maton	—	—	—	3,311	4,608
Test Mean	—	—	—	3,877	4,455
L.S.D. (.10)	—	—	—	963	—
C.V. (%)	—	—	—	17	—
Triticale					
Trical 498	67	41.3	64	—	—
Trical 2700	—	—	—	3,232	3,767
Test Mean	67	41.3	64	3,232	3,767
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

TABLE 9. CHARACTERISTICS OF SMALL GRAINS TESTED IN SOUTHERN ALABAMA, THREE-YEAR SUMMARY

Brand-Variety	Average yield/ac. —Grain only ¹ —			Average yield/ac. —Forage only—			—1998 average—			
	1998 <i>bu.</i>	2-yr. <i>bu.</i>	3-yr. <i>bu.</i>	1998 <i>lb.</i>	2-yr. <i>lb.</i>	3-yr. <i>lb.</i>	Lodg- ing <i>pct.</i>	Height <i>in.</i>	1/10 headed <i>date</i>	Test wt. <i>lb./bu.</i>
Wheat										
Pioneer 2684	70	60	59	—	—	—	1	36	3-24	58.0
Pioneer 2643	74	60	57	—	—	—	6	33	3-31	56.4
Northrup King										
Coker 9835	63	57	54	—	—	—	1	33	3-23	55.1
Pioneer 2691	62	54	50	—	—	—	2	35	3-18	55.3
Wakefield	63	51	49	4,735	4,523	4,454	10	39	4- 2	54.7
Florida 304	54	49	48	4,621	4,575	4,416	16	39	3-26	55.0
Morey	56	50	46	—	—	—	2	37	3-15	54.6
Madison	59	48	46	4,379	4,273	4,124	14	37	3-24	54.4
GA Stuckey	50	45	43	—	—	—	15	32	3-20	52.4
Jackson	55	45	42	—	—	—	21	38	4- 2	54.7
VA 94-54-479	75	—	—	—	—	—	8	35	3-25	55.4
Northrup King 9663	66	—	—	—	—	—	13	38	3-23	54.9
Roberts	66	51	—	4,847	4,691	—	21	37	3-25	53.7
Pocahontas	58	—	—	—	—	—	3	38	3-27	53.8
Fleming	57	—	—	—	—	—	1	34	3-10	54.6
FFR 518 W	56	50	—	—	—	—	9	35	3-18	54.4
Roane	53	—	—	—	—	—	7	34	4- 9	54.8
GA Dozier	—	—	—	4,756	4,719	4,530	—	—	—	—
AR 584A-3-1	—	—	—	5,663	—	—	—	—	—	—
Test Mean	61	52	49	4,834	4,556	4,381	9	36	—	54.8
L.S.D. (.10)	8	9	8	690	728	661	—	—	—	—
C.V. (%)	9	14	13	10	12	11	—	—	—	—
Oats										
Chapman	77	74	82	5,054	4,869	4,424	22	37	3-27	28.9
Harrison	78	65	72	5,037	4,805	4,432	12	45	4- 1	31.4
Ga Mitchell	71	61	72	4,820	4,634	4,249	17	38	3-30	32.0
Secretariat LA 495	89	—	—	—	—	—	24	41	3-30	30.5
Dallas	85	—	—	5,085	—	—	31	43	4- 2	28.6
Test Mean	80	67	76	4,999	4,770	4,368	21	41	—	30.3
L.S.D. (.10)	9	14	13	961	997	860	—	—	—	—
C.V. (%)	8	15	13	14	15	15	—	—	—	—
Rye										
Wren's 96	—	—	—	4,834	5,061	5,342	—	—	—	—
Maton	—	—	—	5,209	5,211	5,037	—	—	—	—
Oklon	—	—	—	5,046	5,164	5,010	—	—	—	—
Bonel	—	—	—	5,056	4,949	4,939	—	—	—	—
GI 87	—	—	—	4,790	4,782	4,719	—	—	—	—
Wren's Abruzzi AL	—	—	—	4,524	4,592	4,456	—	—	—	—
Bates	—	—	—	5,411	5,117	—	—	—	—	—
RB 20-20	—	—	—	5,109	—	—	—	—	—	—
Wintergrazer 70	—	—	—	5,096	—	—	—	—	—	—
Sawan Grazer	—	—	—	4,803	—	—	—	—	—	—
Elbon	—	—	—	4,719	—	—	—	—	—	—
Test Mean	—	—	—	4,963	4,982	4,917	—	—	—	—
L.S.D. (.10)	—	—	—	589	755	1,090	—	—	—	—
C.V. (%)	—	—	—	9	11	16	—	—	—	—
Triticale										
Trical 498	47	48	44	—	—	—	0	41	3-6	42.7
Trical 2700	—	—	—	5,441	5,022	4,745	—	—	—	—
Test Mean	47	48	44	5,441	5,022	4,745	0	41	—	42.7
L.S.D. (.10)	—	—	—	—	—	—	—	—	—	—
C.V. (%)	—	—	—	—	—	—	—	—	—	—

¹ Monroeville, Headland, and Fairhope on grain-only trial.

TABLE 10. PERFORMANCE OF SMALL GRAINS AT CAMDEN, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Wheat					
Northrup King Coker 9835	33	51.9	33	—	—
Pioneer 2643	29	52.8	34	—	—
Pioneer 2684	28	52.0	33	—	—
Pioneer 2691	27	52.1	30	—	—
Morey	25	49.3	26	—	—
Florida 304	25	50.1	27	2,218	2,589
FFR 518 W	25	48.9	—	—	—
VA 94-54-479	24	50.2	—	—	—
Fleming	24	48.6	—	—	—
Jackson	21	50.1	32	—	—
GA Stuckey	20	47.5	25	—	—
Pocahontas	17	50.1	—	—	—
Roane	17	49.4	—	—	—
Wakefield	16	49.3	25	2,260	2,751
Madison	16	47.9	26	2,111	2,660
Roberts	12	50.7	—	2,312	—
Northrup King 9663	10	46.6	—	—	—
AR 584A-3-1	—	—	—	2,238	—
GA Dozier	—	—	—	2,228	2,602
Test Mean	22	49.9	29	2,228	2,650
L.S.D. (.10)	7	—	—	397	—
C.V. (%)	22	—	—	12	—
Oats					
Ga Mitchell	47	34.0	46	2,242	2,561
Secretariat LA 495	44	30.1	—	—	—
Dallas	44	30.8	—	2,450	—
Harrison	41	31.3	42	2,198	2,709
Chapman	40	27.9	42	2,242	2,796
Test Mean	43	30.8	43	2,283	2,689
L.S.D. (.10)	4	—	—	227	—
C.V. (%)	7	—	—	6	—
Rye					
Oklon	—	—	—	2,463	2,809
Elbon	—	—	—	2,411	—
Bonel	—	—	—	2,404	2,946
Maton	—	—	—	2,310	2,876
Wintergrazer 70	—	—	—	2,290	—
Wren's 96	—	—	—	2,261	4,202
RB 20-20	—	—	—	2,200	—
Sawan Grazer	—	—	—	2,187	—
Bates	—	—	—	2,151	—
Wren's Abruzzi AL	—	—	—	2,035	2,628
GI 87	—	—	—	2,001	2,690
Test Mean	—	—	—	2,246	3,025
L.S.D. (.10)	—	—	—	285	—
C.V. (%)	—	—	—	9	—
Triticale					
Trical 498	29	43.1	27	—	—
Trical 2700	—	—	—	2,471	2,666
Test Mean	29	43.1	27	2,471	2,666
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

¹ Grain yields reduced due to wildlife damage.

TABLE 11. PERFORMANCE OF SMALL GRAINS AT MONROEVILLE, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Wheat					
Pioneer 2643	97	58.1	74	—	—
Pioneer 2684	92	59.6	70	—	—
VA 94-54-479	92	56.4	—	—	—
Northrup King 9663	89	58.7	—	—	—
Wakefield	89	57.6	73	1,744	3,389
Roberts	87	56.1	—	1,782	—
Northrup King Coker 9835	86	56.0	65	—	—
Pocahontas	86	57.3	—	—	—
Pioneer 2691	84	57.5	62	—	—
Jackson	82	56.5	65	—	—
Madison	80	57.3	57	1,704	3,321
Morey	80	57.3	50	—	—
Fleming	79	59.5	—	—	—
FFR 518 W	72	56.8	—	—	—
Roane	68	57.9	—	—	—
Florida 304	63	55.1	55	2,020	3,584
GA Stuckey	63	54.7	52	—	—
AR 584A-3-1	—	—	—	1,439	—
GA Dozier	—	—	—	1,285	3,186
Test Mean	82	57.2	62	1,663	3,370
L.S.D. (.10)	9	—	—	187	—
C.V. (%)	8	—	—	8	—
Oats					
Dallas	139	35.4	—	1,802	—
Secretariat LA 495	118	34.5	—	—	—
Chapman	110	32.6	100	2,009	2,891
Harrison	107	36.5	75	1,641	2,663
Ga Mitchell	107	36.7	77	1,893	2,512
Test Mean	116	35.1	84	1,836	2,688
L.S.D. (.10)	13	—	—	396	—
C.V. (%)	7	—	—	14	—
Rye					
Wren's Abruzzi AL	—	—	—	2,035	3,183
Wren's 96	—	—	—	1,708	3,723
Bates	—	—	—	1,643	—
Sawan Grazer	—	—	—	1,598	—
RB 20-20	—	—	—	1,562	—
Bonel	—	—	—	1,402	3,612
Wintergrazer 70	—	—	—	1,399	—
Maton	—	—	—	1,348	3,849
Elbon	—	—	—	1,312	—
Oklon	—	—	—	1,301	3,316
GI 87	—	—	—	1,267	3,156
Test Mean	—	—	—	1,507	3,473
L.S.D. (.10)	—	—	—	300	—
C.V. (%)	—	—	—	14	—
Triticale					
Trical 498	76	49.1	56	—	—
Trical 2700	—	—	—	1,849	3,467
Test Mean	76	49.1	56	1,849	3,467
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

TABLE 12. PERFORMANCE OF SMALL GRAINS AT HEADLAND, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Wheat					
Fleming	66	61.4	—	—	—
Pioneer 2684	64	62.1	58	—	—
VA 94-54-479	64	57.4	—	—	—
FFR 518 W	63	58.5	—	—	—
Pioneer 2691	62	58.1	45	—	—
Northrup King					
Coker 9835	62	59.2	49	—	—
Roberts	60	59.5	—	8,885	—
Morey	59	58.5	50	—	—
Northrup King 9663	57	60.0	—	—	—
Pioneer 2643	56	60.7	49	—	—
GA Stuckey	55	58.4	39	—	—
Florida 304	54	59.8	50	9,097	6,564
Madison	50	57.4	37	7,946	5,451
Pocahontas	48	59.3	—	—	—
Wakefield	48	56.8	32	9,047	6,783
Jackson	44	57.6	33	—	—
Roane	42	56.3	—	—	—
AR 584A-3-1	—	—	—	10,620	—
GA Dozier	—	—	—	9,115	6,781
Test Mean	56	58.9	44	9,118	6,395
L.S.D. (.10)	6	—	—	1,165	—
C.V. (%)	8	—	—	9	—
Oats					
Secretariat LA 495	92	32.7	—	—	—
Chapman	90	32.4	89	9,904	6,693
Dallas	87	32.2	—	10,553	—
Ga Mitchell	87	34.4	82	9,488	6,813
Harrison	78	32.6	80	9,086	6,496
Test Mean	87	32.9	84	9,758	6,667
L.S.D. (.10)	11	—	—	1,880	—
C.V. (%)	8	—	—	12	—
Rye					
Bates	—	—	—	11,118	—
Wintergrazer 70	—	—	—	10,474	—
RB 20-20	—	—	—	10,456	—
Oklon	—	—	—	10,209	8,177
Maton	—	—	—	10,188	7,605
Wren's 96	—	—	—	9,984	8,430
Bonel	—	—	—	9,887	7,625
GI 87	—	—	—	9,501	7,315
Sawan Grazer	—	—	—	9,445	—
Elbon	—	—	—	8,994	—
Wren's Abruzzi AL	—	—	—	8,930	7,519
Test Mean	—	—	—	9,926	7,779
L.S.D. (.10)	—	—	—	1,047	—
C.V. (%)	—	—	—	7	—
Tritical					
Trical 98	56	50.3	55	—	—
Trical 2700	—	—	—	10,577	7,364
Test Mean	56	50.3	55	10,577	7,364
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

TABLE 13. PERFORMANCE OF SMALL GRAINS AT FAIRHOPE, ALABAMA, 1998

Brand-Variety	Grain-only yield/acre			Forage-only yield/acre	
	1998 <i>bu.</i>	Test wt. <i>lb./bu</i>	3-yr. av. <i>bu.</i>	1998 <i>lb.</i>	3-yr. av. <i>lb.</i>
Wheat					
VA 94-54-479	70	57.5	—	—	—
Pioneer 2643	69	54.0	48	—	—
Wakefield	53	55.0	42	5,890	4,895
Pioneer 2684	53	58.1	49	—	—
Northrup King 9663	50	54.1	—	—	—
Roberts	50	48.6	—	6,407	—
Roane	50	55.7	—	—	—
Madison	46	55.0	42	5,757	5,064
Florida 304	46	55.0	40	5,150	4,927
Northrup King Coker 9835	41	53.2	47	—	—
Pioneer 2691	39	53.6	43	—	—
Jackson	39	54.4	29	—	—
Pocahontas	39	48.6	—	—	—
GA Stuckey	33	48.9	39	—	—
FFR 518 W	33	53.3	—	—	—
Morey	29	53.1	38	—	—
Fleming	24	48.9	—	—	—
AR 584A-3-1	—	—	—	8,357	—
GA Dozier	—	—	—	6,393	5,552
Test Mean	45	53.4	42	6,326	5,109
L.S.D. (.10)	9	—	—	808	—
C.V. (%)	14	—	—	9	—
Oats					
Secretariat LA 495	58	24.7	—	—	—
Harrison	47	25.0	61	7,223	5,859
Chapman	31	22.8	58	6,061	5,316
Dallas	30	16.0	—	5,534	—
Ga Mitchell	21	22.9	56	5,656	5,109
Test Mean	37	22.3	58	6,118	5,428
L.S.D. (.10)	4	—	—	1,010	—
C.V. (%)	7	—	—	10	—
Rye					
Maton	—	—	—	6,990	5,818
Bates	—	—	—	6,733	—
Bonel	—	—	—	6,530	5,573
GI 87	—	—	—	6,390	5,714
Wintergrazer 70	—	—	—	6,223	—
RB 20-20	—	—	—	6,218	—
Oklon	—	—	—	6,209	5,739
Elbon	—	—	—	6,159	—
Sawan Grazer	—	—	—	5,983	—
Wren's 96	—	—	—	5,383	5,011
Wren's Abruzzi AL	—	—	—	5,095	4,495
Test Mean	—	—	—	6,174	5,392
L.S.D. (.10)	—	—	—	472	—
C.V. (%)	—	—	—	5	—
Triticale					
Trical 498	10	28.4	22	—	—
Trical 2700	—	—	—	6,867	5,482
Test Mean	10	28.4	22	6,867	5,482
L.S.D. (.10)	—	—	—	—	—
C.V. (%)	—	—	—	—	—

TABLE 14. SEPTORIA BLOTCH RATINGS FOR WHEAT VARIETIES IN ALABAMA, 1997-98¹

Brand-variety	Northern Alabama	Central Alabama	Southern Alabama
AR 494B-2-2	2.4	2.7	—
AR 584A-3-1	2.7	2.3	—
Clemson 201	3.3	3.8	—
Fleming	—	4.2	3.9
Florida 304	5.7	6.3	4.2
Roberts	3.8	3.8	2.5
FFR 518 W	3.1	3.3	3.2
GA Dozier	4.7	3.5	—
GA Stuckey	—	4.2	4.2
Hartz H 1551	3.6	—	—
Jackson	4.4	2.7	2.4
Jaypee	3.3	4.2	—
Madison	2.8	3.2	2.5
Morey	4.2	3.6	—
Novartis 9663	2.5	—	2.2
Novartis Coker 9704	3.6	—	—
Novartis Coker 9835	—	—	2.7
Pioneer 2643	3.1	3.2	1.8
Pioneer 2684	3.3	3.8	2.7
Pioneer 2691	4.1	5.2	3.5
Pioneer XW 662	3.2	—	—
Pioneer XW 663	2.7	—	—
Pocahontas	3.8	3.2	1.8
Roane	2.8	2.8	1.3
VA 94-54-479	3.8	2.5	2.3
Wakefield	3.0	2.8	2.5

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

TABLE 15. LEAF RUST RATINGS FOR WHEAT VARIETIES IN ALABAMA, 1997-98¹

Brand-variety	Northern Alabama	Central Alabama	Southern Alabama
AR 494B-2-2	2.9	3.5	—
AR 584A-3-1	0.3	0.7	—
Clemson 201	0.4	0.8	—
Fleming	—	0.0	0.9
Florida 304	0.3	0.0	0.3
Roberts	1.9	2.3	1.3
FFR 518 W	0.0	0.5	0.3
GA Dozier	0.3	1.8	—
GA Stuckey	—	2.3	2.3
Hartz H 1551	3.3	—	—
Jackson	4.6	4.3	2.9
Jaypee	2.0	2.3	—
Madison	3.0	4.2	—
Morey	—	0.0	0.0
Novartis 9663	0.0	—	0.2
Novartis Coker 9704	2.2	—	—
Novartis Coker 9835	—	—	0.8
Pioneer 2643	2.8	3.2	1.3
Pioneer 2684	2.8	3.3	1.7
Pioneer 2691	2.1	2.8	1.8
Pioneer XW 662	1.8	—	—
Pioneer XW 663	1.3	—	—
Pocahontas	3.3	4.3	2.7
Roane	2.7	2.8	1.6
VA 94-54-479	1.6	2.8	1.8
Wakefield	4.1	5.0	2.5

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

TABLE 16. POWDERY MILDEW RATINGS FOR WHEAT VARIETIES IN ALABAMA, 1997-98¹

Brand-variety	Northern Alabama	Central Alabama	Southern Alabama
AR 494B-2-2	0.8	0.0	—
AR 584A-3-1	0.2	0.0	—
Clemson 201	0.0	0.0	—
Fleming	—	0.0	0.0
Florida 304	1.3	0.0	0.0
Roberts	0.0	0.0	0.0
FFR 518 W	0.0	0.0	0.0
GA Dozier	0.5	0.0	—
GA Stuckey	—	0.0	0.0
Hartz H 1551	0.7	—	—
Jackson	0.5	0.0	0.0
Jaypee	1.1	0.0	—
Madison	0.9	0.0	—
Morey	—	0.0	0.0
Novartis 9663	0.8	—	0.0
Novartis Coker 9704	0.3	—	—
Novartis Coker 9835	—	—	0.0
Pioneer 2643	0.3	0.0	0.0
Pioneer 2684	0.2	0.0	0.0
Pioneer 2691	0.2	0.0	0.0
Pioneer XW 662	0.0	—	—
Pioneer XW 663	0.3	—	—
Pocahontas	0.0	0.0	0.0
Roane	0.0	0.0	0.0
VA 94-54-479	0.0	0.0	0.0
Wakefield	1.1	0.0	0.04

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

TABLE 17. BARLEY YELLOW DWARF RATINGS FOR WHEAT VARIETIES IN ALABAMA, 1997-98¹

Brand-variety	Northern Alabama	Central Alabama	Southern Alabama
AR 494B-2-2	13.4	1.9	—
AR 584A-3-1	11.3	8.5	—
Clemson 201	6.1	13.3	—
Fleming	—	4.2	2.7
Florida 304	18.3	12.8	7.2
Roberts	2.2	10.8	1.3
FFR 518 W	7.6	6.8	2.9
GA Dozier	19.0	6.2	—
GA Stuckey	—	26.8	13.8
Hartz H 1551	2.2	—	—
Jackson	0.0	5.9	1.0
Jaypee	1.4	11.7	—
Madison	3.3	2.7	—
Morey	—	10.0	1.3
Novartis 9663	6.9	—	0.9
Novartis Coker 9704	7.8	—	—
Novartis Coker 9835	—	—	4.2
Pioneer 2643	4.8	21.2	0.9
Pioneer 2684	3.6	35.4	3.0
Pioneer 2691	0.2	18.3	1.1
Pioneer XW 662	6.4	—	—
Pioneer XW 663	11.4	—	—
Pocahontas	23.9	5.2	0.7
Roane	17.2	21.3	1.3
VA 94-54-479	18.1	0.2	1.4
Wakefield	6.9	5.0	3.4

¹ Percent symptomatic plants.

TABLE 18. DISEASE RATINGS FOR OAT VARIETIES IN ALABAMA, 1997-98

Brand-variety	Helminthosporium leaf spot ¹	Crown rust ¹	Stem rust ¹	Barley yellow dwarf ²
Northern Alabama				
Chapman	5.2	0.8	0.0	20.4
Dallas	4.8	0.3	0.0	13.4
GA Mitchell	5.4	0.3	0.0	19.1
Harrison	4.3	0.0	0.0	5.0
Ozark	4.4	0.0	0.0	1.8
Simpson	4.5	0.4	0.0	19.0
Central Alabama				
Chapman	3.8	0.0	0.0	4.4
Dallas	3.0	1.0	0.0	6.2
GA Mitchell	3.0	1.5	0.0	5.2
Harrison	2.0	0.0	0.0	4.2
Ozark	3.2	1.2	0.0	1.3
Simpson	2.5	2.8	0.0	1.7
Southern Alabama				
Chapman	2.0	1.8	2.3	10.1
Dallas	1.7	2.8	1.9	8.0
GA Mitchell	1.8	2.3	0.8	14.0
Harrison	2.0	1.3	1.8	4.7
Secretariat LA 495	1.8	1.9	0.7	4.7

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

² Percent symptomatic plants.

TABLE 19. DISEASE RATINGS FOR TRITICALE VARIETIES IN ALABAMA, 1997-98

Brand-variety	Septoria blotch ¹	Leaf rust ¹	Barley yellow dwarf ²
Northern Alabama			
Trical 498	3.0	2.0	0.9
Central Alabama			
Trical 498	3.5	2.3	0.0
Southern Alabama			
Trical 498	3.0	3.0	0.7

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

² Percent plants affected.

TABLE 20. DISEASE RATINGS FOR BARLEY VARIETIES IN NORTHERN ALABAMA, 1997-98

Brand-variety	Septoria blotch ¹	Spot blotch ¹	Barley yellow dwarf ²
Callao	3.9	5.2	0.3
GA Luttrell	3.4	5.4	1.4
Nomini	3.1	3.8	0.2
Starling	2.8	4.4	0.2

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

² Percent plants affected.

Sources of Seed

Wheat

AR 584A-3-1, AR 494B-2-2, Jaypee
University of Arkansas
Fayetteville, Arkansas

GA Dozier, GA Stuckey, Fleming, Morey,
 FFR 518 W (formerly GA 87467),
 Roberts (formerly GA 871339)
Univ. of Georgia, Georgia Station
Griffin, Georgia

Coker (all varieties, brands, and hybrids)
Novartis Seeds, Inc.
Grifton, North Carolina

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

Jackson, Madison, Wakefield
Alabama Crop Improvement Assoc.
Auburn, Alabama

Pioneer (all varieties, brands, and hybrids)
Pioneer Hi-Bred International, Inc.
Huntsville, Alabama

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

Delta King 1551 W
Delta King Seed Company
McCrory, Arkansas

Pocahontas, VA 94-54-479,
 Roane (formerly VA 93-54-429)
Virginia Polytechnic Inst.
Blacksburg, Virginia

Oats

Ozark
University of Arkansas
Fayetteville, Arkansas

Secretariat LA 495
Terral Seed Co.
Lake Providence, Louisiana

Harrison
Alabama Farmer's Coop
Decatur, Alabama

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

Dallas
Texas A&M University
College Station, Texas

GA Mitchell
Alabama Crop Improvement Assoc.
Auburn, Alabama

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

Barley

Callao, Nomini, Starling
Virginia Polytechnic Inst.
Blacksburg, Virginia

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

Sources of Seed

Triticale

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

Rye

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

GI-87 Ryegrazer
Carl R. Gurley, Inc.
Princeton, North Carolina

RB 20-20
Red Barn Industries,
Raleigh, North Carolina

Bates, Bonel, Elbon, Maton, Oklon
Samuel Roberts Noble Foundation, Inc.
Ardmore, Oklahoma

Wren's 96
Univ. of Georgia, Georgia Station
Griffin, Georgia

Wintergrazer 70
Seed Production, Inc.
Madison, Georgia

Sawan Grazer
Sawan Seeds, Inc.
Pelham, Georgia

Appendix

CHARACTERISTICS OF SELECTED WHEAT VARIETIES

Brand-Variety	Resistance				Test weight	Mat- urity	Straw strength	Vernalization requirement
	Leaf rust	Glume blotch	Powdery mildew	Hessian fly				
AgriPro Hickory	poor	good	fair	fair	fair	medium	fair	medium
AgriPro Mason	good	fair	poor	poor	good	early	good	short
Florida 304	good	fair	fair	good	good	medium	good	medium
GA-Dozier	good	good	fair	fair	good	late	good	long
GA-Gore	poor	good	good	good	good	medium	fair	med. long
GA-Stuckey	poor	fair	good	good	fair	early	fair	very short
Jackson	poor	fair	fair	poor	good	late	fair	long
Madison	poor	fair	good	poor	fair	medium	good	med. long
Morey	good	fair	good	good	good	early	good	very short
NK Coker 9134	poor	good	poor	poor	good	late	fair	long
NK Coker 9663	good	fair	poor	fair	good	medium	good	medium
NK Coker 9835	poor	good	fair	good	good	medium	good	medium
Pioneer 2580	fair	good	good	good	fair	late	fair	long
Pioneer 2643	good	good	good	poor	good	late	good	long
Pioneer 2684	poor	good	good	good	good	early	fair	medium
Pioneer 2691	fair	fair	fair	fair	fair	early	good	very short
Roberts	poor	good	good	good	good	late	fair	med. long
Wakefield	fair	fair	fair	poor	good	late	fair	long

CHARACTERISTICS OF SELECTED OAT VARIETIES

Brand-Variety	Crown rust resistance	Cold hardiness	Maturity	Test weight	Straw strength
AgriPro Hickory	fair	fair	medium	fair	medium
AgriPro Mason	poor	good	early	good	short
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 and 1997-98 growing seasons 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 'L' since none of the current commercial varieties are resistant to this new biotype.