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1973 SMALL GRAIN VARIETY REPORT

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1973 SMALL GRAIN VARIETY REPORT

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Oat, wheat, barley, rye, and triticale varieties were tested during the 1972-73 season by the Auburn University Agricultural Experiment Station at 13 locations in the State. Tests were conducted to furnish information on the relative performance of varieties and not as an absolute measure of the yielding potential of a variety in an area of the State.

Grain yields were unusually low in most tests during the 1972-73 season. Temperature fluctuations during the winter of 1973 were more gradual than the rapid temperature drop in 1972 and resulted in little winter-kill on any varieties in 1973. However, during April temperatures dropped below freezing and reduced pollination and seed set on many early varieties. Excessive rainfall during the spring also contributed to low yields in many tests.

Since small grains are grown for both forage and grain production, two series of plots are used in the testing program. One series is managed to determine grain production only. The other series is managed to determine fall and early winter forage yield and the effect of its removal on subsequent grain production of each variety.

Table 1 shows the amount of feed produced by several varieties under the two systems of management. Average values for yield, date 1/10 headed, height, and lodging by regions for the unclipped tests are given in Table 2. Similar data for the clipped tests are presented in Table 3. Yields of tests managed for forage production only are presented in tables 4 and 5. Varietal reaction to Hessian fly is presented in Table 6. Varietal reactions to diseases are presented in Table 7. Sources of seed used in the tests are listed on the last two pages.

Variety recommendations are made for two situations: (1) grain production only, and (2) forage and grain production combined. Variety recommendations in this report are for general regions of the State. They are based on performance at several locations in each region. Recommendations are made on the basis of the last 3 years' data; however, results over a longer period of time are considered when available.

The Hessian fly, Mayetiola destructor (Say), which has not normally been a problem in Alabama, damaged certain varieties at Prattville, Auburn, and Headland this season. Entries at other locations were examined; however, no damage was observed. This insect prefers wheat but will attack rye, barley and triticale. Oats are reportedly not attacked. Samples of wheat, rye, barley, and triticale were obtained from the Wiregrass Substation, Headland, Alabama and counts of the number of pupa made (Table 6). Neither the reason for the damage occurring this past season nor the probability of the insect recurring or spreading to other areas of the State during the 1973-74 season is known; however, when choosing a variety, consideration should be given to varietal resistance to this insect. Hessian fly data were compiled by Dr. Paul M. Estes, Department of Zoology-Entomology.

1/ Research Associate, Department of Agronomy and Soils

Evaluations of disease resistance were made on entries in the 1972-73 tests. Several diseases occur on small grains, but only those that are most common and damaging in Alabama are included here. Except where noted, these reactions are averages obtained over a period of 2 to 5 years from various locations in the State. A rating of R, or resistant, means that the variety has thus far appeared unaffected or only slightly so by the particular disease. A rating of S means that the variety is susceptible to the extent that appreciable damage has occurred when conditions were favorable for disease occurrence and development. Disease data were compiled by Dr. Robert T. Gudauskas, Department of Botany and Microbiology.

SMALL GRAINS FOR FORAGE

Clipping tests were conducted to determine (1) fall and winter forage production of small grains, and (2) the effect of clipping during this period on grain yields. Data from other experiments show that fall applications of nitrogen are necessary for high forage yields but they usually do not increase grain yields. Therefore, the clipped plots received a fall application of nitrogen at planting or shortly thereafter, which the unclipped plots did not receive. These plots were clipped at intervals until late February or March 1 to simulate grazing, after which both clipped and unclipped plots were topdressed with a uniform application of nitrogen.

When fed to cattle, each pound of dry forage (consumed as pasturage) may be considered worth approximately 1 pound of grain. By converting the bushels of grain produced to pounds and adding it to the pounds of dry forage produced from clipped tests, it is evident that the greatest amount of feed was obtained from small grain that was clipped and then allowed to make grain, Table 1. Total production of feed (forage + forage equivalent of grain) does not differ greatly in the three regions of the State. Grain yields are generally higher and forage yields are lower in northern Alabama than in central and southern Alabama.

Location of the tests and staff members in charge are as follows:

NORTHERN ALABAMA

Sand Mountain Substation, Crossville - S. E. Gissendanner, Superintendent
Tennessee Valley Substation, Belle Mina - J. K. Boseck, Superintendent
Upper Coastal Plain Substation, Winfield - R. A. Moore, Superintendent

CENTRAL ALABAMA

Piedmont Substation, Camp Hill - W. A. Griffey, Superintendent
Agronomy Farm, Auburn - E. M. Evans, in charge
Plant Breeding Unit, Tallassee - J. W. Langford, Superintendent
Experiment Field, Prattville - F. T. Glaze, Superintendent
Black Belt Substation, Marion Junction - L. A. Smith, Superintendent

SOUTHERN ALABAMA

Lower Coastal Plain Substation, Camden - V. L. Brown, Superintendent
Experiment Field, Monroeville - E. L. Carden, Superintendent
Experiment Field, Brewton - E. L. Carden, Superintendent
Gulf Coast Substation, Fairhope - J. E. Barrett, Superintendent
Wiregrass Substation, Headland - J. G. Starling, Superintendent

VARIETIES RECOMMENDED FOR FORAGE AND GRAIN

(Recommendations are based on regional yield and listed in order of 3-year average total feed production; for reaction to Hessian fly and diseases, see tables 6 and 7 respectively)

NORTHERN ALABAMA

Oats	Wheat	Rye	Barley
Coker 66-22	Coker 65-20	Bonel	Colonial 2
Carolee	Ga. 1123	Wintergrazer 70	Hanover[2]
	Wakeland	McNair Vita Graze	
	Arthur	Explorer	
	Blueboy	Elbon	
	Coker 68-15[1]		

CENTRAL ALABAMA

Oats	Wheat[3]	Rye	Barley
Roanoke	Coker 68-15	ACCO 811	Barsoy
Coker 67-22	Wakeland	Wren's Abruzzi	McNair 601
Coker 242	Coker 65-20	McNair Vita Graze	Keowee
Fla. 501[2]	Ga. 1123[2]	Weser	Colonial 2[2]
Carolee[2]	Blueboy[2]	Explorer	
	Arthur[1]		

SOUTHERN ALABAMA

Oats	Wheat[3]	Rye
Fla. 501	Coker 68-15	Weser
Coker 67-22	Coker 65-20	McNair Vita Graze
	Wakeland[2]	Wren's Abruzzi
		ACCO 811

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[1] Trial basis.

[2] If present trends continue, this variety will be removed from the recommended list next year for forage and grain in the region indicated.

[3] In areas where Hessian fly damage occurred during the past season, the potential risk of planting susceptible varieties should be considered. (Table 6)

VARIETIES RECOMMENDED FOR GRAIN ONLY

(Recommendations are based on regional yield and lodging and listed in order of 3-year average yield; for reaction to Hessian fly and diseases, see tables 6 and 7 respectively)

NORTHERN ALABAMA

Oats	Wheat	Rye	Barley
Coker 66-22	Coker 65-20	Bonel	Colonial 2
Carolee	Ga. 1123	Wintergrazer 70	Hanover
	Arthur	Elbon[2/]	Keowee[1/]
	Blueboy[2/]	McNair Vita Graze[2/]	

CENTRAL ALABAMA

Oats	Wheat[3/]	Rye	Barley
Carolee	Coker 68-15	Weser	Keowee
Coker 67-22	Blueboy[2/]	ACCO 811	Barsoy
Coker 242[2/]	Arthur[1/]	McNair Vita Graze	
		Wren's Abruzzi	
		Explorer	

SOUTHERN ALABAMA

Oats	Wheat[3/]	Rye
Elan	Coker 68-15	Weser
Fla. 501[2/]	Wakeland[2/]	Wren's Abruzzi
Coker 242 [2/]	Blueboy[2/]	ACCO 811
		McNair Vita Graze

[1/] Trial basis.

[2/] If present trends continue, this variety will be removed from the recommended list next year for grain production in the region indicated

[3/] In areas where Hessian fly damage occurred during the past season, the potential risk of planting susceptible varieties should be considered. (Table 6)

Table 1. FORAGE AND GRAIN YIELD OF SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Yield of clipped plots, average						Total feed, 1971-73 av.	
	Oven dry forage					Grain	Not clipped grain only	Clipped, forage and grain
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	3-yr. 1971-73		
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
				NORTHERN ALABAMA				
Number of Tests	(3)	(6)	(9)	(12)	(16)	(9)	(9)	(9)
OATS								
Coker 242	1,771	1,602	1,393	1,407	1,419	1,120	1,589	2,513
Carolee	1,549	1,377	1,182	1,241	1,363	1,547	1,813	2,729
Coker 66-22	1,865	1,682	1,592	1,551	1,521	2,069	1,845	3,661
Coker 70-16	1,809	1,596	1,483			1,792	2,389	3,275
Windsor	1,432							
BARLEY								
McNair 601	1,732	1,354	1,331	1,432	1,445	528	976	1,859
Colonial 2	1,670	1,263	1,346	1,468	1,394	1,728	1,472	3,074
Dayton	1,441	1,187	1,161	1,295	1,253	1,056	1,168	2,217
Hanover	1,554	1,308	1,329	1,457		1,184	1,392	2,513
Barsoy	1,496	1,237	1,128			1,216	1,088	2,344
Keowee	1,314	1,125						
RYE								
Bonel	1,996	2,074	2,153	2,239	2,144	1,792	1,755	3,945
Elbon	2,066	2,155	2,151	2,267	2,240	1,325	1,419	3,476
Vita Graze	2,122	2,320	2,314	2,448	2,449	1,232	1,437	3,546
Explorer	2,163	2,101	2,211	2,436	2,431	1,307	1,531	3,518
Wintergrazer 70	2,048	2,015	2,128			1,736	1,717	3,864
Gurley's Grazer	2,007							
WHEAT								
Blueboy	2,163	1,723	1,773	1,827	1,879	1,140	1,580	2,913
Wakeland	2,003	1,753	1,738	1,772	1,827	1,400	1,740	3,138
Coker 65-20	2,099	1,932	1,990	2,012	2,032	1,500	1,880	3,490
Ga 1123	1,950	1,776	1,702	1,625	1,723	1,600	1,840	3,302
Arthur	1,439	1,347	1,322	1,304	1,208	1,660	1,820	2,982
Coker 68-15	2,036	1,828						
McNair 701	2,324	1,887						
Holley	1,723							
ABE	796							
Arthur 71	1,365							
Blueboy II	2,477							
McNair 4823	1,910							
McNair 1587	1,770							
TRITICALE								
Fas Gro 131	731							
Fas Gro 385	1,064							

Table 1. (Continued) FORAGE AND GRAIN YIELD OF SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Yield of clipped plots, average						Total feed, 1971-73 av.	
	Oven dry forage					Grain	Not clipped grain only	Clipped, forage and grain
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	3-yr. 1971-73		
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
				CENTRAL ALABAMA				
Number of Tests	(4)	(8)	(11)	(14)	(19)	(10)	(11)	(11)
OATS								
Roanoke	1,940	1,998	2,143	1,950	1,933	1,408	1,259	3,551
Coker 242	2,102	2,067	2,140	2,039	2,002	1,163	1,045	3,303
Carolee	1,579	1,509	1,738	1,654	1,683	1,387	1,376	3,125
Sumter 3	1,922	1,904	1,963	1,773	1,864	1,237	1,077	3,200
Coker 67-22	1,973	2,075	1,996	1,856	1,878	1,376	1,259	3,372
Fla. 501	1,814	1,862	1,910	1,812	1,856	1,248	1,216	3,158
Coker 70-16	2,199	2,188	2,214			1,803	1,568	4,017
Windsor	1,758							
Coker 227	1,938							
Coker 234	2,073							
BARLEY								
Keowee	1,869	1,574	1,848	1,712	1,656	912	1,104	2,760
Barsoy	1,789	1,639	1,928	1,827	1,834	1,040	912	2,968
Colonial 2	1,861	1,481	1,836	1,844	1,890	880	928	2,716
McNair 601	2,094	1,856	2,031	2,002		800	832	2,831
RYE								
Vita Graze	2,639	2,530	2,750	2,711	2,761	1,008	1,251	3,758
Explorer	2,373	2,377	2,601	2,648	2,726	1,064	1,213	3,665
Weser	2,323	2,327	2,551	2,531	2,721	1,139	1,419	3,690
Wren's Abruzzi	2,163	2,151	2,438	2,459	2,611	1,344	1,269	3,782
ACCO 811	2,364	2,278	2,525			1,269	1,307	3,794
Vita Graze N	2,395							
WHEAT								
Blueboy	2,066	2,143	2,424	2,297	2,359	860	1,040	3,284
Wakeland	2,089	2,206	2,478	2,434	2,459	1,180	1,200	3,658
Ga. 1123	1,820	1,948	2,202	2,168	2,138	1,240	1,120	3,442
Coker 68-19	1,845	1,731	2,078	2,087	2,196	760	900	2,838
Coker 68-15	2,156	2,327	2,568	2,435	2,421	1,340	1,600	3,908
Coker 65-20	2,221	2,277	2,555	2,553		1,020	1,080	3,575
Arthur	1,651	1,784						
McNair 701	2,529	2,349						
ABE	1,517							
Arthur 71	1,629							
Blueboy II	2,463							
TRITICALE								
Fas Gro 131	1,626							

Table 1. (Continued) FORAGE AND GRAIN YIELD OF SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Yield of clipped plots, average						Total feed, 1971-73 av.	
	Oven dry forage					Grain	Not clipped grain only	Clipped, forage and grain
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	3-yr. 1971-73		
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
				SOUTHERN ALABAMA				
Number of Tests	(5)	(10)	(15)	(20)	(24)	(12)	(12)	(15)
OATS								
Coker 242	1,650	1,471	1,819	1,722	1,697	1,312	1,387	3,131
Sumter 3	1,762	1,590	1,969	1,963	1,933	1,312	1,141	3,281
Coker 67-22	1,769	1,666	1,920	1,931	1,952	1,685	1,387	3,605
Fla. 501	1,842	1,710	1,947	1,868	1,839	1,707	1,387	3,654
Elan	1,461	1,420	1,679			1,707	1,643	3,386
Windsor	1,151							
Coker 227	1,323							
Coker 234	1,738							
Pennington 5-11	1,295							
Coker 72-25	1,752							
Coker 72-26	1,660							
BARLEY								
Fla. 102	1,752	1,736	2,009	1,948		720*	624*	2,729*
Fla. X65-202-13	1,797	1,672						
RYE								
Vita Graze	2,150	1,859	2,277	2,446	2,529	877	803	3,154
Weser	2,111	1,832	2,280	2,417	2,527	1,064	952	3,344
ACCO 811	2,105	1,846	2,197	2,445	2,496	915	859	3,112
Wren's Abruzzi	1,927	1,675	2,094	2,347	2,454	1,027	915	3,121
Vita Graze N	2,130							
Gurley's Grazer 2,000	2,153							
WHEAT								
Blueboy	1,662	1,354	1,722	1,707	1,763	840	971	2,562
Wakeland	1,813	1,533	1,868	1,889	1,896	1,120	1,008	2,988
Coker 68-15	1,886	1,677	2,023	1,917	1,931	1,027	1,288	3,050
Coker 65-20	1,906	1,589	2,101	2,028	2,030	980	820	3,081
McNair 701	1,782	1,526						
ABE	982							
Blueboy II	1,893							
Pennington 6-23	1,526							
Fla.X63113319l0	1,531							
Coker 72-5	1,856							
McNair 1813	1,690							
TRITICALE								
Fas Gro 131	1,176							
Fas Gro 385	1,360							

* 2 yr. data

Table 2. GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Regional average yield per acre					Other characteristics 3-Year average		
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				NORTHERN ALABAMA				
Number of Tests	(3)	(6)	(9)	(12)	(15)	(9)	(9)	(9)
OATS								
Coker 242	26	23	49	59	70	5	34	4/25
Carolee	31	38	56	68	78	9	34	4/25
Coker 66-22	25	38	57	61	71	8	36	4/22
Coker 70-16	36	54	74			6	35	4/25
Windsor	27							
BARLEY								
McNair 601	4	4	20	25	34	4	25	4/8
Colonial 2	26	21	30	33	37	13	27	4/17
Dayton	17	14	24	31	34	5	28	4/9
Hanover	20	18	29	36		10	25	4/12
Barsoy	9	15	22			1	27	4/6
Keowee	28	26						
RYE								
Bonel	10	23	31	33	36	10	57	4/3
Elbon	3	17	25	30	34	16	54	4/2
Vita Graze	5	17	25	29	32	13	53	4/3
Explorer	8	19	27	29	31	14	52	4/2
Wintergrazer 70	11	25	30			14	56	4/2
Gurley's Grazer	7							
WHEAT								
Blueboy	16	19	26	32	37	2	34	4/16
Wakeland	16	20	29	34	36	18	36	4/15
Coker 65-20	18	25	31	36	40	11	37	4/15
Ga. 1123	19	24	30	36	39	4	39	4/16
Arthur	21	26	30	34	38	5	33	4/17
Coker 68-15	11	21						
McNair 701	7	14						
Holley	12							
ABE	16							
Arthur 71	17							
Blueboy II	18							
McNair 4823	20							
McNair 1587	16							
TRITICALE								
Fas Gro 131	39							
Fas Gro 385	30							

Table 2. (Continued) GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Regional average yield per acre					Other characteristics 3-Year average		
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				CENTRAL ALABAMA				
Number of Tests	(4)	(8)	(11)	(15)	(19)	(11)	(11)	(11)
OATS								
Roanoke	36	30	39	41	46	32	46	4/20
Coker 242	16	21	32	38	44	25	42	4/18
Carolee	31	30	43	45	53	38	38	4/19
Sumter 3	21	19	33	36	44	36	38	4/16
Coker 67-22	29	25	39	43	51	18	36	4/15
Fla. 501	23	30	38	41	46	29	36	4/12
Coker 70-16	26	26	49			29	38	4/20
Windsor	21							
Coker 227	37							
Coker 234	26							
BARLEY								
Keowee	7	12	23	25	32	2	28	4/6
Barsoy	12	13	19	24	32	7	26	3/24
Colonial 2	10	13	19	20	24	11	29	4/12
McNair 601	7	12	17	21		6	29	4/2
RYE								
Vita Graze	5	18	22	28	30	61	55	3/19
Explorer	6	19	21	26	28	61	52	3/20
Weser	9	24	25	27	29	54	53	3/20
Wren's Abruzzi	6	19	22	26	29	60	53	3/19
ACCO 811	6	20	23			50	53	3/18
Vita Graze N	6							
WHEAT								
Blueboy	9	14	17	20	23	4	36	4/9
Wakeland	8	17	20	20	21	36	38	4/7
Ga. 1123	10	15	18	19	23	9	41	4/8
Coker 68-19	7	11	15	18	21	1	31	4/10
Coker 68-15	8	21	26	26	29	2	37	4/6
Coker 65-20	8	13	18	20		24	38	4/6
Arthur	9	21						
McNair 701	8	15						
ABE	17							
Arthur 71	12							
Blueboy II	10							
TRITICALE								
Fas Gro 131	23							

Table 2 (Continued) GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Regional average yield per acre					Other characteristics 3-Year average		
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	Lodging	Height	1/10 headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				SOUTHERN ALABAMA				
Number of Tests	(5)	(10)	(12)	(16)	(20)	(12)	(12)	(12)
OATS								
Coker 242	41	31	43	46	51	18	43	4/11
Sumter 3	48	25	35	36	42	47	38	4/7
Coker 67-22	44	29	43	44	51	29	39	4/4
Fla. 501	28	25	43	45	50	16	39	4/3
Elan	54	38	51			10	36	4/5
Windsor	43							
Coker 227	44							
Coker 234	46							
Pennington 5-11	39							
Coker 72-25	49							
Coker 72-26	38							
BARLEY								
Fla. 102	21	13				10	28	3/28
Fla. X65-202-13	20	13						
RYE								
Vita Graze	6	11	14	17	21	34	51	3/13
Weser	7	16	17	19	22	27	51	3/12
ACCO 811	7	14	15	19	22	32	51	3/13
Wren's Abruzzi	8	14	16	19	22	31	51	3/13
Vita Graze N	6							
Gurley's Grazer 2,000	8							
WHEAT								
Blueboy	17	12	17	17	23	8	36	4/2
Wakeland	15	14	18	19	23	21	36	3/30
Coker 68-15	18	17	23	24	28	4	36	4/5
Coker 65-20	14	11	14	16	19	20	37	3/27
ABE	19							
Blueboy II	16							
McNair 701	14							
Pennington 6-23	11							
Fla. X63-113-319-10	4							
Coker 72-5	15							
McNair 1813	11							
TRITICALE								
Fas Gro 131	24							
Fas Gro 385	21							

Table 3. GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Regional average yield per acre					Other Characteristics 3 Year average		
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				NORTHERN ALABAMA				
Number of Tests	(3)	(6)	(9)	(12)	(15)	(9)	(9)	(9)
OATS								
Coker 242	24	17	35	46	57	5	31	4/26
Carolee	23	27	48	58	70	9	32	4/27
Coker 66-22	36	45	64	64	75	7	34	4/24
Coker 70-16	36	45	56			7	33	4/27
Windsor	30							
BARLEY								
McNair 601	3	4	11	20	27	0	23	4/14
Colonial 2	33	25	36	39	43	15	27	4/19
Dayton	18	17	22	28	37	5	28	4/21
Hanover	15	15	24	32		4	24	4/18
Barsoy	9	14	25			3	26	4/6
Keowee	25	22						
RYE								
Bonel	14	23	32	31	33	8	53	4/18
Elbon	3	15	23	25	28	15	51	4/17
Vita Graze	5	14	22	23	27	13	51	4/17
Explorer	9	16	23	24	26	12	50	4/16
Wintergrazer 70	15	26	31			11	53	4/16
Gurley's Grazer	8							
WHEAT								
Blueboy	12	15	19	25	28	1	32	4/23
Wakeland	15	21	23	26	29	7	35	4/22
Coker 65-20	15	22	25	30	33	5	35	4/22
Ga. 1123	20	25	26	31	34	2	37	4/22
Coker 68-15	11	22						
McNair 701	9	15						
Holley	18							
ABE	13							
Arthur 71	15							
Blueboy II	13							
McNair 4823	17							
McNair 1587	16							
TRITICALE								
Fas Gro 131	45							
Fas Gro 385	34							

Table 3 (Continued) GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Regional average yield per acre					Other characteristics 3 Year average		
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				CENTRAL ALABAMA				
Number of Tests	(4)	(8)	(10)	(13)	(17)	(10)	(10)	(10)
OATS								
Roanoke	44	35	44	44	47	17	43	4/24
Coker 242	34	23	36	41	46	14	37	4/22
Carolee	39	31	43	44	50	16	34	4/23
Sumter 3	36	27	38	41	44	19	34	4/20
Coker 67-22	45	31	43	47	48	19	34	4/20
Fla. 501	38	28	39	44	46	21	33	4/19
Coker 70-16	47	37	56			16	34	4/22
Windsor	25							
Coker 227	52							
Coker 234	46							
BARLEY								
Keowee	5	8	19	25	31	7	26	4/11
Barsoy	13	13	21	28	33	10	24	3/30
Colonial 2	6	8	18	20	26	7	26	4/13
McNair 601	6	7	16	22		8	27	4/11
RYE								
Vita Graze	8	14	18	22	22	30	49	4/1
Explorer	10	16	19	21	20	30	50	4/1
Weser	12	19	20	24	23	31	49	4/1
Wren's Abruzzi	12	19	24	26	26	29	50	4/1
ACCO 811	10	19	22			38	49	3/29
WHEAT								
Blueboy	8	9	14	18	18	0	33	4/16
Wakeland	16	17	19	21	20	2	37	4/15
Ga. 1123	16	17	20	22	22	0	38	4/14
Coker 68-19	9	8	12	16	17	0	29	4/17
Coker 68-15	7	15	22	23	24	1	32	4/12
Coker 65-20	11	12	19	21		0	35	4/13
Arthur	26	28						
McNair 701	9	11						
ABE	27							
Arthur 71	23							
Blueboy II	7							
TRITICALE								
Fas Gro 131	24							

Table 3. (Continued) GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1969-73

Variety	Regional average yield per acre					Other characteristics		
	1-yr. 1973	2-yr. 1972-73	3-yr. 1971-73	4-yr. 1970-73	5-yr. 1969-73	3-Year average Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				SOUTHERN ALABAMA				
Number of Tests	(5)	(10)	(12)	(16)	(20)	(12)	(12)	(12)
OATS								
Coker 242	46	26	41	44	48	14	39	4/17
Sumter 3	48	25	41	41	47	43	34	4/16
Coker 67-22	58	35	52	53	54	18	36	4/14
Fla. 501	59	37	53	54	57	11	35	4/10
Elan	60	35	53			14	33	4/15
Windsor	42							
Coker 227	69							
Coker 234	65							
Pennington 5-11	62							
Coker 72-25	72							
Coker 72-26	69							
BARLEY								
Fla. 102	20	15				5	27	4/2
Fla. X65-202-13	26	20						
RYE								
Vita Graze	5	13	15	15	17	28	49	3/22
Weser	7	17	19	18	18	17	49	3/22
ACCO 811	7	16	16	16	17	26	50	3/22
Wren's Abruzzi	6	15	18	18	19	21	50	3/22
Vita Graze N	4							
Gurley's Grazer 2,000	6							
WHEAT								
Blueboy	15	10	15	15	18	3	33	4/17
Wakeland	16	14	20	19	20	6	36	4/15
Coker 68-15	13	11	18	20	23	6	31	4/17
Coker 65-20	14	11	16	17	20	10	35	4/13
McNair 701	10	10						
ABE	23							
Blueboy II	15							
Pennington 6-23	13							
Fla. X63-113-319-10	9							
Coker 72-5	12							
McNair 1813	7							
TRITICALE								
Fas Gro 131	32							
Fas Gro 385	23							

Table 4. FORAGE YIELD OF SMALL GRAIN VARIETIES TESTED - PRATTVILLE, 1971-73

Variety	Oven dry forage yield - pounds per acre							
	Clipping date - 1972-73					Total	2-yr. Av.	3-yr. Av.
	12-28-72	2-16-73	3-12-73	4-9-73	5-22-73			
OATS								
Coker 70-16	2,933	284	692	1,799	--	5,707	4,928	6,270
Roanoke	2,681	276	546	1,890	--	5,392	4,750	5,799
Coker 242	2,941	197	518	1,121	--	4,777	4,314	5,265
Coker 67-22	2,944	161	381	1,062	--	4,549	4,227	4,955
Fla. 501	2,797	243	478	1,560	--	5,078	4,648	5,288
Coker 227	2,887	357	699	2,296	--	6,239		
Coker 234	2,877	284	581	1,925	--	5,667		
Pennington 5-11	2,731	580	675	1,456	--	5,442		
Ga. 7199	2,691	108	336	1,381	--	4,516		
BARLEY								
Keowee	2,336	580	817	708	--	4,441	3,443	4,541
McNair 601	2,091	1,707	1,006	360	--	5,164	4,215	4,896
Colonial 2	1,744	766	1,050	973	--	4,533	3,713	4,616
RYE								
Vita Graze	1,926	929	991	895	--	4,741	4,309	4,994
Explorer	2,365	833	1,004	940	--	5,142	4,704	5,313
Weser	2,079	936	1,189	860	--	5,065	4,690	5,216
Wren's Abruzzi	2,416	647	1,060	952	--	5,076	4,626	5,240
Wintergrazer 70	2,089	757	1,058	1,179	--	5,082	4,949	
Wheeler	2,140	591	937	2,048	--	5,716	4,243	
Penngrazer W	1,844	1,035	969	848	--	4,696	4,706	
Vita Graze N	1,991	906	1,108	976	--	4,982		
Gurley's Grazer 2,000	2,026	724	912	784	--	4,447		
Gurley's GI75	2,171	762	1,049	1,051	--	5,033		
Excel 101	2,257	700	1,057	973	--	4,987		
Excel 102	1,982	713	1,158	1,020	--	4,873		
Excel 103	2,193	801	1,222	1,037	--	5,252		
WHEAT								
Coker 68-15	2,283	573	917	759	--	4,531	4,620	5,337
Coker 65-20	2,415	733	779	466	--	4,393	4,410	5,013
DeKalb 9190	2,428	688	974	1,540	--	5,630		
DeKalb 9090	2,229	575	803	1,477	877	5,961		
TRITICALE								
Fas Gro Midblend	2,405	255	920	2,010	--	5,590		

Table 5. FORAGE YIELD OF SMALL GRAIN VARIETIES TESTED - TALLASSEE, 1971-73

Variety	Oven dry forage yield-pounds per acre Clipping date - 1972-73 11-10-72	12-27-72	2-20-73	3-9-73	4-6-73	5-10-73	Total	2-yr. Av.	3-yr. Av.
OATS									
Coker 70-16	1,031	911	685	742	1,481	1,114	5,963	5,070	5,914
Roanoke	1,080	1,235	752	648	1,094	1,948	6,756	5,147	6,147
Coker 242	1,014	1,205	939	616	506	523	4,803	3,709	3,479
Coker 67-22	998	645	678	587	561	502	3,971	3,421	3,273
Fla. 501	1,125	881	865	497	490	354	4,212	3,385	3,431
Coker 227	951	888	906	811	1,086	1,178	5,821		
Coker 234	1,064	996	888	580	745	1,155	5,428		
Pennington 5-11	810	850	677	572	691	538	4,138		
Ga. 7199	1,340	809	705	522	523	855	4,754		
BARLEY									
Keowee	836	760	550	828	432	379	3,785	3,517	4,731
McNair 601	1,134	973	1,166	859	165	342	4,639	3,574	4,305
Colonial 2	750	845	656	568	520	340	3,678	3,355	4,973
RYE									
Vita Graze	1,205	1,205	1,327	565	331	351	4,984	5,380	5,755
Explorer	1,363	1,055	1,208	826	356	498	5,306	5,586	5,998
Weser	1,103	994	1,097	613	456	659	4,921	5,378	5,790
Wren's Abruzzi	1,231	992	1,100	611	368	574	4,875	5,452	5,991
Wintergrazer 70	1,128	988	1,174	879	546	1,040	5,765	6,168	
Wheeler	1,157	981	753	679	878	903	5,351	6,002	
Penngrazer W	1,139	973	1,108	475	365	339	4,398		
Vita Graze N	1,075	987	1,248	730	432	576	5,048		
Gurley's Grazer 2,000	1,401	1,007	1,066	603	295	451	4,823		
Gurley's GI 75	1,272	1,060	1,285	753	386	604	5,360		
Excel 101	1,241	922	992	586	311	166	4,218		
Excel 102	1,023	1,062	1,116	625	339	214	4,379		
Excel 103	1,540	1,143	1,286	777	357	442	5,544		
WHEAT									
Coker 68-15	879	1,164	991	978	759	333	5,103	5,311	6,050
DeKalb 9090	1,084	942	557	757	812	1,849	6,001	5,764	
DeKalb 9190	1,104	1,023	690	899	920	1,927	6,564	6,280	
Coker 65-20	935	1,118	1,155	603	359	280	4,450	4,519	
TRITICALE									
Fas Gro Midblend	967	960	566	788	913	970	5,163		

Table 6. REACTION TO HESSIAN FLY, WIREGRASS SUBSTATION - 1973

Variety	Pupa per 50 stems	Stems infested
	No.	Pct.
WHEAT		
Coker 68-15	542	94
Blueboy II	450	76
Wakeland	266	62
Blueboy	241	80
Pennington 6-23	105	70
Coker 72-5	38	28
Coker 65-20	31	22
McNair 701	7	8
ABE	1	2
Fla. X-63-113-319-103	0	0
McNair 1813	0	0
TRITICALE		
Fas Gro 131	77	42
Fas Gro 385	0	0
BARLEY		
Fla. 102	0	0
Fla. X65-202-13	2	2
RYE		
Wren's Abruzzi	0	0
Gurley's Grazer 2000	0	0
Vita Graze N	0	0
ACCO 811	0	0
Weser	0	0
Vita Graze	0	0

Table 7. REACTION OF OAT VARIETIES TO SOME DISEASES IN ALABAMA

Variety	Crown rust	Helminthosporium leaf blotch	Septoria leaf blotch	Loose smut
NORTHERN ALABAMA				
Carolee	S	S	S	R
Coker 66-22	R	S	R	R
Coker 70-16	S	S	R	R
Coker 242	R	S	R	R
Windsor 1/	S	S	S	R
CENTRAL ALABAMA				
Carolee	S	S	S	R
Coker 67-22	R	S	S	R
Coker 70-16	S	S	R	R
Coker 227 1/	R	S	R	R
Coker 234 1/	R	S	S	R
Coker 242	R	S	R	R
Fla. 501	R	S	R	R
Roanoke	S	S	S	R
Sumter 3	R	S	S	R
Windsor 1/	R	R	S	R
SOUTHERN ALABAMA				
Carolee	S	S	S	R
Coker 67-22	S	S	R	R
Coker 72-25 1/	R	S	R	R
Coker 72-26 1/	R	S	R	R
Coker 227 1/	R	S	R	R
Coker 234 1/	R	S	R	R
Coker 242	S	S	R	R
Elan	S	S	R	R
Fla. 501	S	S	R	R
Pennington 5-11 1/	S	S	R	R
Sumter 3	S	S	S	R
Windsor 1/	S	S	R	R

1/ 1-year data

Table 7. (Continued) REACTION OF WHEAT VARIETIES TO SOME DISEASES IN ALABAMA

Variety	Powdery mildew	Leaf rust	Septoria leaf blotch	Loose smut
NORTHERN ALABAMA				
ABE 1/	R	R	S	R
Arthur	R	R	S	R
Arthur 71 1/	R	R	S	R
Blueboy	S	S	S	R
Blueboy II 1/	S	R	R	R
Coker 65-20	S	S	S	R
Coker 68-15	S	R	S	R
Coker 68-19	R	R	R	R
Ga. 1123	S	S	S	R
Holley 1/	R	R	S	R
McNair 701	R	R	S	R
McNair 1587 1/	R	S	S	R
McNair 4823 1/	S	R	S	R
Wakeland	S	R	S	S
CENTRAL ALABAMA				
ABE 1/	R	R	S	R
Arthur	S	R	S	R
Arthur 71 1/	R	R	R	R
Blueboy	S	S	S	R
Blueboy II 1/	S	R	S	R
Coker 65-20	S	S	S	R
Coker 68-15	S	R	S	R
Coker 68-19	R	S	S	R
Ga. 1123	S	S	S	R
McNair 701	S	R	S	R
Wakeland	S	S	S	S
SOUTHERN ALABAMA				
ABE 1/	R	R	R	R
Blueboy	S	S	S	R
Blueboy II 1/	S	R	S	R
Coker 65-20	S	S	S	R
Coker 68-15	S	R	R	R
Coker 72-5 1/	S	S	S	R
Fla. X63-113-319-10 1/	R	R	S	R
McNair 701	R	S	S	R
McNair 1813 1/	R	S	S	R
Pennington 6-23 1/	R	R	S	R
Wakeland	S	S	S	S

1/ 1-year data

Table 7. (Continued) REACTION OF BARLEY, RYE, AND TRITICALE VARIETIES TO SOME DISEASES IN ALABAMA

Variety	Powdery mildew	Spot blotch	Net blotch	Leaf rust	Scald	Septoria leaf blotch
BARLEY						
Barsoy	R	S	S	S	R	
Colonial 2	R	S	S	S	S	
Dayton	R	S	S	S	S	
Fla. 102	R	S	R	S	R	
Fla. X65-202-13	R	S	R	R	R	
Hanover	R	S	S	R	R	
Keowee	R	S	R	S	R	
McNair 601	R	S	S	R	R	
RYE						
ACCO 811	R			S	R	R
Bonel	R			S	R	S
Elbon	S			S	R	S
Explorer	S			S	R	R
Gurley's Grazer	R			S	R	S
Gurley's Grazer 2000 1/	R			R	R	S
Vita Graze	R			S	R	S
Vita Graze N 1/	R			S	R	R
Weser	R			S	R	S
Wintergrazer 70	R			S	R	S
Wren's Abruzzi	R			S	R	S
TRITICALE						
Fas Gro 131 1/	R			R		S
Fas Gro 385 1/	R			R		S

1/ 1-year data

SOURCES OF SEED

OATS

Carolee	North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina
Coker 242	Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 66-22	Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 67-22	Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 70-16	Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 227	Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 234	Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 72-25	Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 72-26	Coker Pedigreed Seed Company, Hartsville, South Carolina
Elan	Coastal Plain Experiment Station, Tifton, Georgia
Fla. 501	North Florida Experiment Station, Quincy, Florida
Pennington 5-11	Pennington Grain and Seed, Inc., Madison, Georgia
Ga. 7199	Coastal Plain Experiment Station, Tifton, Georgia
Roanoke	North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina
Sumter 3	Department of Agronomy, Clemson University, Clemson, South Carolina
Windsor	Department of Agronomy, Virginia Polytechnic Institute, Blacksburg, Virginia

BARLEY

Barsoy	Department of Agronomy, University of Kentucky, Lexington, Kentucky
Colonial 2	North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina
Dayton	Department of Agronomy, Ohio State University, Columbus, Ohio
Florida 102	North Florida Experiment Station, Quincy, Florida
Fla. X65-202-13	North Florida Experiment Station, Quincy, Florida
Hanover	Department of Agronomy, Virginia Polytechnic Institute Blacksburg, Virginia
Keowee	Department of Agronomy, Clemson University, Clemson, South Carolina
McNair 601	McNair Seed Company, Laurinburg, North Carolina

RYE

ACCO 811	Acco Seed, Plainview, Texas
Bonel	Noble Foundation, Inc., Ardmore, Oklahoma
Elbon	Foundation Seed Stocks Farm, Thorsby, Alabama
Excel 101	Excel Seed Company; Plainview, Texas
Excel 102	Excel Seed Company; Plainview, Texas
Excel 103	Excel Seed Company; Plainview, Texas
Explorer	Foundation Seed Stocks Farm, Thorsby, Alabama
Gurley's GI 75	Gurley Milling Co., Selma, North Carolina
Gurley's Grazer	Gurley Milling Co., Selma, North Carolina
Gurley's Grazer 2000	Gurley Milling Co., Selma, North Carolina
Penngrazer W	Pennington Grain and Seed, Inc., Madison, Georgia
Vita Graze	McNair Seed Company, Laurinburg, North Carolina
Vita Graze N	McNair Seed Company, Laurinburg, North Carolina
Weser	Foundation Seeds, Inc., Athens, Georgia
Wheeler	Michigan State University, East Lansing, Michigan
Wintergrazer 70	Pennington Grain and Seed, Inc., Madison, Georgia
Wren's Abruzzi	Foundation Seed Stocks Farm, Thorsby, Alabama

WHEAT

ABE----------Department of Agronomy, Purdue University, Lafayette, Indiana
Arthur----------Department of Agronomy, Purdue University, Lafayette, Indiana
Arthur 71----------Department of Agronomy, Purdue University, Lafayette, Indiana
Blueboy----------North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina
Blueboy II---------North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina
Coker 65-20--------Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 68-15--------Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 68-19--------Coker Pedigreed Seed Company, Hartsville, South Carolina
Coker 72-5---------Coker Pedigreed Seed Company, Hartsville, South Carolina
Dekalb 9090--------Dekalb Ag Research, Wichita, Kansas
Dekalb 9190--------Dekalb Ag Research, Wichita, Kansas
Fla. X63-113-319-103North Florida Experiment Station, Quincy, Florida
Ga. 1123-----------Foundation Seed Stocks Farm, Thorsby, Alabama
Holley----------Department of Agronomy, Georgia Station, Experiment, Georgia
McNair 701---------McNair Seed Company, Laurinburg, North Carolina
McNair 1587--------McNair Seed Company, Laurinburg, North Carolina
McNair 1813--------McNair Seed Company, Laurinburg, North Carolina
McNair 4823--------McNair Seed Company, Laurinburg, North Carolina
Pennington 6-23----Pennington Grain and Seed, Inc., Madison, Georgia
Wakeland-----------Foundation Seed Stocks Farm, Thorsby, Alabama

TRITICALE

Fas Gro 131--------Farm Management Services, Inc., Wichita, Kansas
Fas Gro 385--------Farm Management Services, Inc., Wichita, Kansas
Fas Gro Midblend---Farm Management Services, Inc., Wichita, Kansas