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1974 Small Grain Variety Report

DEPARTMENT OF AGRONOMY & SOILS
AGRICULTURAL EXPERIMENT STATION
R. DENNIS ROUSE, DIRECTOR

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1974 SMALL GRAIN VARIETY REPORT

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Oat, wheat, barley, and rye varieties were tested during the 1973-74 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. The low grain yields this season were primarily due to the combination of a mild winter and diseases. This is the third consecutive season that yields of small grain have been low in the tests. Although several diseases were damaging, the most severe were leaf rust and stem rust of wheat, crown rust of oats, and Septoria glume blotch of wheat. Septoria glume blotch continues to be the most consistently damaging disease on wheat in Alabama. Hessian fly was observed in several tests but was not as damaging as during the 1972-73 season.

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. Plots managed for forage and grain production were planted in late-September or early-October. Plots managed for grain production only were planted in late-October or early-November.

Tests for total forage production were conducted at Prattville and Tallassee. These plots receive more nitrogen since they are clipped for forage until there is no regrowth in the spring. Fertility data are listed for these tests in tables 4 and 5.

The experimental design was a split plot with species as main-plots and varieties as sub-plots. Plots were three rows wide, either 18 or 20 feet long, and replicated three times. Recommended cultural practices were followed and were the same for all entries within a management series at a location.

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 reactions to diseases are presented in Table 6. 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. Varieties which have a good record for 2 years are recommended on a trial basis.

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Evaluations of disease resistance were made on entries in the 1973-74 tests. Several diseases occur in 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 application of nitrogen is necessary for high forage yields but usually does 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.

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

NORTHERN ALABAMA

Sand Mountain Substation, Crossville - J. T. Eason, 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, Talladega - 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 diseases, see Table 6)

NORTHERN ALABAMA

<u>Oats</u>	<u>Wheat</u>	<u>Rye</u>	<u>Barley</u>
Coker 66-22	Ga. 1123	Wintergrazer 70	Keowee
Carolee	Coker 68-15	Bonel	Barsoy
	Wakeland	McNair Vita Graze	
	Arthur	Explorer	
	Coker 65-20	Elbon	

CENTRAL ALABAMA

<u>Oats</u>	<u>Wheat</u>	<u>Rye</u>	<u>Barley</u>
Roanoke	Arthur	Wren's Abruzzi	Barsoy
Coker 67-22	Coker 68-15	Weser	McNair 601
Coker 242	Wakeland	Explorer	Keowee ^{2/}
Fla. 501	Coker 65-20	ACCO 811	
Coker 227 ^{1/}		McNair Vita Graze	

SOUTHERN ALABAMA

<u>Oats</u>	<u>Wheat</u>	<u>Rye</u>
Fla. 501	Wakeland	Weser
Coker 67-22	Coker 68-15	Wren's Abruzzi
Coker 227 ^{1/}	Coker 65-20	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 forage and grain in the region indicated.

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 diseases, see Table 6).

NORTHERN ALABAMA

<u>Oats</u>	<u>Wheat</u>	<u>Rye</u>	<u>Barley</u>
Carolee Coker 66-22	Arthur Coker 65-20 Ga. 1123 Coker 68-15	Wintergrazer 70 Bonal	Keowee Hanover ^{2/}

CENTRAL ALABAMA

<u>Oats</u>	<u>Wheat</u>	<u>Rye</u>
Fla. 501	Arthur	Weser
Carolee	Coker 68-15	Explorer
Coker 67-22	Abe ^{1/}	Wren's Abruzzi
Coker 227 ^{1/}	Arthur 71 ^{1/}	ACCO 811
		M-Nair Vita Graze ^{2/}

SOUTHERN ALABAMA

<u>Oats</u>	<u>Wheat</u>	<u>Rye</u>
Elan Coker 227 ^{1/}	Coker 68 15 Wakeland ^{2/} Abe ^{1/}	Weser Wren's Abruzzi ACCO 811 ^{2/} McNair Vita Graze ^{2/}

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.

Table 1. FORAGE AND GRAIN YIELD OF SMALL GRAIN VARIETIES TESTED, 1970-74

Variety	Yield of clipped plots, average						Total feed, 1972-74 av.	
	Oven dry forage			Grain			Not clipped	Clipped, forage and grain
	1-yr. 1974	2-yr. 1973-74	3-yr. 1972-74	4-yr. 1971-74	5-yr. 1970-74	3-yr. 1972-74	grain only	grain
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
NORTHERN ALABAMA								
Number of tests	(3)	(6)	(9)	(12)	(15)	(9)	(9)	(9)
OATS								
Carolee	1,549	1,549	1,434	1,274	1,303	364	1,408	2,298
Coker 66-22	1,508	1,687	1,624	1,571	1,542	1,376	1,376	3,000
Windsor	1,018	1,225						
Coker 227	1,402							
Cumberland	992							
Coker 73-14	1,603							
BARLEY								
Hanover	1,401	1,478	1,339	1,347	1,446	656	1,088	1,995
Barsoy	1,770	1,633	1,414	1,289		784	1,072	2,198
Keowee	1,404	1,359	1,218			1,008	1,312	2,226
Volbar	1,202							
Knob	1,432							
RYE								
Bonel	1,857	1,927	2,002	2,079	2,163	1,251	1,269	3,253
Elbon	1,801	1,934	2,037	2,063	2,174	728	896	2,765
Vita Graze	1,887	2,005	2,175	2,207	2,336	803	971	2,978
Explorer	1,925	2,044	2,042	2,140	2,333	915	1,064	2,957
Wintergrazer 70	1,869	1,959	1,966	2,063		1,325	1,307	3,291
Gurley's Grazer	1,677	1,842						
ACCO 811	2,074							
Vita Graze N	2,124							
Cougar	1,157							
N.F. 331	2,145							
WHEAT								
Ga. 1123	1,613	1,782	1,721	1,680	1,622	1,280	1,300	3,001
Wakeland	1,902	1,953	1,802	1,779	1,798	1,040	1,280	2,842
Coker 65-20	1,771	1,935	1,545	1,685	1,964	960	1,380	2,505
Arthur	1,346	1,393	1,346	1,323	1,312	1,280	1,380	2,626
McNair 701	1,759	2,042	1,844			700	920	2,544
Coker 68-15	1,707	1,872	1,733			1,080	1,260	2,868
Holley	1,467	1,595						
Abe	1,190	993						
Arthur 71	1,297	1,331						
Blueboy II	2,067	2,272						
McNair 4823	1,575	1,743						
McNair 1587	1,945	1,858						

Table 1. (Continued) FORAGE AND GRAIN YIELD OF SMALL GRAIN VARIETIES TESTED,
1970-74

Variety	Yield of clipped plots, average					Total feed, 1972-74 av.		
	Oven dry forage					Grain 3-yr. 1972-74	Not clipped grain only	Clipped forage and grain
	1-yr. 1974	2-yr. 1973-74	3-yr. 1972-74	4-yr. 1971-74	5-yr. 1970-74			
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
	CENTRAL ALABAMA							
Number of tests	(4)	(8)	(12)	(15)	(18)	(12)	(12)	(12)
OATS								
Roanoke	2,109	2,025	2,035	2,135	1,982	1,045	1,109	3,080
Coker 242	2,160	2,131	2,093	2,145	2,063	661	885	2,759
Carolee	1,812	1,696	1,610	1,757	1,686	981	1,134	2,591
Coker 67-22	1,868	1,921	2,006	1,964	1,858	1,035	1,120	3,041
Fla. 501	2,010	1,912	1,911	1,935	1,851	843	1,216	2,754
Windsor	1,754	1,756						
Coker 227	1,852	1,895						
Elan	1,881							
Coker 73-14	1,853							
BARLEY								
Keowee	1,586	1,728	1,578	1,783	1,687	400	672	1,978
McNair 601	2,150	2,122	1,954	2,061	2,031	288	624	2,242
Barsoy	2,091	1,940	1,790	1,969	1,880	704	848	2,494
Hanover	1,882							
RYE								
Vita Graze	2,126	2,383	2,395	2,594	2,594	784	989	3,179
Explorer	2,324	2,349	2,359	2,532	2,583	915	1,176	3,274
Weser	2,123	2,223	2,259	2,444	2,450	1,027	1,307	3,286
Wren's Aburzzi	2,170	2,167	2,157	2,371	2,401	1,176	1,157	3,333
ACCO 811	2,182	2,273	2,246	2,439		989	1,139	3,235
Vita Graze N	2,746	2,571						
Gurley's Grazer	2,667							
	2000							
WHEAT								
Coker 65-20	2,334	2,277	2,296	2,499	2,509	720	840	3,016
Wakeland	2,310	2,200	2,270	2,436	2,409	860	1,040	3,130
Coker 68-15	2,057	2,107	2,237	2,440	2,360	940	1,420	3,177
Ga. 1123	1,859	1,840	1,913	2,117	2,106	920	1,080	2,838
McNair 701	2,168	2,349	2,288			540	920	2,828
Arthur	1,570	1,611	1,713			1,560	1,480	3,273
Abe	1,318	1,418						
Arthur 71	1,333	1,481						
Blueboy II	2,277	2,370						
Coker 73-18	1,177							
Holley	1,885							
McNair 4823	1,653							

Table 1. (Continued) FORAGE AND GRAIN YIELD OF SMALL GRAIN VARIETIES TESTED,
1970-74

Variety	Yield of clipped plots average					Not Clipped, grain and forage		
	1-yr. 1974		Oven dry forage 3-yr. 1972-74		5-yr. 1971-74	Grain 3-yr. 1972-74	clipped grain only	forage grain
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
SOUTHERN ALABAMA								
Number of tests	(5)	(10)	(15)	(20)	(25)	(15)	(15)	(15)
OATS								
Coker 242	2,145	1,898	1,696	1,901	1,806	693	875	2,389
Coker 67-22	1,903	1,836	1,745	1,916	1,925	907	832	2,652
Fla. 501	1,835	1,864	1,768	1,931	1,871	981	757	2,749
Elan	1,777	1,619	1,539	1,704		875	1,134	2,414
Windsor	1,776	1,464						
Coker 227	1,983	1,653						
Coker 73-31	2,094							
BARLEY								
Fla. 102	2,059	1,906	1,844	2,022	1,970	560	688	2,404
Volbar	1,527							
RYE								
Vita Graze	2,416	2,283	2,045	2,312	2,440	597	597	2,642
Weser	2,467	2,289	2,044	2,327	2,427	896	896	2,940
ACCO 811	2,310	2,208	2,001	2,226	2,418	728	672	2,729
Wren's Abruzzi	2,404	2,166	1,918	2,172	2,358	359	821	2,777
Vita Graze N	2,392	2,261						
Gurley's Grazer	2,350	2,252						
	2000							
WHEAT								
Wakeland	2,111	1,962	1,725	1,929	1,933	728	653	2,453
Coker 68-15	1,734	1,810	1,696	1,951	1,880	560	803	2,256
Coker 65-20	1,973	1,940	1,717	2,069	2,017	430	600	2,197
McNair 701	1,939	1,861	1,663			429	336	2,092
Abe	1,402	1,192						
Blueboy II	2,025	1,959						
Pennington 6-23	1,384	1,705						
Fla. 103	1,930	1,731						
McNair 1813	1,829	1,760						
Coker 73-16	1,564							
Arthur	1,447							
Holley	1,791							
Arthur 71	1,408							

Table 2. GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1970-74

Variety	Regional average yield per acre					Other characteristics			1/10 Date
	1-yr. 1974	2-yr. 1973-74	3-yr. 1972-74	4-yr. 1971-74	5-yr. 1970-74	Lodging	Height	Headed	
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.		
NORTHERN ALABAMA									
Number of tests	(3)	(6)	(9)	(12)	(15)	(9)	(9)	(9)	
OATS									
Carolee	56	43	44	56	65	13	35		4/23
Coker 66-22	53	39	43	56	59	15	39		4/18
Windsor	40	33							
Coker 227	66								
Cumberland	41								
Coker 73-14	54								
BARLEY									
Hanover	31	25	22	29	35	15	25		4/8
Barsoy	36	22	22	26		3	25		4/1
Keowee	30	29	27			18	29		4/13
Volbar	41								
Knob	33								
RYE									
Bone 1	21	15	22	28	30	15	56		3/28
Elbon	14	8	16	22	26	16	52		3/26
Vita Graze	17	11	17	23	26	12	52		3/26
Explorer	19	13	19	25	27	14	52		3/25
Wintergrazer 70	20	15	23	28		14	54		3/26
Gurley's Grazer	18	12							
ACCO 811	16								
Vita Graze N	19								
Cougar	6								
N.F. 331	20								
WHEAT									
Wakeland	23	19	21	27	31	12	36		4/9
Ga. 1123	17	18	21	27	32	5	39		4/8
Arthur	16	18	23	26	31	6	33		4/12
Coker 65-20	20	19	23	28	33	8	38		4/13
McNair 701	17	12	15			3	28		3/28
Coker 68-15	21	16	21			1	31		4/8
Holley	13	15							
Abe	19	17							
Arthur 71	16	16							
Blueboy II	17	17							
McNair 4823	23	21							
McNair 1587	18	17							

Table 2. (Continued) GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1970-74

Variety	Regional average yield per acre					Other characteristics 3-year average		
	1-yr. 1974	2-yr. 1973-74	3-yr. 1972-74	4-yr. 1971-74	5-yr. 1970-74	Lodging Pct.	Height In.	1/10 Headed Date
	Bu.	Bu.	Bu.	Bu.	Bu.			
CENTRAL ALABAMA								
Number of tests	(4)	(8)	(12)	(15)	(18)	(12)	(12)	(12)
OATS								
Roanoke	43	39	34	40	42	41	47	4/15
Coker 242	41	28	27	34	39	28	43	4/13
Carolee	51	41	37	45	46	42	39	4/14
Coker 67-22	56	42	35	43	44	26	39	4/9
Fla. 501	54	38	38	42	43	33	39	4/4
Windsor	58	39						
Coker 227	81	59						
Coker 73-14	43							
Elan	56							
BARLEY								
Keowee	18	12	14	21	23	6	26	4/1
McNair 601	14	10	13	16	20	7	27	3/28
Barsoy	26	19	17	20	24	11	25	3/22
Hanover	13							
RYE								
Vita Graze	17	11	17	21	26	35	50	3/14
Explorer	24	15	21	22	26	34	49	3/15
Weser	21	15	23	24	26	27	50	3/14
Wren's Abruzzi	24	15	20	23	26	34	50	3/14
ACCO 811	21	13	20	22		31	51	3/15
Vita Graze N	22	14						
Gurley's Grazer	19							
	2000							
WHEAT								
Coker 65-20	16	12	14	17	19	22	37	4/2
Wakeland	18	13	17	19	20	34	37	3/30
Coker 68-15	28	18	23	27	27	4	37	4/1
Ga. 1123	23	16	18	19	20	5	41	3/31
McNair 701	16	12	15			23	31	3/25
Arthur	32	20	24			2	38	4/2
Abe	34	25						
Arthur 71	33	22						
Blueboy II	22	16						
McNair 4823	29							
Coker 65-20	16							
Holley	19							
Coker 73-18	36							

Table 2. (Continued) GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1970-74

Variety	Regional average yield per acre					Other characteristics		
	1-yr.		2-yr.		3-yr.	4-yr.	5 yr.	3-year average
	1974	1973-74	1973-74	1972-74	Bu.	Bu.	Bu.	1/10
SOUTHERN ALABAMA								
Number of tests	(5)	(10)	(15)	(17)	(21)	(15)	(15)	(15)
OATS								
Coker 242	19	30	27	37	41	16	40	4/8
Coker 67-22	19	31	26	37	39	29	37	4/1
Fla. 501	20	24	23	37	40	13	38	3/31
Elan	35	44	37	47		12	36	4/4
Windsor	9	26						
Coker 227	32	33						
Coker 73-31	29							
BARLEY								
Fla. 102	17	19	14			4	28	3/25
Volbar	12							
RYE								
Vita Graze	9	7	10	13	16	30	43	3/11
Weser	16	11	16	16	19	24	43	3/11
ACCO 811	8	7	12	13	17	26	49	3/12
Wren's Abruzzi	15	11	14	16	18	25	49	3/12
Vita Graze N	8	7						
Gurley's Grazer	11	9						
2000								
WHEAT								
Coker 63-15	9	13	14	19	21	8	33	4/5
Coker 65-20	8	11	10	10	12	16	36	3/26
Wakeland	7	11	11	15	17	11	37	3/27
McNair 701	4	9	6			8	30	3/14
Abe	13	16						
Blueboy II	9	12						
Fla. 103	3	3						
McNair 1813	5	8						
Pennington 6-23	6	8						
Holley	6							
Arthur 71	11							
Coker 73-16	8							
Arthur	9							

Table 3. GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1970-74

Variety	Regional average yield per acre					Other characteristics		
	1-yr. 1974	2-yr. 1973-74	3-yr. 1972-74	4-yr. 1971-74	5-yr. 1970-74	3-yr. average		
	Bu.	Bu.	Bu.	Bu.	Bu.	Lodging Pct.	Height In.	Headed Date
NORTHERN ALABAMA								
Number of tests	(3)	(6)	(9)	(12)	(15)	(9)	(9)	(9)
OATS								
Carolee	27	25	27	43	52	10	33	4/22
Coker 66-22	39	37	43	58	59	9	34	4/19
Windsor	15	22						
Coker 227	23							
Cumberland	34							
Coker 73-14	17							
BARLEY								
Hanover	10	12	13	21	28	7	22	4/14
Barsoy	21	15	16	24		5	23	3/31
Keowee	18	21	21			11	26	4/14
Volbar	31							
Knob	15							
RYE								
Bonel	20	17	22	29	29	12	52	4/1
Elbon	9	6	13	20	22	19	43	4/1
Vita Graze	14	9	14	20	21	14	49	4/2
Explorer	16	12	16	21	22	16	49	3/31
Wintergrazer 70	18	16	23	27		13	52	4/1
Gurley's Grazer	18	13						
ACCO 811	15							
Vita Graze N	12							
Cougar	4							
N.F. 331	19							
WHEAT								
Ga. 1123	14	17	21	23	27	4	36	4/15
Wakeland	10	12	17	20	23	3	33	4/16
Coker 65-20	6	10	16	20	25	6	33	4/18
Arthur	18	17	21	25	30	5	30	4/13
McNair 701	5	7	11			3	26	4/11
Coker 68-15	10	10	18			1	28	4/13
Holley	12	15						
Abe	16	14						
Arthur 71	16	15						
Blueboy II	8	10						
McNair 4823	16	16						
McNair 1587	9	12						

Table 3. (Continued) GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1970-74

Table 4. FORAGE YIELD OF SMALL GRAIN VARIETIES TESTED - PRATTVILLE,
1971-74

Variety	Oven dry forage yield - pounds per acre					Total	2-yr. av.	3-yr. av.	4-yr. av.
	12-3-73	2-1-74	3-7-74	4-5-74	5-6-74				
OATS									
Roanoke	436	2,644	345	1,332	2,758	7,565	6,478	5,688	5,293
Coker 242	537	2,319	273	785	1,377	5,295	5,036	4,641	4,444
Fla. 501	801	2,433	152	514	943	4,842	4,960	4,712	4,589
Coker 67-22	1,045	2,095	105	393	1,700	5,337	4,943	4,597	4,424
Coker 227	140	2,280	183	1,242	2,380	6,225	6,232		
Ga. 7199	383	2,361	94	473	2,007	5,388	4,952		
Coker 73-14	200	2,068	228	1,190	2,815	5,501			
BARLEY									
Keowee	1,411	1,816	439	870	701	5,237	4,839	4,041	3,642
McNair 601	1,526	1,762	639	750	580	5,257	5,210	4,562	4,238
Hanover	1,242	2,366	205	422	692	4,927			
RYE									
Vita Graze	1,630	2,143	403	903	-	5,079	4,910	4,565	4,393
Explorer	1,467	1,895	469	1,072	-	4,903	5,022	4,770	4,644
Weser	1,325	2,111	377	1,384	-	5,199	5,132	4,860	4,724
Wren's Abruzzi	997	1,987	457	1,406	-	4,848	4,962	4,700	4,569
Wintergrazer 70	1,371	1,886	359	1,276	-	4,892	4,987	4,930	
Wheeler	1,542	1,653	419	1,280	-	4,894	5,305	4,460	
Penngrazer W.	1,550	1,997	409	1,259	-	5,215	4,955	4,876	
Vita Graze N.	1,497	1,884	417	834	-	4,632	4,807		
Gurley's Grazer 2000	1,486	2,062	310	935	-	4,793	4,620		
Triple Graze	1,379	1,702	322	1,345	-	5,248			
WHEAT									
Coker 68-15	404	2,499	852	1,414	-	5,168	4,349	4,803	4,779
Coker 65-20	1,002	3,059	-	-	-	4,062	4,227	4,293	4,326
DeKalb 9090	245	1,672	639	1,679	1,923	6,207	5,645		
DeKalb 9190	376	2,041	383	1,852	1,288	6,439	6,034		
DeKalb 9090 + 9190	260	1,607	645	1,767	1,921	6,200			

Planting date: October 4, 1973

Fertility: 250 lb. 0-25-25 ahead of planting
110 lb. nitrogen November 2, 1973
100 lb. nitrogen February 22, 1974

Table 5. FORAGE YIELD OF SMALL GRAIN VARIETIES TESTED - Tallahassee, 1972-74.

Variety	Oven dry forage yield-pounds per acre								Total	2-yr. av.	3-yr. av.			
	Clipping date - 1973-74													
	11-27-73	1-8-74	1-22-74	3-7-74	3-22-74	4-11-74								
OATS														
Roanoke	826	278	545	794	867	792	4,102	5,429	4,799					
Coker 242	825	304	439	420	535	520	3,043	3,923	3,487					
Coker 67-22	833	100	345	413	529	781	3,000	3,485	3,280					
Fla. 501	1,015	121	418	484	450	610	3,099	3,655	3,290					
Coker 227	916	230	671	561	762	480	3,620	4,720						
Ga. 7199	953	156	313	435	613	560	3,040	3,897						
Coker 73-14	959	282	403	339	484	609	3,080							
BARLEY														
Keowee	626	344	593	148	379	587	2,677	3,231	3,237					
McNair 601	925	431	613	78	90	485	2,622	3,630	3,257					
Hanover	1,007	385	541	277	306	456	2,972	2,972						
RYE														
Vita Graze	1,105	675	425	863	534	296	3,893	4,441	4,836					
Explorer	798	715	471	953	624	526	4,086	4,696	5,036					
Weser	991	512	486	824	683	430	3,976	4,448	4,911					
Wren's Abruzzi	837	743	418	780	678	402	3,857	4,366	4,920					
Wintergrazer 70	840	473	477	881	569	464	3,703	4,734	5,346					
Wheeler	848	490	467	456	916	741	3,919	4,635	5,303					
Penngrazer W	923	515	377	824	678	477	3,793	4,095						
Vita Graze N	1,175	641	417	762	728	405	4,128	4,588						
Gurley's Grazer 2000	923	436	416	811	717	375	3,678	4,250						
Triple Graze	636	732	580	1,185	1,119	520	4,771							
WHEAT														
Coker 68-15	1,049	625	609	503	701	588	4,075	4,539	4,899					
DeKalb 9090	629	379	699	648	1,303	1,004	4,662	5,331	5,397					
DeKalb 9190	1,260	402	526	839	1,091	779	4,896	5,30	5,818					
Coker 65-20	1,233	576	449	342	268	600	3,529	3,989	4,189					
DeKalb 9090 + 9190	857	449	670	617	1,124	760	4,477							

Planting date: September 27, 1973

Fertility: 500 lb. 8-3-8 ahead of planting

40 lb. nitrogen November 28, 1973

40 lb. nitrogen January 23, 1974

40 lb. nitrogen March 8, 1974

Table 6. REACTION OF OAT VARIETIES TO SOME DISEASES IN ALABAMA

Variety	Crown rust	<i>Melrinthosporium</i> leaf blotch	Septoria leaf blotch	Loose smut
NORTHERN ALABAMA				
Carolee	S	S	S	R
Coker 66-22	S	S	R	R
Coker 73-141/	R	S	R	R
Coker 227 ^{1/}	R	S	R	R
Cumberland ^{1/}	S	S	R	R
Windsor	S	S	S	R
CENTRAL ALABAMA				
Carolee	S	S	S	R
Coker 67-22	S	S	S	R
Coker 73-141/	S	S	R	R
Coker 227	R	S	R	R
Coker 242	R	S	R	R
Elan ^{1/}	R	S	R	R
Fla. 501	R	S	R	R
Roanoke	S	S	S	R
Windsor	R	S	S	R
SOUTHERN ALABAMA				
Coker 67-22	S	S	R	
Coker 73-31 ^{1/}	S	S	R	
Coker 227	S	S	S	
Coker 242	S	S	R	
Elan	S	S	R	
Fla. 501	S	S	R	
Windsor	S	S	R	

^{1/} 1 year data

(Continued)

Table 6. REACTION OF WHEAT VARIETIES TO SOME DISEASES IN ALABAMA

Variety	Powdery mildew	Leaf rust	Septoria leaf blotch	Loose smut
NORTHERN ALABAMA				
Abe	R	R	S	R
Arthur	R	R	S	R
Arthur 71	R	R	S	R
Blueboy II	S	R	S	R
Coker 65 20	S	S	S	R
Coker 68-15	S	R	S	R
GA. 1123	S	S	S	R
Holley	R	R	S	R
McNair 701	R	R	S	R
McNair 1587	R	S	S	R
McNair 4823	S	R	S	R
Wakeland	S	R	S	S
CENTRAL ALABAMA				
Abe	R	R	S	R
Arthur	S	R	S	R
Arthur 71	R	R	S	R
Blueboy II	S	R	S	R
Coker 65 20	S	S	S	R
Coker 68-15	S	R	S	R
Coker 73-18 ^{1/}	R	R	S	R
Ga. 1123	S	S*	S	R
Holley ^{1/}	R	R	S	R
McNair 701	S	R*	S	R
McNair 4823 ^{1/}	S	R	S	R
Wakeland	S	S	S	S
SOUTHERN ALABAMA				
Abe	R	R	R	R
Arthur ^{1/}	R	R	R	R
Arthur 71 ^{1/}	R	R	R	R
Blueboy II	S	R	S	R
Coker 65-20	S	S	S	R
Coker 68-15	S	R	S	R
Coker 73-16 ^{1/}	R	R	S	R
Fla. 103	R	R	S	R
Holley ^{1/}	R	R	S	R
McNair 701	R	S*	S	R
McNair 1813	R	S	S	R
Pennington 6-23	R	R	S	R
Wakeland	S	S	S	S

^{1/} 1 year data

* Susceptible to stem rust

(Continued)

Table 6. REACTION OF BARLEY AND RYE TO SOME DISEASES IN ALABAMA

Variety	Powdery mildew	Spot blotch	Net blotch	Leaf rust	Anthracnose	Septoria leaf blotch
BARLEY						
Barsoy	R	S	S	S		
Fla. 102	R	S	S	S		
Hanover	R	S	R	R		
Keowee	R	S	R	S		
Knob ^{1/}	R	S	S	R		
McNair 601	R	S	S	R		
Volbar ^{1/}	R	S	S	R		
RYE						
ACCO 811	R			S	S	S
Bonel	R			S	S	S
Cougar ^{1/}	R			S	S	S
Elbon	S			S	S	S
Explorer	S			S	S	S
Gurley's Grazer	R			S	S	S
Gurley's Grazer 2000 ^{1/}	R			R	S	S
Vita Graze	R			S	S	S
Vita Graze N	R			S	S	S
Weser	R			S	S	S
Wintergrazer 70	R			S	S	S
Wren's Abruzzi	R			S	S	S
NF 331 ^{1/}	R			R		R

^{1/}, 1 year data

SOURCES OF SEED

OATS

Carolee	North Carolina Foundation Seed Producers, Inc., Raleigh North Carolina
Coker 242	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Coker 66-22	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Coker 67-22	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Coker 227	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Coker 73-14	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Coker 73-31	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Cumberland	Department of Agronomy, University of Tennessee, Knoxville, Tennessee
Elan	Coastal Plain Experiment Station, Tifton, Georgia
Fla. 501	North Florida Experiment Station, Quincy, Florida
Ga. 7199	Coastal Plain Experiment Station, Tifton, Georgia
Roanoke	North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina
Windsor	Department of Agronomy, Virginia Polytechnic Institute and State University, Blacksburg, Virginia

BARLEY

Barsoy	Department of Agronomy, University of Kentucky, Lexington, Kentucky
Florida 102	North Florida Experiment Station, Quincy, Florida
Hanover	Department of Agronomy, Virginia Polytechnic Institute and State University, Blacksburg, Virginia
Keowee	Department of Agronomy, Clemson University, Clemson, South Carolina
Knob	Department of Agronomy, University of Kentucky, Lexington Kentucky
McNair 601	McNair Seed Company, Laurinburg, North Carolina
Volbar	Department of Agronomy, University of Tennessee, Knoxville, Tennessee

RYE

ACCO 811	Acco Seed, Plainview, Texas
Bonel	Noble Foundation, Inc., Ardmore, Oklahoma
Cougar	Dobson-Hicks Company, Nashville, Tennessee
Elbon	Foundation Seed Stocks Farm, Thorsby, Alabama
Explorer	Foundation Seed Stocks Farm, Thorsby, Alabama
Gurley's Grazer	Gurley Milling Co., Selma, North Carolina
Gurley's Grazer 2000	Gurley Milling Co., Selma, North Carolina
NF 331	Noble Foundation, Inc. Ardmore, Oklahoma
Penngrazer W	Pennington Grain and Seed, Inc., Madison, Georgia
Triple Graze	Ring Around Products, Inc. Montgomery, Alabama
Vita Graze	McNair Seed Company, Laurinburg, North Carolina
Vita Graze N	McNair Seed Company, Laurinburg, North Carolina
Weser	Foundation Seed Stocks Farm, Thorsby, Alabama
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

SOURCES OF SEED (Continued)

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 II	North Carolina Foundation Seed Producers, Inc., Raleigh North Carolina
Coker 65-20	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Coker 68-15	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Coker 73-16	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Coker 73-18	Coker's Pedigreed Seed Company, Hartsville, South Carolina
DeKalb 9090	DeKalb Ag. Research, Wichita, Kansas
DeKalb 9190	DeKalb Ag. Research, Wichita, Kansas
DeKalb 9090 + 9190	DeKalb Ag. Research, Wichita, Kansas
Fla. 103	North Florida Experiment Station, Quincy, Florida
Ga. 1123	Foundation Seed Stocks Farm Thorsby, Alabama
Holley	Department of Agronomy, Georgia Agricultural Experiment Station, Experiment, Georgia
McNair 701	McNair Seed Company, Laurinburg, North Carolina
McNair 1587	McNair Seed Company, Laurinburg, North Carolina
McNair 4823	McNair Seed Company, Laurinbrug, North Carolina
McNair 1813	McNair Seed Company, Laurinburg, North Carolina
Pennington 6-23	Pennington Grain and Seed, Inc., Madison, Georgia
Wakeland	Foundation Seed Stocks Farm, Thorsby, Alabama

