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1978 SMALL GRAIN VARIETY REPORT

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SMALL GRAIN VARIETY REPORT, 1978

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Wheat, oats, barley, and rye are tested annually at several locations throughout Alabama by the Auburn University Agricultural Experiment Station. The tests are designed to provide information on relative performance of varieties in given regions of the State and may not reflect absolute yielding potential. Entries selected for testing are commercially available varieties and experimental lines from public and private sources which show potential for use in Alabama.

Small grain variety tests were conducted at 12 locations during the 1977-78 season. Soil moisture at most locations was adequate to produce good stands. One forage harvest was obtained at most northern locations and either two or three were obtained at the central and southern locations. There was some stand loss of certain wheat, oat, and barley varieties due to winterkill (Table 2).

In Alabama, small grains are grown for grain only, for forage and grain, and for forage only. To evaluate performance of small grains under these three management practices, three series of plots were used. One series was managed for grain production only using wheat, oat, and barley varieties. The second series, using wheat, oat, and barley varieties, was clipped during the fall and winter as growth permitted, to evaluate forage production and the effect of its removal on subsequent grain production. In this series, the final forage harvest for the season was made no later than early March, prior to jointin The third series, at Prattville and Tallassee, was clipped throughout the growing season until no regrowth occurred to determine total forage production of wheat, oat, barley, and rye varieties. Since rye is primarily

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1/Research Associate, Department of Agronomy and Soils, and Superintendent, Gulf Coast Substation, respectively.

grown for forage in Alabama, rye varieties were tested for forage production only. The rye tests were conducted at ten locations and plots were clipped throughout the season until no regrowth occurred.

The experimental design for the tests, except the rye forage test, was a split plot with species as main plots and varieties as subplots. A randomized complete block experimental design was used for the rye forage test. Plots consisted of three rows spaced twelve inches apart and were 16 to 20 feet long. Each management series was replicated three times. Recommended cultural practices were followed and were the same for all entries within a management series at a location. At most locations, plots managed for forage plus grain were planted in September or early October, and grain only plots were planted 3 to 6 weeks later, depending on location and soil moisture conditions.

Forage dry matter yields were obtained by clipping the entire plot, determining percent moisture content, and converting the plot green weight to pounds of dry matter per acre. Two methods were used to harvest grain. At Brewton, Monroeville, Headland, Camden, and Prattville a small plot combine was used and the entire plot was harvested. At Fairhope, Camp Hill, Marion Junction, Tallassee, Winfield, Crossville, and Belle Mina the center row of the plot was cut by hand and threshed on a stationary thresher. In either case, grain samples were air dried, cleaned, weighed, and yield was calculated on a per acre basis. For conversion to bushels per acre the following values were used: rye, 56 lb/bu; wheat, 60 lb/bu; oats, 32 lb/bu; and barley, 48 lb/bu. Bushel weights were not adjusted for moisture content.

Since growing conditions, and thus performance, may vary among locations, regional averages are used to give a better indication of variety performance for a region. Where data are available, averages over several years are included.

Table 1 shows forage and grain yields and total feed production values for clipped and unclipped plots. Grain yield, lodging, plant height, and date of one-tenth headed for unclipped plots are given in Table 3. Similar data for clipped plots are given in Table 4. Lodging is given as the percent of the stand that is broken or leaning and would likely be missed or shattered by a combine. Height is the average height of the plants measured from the soil surface to the tips of the heads. Date of one-tenth headed is the date when approximately 10 percent of the plants show fully emerged heads.

Yields of varieties tested for production of forage only, at Tallassee and Prattville, are given in Table 5. Rye forage yields are presented in Table 6. Since this is the first year of the rye forage test series, only 1977-78 averages are available.

Disease ratings for wheat, oat, and barley varieties are presented in tables 7, 8, and 9. Several diseases occur in small grains, but only those that are most common in Alabama are included here. Generally, disease incidence and severity were light in the variety tests this year. Disease data were compiled by Dr. Robert T. Gudauskas, Department of Botany and Microbiology.

Varieties are recommended by region for (1) forage and grain production combined, (2) grain production only, and (3) forage production only for rye varieties. Variety recommendations in this report are for general regions of the State, and are based on performance at several locations in each region. Recommendations are made on the basis of the last 3 years data; however performance over a longer period is considered when data are available. Varieties that show exceptional performance over a 2-year period may be recommended on a trial basis.

Acknowledgements

Appreciation is expressed to W. H. Hearn and Mrs. Sally Bagwell, Research Data Analysis for the computation and summarization of data in this report. Appreciation is also expressed to the following cooperators in charge of their respective substations:

NORTHERN ALABAMA

Sand Mountain Substation, Crossville - J. T. Eason, Superintendent
Tennessee Valley Substation, Belle Mina - W. B. Webster, Superintendent
Upper Coastal Plain Substation, Winfield, - R. A. Moore, Superintendent

CENTRAL ALABAMA

Black Belt Substation, Marion Junction - L. A. Smith, Superintendent
Experiment Field, Prattville - F. T. Glaze, Superintendent
Piedmont Substation, Camp Hill - W. A. Griffey, Superintendent
Plant Breeding Unit, Tallassee - Ellis Burgess, Superintendent

SOUTHERN ALABAMA

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

Table 1. FORAGE AND GRAIN YIELDS OF SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Yield of clipped plots, average						Total feed, 1976-78 av.	
	Oven dry forage					Grain	Clipped forage plus grain	Not clipped, grain only
	1-yr 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	3-yr. 76-78		
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
			NORTHERN ALABAMA					
Number of tests[1/]	(2)	(5)	(8)	(11)	(14)	(9)	(8)	(9)
WHEAT								
Wakeland	322	810	1124	996	1184	1815	2939	1936
Blue Boy II	208	732	900	816	1074	2125	3025	2028
Coker 68-15	84	678	908	849	1025	1902	2810	2235
Ga. 1123	304	778	884	801	968	1801	2685	2022
Arthur 71	86	617	636	583	731	1338	1974	1635
Arthur	178	493	644	569	726	1862	2506	1835
Abe	108	365	467	426	580	1708	2175	1682
Oasis	185	514	612	558		1585	2197	1680
Coker 747	60	457	580	545		2148	2728	2367
McNair 3006	100	529	740			2311	3051	2451
Coker 75-24	102	625						
Coker 76-22	295							
McNair 1003	188							
FL 7111A33-1-10	116							
OATS								
Coker 227	42	356	457	423	624	2525	2982	2415
Coker 70-16	131	343	328			2324	2652	2648
Coker 76-19	148	296						
Carolee	183	267						
Coker 76-16	246							
Bob	96							
BARLEY								
Barsoy	351	500	629	594	833	2109	2738	2243
Keowee	268	395	504	463	656	1978	2482	1953
Volbar	51	323	451	393	557	2334	2785	2517
Surry	203							

1/Due to cold weather during the 1977-78 season, no forage harvests were made at Crossville. Forage data for 1978 are from Belle Mina and Winfield.

Table 1. (Cont'd) FORAGE AND GRAIN YIELDS OF SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Yield of clipped plots, average						Total feed, 1976-78 av.	
	Oven dry forage					Grain	Clipped forage plus grain	Not clipped, grain only
	1-yr 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	3-yr. 76-78		
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
	CENTRAL ALABAMA							
Number of tests	(4)	(6)	(9)	(13)	(17)	(9)	(9)	(9)
WHEAT								
Wakeland	2076	1945	1601	1664	1793	1587	3188	1673
Coker 68-15	2086	1982	1583	1619	1707	1802	3385	1836
Blue Boy II	2448	1739	1499	1543	1690	1568	3067	1534
Arthur	1547	1021	859	924	1053	2192	3051	1831
Arthur 71	1531	1087	829	910	994	1952	2781	1754
Abe	1687	1006	762	810	911	2248	3010	1776
Coker 747	1921	1256	1047	1089		2160	3207	1853
Oasis	1918	1286	1007	1046		2083	3090	1701
McNair 1813	1878	1940	1583			1863	3446	1651
McNair 1003	2351	1893	1562			2101	3663	2305
Coker 76-22	2390	2030						
McNair 3006	2348							
Coker 77-13	2206							
Coker 76-35	2089							
Holley	1734							
OATS								
Coker 227	1687	1109	874	1059	1217	1917	2791	1503
Elan	1349	821	625	839	1047	1257	1882	1257
Salem	1417	1213	918			1412	2330	1763
Coker 70-16	1762	1202	891			1971	2862	1599
Coker 76-16	2131	1510						
Coker 76-19	1568	1148						
Carolee	1438	1090						
Bob	1480							
BARLEY								
Barsoy	1597	1482	1190	1279	1442	1853	3043	1754
Surry	1587							
Volbar	703							

Table 1. (Cont'd) FORAGE AND GRAIN YIELDS OF SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Yield of clipped plots, average						Total feed, 1976-78 av.	
	Oven dry forage					Grain	Clipped forage plus grain	Not clipped, grain only
	1-yr 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	3-yr. 76-78		
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
	SOUTHERN ALABAMA							
Number of tests	(5)	(10)	(15)	(20)	(25)	(15)	(15)	(15)
WHEAT								
Wakeland	1865	1710	1677	1681	1767	1839	3516	1932
McNair 1813	1332	1361	1339	1417	1499	1581	2920	1743
Holley	1565	1459	1288	1325	1418	1633	2921	1728
Coker 68-15	1346	1353	1260	1314	1398	1950	3210	2065
Arthur 71	978	833	701	738	872	1733	2434	1657
Abe	1004	745	635	660	808	1959	2594	1779
Coker 747	916	795	716	732		2323	3039	2194
McNair 1003	1604	1500	1397			1926	3323	2318
Coker 76-22	1739	1589						
Coker 75-24	1656	1577						
Coker 77-13	1681							
Fl 7111A33-1-10	1404							
Coker 76-35	1380							
McNair 3006	1341							
OATS								
Fla. 501	1511	1146	1053	1149	1296	1653	2706	1813
Coker 227	1258	1032	923	955	1160	2001	2924	2193
Elan	1313	925	830	933	1102	1893	2723	1924
Coker 76-18	1609	1330						
Coker 76-16	1654	1310						
Bob	1390							

Table 2. ESTIMATED PERCENT STAND LOSS OF SMALL GRAIN VARIETIES DUE TO WINTERKILL DURING THE 1977-78 SEASON

Variety	Northern Alabama		Central Alabama		Southern Alabama	
	Clipped	Unclipped	Clipped	Unclipped	Clipped	Unclipped
	%	%	%	%	%	%
WHEAT						
Abe	0	0	5	0	0	8
Arthur 71	0	0	5	0	0	7
Coker 68-15	0	0	5	0	0	6
Coker 75-24	11	0	--	--	0	0
Coker 76-22	17	0	7	0	0	4
Coker 76-35	-- 1/	--	0	4	0	11
FL 7111A33-1-10	24	0	--	--	0	6
Ga. 1123	28	0	--	--	--	--
Holley	--	--	14	6	4	4
McNair 1813	--	--	2	0	0	8
Wakeland	17	0	6	0	0	3
OATS						
Bob	35	7	31	15	20	6
Carolee	70	25	50	21	--	--
Coker 227	15	0	15	6	21	6
Coker 70-16	5	0	21	8	--	--
Coker 76-16	17	0	33	18	22	0
Coker 76-18	--	--	--	--	18	0
Coker 76-19	65	14	31	13	--	--
Elan	--	-	60	23	23	5
Fla. 501	--	--	--	--	21	6
Salem	--	--	49	24	--	--
BARLEY						
Barsoy	31	0	11	13	--	--
Keowee	13	0	--	--	--	--
Surry	24	0	12	15	--	--
Volbar	18	0	14	10	--	--

1/Dashes indicate that the variety was not tested in that region during the 1977-78 season.

Table 3. GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Regional average yield per acre					Other characteristics 3-yr. av. 1976-78		
	1-yr. 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	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)
WHEAT								
Coker 68-15	36	37	37	34	31	5	36	4/16
Ga. 1123	35	36	34	31	28	9	45	4/16
Blue Boy II	34	36	34	30	28	6	39	4/19
Wakeland	33	35	32	29	28	23	43	4/16
Arthur	33	37	31	30	27	12	37	4/16
Abe	32	33	28	28	26	19	34	4/17
Arthur 71	32	32	27	27	24	12	36	4/17
Coker 747	35	38	39	37		16	34	4/17
Oasis	32	33	28	28		16	36	4/17
McNair 3006	40	44	41			6	36	4/15
Coker 75-24	30	38						
Coker 76-22	42							
McNair 1003	37							
FL 7111A33-1-10	25							
OATS								
Coker 227	79	82	75	70	69	19	38	4/21
Coker 70-16	94	93	83			19	38	4/24
Coker 76-19	60	75						
Carolee	52	56						
Coker 76-16	78							
Bob	56							
BARLEY								
Volbar	37	44	52	48	47	21	36	4/13
Barsoy	22	33	47	44	43	38	28	4/3
Keowee	28	34	41	37	36	34	32	4/14
Surry	25							

Table 3. (Cont'd) GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Regional average yield per acre					Other characteristics 3-yr. av. 1976-78		
	1-yr. 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
			CENTRAL ALABAMA					
Number of tests	(4)	(6)	(9)	(13)	(17)	(9)	(9)	(9)
WHEAT								
Arthur	30	33	31	31	31	9	38	4/8
Coker 68-15	26	31	31	31	31	4	36	4/7
Arthur 71	25	29	29	30	31	9	37	4/9
Abe	26	31	30	29	30	14	34	4/9
Wakeland	18	27	28	26	25	14	44	4/6
Blue Boy II	22	25	26	26	25	7	39	4/10
Coker 747	26	33	31	32		17	33	4/10
Oasis	25	30	28	30		11	37	4/9
McNair 1003	29	39	38			3	36	4/6
McNair 1813	26	33	28			4	36	4/4
Coker 76-22	28	36						
Coker 76-35	30							
Coker 77-13	28							
Holley	26							
McNair 3006	23							
OATS								
Coker 227	39	43	47	48	55	22	37	4/14
Elan	43	33	39	44	47	15	34	4/14
Salem	51	59	55			16	38	4/19
Coker 70-16	39	48	50			13	39	4/17
Coker 76-16	58	56						
Coker 76-19	42	56						
Coker 77-23	77							
Bob	43							
BARLEY								
Barsoy	26	36	37	37	35	13	30	3/29
Volbar	42							
Surry	31							

Table 3. (Cont'd) GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Regional average yield per acre					Other characteristics 3-yr. av. 1976-78		
	1-yr. 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
			SOUTHERN ALABAMA					
Number of tests	(5)	(10)	(15)	(20)	(25)	(15)	(15)	(15)
WHEAT								
Coker 68-15	24	32	34	30	26	1	32	4/5
Wakeland	21	29	32	28	24	15	37	4/3
Abe	19	27	30	27	24	4	30	4/6
Arthur 71	18	25	28	25	22	5	32	4/6
Holley	21	27	29	25	21	10	36	3/27
McNair 1813	20	27	29	25	21	4	33	3/30
Coker 747	23	33	37	32		4	30	4/6
McNair 1003	26	35	39			1	32	4/2
Coker 76-22	32	38						
Coker 75-24	25	36						
Coker 77-13	26							
Coker 76-35	22							
McNair 3006	20							
FL 7111A33-1-10	19							
OATS								
Coker 227	44	62	69	59	52	24	36	4/8
Elan	44	59	60	54	48	23	33	4/7
Fla. 501	43	54	57	48	42	38	34	4/3
Coker 76-16	58	70						
Coker 76-18	50	61						
Bob	50							

Table 4. GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Regional average yield per acre					Other characteristics 3-yr. av. 1976-78		
	1-yr. 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	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)
WHEAT								
Arthur	41	41	31	29	27	6	36	4/15
Blue Boy II	34	41	35	30	26	3	37	4/18
Ga. 1123	16	34	30	28	26	7	42	4/16
Abe	39	33	28	28	25	13	33	4/15
Coker 68-15	26	36	32	27	24	3	34	4/14
Wakeland	33	36	30	27	23	16	41	4/17
Arthur 71	31	27	22	23	22	8	35	4/15
Coker 747	34	40	36	34		13	33	4/16
Oasis	34	30	26	26		10	36	4/16
McNair 3006	39	45	39			4	35	4/14
Coker 75-24	27	32						
McNair 1003	36							
Coker 76-22	30							
FL 7111A33-1-10	36							
OATS								
Coker 227	88	95	79	72	62	18	37	4/19
Coker 70-16	77	86	73			7	37	4/23
Coker 76-19	20	44						
Carolee	24	32						
Coker 76-16	81							
Bob	24							
BARLEY								
Volbar	45	46	49	47	44	22	36	4/10
Barsoy	17	40	44	41	38	34	28	4/3
Keowee	41	39	41	40	36	21	31	4/11
Surry	41							

1/ The small grain variety test was not clipped at Crossville in 1978, and grain yields of these varieties are not included in the 1978 grain yield averages. Grain yields are averages from Belle Mina and Winfield.

Table 4. (Cont'd) GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Regional average yield per acre					Other characteristics 3-yr. av. 1976-78		
	1-yr. 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				CENTRAL ALABAMA				
Number of tests	(4)	(6)	(9)	(13)	(17)	(9)	(9)	(9)
WHEAT								
Abe	35	39	37	34	31	16	36	4/7
Arthur	35	40	37	32	30	11	39	4/7
Arthur 71	32	37	33	28	27	9	38	4/7
Coker 68-15	24	31	30	25	24	5	35	4/6
Wakeland	21	26	26	22	19	13	41	4/7
Blue Boy II	23	26	26	21	19	1	39	4/10
Coker 747	32	36	36	32		18	35	4/8
Oasis	32	37	35	31		11	39	4/8
McNair 1003	26	38	35			2	35	4/6
McNair 1813	27	35	31			5	34	4/3
Coker 76-22	22	32						
Coker 76-35	27							
Coker 77-13	24							
McNair 3006	23							
Holley	21							
OATS								
Coker 227	50	65	60	55	53	34	40	4/11
Elan	19	44	39	38	34	1	38	4/13
Coker 70-16	58	70	62			20	40	4/18
Salem	28	49	44			3	38	4/19
Coker 76-16	45	59						
Coker 76-19	32	53						
Carolee	29	49						
Coker 77-23	71							
Bob	39							
BARLEY								
Barsoy	20	41	39	33	29	8	28	3/27
Volbar	42							
Surry	26							

Table 4. (Cont'd) GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1974-78

Variety	Regional average yield per acre					Other characteristics 3-yr. av. 1976-78		
	1-yr. 1978	2-yr. 77-78	3-yr. 76-78	4-yr. 75-78	5-yr. 74-78	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
			SOUTHERN ALABAMA					
Number of tests	(5)	(10)	(15)	(20)	(25)	(15)	(15)	(15)
WHEAT								
Abe	24	33	33	31	27	4	32	4/1
Coker 68-15	27	34	33	29	24	2	34	3/30
Arthur 71	21	30	29	26	23	2	33	4/1
Wakeland	23	29	31	26	22	11	37	3/31
Holley	19	27	27	23	20	9	36	3/27
McNair 1813	21	28	26	21	18	2	32	3/26
Coker 747	31	39	39	35		5	32	3/31
McNair 1003	25	34	32			5	32	3/28
Coker 76-22	29	36						
Coker 75-24	20	31						
McNair 3006	28							
Coker 76-35	25							
Coker 77-13	25							
FL 7111A33-1-10	16							
OATS								
Coker 227	39	62	63	57	51	16	38	4/3
Elan	32	55	59	52	44	15	34	4/5
Fla. 501	28	52	52	48	42	24	34	3/31
Coker 76-16	51	68						
Coker 76-18	46	64						
Bob	33							

Table 5. FORAGE YIELD OF SMALL GRAIN VARIETIES TESTED FOR FORAGE ONLY AT PRATTVILLE AND TALLASSEE, 1974-78

Variety	Oven dry forage, lb. per acre						
	1978 Season Total Prattville	1978 Season Total Tallassee	Averages of both locations				
			1978 Season av.	77-78 2-yr. av.	76-78 3-yr. av.	75-78 4-yr. av.	74-78 5-yr. av.
RYE							
Wintergrazer 70	5018	5213	5116	4847	4583	4537	4489
McNair Vita Graze	4384	4581	4482	4379	4045	4066	4151
Gurley's Grazer 2000	4330		4330	4481	4186	4124	4146
Wren's Abruzzi	4023	4231	4127	4234	4038	4085	4139
Weser	4319	4214	4267	3873	3726	3823	3976
Maton	5183	5254	5218	5361	4776	4738	
Athens Abruzzi	4754	4459	4607	4824	4497	4491	
Gurley's GI 76	4798	4010	4404	4575	4158		
ACCO WR-811	4363	4467	4415	4387	4104		
Bonel	5355	4864	5109	5122			
NAPB SR-80	5673	5498	5586				
Wintergrazer	5755	4694	5225				
Wintergrazer A	5243	4963	5103				
WHEAT							
Coker 68-15	4268	3152	3710	3854	3643	3695	3871
Wakeland	4284	3456	3870	3791	3509		
Ga. 1123	4369	2959	3664	3680			
McNair 1813	3772	2644	3208	3447			
Abe	3818	2677	3248	3273			
Arthur	3693	2849	3271	3225			
Holley	3339	2745	3042	3145			
Coker 747	4374	2926	3650				

Table 5. (Cont'd) FORAGE YIELD OF SMALL GRAIN VARIETIES TESTED FOR FORAGE ONLY AT PRATTVILLE AND TALLASSEE, 1974-78

Variety	Oven dry forage, lb. per acre						
	1978 Season Total Prattville	1978 Season Total Tallassee	Averages of both locations				
			1978 Season av.	77-78 2-yr. av.	76-78 3-yr. av.	75-78 4-yr. av.	74-78 5-yr. av.
OATS							
Coker 227	5286	3527	4407	4203	4078	4133	4291
Carolee	3429	2768	3098	3142			
Fla. 501	2983	2631	2807	2756			
Elan	2064	2052	2058	2072			
Bob	4222	2933	3578				
BARLEY							
Volbar	4448	2717	3583	3903			
Barsoy	3102	3077	3089	3674			
Surry	3633	3179	3406				

Table 6. FORAGE YIELD OF RYE VARIETIES TESTED FOR FORAGE ONLY, 1978

Variety	Oven dry forage, lb. per acre			Regional Average
	Locations			
	Northern Alabama			
	Belle Mina	Crossville	Winfield	
NF 74	3468	4272	4226	3989
Wintergrazer 70	2916	4211	4258	3795
Bonel	3252	4107	3952	3770
Wintergrazer	3194	3959	3873	3675
Athens Abruzzi	2518	2994	3699	3070
Maton	2740	3502	2903	3048
Gurley's Grazer 2000	1856	3153	3454	2821
Gurley's GI 75	2158	2668	3482	2769
McNair Vita Graze	1559	3035	3272	2622
Wren's Abruzzi	1977	2712	3168	2619
ACCO WR-811	2066	2558	2996	2540
Weser	1369	2670	2959	2333
	Central Alabama			
	Marion Junction		Camp Hill	
Bonel	3855		4764	4310
Wintergrazer	3751		4497	4124
Wintergrazer A	3427		4622	4025
Maton	3707		4159	3933
Wintergrazer 70	3259		4449	3854
Gurley's GI 76	3510		3870	3690
Athens Abruzzi	3410		3603	3507
McNair Vita Graze	3575		3414	3495
Gurley's Grazer 2000	3366		3407	3387
ACCO WR-811	3512		3118	3315
Wren's Abruzzi	3151		3461	3306
Weser	3172		3237	3205

Table 6 (Cont'd) FORAGE YIELD OF RYE VARIETIES TESTED FOR FORAGE ONLY, 1978

Variety	Oven dry forage, lb. per acre					Regional Average
	Locations					
	SOUTHERN ALABAMA					
	Fairhope	Brewton	Monroeville	Headland	Camden	
Bonel	4255	5385	5733	5738	5120	5246
Wintergrazer	3975	4946	6237	5922	4843	5185
NF 74	3910	5719	6333	5508	4140	5122
Athens Abruzzi	4196	4952	5980	5603	4724	5091
Maton	3936	5458	6339	4937	4712	5076
Wintergrazer 70	3912	5204	6035	4992	5170	5063
NF 72	3800	5669	5884	5221	4590	5033
Gurley's Grazer 2000	3579	4711	5645	4519	4418	4574
Wren's Abruzzi	4323	4192	5440	4749	4096	4560
ACCO WR-811	3369	4621	5796	4859	4101	4549
Weser	3719	4248	5614	4780	3986	4469
Gurley's GI 75	3844	4265	5866	4298	3855	4426
McNair Vita Graze	3426	3867	5570	4063	3368	4059

Table 7. Disease ratings for wheat varieties in 1977-78 tests in Alabama

Variety	Powdery mildew[1/]	Leaf rust[1/]	Septoria blotch[1/]	Loose smut[2/]
NORTHERN ALABAMA[3/]				
Abe	2.3	0	2.3	0
Arthur	2.0	0	1.7	0
Arthur 71	2.0	0	2.7	0
Blue Boy II	2.3	0	3.3	0
Coker 68-15	2.7	0	2.3	0
Coker 75-24	0	0	2.7	0
Coker 76-22	0	0	2.0	0
Coker 747	0	0	1.7	0
FL 7111A33-1-10[4/]	0	0	3.0	0
Ga. 1123	1.7	0	2.7	0
McNair 1003	0	0	2.3	0
McNair 3006	0	0	2.3	0
Oasis	2.0	0	2.3	0
Wakeland	0	0	2.3	0
CENTRAL ALABAMA[5/]				
Abe	2.5	0.2	1.7	0
Arthur	1.7	1.0	1.7	0
Arthur 71	1.7	0	1.5	0
Blue Boy II	5.2	0	2.2	0
Coker 68-15	3.7	0	2.0	0
Coker 76-22	0.2	0	1.5	0
Coker 76-35	0.7	0	1.5	0
Coker 77-13	0.5	0	1.5	0
Coker 747	1.0	0	1.5	0
Holley	0	0	1.7	0
McNair 1813	0	0	1.7	0
McNair 1003	0.2	0	2.2	0
McNair 3006	0	1.7	1.7	0
Oasis	0.7	0	1.2	0
Wakeland	0.7	0	1.5	0
SOUTHERN ALABAMA[3/]				
Abe	1.3	0.7	1.3	0
Arthur 71	0.3	0.3	1.3	0
Coker 68-15	1.0	0	1.7	0
Coker 75-24	0	0	1.7	0
Coker 76-22	0	0	1.7	0
Coker 76-35	0	0	2.3	0

Table 7. (Cont'd) Disease ratings for wheat varieties in 1977-78 tests in Alabama

Variety	Powdery mildew[1/]	Leaf rust[1/]	Septoria blotch[1/]	Loose smut[2/]
Coker 747	0	0.3	1.3	0
Coker 77-13	0	0	2.0	0
FL 7111A33-1-10	0	0	4.0	0
Holley	0	0	2.7	0
McNair 1813	0	0	2.7	0
McNair 1003	0	0.3	2.0	0
McNair 3006	0	2.7	2.0	0
Wakeland	0	0	1.7	0

1/ 0-9 scale; 0=no disease, 9=severe infection
2/ No. smutted heads per 16 feet of row
3/ Averages from 3 locations unless indicated otherwise.
4/ Averages from 2 locations
5/ Averages from 4 locations

Table 8. Disease ratings for oat varieties in 1977-78 tests in Alabama

Variety	Barley yellow dwarf[1]	Leaf blotch[2]	Leaf rust[2]	Loose smut[3]
NORTHERN ALABAMA[4]				
Bob	T	0	0	0
Carolee	T	0	0	0
Coker 70-16	1.7	0	0	0
Coker 76-16	0	0	0	0
Coker 76-19	T	0	0	1.3
Coker 227	1.7	0	0	0
CENTRAL ALABAMA[5]				
Bob	20.5	1.7	0	0
Carolee	4.0	3.0	0	0
Coker 70-16	2.0	2.2	0	0
Coker 76-16	5.0	2.5	0	0
Coker 76-19	15.0	3.0	0	0.7
Coker 77-23[6]	0	1.0	0	0
Coker 227	5.7	2.3	0	0
Elan[4]	3.7	2.0	0	0
Salem	5.0	2.2	0	0
SOUTHERN ALABAMA[4]				
Bob	2.0	1.0	0	0
Coker 76-16	0.3	0.7	0	0
Coker 76-18	1.0	0.7	0	0
Coker 227	3.7	1.0	0	0
Elan	0	1.0	0	0
Fla. 501	7.0	1.0	0.3	0

[1] Percentage of plants showing symptoms
[2] 0-9 scale; 0=no disease, 9=severe infection
[3] Number of smutted heads per 16 feet of row
[4] Averages from 3 locations
[5] Averages from 4 locations
[6] Data from 1 location

Table 9. Disease ratings[1/] for barley varieties in 1977-78 tests in Alabama

Variety	Powdery mildew	Spot blotch	Net blotch	Leaf rust	Scald
Barsoy	0	1.8	1.4	0	1.1
Keowee[2/]	0	0	0	0	0
Surry	0	1.8	0.4	0	0.4
Volbar	0	1.3	0.4	0	0

[1/] 0-9 scale; 0=no disease, 9=severe infection. Averages from 7 locations unless indicated otherwise.

[2/] Averages from 3 locations.

VARIETIES RECOMMENDED FOR FORAGE AND GRAIN

Recommendations are based on regional yield of forage and grain. For varieties, the ratio of forage to grain will vary and should be considered in varietal selection. Varieties are listed alphabetically. For disease ratings see tables 7, 8, and 9.

NORTHERN ALABAMA

Wheat	Oats	Barley
Arthur	Coker 227	Barsoy
Blue Boy II	Coker 70-16	Keowee[1/]
Coker 68-15		Volbar
Coker 747		
Ga. 1123		
Wakeland		

CENTRAL ALBAMA

Wheat	Oats	Barley
Blue Boy II[1/]	Carolee[1/]	Barsoy
Coker 68-15	Coker 227	
Coker 747	Coker 70-16	
McNair 1813		
McNair 1003		
Wakeland		

SOUTHERN ALABAMA

Wheat	Oats
Blue Boy II[1/2/]	Coker 227
Coker 68-15	Coker 76-16[3/]
Coker 747	Coker 76-18[3/]
Holley	Elan
McNair 1813	Fla. 501
McNair 1003	
Wakeland	

1/ If present trends continue, this variety will be removed from the recommended list for forage and grain next year in the region indicated.
2/ This variety was not tested in the southern region during the 1977-78 season.
3/ Trial basis.

VARIETIES RECOMMENDED FOR GRAIN ONLY

Recommendations are based on regional yield and lodging. Varieties are listed alphabetically. For disease ratings see tables 7, 8, and 9.

NORTHERN ALABAMA

Wheat	Oats	Barley
Abe[1/]	Coker 227	Barsoy
Arthur	Coker 70-16	Volbar
Arthur 71[1/]		
Blue Boy II		
Coker 68-15		
Coker 747		
Ga. 1123		
Oasis[1/]		
Wakeland		

CENTRAL ALABAMA

Wheat	Oats	Barley
Abe	Coker 227	Barsoy
Arthur	Coker 70-16	
Arthur 71	Elan[1/]	
Blue Boy II[1/]	Salem	
Coker 68-15		
Coker 747		
McNair 1813		
McNair 1003		
Oasis		
Wakeland		

SOUTHERN ALABAMA

Wheat	Oats
Abe[1/]	Coker 227
Arthur 71[1/]	Elan
Coker 68-15	
Coker 747	
Holley[1/]	
McNair 1813[1/]	
McNair 1003	
Wakeland	

1/ If present trends continue, this variety will be removed from the recommended list for grain only next year in the region indicated.
2/ This variety was not tested in the southern region during the 1977-78 season.

RYE VARIETIES RECOMMENDED FOR FORAGE ONLY

Rye recommendations are the same as those made in the 1977 Small Grain Variety Report. Recommendations were based on forage and grain yield. For total forage yield of rye varieties in the 1977-78 season, see table 6. Varieties are listed alphabetically.

NORTHERN ALABAMA

Rye
ACCO WR-811
Athens Abruzzi
Bonel
Gurley's Grazer 2000
Maton
McNair Vita Graze
Wintergrazer 70
Wren's Abruzzi

CENTRAL ALABAMA

Rye
ACCO WR-811
Athens Abruzzi
Gurley's Grazer 2000
Maton
McNair Vita Graze
Weser
Wintergrazer 70
Wren's Abruzzi

SOUTHERN ALABAMA

Rye
ACCO WR-811
Athens Abruzzi
Gurley's Grazer 2000
Maton
McNair Vita Graze
Weser
Wintergrazer 70
Wren's Abruzzi

SOURCES OF SEED

RYE

Acco WR 811	Acco Seed, Plainview, Texas
Athens Abruzzi	Georgia Seed Development Commission, Athens, Georgia
Bonel	Noble Foundation, Ardmore, Oklahoma
Gurley's	Gurley's Inc., Selma, North Carolina
Maton	Noble Foundation, Ardmore, Oklahoma
McNair	McNair Seed Company, Laurinburg, North Carolina
NF	Noble Foundation, Ardmore, Oklahoma
SR-80	North American Plant Breeders, Brookston, Indiana
Weser	Georgia Seed Development Commission, Athens, Georgia
Wintergrazer	Pennington Grain & 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
Blue Boy II	North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina
Coker (all varieties)	Coker's Pedigreed Seed Company, Hartsville, South Carolina
FL 7111A33-1-10	Institute of Food and Agricultural Sciences, University of Florida, Quincy, Florida
Ga. 1123	Georgia Seed Development Commission, Athens, Georgia
Holley	Georgia Seed Development Commission, Athens, Georgia
McNair (all varieties)	McNair Seed Company, Laurinburg, North Carolina
Oasis	Department of Agronomy, Purdue University, Lafayette, Indiana
Wakeland	Foundation Seed Stocks Farm, Thorsby, Alabama

OATS

Bob	Rice Branch Station, University of Arkansas, Stuttgart, Arkansas
Carolee	North Carolina Foundation Seed Producers, Inc. Raleigh, North Carolina
Coker (all varieties)	Coker's Pedigreed Seed Company, Hartsville, South Carolina
Elan	Georgia Seed Development Commission, Athens, Georgia
Fla. 501	North Florida Experiment Station, Quincy, Florida
Salem	North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina

BARLEY

Barsoy	Department of Agronomy, University of Kentucky, Lexington, Kentucky
Keowee	Department of Agronomy, Clemson University, Clemson, South Carolina
Surry	Virginia Polytechnic Institute and State University, Blacksburg, Virginia
Volbar	Department of Agronomy, University of Tennessee, Knoxville, Tennessee