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1977 Small Grain Variety Report

Department of Agronomy & Soils
Agricultural Experiment Station
R. Dennis Rouse, Director

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Auburn University
Auburn, Alabama

SMALL GRAIN VARIETY REPORTS, 1977

Emmett L. Carden[1/]

Wheat, rye, oats, and barley 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 1976-77 growing season. A cool fall and cold winter caused poor forage growth, and at most locations only one or two forage harvests were made, in January and/or February. The severe cold caused some stand loss of oats in northern and central Alabama (Table 2). There was little or no stand loss of rye, wheat, or barley in any region of the State.

In Alabama, small grains are grown for forage and grain, for grain only, 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. The second series was clipped during the fall and winter as growth permitted, to evaluate forage production and the effect of its removal on subsequent grain production. The final forage harvest for the season was made no later than early March, prior to jointing. The third series, at Prattville and Tallassee, was clipped throughout the growing season until no regrowth occurred to determine total forage production.

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NON CIRCULATING

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The experimental design for these tests was a split plot with species as main-plots and varieties as sub-plots. Plots were three 12-inch rows, 16 to 20 feet long, depending on location. 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 when growth was sufficient, determining percent moisture, and converting the plot green weight to pounds of dry matter per acre. Two methods were used to harvest grain. At 4 locations a plot combine was used and the entire plot was combined. At the other locations 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 and 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 between locations, regional averages are used to give a better indication of performance of varieties over the whole region. Where data are available, averages over several years are included.

Table 1 shows forage yields and grain and total feed production for clipped and unclipped plots. Grain yield, lodging, height, and date 1/10 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 will 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 1/10 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 tables 5 and 6. Current-season data are presented by harvest date to show seasonal distribution of forage production.

Varietal reactions to diseases 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. Except where noted, these reactions are averages obtained over a period of 3 to 5 years from various locations in the State. A rating of resistant (R) means the variety has thus far appeared unaffected or only slightly affected by the particular disease. A rating of susceptible (S) means 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.

Varieties are recommended by region for (1) grain production only and (2) forage and grain production combined. 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.

Locations of the 1976-77 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

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 - J. E. Barrett, 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, 1973-77

Variety	Yield of clipped plots, average						Total feed, 1975-77 av.	
	Oven dry forage					Grain	Clipped forage plus grain	Not clipped, grain only
	1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	3 yr. 75-77		
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
	NORTHERN ALABAMA							
Number of tests[1/]	(3)	(6)	(9)	(12)	(15)	(9)	(9)	(9)
RYE								
McNair Vita Graze	2223	2366	1943	1939	1947	1311	3254	1623
Bonel	2025	2129	1758	1788	1801	1591	3349	1800
Wintergrazer 70	1719	2063	1664	1724	1763	1659	3323	1815
Maton	2154	2084	1708	1822		1554	3262	1800
Acco WR 811	1768	1938	1575	1712		1603	3178	1625
Wren's Abruzzi	1936	2144	1809			1580	3389	1834
Athens Abruzzi	1994	2213	1769			1520	3289	1963
Gurley's Grazer 2000	2071	2051	1701			1323	3024	1627
Gurley's GI 75	1988							
WHEAT								
Blue Boy II	1257	1247	1019	1290	1485	1742	2761	1747
Wakeland	1298	1526	1221	1399	1484	1464	2685	1676
Coker 68-15	1271	1320	1104	1260	1385	1600	2704	1976
Ga. 1123	1252	1173	966	1134	1262	1771	2737	1805
Holley	995	941	824	987	1112	1473	2297	1439
Arthur 71	1149	911	749	893	966	1266	2015	1545
Arthur	808	877	699	863	959	1565	2264	1763
Abe	622	647	532	698	714	1513	2045	1602
Coker 747	854	841	707			1982	2689	2289
Oasis	844	826	682			1466	2148	1594
McNair 3006	958	1061						
Doublecrop	1013	964						
Coker 75-26	1422							
Coker 75-24	1149							
Beau	526							
OATS								
Coker 66-22	479	507	438	712	917	1822	2260	2073
Coker 227	670	664	550	769		2084	2634	2167
Elan	296	332	373			348	721	1457
Coker 70-16	554	427						
Coker 76-19	445							
Carolee	351							
BARLEY								
Barsoy	648	768	675	954	1040	2224	2899	2501
Keowee	522	622	529	753	837	2003	2532	1913
Volbar	594	650	507	683		2365	2872	2466

1/Due to cold weather, only rye made sufficient growth for clipping by March 1, at Crossville. Forage data for wheat, oats and barley in 1977 are from Belle Mina and Winfield.

Table 1 . (Cont'd) FORAGE AND GRAIN YIELDS OF SMALL GRAIN VARIETIES TESTED, 1973-77

Variety	Yield of clipped plots, average Oven dry forage 1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	Grain 3-yr. 75-77	Total feed 1975-77 av. Clipped forage plus grain	Not clipped, grain only
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
				CENTRAL ALABAMA				
Number of tests	(2)	(5)	(9)	(13)	(17)	(9)	(9)	(9)
RYE								
McNair Vita Graze	3015	2204	2088	2097	2205	803	2891	1417
Weser	2323	1741	1813	1890	1997	1027	2840	1516
ACCO WR 811	2436	1824	1812	1905	1996	1111	2923	1355
Wren's Abruzzi	2539	1876	1880	1953	1995	1115	2995	1420
Gurley's Grazer 2000	2853	2035	1952	2131		914	2866	1396
Maton	2832	1986	1929			1315	3244	1289
Athens Abruzzi	2566	1898	1874			1128	3002	1438
Wintergrazer 70	1952	1467	1580			1326	2906	1335
Gurley's Abruzzi	2667							
Gurley's GI 76	2616							
NF 74	2484							
NF 72	2331							
WHEAT								
Wakeland	1814	1363	1527	1723	1796	1307	2834	1734
Coker 68-15	1879	1332	1464	1612	1721	1558	3022	1988
Blue Boy II	1030	1025	1241	1500	1692	1265	2506	1667
Arthur	494	515	716	930	1058	1855	2571	1858
Arthur 71	642	478	703	860	1013	1631	2334	1897
Abe	326	300	518	718	876	2047	2565	1817
Coker 747	591	610	811			1955	2766	2044
Oasis	655	551	756			1801	2557	1883
McNair 1813	2002	1435						
McNair 3001	1435	1168						
Doublecrop	726	563						
Coker 76-22	1670							
Coker 75-27	1460							
OATS								
Coker 227	530	467	849	1100	1267	1810	2659	1638
Fla. 501	474	393	824	1121	1259	1255	2079	1147
Elan	294	263	668	972		1403	2071	1436
Salem	1009	669						
Coker 70-16	641	455						
Coker 76-16	888							
Carolee	742							
Coker 76-19	729							
Coker 76-18	692							
BARLEY								
Barsoy	1366	987	1173	1403	1480	1769	2942	1938
Boone	1171	694						

Table 1. (Cont'd) FORAGE AND GRAIN YIELDS OF SMALL GRAIN VARIETIES TESTED, 1973-77

Variety	Yield of clipped plots, average						Total feed 1975-77 av.	
	Oven dry forage					Grain	Clipped forage plus grain	Not clipped, grain only
	1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	3-yr. 75-77		
	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
				SOUTHERN ALABAMA				
Number of tests	(5)	(10)	(15)	(20)	(25)	(15)	(15)	(15)
RYE								
McNair Vita Graze	2047	2157	2152	2218	2204	706	2858	1339
Weser	1935	2096	2058	2160	2151	1088	3146	1395
Gurley's Grazer 2000	2017	2117	2081	2148	2149	1001	3082	1265
Wren's Abruzzi	1863	2064	2087	2166	2118	1101	3188	1370
ACCO WR 811	1994	1967	1938	2031	2045	777	2715	1094
Athens Abruzzi	2132	2188	2076			1048	3124	1182
Maton	1857	1868	1849			1112	2961	1080
Wintergrazer 70	1617	1718	1731			1378	3109	1224
NF 72	2083							
Gurley's GI 75	1979							
NF 74	1805							
WHEAT								
Wakeland	1554	1583	1620	1743	1757	1581	3201	1849
Blue Boy II	1246	1302	1367	1532	1604	1590	2957	1672
McNair 1813	1390	1342	1445	1541	1574	1302	2747	1589
Coker 68-15	1360	1216	1303	1411	1506	1762	3065	1898
Abe	487	451	545	759	804	1964	2509	1763
Holley	1353	1150	1245	1381		1485	2730	1546
Arthur 71	689	563	658	845		1673	2331	1646
Coker 747	673	616	671			2209	2880	2122
McNair 3001	1397	1294						
Coker 75-24	1497							
Coker 76-22	1439							
Coker 75-26	1400							
Coker 75-27	1340							
OATS								
Fla. 501	781	823	1028	1243	1362	1744	2772	1604
Coker 227	806	755	854	1136	1173	2019	2873	2042
Elan	537	589	806	1049	1131	1895	2701	1845
Salem	726	816						
Coker 76-18	1051							
Coker 76-16	967							
Coker 76-19	883							

Table 2. Estimated Percent Stand Loss of Oat Varieties Due to Severe Cold During the 1976-77 Season.

Variety	Northern Alabama		Central Alabama	
	Clipped	Unclipped	Clipped	Unclipped
Carolee	27	24	0	14
Coker 227	1	4	0	19
Coker 66-22	0	2	-	-
Coker 70-16	1	1	0	7
Coker 76-16	-	-	0	9
Coker 76-18	-	-	0	12
Coker 76-19	9	8	0	11
Elan	72	51	0	38
Fal. 501	-	-	0	23
Salem	-	-	0	20

TABLE 3. GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1973-77

Variety	Regional average yield per acre					Other characteristics 3-year av. 1975-77		
	1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	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)
RYE								
Wintergrazer 70	42	39	32	30	26	44	58	4/2
Bonel	35	39	32	29	25	45	60	4/3
McNair Vita Graze	32	37	29	26	22	51	57	3/30
Maton	38	37	32	29		46	58	4/1
Acco WR 811	34	34	29	26		41	57	4/1
Athens Abruzzi	42	41	35			42	61	3/31
Wren's Abruzzi	38	39	33			52	58	3/31
Gurley's Grazer 2000	34	36	29			44	56	3/31
Gurley's GI 75	45							
WHEAT								
Coker 68-15	38	38	33	30	26	6	34	4/13
Blue Boy II	38	34	29	27	25	7	38	4/16
Ga. 1123	37	33	30	26	25	11	43	4/15
Wakeland	37	32	28	26	24	23	41	4/15
Arthur	40	29	29	25	24	12	36	4/16
Abe	33	26	27	24	22	20	34	4/17
Arthur 71	32	25	26	23	22	18	36	4/17
Holley	39	26	24	22	20	19	39	4/10
Coker 747	41	42	38			19	33	4/17
Oasis	35	26	27			18	36	4/17
McNair 3006	48	41						
Doublecrop	25	20						
Coker 75-24	46							
Coker 75-26	40							
Beau	37							
OATS								
Coker 66-22	89	71	65	61	53	36	41	4/23
Coker 227	86	74	68	66		38	37	4/21
Elan	53	48	46			27	32	4/23
Coker 70-16	92	77						
Coker 76-19	89							
Carolee	60							
BARLEY								
Barsoy	45	59	52	49	41	43	30	4/2
Keowee	39	47	40	38	36	47	34	4/15
Volbar	52	60	51	50		40	37	4/13

TABLE 3. (Cont'd) GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1973-77

Variety	Regional average yield per acre					Other characteristics 3-year av. 1975-77		
	1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				CENTRAL ALABAMA				
Number of tests	(3)	(6)	(10)	(14)	(18)	(10)	(10)	(10)
RYE								
Weser	32	33	27	26	22	9	54	3/17
Wren's Abruzzi	27	30	25	25	21	11	54	3/17
McNair Vita Graze	27	29	25	23	19	4	54	3/17
Acco WR 811	30	29	24	23	19	11	54	3/18
Gurley's Grazer 2000	32	29	25	23		8	56	3/16
Athens Abruzzi	28	29	26			7	56	3/18
Wintergrazer 70	28	27	24			8	58	3/20
Maton	30	26	23			6	56	3/18
Gurley's GI 76	32							
Gurley's Abruzzi	29							
NF 72	29							
NF 74	29							
WHEAT								
Arthur 71	34	31	32	32	28	1	36	4/6
Abe	35	31	30	31	28	7	34	4/6
Coker 68-15	36	33	33	32	27	1	36	4/3
Arthur	35	31	31	31	27	7	37	4/5
Wakeland	36	33	29	26	23	8	43	3/31
Blue Boy II	29	27	28	26	23	1	37	4/4
Coker 747	40	33	34			9	33	4/6
Oasis	34	30	31			6	37	4/6
McNair 3001	49	43						
Doublecrop	36	30						
McNair 1813	40	28						
Coker 76-22	45							
Coker 75-27	41							
OATS								
Coker 227	48	51	51	59	54	9	38	4/12
Fla. 501	43	40	36	40	37	1	38	4/7
Elan	23	38	45	48		7	36	4/11
Salem	66	57						
Coker 70-16	56	55						
Coker 76-19	70							
Carolee	62							
Coker 76-16	55							
Coker 76-18	54							
BARLEY								
Barsoy	46	42	40	37	32	12	29	3/25
Boone	32	31						

TABLE 3. (Cont'd) GRAIN YIELD AND OTHER CHARACTERISTICS OF UNCLIPPED SMALL GRAIN VARIETIES TESTED, 1973-77

Variety	Regional average yield per acre					Other characteristics 3-year av. 1975-77		
	1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	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)
RYE								
Weser	34	33	25	23	19	32	52	3/16
Wren's Abruzzi	33	33	24	22	19	33	54	3/16
McNair Vita Graze	36	31	24	20	17	29	53	3/14
Gurley's Grazer 2000	32	30	23	20	17	30	54	3/15
Acco WR 811	36	27	20	17	14	33	53	3/16
Wintergrazer 70	29	28	22			25	55	3/20
Athens Abruzzi	30	28	21			31	54	3/17
Maton	28	25	19			31	55	3/19
Gurley's GI 75	35							
NF 74	35							
NF 72	32							
WHEAT								
Coker 68-15	40	39	32	26	24	2	35	4/5
Wakeland	37	38	31	25	23	16	39	3/29
Abe	34	35	29	25	23	5	33	4/6
Blue Boy II	31	35	28	23	21	4	37	3/30
McNair 1813	34	34	26	21	19	5	34	3/22
Arthur 71	32	32	27	23		10	34	4/6
Holley	33	33	26	21		6	38	3/23
Coker 747	43	43	35				32	4/6
McNair 3001	45	45						
Coker 75-27	46							
Coker 75-24	46							
Coker 76-22	45							
Coker 75-26	42							
OATS								
Coker 227	81	81	64	54	52	23	42	4/5
Elan	74	68	58	49	50	24	38	4/4
Fla. 501	64	64	50	41	39	37	40	3/30
Salem	68	61						
Coker 76-16	83							
Coker 76-19	83							
Coker 76-18	72							

TABLE 4. GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1973-77

Variety	Regional average yield per acre					Other characteristics 3-year av. 1975-77		
	1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				NORTHERN ALABAMA				
Number of tests[1/]	(3)	(6)	(9)	(12)	(15)	(9)	(9)	(9)
RYE								
Wintergrazer 70	35	31	30	28	25	55	56	4/3
Bonel	32	30	28	27	24	58	57	4/4
McNair Vita Graze	39	29	23	22	18	59	54	4/2
Acco WR 811	42	34	29	26		56	54	4/2
Maton	35	31	28	26		54	57	4/3
Wren's Abruzzi	35	31	28			55	54	4/3
Athens Abruzzi	35	30	27			54	56	4/2
Gurley's Grazer 2000	34	27	24			55	55	4/3
Gurley's GI 75	38							
WHEAT								
Ga. 1123	42	32	30	26	25	10	40	4/13
Arthur	42	27	26	24	23	11	35	4/13
Blue Boy II	47	36	29	24	22	8	35	4/16
Abe	31	25	25	23	21	19	33	4/13
Holley	33	27	25	21	21	13	37	4/12
Coker 68-15	43	33	27	23	20	10	33	4/12
Wakeland	38	29	24	21	20	23	38	4/15
Arthur 71	25	19	21	20	19	15	34	4/13
Coker 747	43	35	33			17	33	4/14
Oasis	28	24	24			18	35	4/15
McNair 3006	49	37						
Doublecrop	24	19						
Coker 75-26	45							
Coker 75-24	38							
Beau	37							
OATS								
Coker 66-22	75	62	57	52	49	21	41	4/20
Coker 227	97	72	65	54		20	37	4/18
Elan	0	0	11			23	31	4/21
Coker 70-16	82	64						
Coker 76-19	66							
Carolee	49							
BARLEY								
Barsoy	55	54	46	41	35	39	29	3/31
Keowee	43	44	42	37	34	40	32	4/10
Volbar	54	54	49	45		36	37	4/9

1/Wheat, oats and barley were not clipped at Crossville in 1977, and grain yields of these crops are not included in the 1977 grain yield averages.

TABLE 4. (Cont'd) GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1973-77

Variety	Regional average yield per acre					Other characteristics 3-year av. 1975-77		
	1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	Lodging	Height	1/10 Headed
	Bu.	Bu.	Bu.	Bu.	Bu.	Pct.	In.	Date
				CENTRAL ALABAMA				
Number of tests	(2)	(5)	(9)	(13)	(17)	(9)	(9)	(9)
RYE								
Wren's Abruzzi	25	24	20	21	19	9	49	3/24
Acco WR 811	27	24	20	19	17	14	49	3/24
Weser	23	23	18	18	16	9	48	3/24
McNair Vita Graze	22	19	14	14	13	11	49	3/24
Gurley's Grazer 2000	20	19	16	17		9	52	3/24
Wintergrazer 70	31	29	24			9	52	3/24
Maton	30	29	23			9	51	3/23
Athen's Abruzzi	28	25	20			9	51	3/23
NF 74	34							
NF 72	33							
Gurley's GI 76	25							
Gurley's Abruzzi	25							
WHEAT								
Abe	42	39	34	30	30	4	33	4/4
Arthur	46	37	31	28	28	6	36	4/4
Arthur 71	41	33	27	25	25	3	35	4/5
Coker 68-15	39	33	26	24	20	1	32	4/2
Wakeland	31	29	22	18	18	2	39	4/5
Blue Boy II	29	28	21	18	16	1	35	4/8
Coker 747	39	38	33			9	33	4/5
Oasis	41	36	30			3	35	4/5
McNair 3001	50	39						
McNair 1813	44	33						
Doublecrop	43	30						
Coker 76-22	42							
Coker 75-27	31							
OATS								
Coker 227	80	65	57	54	53	3	37	4/9
Fla. 501	63	49	39	35	36	4	35	4/7
Elan	70	50	44	38		1	33	4/12
Coker 70-16	82	64						
Salem	69	52						
Coker 76-19	74							
Coker 76-16	72							
Carolee	69							
Coker 76-18	65							
BARLEY								
Barsoy	63	48	37	32	28	2	26	3/25
Boone	43	32						

TABLE 4. (Cont'd) GRAIN YIELD AND OTHER CHARACTERISTICS OF CLIPPED SMALL GRAIN VARIETIES TESTED, 1973-77

Variety	Regional average yield per acre					Other characteristics 3-year av. 1975-77		
	1-yr. 1977	2-yr. 76-77	3-yr. 75-77	4-yr. 74-77	5-yr. 73-77	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)
RYE								
Wren's Abruzzi	26	26	20	19	16	33	51	3/17
Weser	26	26	19	18	15	38	50	3/17
Gurley's Grazer 2000	28	24	18	16	14	35	51	3/17
Acco WR 811	23	19	14	12	11	43	50	3/17
McNair Vita Graze	22	18	13	11	9	42	49	3/16
Wintergrazer 70	34	32	25			29	53	3/18
Maton	28	26	20			34	52	3/17
Athens Abruzzi	28	25	19			29	51	3/17
NF 72	31							
NF 74	30							
Gurley's GI 75	27							
WHEAT								
Abe	41	37	33	27	26	5	34	3/27
Coker 68-15	41	35	29	24	21	2	35	3/26
Wakeland	34	34	26	22	21	10	38	3/25
Blue Boy II	37	33	26	22	20	6	36	3/28
McNair 1813	35	29	22	17	15	4	32	3/19
Arthur 71	39	33	28	23		3	35	3/27
Holley	34	31	25	20		11	38	3/22
Coker 747	48	43	37			8	34	3/27
McNair 3001	42	35						
Coker 76-22	42							
Coker 75-26	41							
Coker 75-24	41							
Coker 75-27	38							
OATS								
Coker 227	86	74	63	53	55	16	41	3/31
Elan	79	73	59	47	48	18	38	4/2
Fla. 501	77	63	54	45	47	24	38	3/28
Salem	70	54						
Coker 76-19	87							
Coker 76-16	86							
Coker 76-18	81							

Table 5. Forage Yield of Small Grain Varieties Tested for Forage Only - Prattville, 1974-77

Variety	Oven dry forage, lb. per acre: Clipping date 2-8-77	3-2-77	3-15-77	4-5-77	1977 Season total	76-77 2-yr. av.	75-77 3-yr. av.	74-77 4-yr. av.
RYE								
Wintergrazer 70	1899	1452	725	906	4982	4824	4897	4896
Wren's Abruzzi	1793	1503	327	853	4477	4307	4554	4628
Gurley's Grazer 2000	1872	1345	408	1054	4678	4386	4475	4555
McNair Vita Graze	1632	1491	337	931	4392	4041	4245	4453
Weser	1785	1071	285	642	3783	3958	4203	4452
Athens Abruzzi	2165	1601	421	989	5177	4799	4904	
Gurley's GI 75	2004	1527	413	1042	4985	4547	4595	
Maton	1859	1838	682	1137	5516	4858		
Acco WR 811	2018	1300	503	1109	4930	4382		
Gurley's GI 76	1691	1531	457	1134	4813	4320		
Bonel	1743	1760	763	1187	5453			
WHEAT								
Coker 68-15	829	1106	989	1025	3949	3799	3847	4177
Blue Boy II	657	910	972	1274	3812	3708	3810	
Wakeland	601	1356	715	746	3418	3417		
McNair 1813	1049	1054	754	831	3688			
Ga. 1123	1020	1129	724	781	3653			
McNair 3001	696	1099	807	1042	3644			
Abe	488	448	1058	1555	3549			
Arthur 71	467	741	1060	1173	3440			
Arthur	145	624	1139	1146	3053			
Holley	789	693	602	967	3050			
OATS								
Coker 227	252	661	1472	1634	4019	4372	4548	4967
Fla. 501	254	232	722	1301	2509	2750		
Coker 66-22	214	532	1314	1484	3544			
Carolee	236	524	858	1319	2937			
Elan	161	98	526	1408	2194			
BARLEY								
Keowee	190	748	1212	1547	3696	3470	3685	4073
Volbar	221	479	1263	1953	3917	3955		
Barsoy	231	919	1196	1051	3397			

Table 6. Forage Yield of Small Grain Varieties Tested for Forage Only - Tallassee, 1974-77

Variety	Oven dry forage, lb. per acre: Clipping date 11-17-76	12-28-76	2-22-77	3-9-77	3-31-77	1977 Season total	76-77 2-yr. av.	75-77 3-yr. av.	74-77 4-yr. av.
RYE									
Wintergrazer 70	504	678	892	1522	581	4176	3808	4166	4051
Wren's Abruzzi	944	1360	674	844	383	4205	3682	3794	3810
Gurley's Grazer 2000	949	1537	784	844	471	4586	3843	3852	3809
McNair Vita Graze	885	1364	803	767	342	4161	3611	3772	3804
Weser	936	968	371	619	282	3176	2954	3333	3494
Athens Abruzzi	782	1397	1067	1130	529	4905	4086	4213	
Gurley's GI 75	676	1232	751	982	561	4203	3704	3827	
Maton	917	1374	1092	1429	679	5491	4252		
Gurley's GI 76	900	1322	911	1060	487	4679	3749		
Acco WR 811	616	1098	593	1006	474	3787	3515		
Bonel	743	929	1004	1442	697	4816			
WHEAT									
Coker 68-15	291	808	797	1195	956	4048	3421	3755	3835
Blue Boy II	435	769	695	1159	1071	4129	3266	3620	
Wakeland	228	1132	1145	937	565	4007	3243		
Ga. 1123	375	806	791	1060	707	3738			
McNair 1813	533	760	843	920	627	3683			
Holley	538	1166	244	775	723	3446			
McNair 3001	434	602	882	860	646	3423			
Arthur	232	329	106	1258	1378	3302			
Arthur 71	154	353	124	1212	1328	3172			
Abe	177	283	77	1064	1444	3046			
OATS									
Coker 227	100	447	354	1422	1655	3979	3454	3948	3866
Fla. 501	336	998	130	536	900	2900	2483		
Coker 66-22	101	604	282	1121	1406	3515			
Carolee	313	1035	284	816	986	3434			
Elan	84	598	87	409	800	1978			
BARLEY									
Keowee	245	379	592	2019	1948	5183	3805	3684	3432
Volbar	102	193	670	1777	1787	4530	3435		
Barsoy	362	626	899	2133	1099	5120			

Table 7. Reaction of Wheat Varieties to Some Diseases in Alabama[1/]

Variety	Powdery mildew	Leaf rust	Septoria leaf blotch	Loose smut
NORTHERN ALABAMA[2/]				
Abe	R	S	S	R
Arthur	R	S	S	R
Arthur 71	R	S	S	R
Blueboy II	S	R	S	R
Coker 68-15	S	R	S	R
Doublecrop[3/]	R	R	S	R
Ga. 1123	S	S	S	R
Holley	R	R	S	R
McNair 3006[3/]	R	R	S	R
Oasis[3/]	R	S	R	R
Wakeland	S	R	S	S
CENTRAL ALABAMA				
Abe	S	R	S	R
Arthur	S	R	S	R
Arthur 71	S	R	S	R
Blueboy II	S	R	S	R
Coker 68-15	S	R	S	R
Coker 76-22[3/]	R	R	R	R
Coker 747[3/]	S	R	R	R
Doublecrop[3/]	S	R	R	R
McNair 1813[4/]	R	R	S	R
McNair 3001[4/]	R	R	S	R
Oasis	S	R	S	R
Wakeland	S	S	S	S
SOUTHERN ALABAMA				
Abe	S	R	S	R
Arthur[3/]	R	R	R	R
Arthur 71	S	R	S	R
Blueboy II	S	R	S	R
Coker 68-15	S	R	S	R
Coker 75-24[3/]	R	R	S	R
Coker 75-26[3/]	R	R	R	R
Coker 75-27[3/]	R	R	R	R
Coker 76-22[3/]	R	R	R	R
Coker 747[3/]	S	R	R	R
Holley	R	R	S	R
McNair 1813	R	S	S	R
McNair 3001[4/]	R	R	S	R
Wakeland	S	S	S	S

1/A rating of resistant (R) means the variety has thus far appeared unaffected or only slightly affected by the particular disease in the region indicated. A rating of susceptible (S) means the variety is susceptible to the extent that appreciable damage has occurred in the region indicated when conditions were favorable for disease occurrence and development.

2/No disease ratings were made in northern Alabama in the 1976-77 season. Reactions to diseases are based on data from previous years.

3/1 year data 4/2 year's data

Table 8. Reaction of Oat Varieties to Some Diseases in Alabama[1/]

Variety	Crown rust	Helminthosporium leaf blotch	Septoria leaf blotch	Loose smut
NORTHERN ALABAMA[2/]				
Carolee	S	S	S	R
Coker 66-22	S	S	R	R
Coker 70-16[3/]	R	S	R	R
Coker 227[3/]	R	S	R	R
Elan[3/]	R	S	R	R
CENTRAL ALABAMA				
Carolee	S	S	S	R
Coker 70-16[2/]	R	R	R	R
Coker 76-16[3/]	R	R	R	R
Coker 76-18[3/]	R	R	R	R
Coker 76-19[3/]	R	R	R	R
Coker 227	R	S	R	R
Elan	R	S	R	R
Fla. 501	R	S	R	R
Roanoke	S	S	S	R
Salem[4/]	R	R	R	R
SOUTHERN ALABAMA				
Coker 76-16[3/]	R	R	R	R
Coker 76-18[3/]	R	R	R	R
Coker 76-19[3/]	R	R	R	R
Coker 227	S	S	S	R
Elan	S	S	R	R
Fla. 501	S	S	R	R
Salem[4/]	S	R	R	R

1/A rating of resistant (R) means the variety has thus far appeared unaffected or only slightly affected by the particular disease in the region indicated. A rating of susceptible (S) means the variety is susceptible to the extent that appreciable damage has occurred in the region indicated when conditions were favorable for disease occurrence and development.

2/No disease ratings were made in northern Alabama in the 1976-77 season.

3/One year data.

4/Two year's data.

Table 9. Reaction of Barley and Rye to Some Diseases in Alabama[1/]

Variety	Powdery mildew	Spot blotch	Net blotch	Leaf rust	Anthracnose	Septoria leaf blotch
BARLEY						
Barsoy	R	S	S	S		R
Boone[3/]	R	S	R	R		R
Keowee	R	S	R	S		R
Volbar[3/]	R	S	S	R		R
RYE						
ACCO 811	R			S	S	S
Athen's Abruzzi[3/]	R			R	R	S
Bonel	R			S	S	S
Gurley's Abruzzi[2/]	R			R	R	R
Gurley's GI 75[2/]	R			R	R	R
Gurley's GI 76[2/]	R			R	R	R
Gurley's Grazer 2000	R			R	S	S
Maton	R			R	R	R
McNair Vita-Graze[2/]	R			R	R	R
NF 72[2/]	R			R	R	R
NF 74[2/]	R			R	R	R
Weser	R			S	S	S
Wintergrazer 70	R			S	S	S
Wren's Abruzzi	R			S	S	S

1/A rating of resistant (R) means the variety has thus far appeared unaffected or only slightly affected by the particular disease. A rating of susceptible (S) means the variety is susceptible to the extent that appreciable damage has occurred. These reactions are based on data from several locations over the State except that no ratings were made in northern Alabama in the 1976-77 season.

2/1 year data

3/2 year's data

VARIETIES RECOMMENDED FOR FORAGE AND GRAIN

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

NORTHERN ALABAMA

Oats	Barley	Rye	Wheat
Carolee[1/] [2/]	Barsoy	Acco WR 811	Blue Boy II
Coker 227	Keowee[2/]	Athens Abruzzi	Coker 68-15
Coker 66-22	Volbar	Bonel	Coker 747
		Gurley's Grazer 2000	Ga. 1123
		Maton	Wakeland
		McNair Vita Graze	
		Wintergrazer 70	
		Wren's Abruzzi	

CENTRAL ALABAMA

Oats	Barley	Rye	Wheat
Carolee[1/]	Barsoy	Acco WR 811	Abe[2/]
Coker 227		Athens Abruzzi	Arthur[2/]
		Gurley's Grazer 2000	Blue Boy II[2/]
		Maton	Coker 68-15
		McNair Vita Graze	Coker 747
		Weser	Wakeland
		Wintergrazer 70	
		Wren's Abruzzi	

SOUTHERN ALABAMA

Oats	Rye	Wheat
Coker 227	Acco WR 811	Blue Boy II
Elan	Athens Abruzzi	Coker 68-15
Fla. 501	Gurley's Grazer 2000	Coker 747
	Maton	Holley
	McNair Vita Graze	McNair 1813
	Weser	Wakeland
	Wintergrazer 70	
	Wren's Abruzzi	

1/Carolee was not tested in 1975-76. Recommendation is based on data from 1977 and years previous to 1976.

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

VARIETIES RECOMMENDED FOR GRAIN ONLY

Recommendations are based on yield and lodging and are listed in alphabetical order. For reaction to diseases see tables 7,8, and 9.

NORTHERN ALABAMA

Oats	Barley	Rye	Wheat
Carolee[1/]	Barsoy	Acco WR 811	Abe
Coker 227	Volbar	Athens Abruzzi	Arthur
Coker 66-22		Bonel	Arthur 71
Coker 70-16[2/]		Gurley's Grazer 2000	Blue Boy II
		Maton	Coker 68-15
		McNair Vita Graze	Coker 747
		Wintergrazer 70	Ga. 1123
		Wren's Abruzzi	McNair 3006[2/]
			Oasis
			Wakeland

CENTRAL ALABAMA

Oats	Rye	Wheat
Carolee[1/]	Acco WR 811	Abe
Coker 227	Athens Abruzzi	Arthur
Elan	Gurley's Grazer 2000	Arthur 71
	Maton	Coker 68-15
	McNair Vita Graze	Blue Boy II
	Weser	Coker 747
	Wintergrazer 70	McNair 3001[2/]
	Wren's Abruzzi	Oasis
		Wakeland

SOUTHERN ALABAMA

Oats	Rye	Wheat
Coker 227	Acco WR 811	Abe
Elan	Athens Abruzzi	Arthur 71
	Gurley's Grazer 2000	Blue Boy II
	Maton	Coker 68-15
	McNair Vita Graze	Coker 747
	Weser	Holley
	Wintergrazer 70	McNair 3001[2/]
	Wren's Abruzzi	McNair 1813
		Wakeland

[1/] Carolee was not tested in 1975-76. Recommendation is based on data for 1977 and years previous to 1976; however, grain yield is marginal and if present trends continue Carolee will be removed from the recommended list in the regions indicated.

[2/] Trial basis.

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
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
Beau	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
Doublecrop	Northeast Branch Experiment Station, Keiser, Arkansas
Ga. 1123	Georgia Seed Development Commission, Athens, Georgia
Holley	Georgia Seed Development Commission, Athens, Georgia
McNair	McNair Seed Company, Laurinburg, North Carolina
Oasis	Department of Agronomy, Purdue University, Lafayatte, Indiana
Wakeland	Foundation Seed Stocks Farm, Thorsby, Alabama

OATS

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
Boone	North Carolina Foundation Seed Producers, Inc., Raleigh, North Carolina
Keowee	Department of Agronomy, Clemson University, Clemson, South Carolina
Volbar	Department of Agronomy, University of Tennessee, Knoxville, Tennessee

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