Performance of Small Grain Varieties for Forage in Alabama, 2001-02

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TABLE OF CONTENTS

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THE 2002 ALABAMA PERFORMANCE COMPARISON OF SMALL GRAIN VARIETIES FOR FORAGE

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Introduction

The large number of commercially available varieties of wheat, oats, rye, barley, and triticale makes it difficult for growers to select varieties most suited for forage production in their particular area of the State because yields and distribution of growth vary. For example, many of the small grain species and varieties differ in their capability to produce early fall and winter forage for livestock production. Making the proper selection requires up-to-date, unbiased, reliable information on total forage yields and seasonal yields of varieties.

Entries in each experiment are determined by the companies or institutes which control each variety, or line, not by Experiment Station personnel. Data from tests conducted at nine locations were used to compile this report. These locations represent the varied growing conditions around the State for the past 3 years.

Procedure

The experimental design for the tests was a split plot with species as the main plot and varieties as subplots. Plots were 5 feet by 20 feet with rows spaced 7 inches apart. A cone drill was used to plant all tests. Each variety was replicated three times in each test entered.

The tests are normally planted in late September to early October. In the 2002 harvest year, planting at the central and southern locations were delayed due to dry soil conditions. The tests were fertilized at planting with 100 pounds N per acre and clipped with a flail-type mower each time they reached 6 inches in height. The entire harvested forage from each plot was weighed. A sub-sample was also weighed green from each plot, then dried and reweighed. The percent dry matter figure from these weights was then used to calculate forage dry matter per acre. The tests were top-dressed in February with 60 pounds N per acre and clipping was continued until no regrowth occurred in the spring.

Data Explanation

Total and seasonal dry matter yields are recorded by locations. The four seasonal periods are: autumn-forage produced through December; winter-January and February production; early spring-March and early April production; and late spring-production after April 20.

Discussion

Growing conditions and variety forage performance often vary among locations and years. Multiple-year averages are provided and should be a better indicator for performance comparisons. The 2002 yields at Headland were adversely affected due to moderate to severe incidence of barley yellow dwarf on all forage varieties.

TABLE 1. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT TENNESSEE VALLEY RESEARCH AND EXTENSION CENTER, BELLE MINA, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
		lbs/acre		
Wheat				
Pat	----	829	2563	3392
Armor 3235	----	1204	2143	3347
Roberts	----	988	1884	2872
Test Mean		1007	2197	3204
C.V. (%)		10	6	7
LSD(0.10)		182	233	371
Oat				
Plantation Exp 201	----	1101	1943	3044
Horizon 314	----	985	1931	2917
LA 604	----	963	1900	2862
SC 910337	----	1177	1682	2859
Horizon 474	----	1244	1589	2832
Harrison	----	1203	1549	2752
Chapman	----	1127	1413	2539
Test Mean		1114	1715	2829
C.V. (%)		8	10	6
LSD(0.10)		122	260	238
Rye				
Maton	----	1232	2876	4108
Elbon	----	1048	3051	4098
Oklon	----	1472	2324	3796
Bates	----	1293	2428	3721
NF 1	----	1423	2043	3466
SS Early Graze	----	1316	2151	3466
Carolina Grazer 2000	----	1538	1900	3438
Carolina Early Grazer 2000	----	1678	1740	3417
NF 65	----	1432	1956	3388
Wintergrazer 70	----	1437	1760	3197
Wren's Abruzzi AL	----	1354	1454	2808
Test Mean		1384	2153	3537
C.V. (%)		14	8	6
LSD(0.10)		273	247	321
Triticale				
Trical 336	----	1201	2531	3732
Trical 2700	----	1547	2122	3670
RSI 351	----	1519	1684	3203
RSI Exp 314	----	1288	1224	2513
Trical 498	----	1170	1282	2452
Test Mean		1345	1769	3114
C.V. (%)		8	9	5
LSD(0.10)		168	249	256

TABLE 2. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT TENNESSEE VALLEY RESEARCH AND EXTENSION CENTER, BELLE MINA, ALABAMA, 2001-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	lbs/acre				
Wheat					
Armor 3235	358	731	2231	787	4107
Roberts	397	712	1739	596	3445
Oat					
Harrison	339	692	2134	1643	4808
Horizon 314	239	545	2050	1580	4412
LA 604	136	535	2103	1324	4098
Chapman	334	650	1792	1187	3964
Rye					
Elbon	375	739	3076	327	4517
Maton	368	852	2943	343	4506
Carolina Grazer 2000	590	1213	2068	508	4379
Oklon	432	1028	2399	403	4262
Bates	472	925	2323	389	4108
Carolina Early Grazer 2000	421	1309	1907	458	4096
Wintergrazer 70	481	1114	1903	445	3942
Wren's Abruzzi AL	659	1091	1509	501	3759
Triticale					
Trical 2700	482	947	2291	727	4447
RSI 351	714	962	1719	699	4094
Trical 498	467	767	1353	373	2960

TABLE 3. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT TENNESSEE VALLEY RESEARCH AND EXTENSION CENTER, BELLE MINA, ALABAMA, 2000-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	lbs/acre				
Wheat					
Armor 3235	484	730	2714	972	4900
Roberts	609	810	2303	771	4493
Oat					
Harrison	548	785	2414	1556	5304
Horizon 314	562	673	2356	1574	5165
Chapman	634	766	2191	1176	4767
Rye					
Oklon	1297	1028	3092	753	6170
Maton	891	867	3516	601	5875
Elbon	789	755	3667	536	5746
Bates	1066	957	2758	756	5537
Wintergrazer 70	888	1012	2397	868	5165
Wren's Abruzzi AL	1056	1044	1813	1023	4936
Triticale					
Trical 2700	1102	932	2565	1087	5686
Trical 498	849	753	1550	808	3959

TABLE 4. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT SAND MOUNTAIN RESEARCH AND EXTENSION CENTER, CROSSVILLE, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
	lbs/acre			
Wheat				
Armor 3235	355	2003	1062	3420
Roberts	323	1156	1619	3098
Pat	259	940	1691	2757
Test Mean	345	1366	1457	3092
C.V. (%)	43	10	20	9
LSD(0.10)	353	236	501	481
Oat				
Horizon 314	213	1508	1467	3188
Harrison	384	1547	1154	3086
Plantation Exp 201	338	1297	1348	2984
Horizon 474	420	1296	1201	2917
Chapman	304	1417	1172	2893
SC 910337	223	1417	893	2533
LA 604	235	1092	1152	2425
Test Mean	310	1368	1198	2861
C.V. (%)	29	14	18	13
LSD(0.10)	134	275	314	549
Rye				
Bates	385	1829	2427	4642
NF 1	380	2044	1989	4412
Oklon	404	1621	2380	4406
NF 65	369	2053	1846	4268
Carolina Early Grazer 2000	522	1953	1732	4207
Maton	479	1029	2696	4204
Wintergrazer 70	342	2596	1238	4175
Carolina Grazer 2000	380	2082	1667	4129
Elbon	287	1239	2460	3986
SS Early Graze	332	2109	1345	3787
Wren's Abruzzi AL	527	2066	959	3552
Test Mean	401	1875	1885	4161
C.V. (%)	26	9	21	11
LSD(0.10)	146	227	549	624
Triticale				
Trical 336	176	1239	2307	3719
Trical 2700	497	1283	1798	3578
Trical 498	650	1355	1298	3303
RSI Exp 314	745	1399	963	3107
RSI 351	493	1526	955	2973
Test Mean	548	1360	1464	3336
C.V. (%)	21	20	21	15
LSD(0.10)	180	405	475	746

TABLE 5. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT SAND MOUNTAIN RESEARCH AND EXTENSION CENTER, CROSSVILLE, ALABAMA, 2001-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	lbs/acre				
Wheat					
Armor 3235	355	1299	1900	2224	5777
Roberts	323	967	1669	1691	4650
Oat					
Horizon 314	213	1080	1717	3715	6725
Harrison	384	1074	1507	3531	6496
LA 604	235	710	1458	3732	6135
Chapman	304	931	1382	2943	5561
Rye					
Wintergrazer 70	342	2169	2186	2270	6966
Oklon	404	1405	2734	2416	6960
Bates	385	1474	2693	2339	6891
Elbon	287	1003	2860	2735	6885
Wren's Abruzzi AL	527	2875	1030	2351	6783
Carolina Early Grazer 2000	522	2082	1754	2213	6572
Carolina Grazer 2000	380	2027	1970	1962	6339
Maton	479	746	2936	2103	6264
Triticale					
Trical 2700	497	1051	2010	1940	5498
RSI 351	493	1505	1023	1956	4977
Trical 498	650	1228	1077	1881	4837

TABLE 6. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT SAND MOUNTAIN RESEARCH AND EXTENSION CENTER, CROSSVILLE, ALABAMA, 2000-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	lbs/acre				
Wheat					
Armor 3235	355	1299	2283	1906	5842
Roberts	323	967	2243	1549	5081
Oat					
Horizon 314	213	1080	1908	2882	6083
Harrison	384	1074	1577	2705	5740
Chapman	304	931	1617	2353	5205
Rye					
Wintergrazer 70	342	2169	2602	2245	7357
Bates	385	1474	3234	2165	7259
Wren's Abruzzi AL	527	2875	1519	2231	7152
Oklon	404	1405	3163	2112	7085
Elbon	287	1003	2915	2449	6654
Maton	479	746	3266	1939	6430
Triticale					
Trical 2700	497	1051	2259	1822	5629
Trical 498	650	1228	1608	1531	5017

TABLE 7. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT UPPER COASTAL PLAIN RESEARCH STATION, WINFIELD, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
		lbs/acre		
Wheat				
Armor 3235	----	523	3673	4021
Pat	----	37	2792	2841
Roberts	----	142	2575	2669
Test Mean		295	3013	3177
C.V. (%)		191	20	27
LSD(0.10)		NS	1028	1470
Oat				
Plantation Exp 201	----	1311	3795	5106
Horizon 474	----	244	3866	4134
Harrison	----	1249	2882	4130
SC 910337	----	618	3142	3760
LA 604	----	862	2825	3687
Chapman	----	849	2933	3605
Horizon 314	----	205	2190	2395
Test Mean		819	3090	3831
C.V. (%)		75	15	21
LSD(0.10)		904	668	1186
Rye				
NF 1	----	1752	3982	5734
Elbon	----	230	4604	4834
Oklon	----	845	3604	4449
SS Early Graze	----	496	3600	4097
Maton	----	122	3812	4000
Bates	----	164	3513	3728
Wintergrazer 70	----	657	2880	3537
Carolina Grazer 2000	----	409	2928	3336
Wren's Abruzzi AL	----	503	2652	3155
NF 65	----	611	2629	3143
Carolina Early Grazer 2000	----	623	2517	3140
Test Mean		643	3338	3923
C.V. (%)		136	19	32
LSD(0.10)		1244	900	1746
Triticale				
RSI 351	----	1975	2741	4717
Trical 2700	----	466	3923	4411
Trical 336	----	342	3919	4324
Trical 498	----	1052	2300	3352
RSI Exp 314	----	758	1781	2463
Test Mean		1150	2933	3853
C.V. (%)		77	11	20
LSD(0.10)		1459	478	1165

TABLE 8. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT UPPER COASTAL PLAIN RESEARCH STATION, WINFIELD, ALABAMA, 2001-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
			lbs/acre		
Wheat					
Armor 3235	---	523	3324	505	4353
Roberts	---	142	2676	489	3307
Oat					
Chapman	---	849	3196	640	4685
Harrison	---	1249	2979	453	4681
LA 604	---	862	2685	618	4165
Horizon 314	---	205	2419	651	3275
Rye					
Oklon	---	845	3767	340	4952
Elbon	---	230	4295	374	4900
Carolina Early Grazer 2000	---	623	3662	532	4817
Bates	---	164	3846	308	4318
Wren's Abruzzi AL	---	503	3344	390	4237
Carolina Grazer 2000	---	409	3597	203	4209
Maton	---	122	3705	362	4189
Wintergrazer 70	---	657	2965	413	4035
Triticale					
RSI 351	---	1975	2851	343	5169
Trical 2700	---	466	3804	362	4633
Trical 498	---	1052	2866	317	4235

TABLE 9. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT UPPER COASTAL PLAIN RESEARCH CENTER, WINFIELD, ALABAMA, 2000-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
			lbs/acre		
Wheat					
Armor 3235	---	1003	3365	4307	8675
Roberts	---	1361	2915	3414	7689
Oat					
Chapman	---	1212	3001	3446	7658
Harrison	---	1232	2874	3202	7308
Horizon 314	---	1370	2354	3292	7016
Rye					
Wintergrazer 70	---	1292	3223	5865	10379
Oklon	---	1323	3665	4565	9554
Wren's Abruzzi AL	---	2168	3260	3905	9334
Bates	---	1176	3745	3922	8843
Maton	---	886	3462	3680	8028
Elbon	---	861	3682	3248	7791
Triticale					
Trical 2700	---	1607	3475	3709	8791
Trical 498	---	1362	2618	2910	6890

TABLE 10. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT BLACK BELT RESEARCH AND EXTENSION CENTER, MARION JUNCTION, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
		lbs/acre		
Wheat				
Roberts	----	2334	2890	5225
Armor 3235	----	2322	2237	4559
Pat	----	2375	1833	4208
Test Mean		2344	2320	4664
C.V. (%)		9	24	13
LSD(0.10)		380	955	1081
Oat				
Plantation Exp 201	----	2890	741	3630
SC 910337	----	2994	350	3343
Horizon 314	----	2382	871	3253
Harrison	----	2812	405	3217
Horizon 474	----	2611	483	3093
LA 604	----	2141	637	2778
Chapman	----	2364	312	2676
Test Mean		2599	543	3142
C.V. (%)		12	18	10
LSD(0.10)		440	141	467
Rye				
Bates	----	2074	2661	4735
SS Early Graze	----	2472	2167	4639
Wren's Abruzzi AL	----	3541	1061	4602
Wintergrazer 70	----	3014	1502	4516
Elbon	----	1595	2866	4461
Oklon	----	1756	2603	4359
Maton	----	1334	2964	4298
Test Mean		2255	2261	4516
C.V. (%)		10	8	8
LSD(0.10)		334	251	514
Triticale				
Trical 336	----	2240	2685	4925
RSI Exp 314	----	3498	625	4123
Trical 2700	----	2693	1091	3784
Trical 498	----	2764	522	3285
RSI 351	----	2714	343	3056
Test Mean		2782	1053	3835
C.V. (%)		18	34	12
LSD(0.10)		767	545	707

TABLE 11. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT BLACK BELT RESEARCH AND EXTENSION CENTER, MARION JUNCTION, ALABAMA, 2001-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
			lbs/acre		
Wheat					
Roberts	---	2334	5249	---	7583
Armor 3235	---	2322	4365	---	6687
Oat					
Harrison	---	2812	3368	---	6180
Horizon 314	---	2382	3705	---	6088
Chapman	---	2364	3243	---	5607
LA 604	---	2141	2985	---	5126
Rye					
Wren's Abruzzi AL	---	3541	5034	---	8575
Wintergrazer 70	---	3014	4835	---	7849
Bates	---	2074	5440	---	7514
Oklon	---	1756	5132	---	6888
Elbon	---	1595	4370	---	5965
Maton	---	1334	4576	---	5910
Triticale					
RSI 351	---	2714	4572	---	7285
Trical 2700	---	2693	4063	---	6756
Trical 498	---	2764	3969	---	6733

TABLE 12. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT BLACK BELT RESEARCH EXPERIMENT CENTER, MARION JUNCTION, ALABAMA, 2000-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
			lbs/acre		
Wheat					
Roberts	---	1344	3832	2063	7239
Armor 3235	---	1297	3317	1555	6170
Oat					
Harrison	---	1477	2604	2476	6557
Horizon 314	---	1317	2852	2212	6381
Chapman	---	1279	2554	1883	5717
Rye					
Wintergrazer 70	---	1571	3607	1589	6767
Bates	---	1125	4007	1505	6637
Wren's Abruzzi AL	---	1941	3801	874	6616
Oklon	---	923	3780	1905	6608
Maton	---	714	3375	2252	6340
Elbon	---	845	3246	2126	6217
Triticale					
Trical 2700	---	1689	3111	1053	5853
Trical 498	---	1717	2931	923	5571

TABLE 13. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT PRATTVILLE EXPERIMENT FIELD, PRATTVILLE, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
		lbs/acre		
Wheat				
Armor 3235	----	2020	1794	3815
Pat	----	2275	1433	3708
Roberts	----	1747	1394	3141
Test Mean		2014	1540	3555
C.V. (%)		15	10	11
LSD(0.10)		522	276	703
Oat				
Horizon 474	----	2701	894	3596
Plantation Exp 201	----	2585	983	3568
SC 910337	----	2623	903	3526
Chapman	----	2588	930	3518
Harrison	----	2503	959	3461
Horizon 314	----	2178	1053	3232
LA 604	----	1713	945	2658
Test Mean		2413	953	3365
C.V. (%)		12	11	9
LSD(0.10)		425	151	429
Rye				
Wren's Abruzzi AL	----	3342	2169	5511
Bates	----	2888	2353	5242
Oklon	----	2566	2270	4837
Wintergrazer 70	----	2809	1821	4630
SS Early Graze	----	2306	2086	4392
Elbon	----	2196	2073	4269
Maton	----	1858	1937	3795
Test Mean		2567	2101	4668
C.V. (%)		14	5	7
LSD(0.10)		519	168	470
Triticale				
Trical 2700	----	3378	1245	4623
Trical 336	----	2454	1952	4406
Trical 498	----	2968	716	3683
RSI Exp 314	----	2779	722	3501
RSI 351	----	2856	634	3491
Test Mean		2887	1054	3941
C.V. (%)		12	9	9
LSD(0.10)		523	142	561

TABLE 14. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT PRATTVILLE EXPERIMENT FIELD, PRATTVILLE, ALABAMA, 2001-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
			lbs/acre		
Wheat					
Armor 3235	---	2020	2538	---	4559
Roberts	---	1747	2498	---	4245
Oat					
Chapman	---	2588	2191	---	4779
Harrison	---	2503	2246	---	4748
Horizon 314	---	2178	2472	---	4650
LA 604	---	1713	2018	---	3730
Rye					
Bates	---	1912	3180	---	5092
Wren's Abruzzi AL	---	2349	2630	---	4978
Oklon	---	1754	3088	---	4842
Elbon	---	1525	3239	---	4764
Wintergrazer 70	---	1931	2610	---	4541
Maton	---	1224	2836	---	4061
Triticale					
Trical 2700	---	2242	2365	---	4607
RSI 351	---	2051	1756	---	3807
Trical 498	---	2025	1591	---	3616

TABLE 15. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT PRATTVILLE EXPERIMENT FIELD, PRATTVILLE, ALABAMA, 2000-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
			lbs/acre		
Wheat					
Armor 3235	---	1542	2368	758	4669
Roberts	---	1279	2456	812	4547
Oat					
Horizon 314	---	1444	2400	1522	5366
Harrison	---	1502	2295	1300	5096
Chapman	---	1492	2130	1435	5057
Rye					
Bates	---	1628	2893	679	5201
Oklon	---	1524	2904	709	5137
Elbon	---	1343	2985	745	5073
Wintergrazer 70	---	1616	2530	758	4904
Wren's Abruzzi AL	---	1840	2332	635	4808
Maton	---	1077	2689	899	4665
Triticale					
Trical 2700	---	1891	2110	1015	5016
Trical 498	---	1526	1282	600	3409

TABLE 16. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT E.V. SMITH RESEARCH CENTER, PLANT BREEDING UNIT, TALLASSEE, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
	lbs/acre			
Wheat				
Armor 3235	805	1145	3201	5151
Pat	771	833	2783	4387
Roberts	660	1023	2671	4354
Test Mean	746	1000	2885	4631
C.V. (%)	44	16	5	6
LSD(0.10)	572	272	243	499
Oat				
Horizon 474	416	1335	2155	3906
Plantation Exp 201	390	1287	2145	3822
Harrison	357	1271	2003	3631
Horizon 314	267	1138	1856	3261
Chapman	317	1414	1255	2986
SC 910337	194	1169	1493	2856
LA 604	198	924	1428	2549
Test Mean	306	1220	1762	3287
C.V. (%)	14	11	12	7
LSD(0.10)	64	190	308	358
Rye				
Elbon	606	1247	3464	5318
Maton	561	1131	3549	5241
Wintergrazer 70	727	1827	2527	5080
SS Early Graze	555	1533	2948	5036
Bates	638	1433	2941	5012
Oklon	599	1270	2981	4850
Wren's Abruzzi AL	757	1803	2005	4564
Test Mean	635	1464	2916	5014
C.V. (%)	19	8	6	5
LSD(0.10)	176	164	267	357
Triticale				
Trical 2700	511	1490	2606	4607
Trical 336	247	716	2897	3859
RSI 351	683	1566	1463	3711
RSI Exp 314	571	1217	1485	3272
Trical 498	532	1169	1352	3053
Test Mean	509	1231	1960	3701
C.V. (%)	12	7	11	9
LSD(0.10)	93	131	330	501

TABLE 17. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT E.V. SMITH RESEARCH CENTER, PLANT BREEDING UNIT, TALLASSEE, ALABAMA, 2001-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Armor 3235	1255	1653	2623	---	5532
Roberts	943	1687	2213	---	4844
Oat					
Harrison	929	1184	2004	---	4117
Horizon 314	1053	1009	1920	---	3981
Chapman	1235	1072	1142	---	3449
LA 604	819	766	1549	---	3133
Rye					
Maton	1655	1559	3346	---	6559
Elbon	1319	1653	3138	---	6110
Oklon	1384	1802	2724	---	5910
Bates	1271	1963	2541	---	5775
Wintergrazer 70	1248	2325	2046	---	5619
Wren's Abruzzi AL	1618	2297	1544	---	5458
Triticale					
Trical 2700	1249	1772	2420	---	5442
RSI 351	1353	1531	1501	---	4386
Trical 498	1273	1267	1357	---	3897

TABLE 18. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT E.V. SMITH RESEARCH CENTER, PLANT BREEDING UNIT, TALLASSEE, ALABAMA, 2000-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Armor 3235	1059	1699	2582	317	5657
Roberts	823	1717	2514	207	5261
Oat					
Harrison	900	1429	2378	257	4964
Horizon 314	904	1344	2026	423	4698
Chapman	948	1237	1439	168	3793
Rye					
Maton	1441	1682	3116	316	6555
Oklon	1279	2003	2575	251	6107
Elbon	1208	1731	2953	168	6059
Bates	1195	2191	2269	216	5872
Wintergrazer 70	1210	2257	2059	278	5805
Wren's Abruzzi AL	1514	2220	1412	389	5535
Triticale					
Trical 2700	1078	1809	2216	288	5391
Trical 498	1161	1430	1234	---	3825

TABLE 19. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT BREWTON EXPERIMENT FIELD, BREWTON, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
	lbs/acre			
Wheat				
Roberts	1850	772	2092	4715
Test Mean	N/A	N/A	N/A	N/A
C.V. (%)	N/A	N/A	N/A	N/A
LSD(0.10)	N/A	N/A	N/A	N/A
Oat				
Horizon 314	2799	423	1286	4507
Horizon 474	2426	268	1410	4105
SC 910337	2259	309	1240	3808
Harrison	1897	278	1463	3638
Plantation Exp 201	1858	276	1250	3384
LA 604	2040	263	1010	3312
Chapman	1818	262	1218	3297
Test Mean	2157	297	1268	3722
C.V. (%)	32	20	20	20
LSD(0.10)	990	86	373	1072
Rye				
Oklon	2535	856	2335	5726
Elbon	2034	917	2682	5633
Maton	2165	812	2644	5621
SS Early Graze	2265	938	2246	5449
AFC20-20 Early	2596	767	2040	5402
NF 65	2342	886	2141	5369
AFC 20-20X	2052	935	2333	5320
Bates	1746	897	2591	5234
Wintergrazer 70	2525	863	1845	5233
NF 1	1978	1035	2091	5104
Wren's Abruzzi AL	2125	862	1766	4753
Test Mean	2215	888	2247	5349
C.V. (%)	23	14	9	10
LSD(0.10)	730	179	293	753
Triticale				
Trical 336	2007	750	2605	5362
Trical 2700	2124	727	1819	4669
RSI Exp 314	2523	589	1143	4255
RSI 351	2289	537	1423	4249
Trical 498	2034	497	1042	3574
Test Mean	2195	620	1607	4422
C.V. (%)	20	14	4	11
LSD(0.10)	656	133	97	718

TABLE 20. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
	lbs/acre			
Wheat				
Roberts	671	1008	3939	5618
Test Mean	N/A	N/A	N/A	N/A
C.V. (%)	N/A	N/A	N/A	N/A
LSD(0.10)	N/A	N/A	N/A	N/A
Oat				
Horizon 314	725	787	3427	4938
LA 604	506	731	3593	4829
Plantation Exp 201	761	691	3319	4770
Horizon 474	951	728	3078	4757
Chapman	552	896	3258	4705
Harrison	711	768	2950	4428
SC 910337	750	802	2749	4301
Test Mean	708	772	3196	4676
C.V. (%)	32	19	25	15
LSD(0.10)	326	214	1140	1023
Rye				
Oklon	936	1056	5391	7383
Maton	940	911	5473	7324
Elbon	728	904	5307	6939
NF 65	899	1485	4534	6918
SS Early Graze	894	1385	4409	6688
Bates	809	1006	4689	6503
NF 1	897	1233	4351	6481
Wintergrazer 70	941	1388	4089	6418
AFC20-20 Early	952	1325	3885	6163
AFC 20-20X	1040	1259	3578	5878
Wren's Abruzzi AL	1099	1387	3109	5595
Test Mean	921	1213	4438	6572
C.V. (%)	16	18	9	9
LSD(0.10)	211	304	588	848
Triticale				
Trical 336	519	943	4224	5685
Trical 2700	1024	1134	2953	5111
RSI 351	1047	1206	1929	4182
RSI Exp 314	1192	1060	1695	3947
Trical 498	1018	760	1169	2947
Test Mean	960	1021	2394	4375
C.V. (%)	18	13	10	7
LSD(0.10)	270	204	360	451

TABLE 21. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, ALABAMA, 2001-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	lbs/acre				
Wheat					
Roberts	791	1627	2668	---	5086
Oat					
LA 604	689	1305	2577	---	4571
Horizon 314	433	1469	2584	---	4486
Harrison	571	1360	2289	---	4219
Chapman	291	1434	2135	---	3860
Rye					
Oklon	676	2167	3819	---	6662
Maton	942	1520	3826	---	6289
Elbon	429	1823	3898	---	6150
Bates	506	2256	3274	---	6037
Wintergrazer 70	505	2775	2733	---	6013
Wren's Abruzzi AL	782	2901	2014	---	5696
Triticale					
Trical 2700	985	2310	1967	---	5262
RSI 351	682	2374	1280	---	4336
Trical 498	959	1574	817	---	3350

TABLE 22. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, ALABAMA, 2000-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	lbs/acre				
Wheat					
Roberts	791	1826	2823	---	5440
Oat					
Horizon 314	433	1712	2813	---	4957
Harrison	571	1737	2448	---	4756
Chapman	291	1810	2291	---	4391
Rye					
Oklon	1176	2241	3950	---	7367
Wintergrazer 70	1005	3010	3079	---	7094
Maton	942	2072	4067	---	7082
Bates	1006	2529	3501	---	7037
Elbon	929	1988	3887	---	6804
Wren's Abruzzi AL	1282	3436	1951	---	6668
Triticale					
Trical 2700	985	2571	2114	---	5670
Trical 498	959	1938	879	---	3775

TABLE 23. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE, ALABAMA, 2002

Brand-Variety	Autumn	Winter	Early Spring	Total
	lbs/acre			
Wheat				
Roberts	944	2925	3072	6942
Test Mean	N/A	N/A	N/A	N/A
C.V. (%)	N/A	N/A	N/A	N/A
LSD(0.10)	N/A	N/A	N/A	N/A
Oats				
Horizon 474	2583	2285	3449	8317
Horizon 314	1596	3017	3461	8073
Harrison	1650	2866	3125	7641
Plantation Exp 201	1678	2479	3406	7563
SC 910337	1255	2943	3194	7392
LA 604	1197	2590	3416	7203
Chapman	1095	2408	2939	6442
Test Mean	1579	2655	3284	7519
C.V. (%)	39	11	8	12
LSD(0.10)	894	407	363	1308
Rye				
SS Early Graze	1374	2629	3056	7059
AFC 20-20X	1629	2283	2790	6703
AFC20-20 Early	1598	2309	2789	6696
Elbon	1050	2120	2957	6127
NF 65	1317	2202	2602	6121
Wren's Abruzzi AL	1499	2192	2404	6095
Oklon	1328	1899	2864	6091
NF 1	1294	2218	2566	6077
Wintergrazer 70	1306	2305	2404	6016
Maton	982	1913	3039	5934
Bates	1046	2020	2853	5919
Test Mean	1311	2190	2757	6258
C.V. (%)	18	15	9	10
LSD(0.10)	328	460	356	901
Triticale				
Trical 336	447	1994	2602	5043
Trical 498	1030	1524	2369	4923
RSI 351	887	1951	2075	4913
Trical 2700	835	1976	1990	4801
RSI Exp 314	1013	1486	2256	4756
Test Mean	842	1786	2258	4887
C.V. (%)	10	6	8	6
LSD(0.10)	129	172	279	434

TABLE 24. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE, ALABAMA, 2001-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	931	3288	2327	---	6545
Oat					
Horizon 314	1609	2904	3595	---	8108
Harrison	1503	3025	3186	---	7715
LA 604	1233	2797	3592	---	7621
Chapman	1346	2668	2852	---	6867
Rye					
Elbon	1190	2558	2919	---	6667
Oklon	1527	2537	2520	---	6584
Bates	1304	2741	2388	---	6434
Maton	1151	2450	2807	---	6407
Wintergrazer 70	1379	2905	1888	---	6171
Wren's Abruzzi AL	1573	2598	1845	---	6016
Triticale					
Trical 498	1081	2571	2012	---	5664
Trical 2700	980	2512	2004	---	5495
RSI 351	1114	2522	1753	---	5390

TABLE 25. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE, ALABAMA, 2000-2002

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	1049	2925	1781	---	5755
Oat					
Horizon 314	1508	2762	2902	---	7172
Harrison	1619	2825	2668	---	7113
Chapman	1354	2593	2285	---	6232
Rye					
Elbon	1500	2411	2420	---	6330
Oklon	1732	2467	2101	---	6300
Maton	1391	2312	2463	---	6166
Bates	1587	2563	1973	---	6124
Wintergrazer 70	1712	2663	1659	---	6035
Wren's Abruzzi AL	1739	2539	1438	---	5716
Triticale					
Trical 2700	1471	2395	1564	---	5429
Trical 498	1296	2291	1401	---	4988

SEED SOURCES

WHEAT	
Armor 3235, Pat	University of Arkansas Fayetteville, Arkansas
Roberts	Univ. of Georgia, Georgia Station Griffin, Georgia
OATS	
Chapman, Horizon 314, Horizon 474, Plantation Exp 201*	University of Florida Quincy, Florida
LA 604, Harrison	Arkansas County Seed Co., Stuttgart, Arkansas
SC 910337*	South Carolina Foundation Seed Clemson, South Carolina
RYE	
Wren's Abruzzi AL	Alabama Crop Improvement Assoc. Auburn, Alabama
Bates, Elbon, Maton, Oklon NF 1, NF 65	Samuel Roberts Noble Foundation, Inc. Ardmore, Oklahoma
Wintergrazer 70	Pennington Seed, Inc. Madison, Georgia
AFC 20-20, AFC 20-20 Early Carolina Grazer, Carolina Early Grazer	Gainey Grain, Inc. Laurel Hill, North Carolina
SS Early Grazer	Southern States Coop., Richmond, Virginia
TRITICALE	
Trical 498, Trical 336, Trical 2700 RSI Exp 314*, RSI Exp 351*	Resource Seeds, Inc. Union, Kentucky

* Experimental line; not yet commercially available.