Performance of Small Grain Varieties for Forage in Alabama, 2002-03

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THE 2003 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 eight 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 2003 harvest year, planting at the northern and southern locations were delayed due to wet 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. Cold weather and wet conditions in the fall combined to reduce fall and winter growth.

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, 2003

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	----------	----------	lbs/acre	----------	----------
Wheat					
LA 90185G3-1-3-4-2	----	331	3131	496	3958
Roberts	----	105	2688	424	3217
Oat					
FL 9708-P37	----	184	3438	492	4114
LA 9533D36-5	----	107	3349	419	3888
TX01CSRH Sel 1	----	66	3346	433	3846
Horizon 314	----	105	3286	410	3800
Horizon 474	----	248	3251	266	3766
Harrison	----	132	3215	320	3667
Chapman	----	91	3106	385	3583
Spike Plot (LA9339)	----	261	3024	227	3512
Rye					
Elbon	----	302	4128	303	4733
Oklon	----	534	3791	373	4698
SPI Rye	----	336	3954	309	4600
Wintergrazer 70	----	424	3831	331	4573
Maton	----	228	4021	316	4565
Bates	----	676	3322	329	4328
FL Bates Sel	----	743	3204	256	4203
FLNF94 Sel	----	664	3170	267	4101
FL PL97P20	----	1009	2318	416	3743
Wren's Abruzzi AL	----	953	2210	409	3572
Triticale					
Trical 336	----	187	3933	586	4706
Trical 2700	----	460	3616	319	4395
Trical 308	----	717	2418	638	3773
Trical 2115	----	568	2237	472	3276
Trical 498	----	559	2262	279	3100
Trical 314	----	773	1824	432	3028
Test Mean	----	414	3157	381	3952
C.V. (%)	----	26	7	19	6
LSD(0.10)	----	160	287	122	302

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, 2002-2003

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	----	546	2286	424	3257
Oat					
Horizon 314	----	545	2609	410	3563
Horizon 474	----	746	2420	266	3432
Harrison	----	668	2382	320	3370
Chapman	----	609	2259	385	3254
Rye					
Elbon	----	675	3589	303	4567
Maton	----	730	3449	316	4495
Oklon	----	1003	3057	373	4433
Bates	----	985	2875	329	4189
Wintergrazer 70	----	931	2795	331	4057
Wren's Abruzzi AL	----	1154	1832	409	3394
Triticale					
Trical 336	----	694	3232	586	4512
Trical 2700	----	1004	2869	319	4192
Trical 308	----	1118	2051	638	3807
Trical 498	----	865	1772	279	2915
Trical 314	----	1031	1524	432	2986
Test Mean	----	831	2563	383	3777
C.V. (%)	----	18	9	17	6
LSD(0.10)	----	113	150	86	177

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, 2001-2003

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	397	510	2055	510	3473
Oat					
Harrison	339	505	2494	982	4321
Horizon 314	239	398	2462	995	4093
Chapman	334	464	2230	786	3814
Rye					
Elbon	375	593	3427	315	4710
Maton	368	644	3302	330	4644
Oklon	432	863	2863	388	4546
Bates	472	842	2656	359	4328
Wintergrazer 70	481	884	2545	388	4298
Wren's Abruzzi AL	659	1045	1742	455	3901
Triticale					
Trical 2700	482	785	2733	523	4522
Trical 308	714	880	1952	669	4215
Trical 498	467	698	1656	326	3146

TABLE 4. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE SAND MOUNTAIN RESEARCH AND EXTENSION CENTER, CROSSVILLE, ALABAMA, 2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	----------	----------	lbs/acre	----------	----------
Wheat					
Roberts	----	----	2107	2045	4153
LA 90185G3-1-3-4-2	----	----	2322	1345	3667
Oat					
LA 9533D36-5	----	----	2930	1455	4385
TX01CSRH Sel 1	----	----	2757	1554	4311
Harrison	----	----	2738	1423	4161
FL 9708-P37	----	----	2471	1583	4054
Chapman	----	----	2693	1304	3997
Spike Plot (LA9339)	----	----	2646	1180	3826
Horizon 314	----	----	2312	1474	3786
Horizon 474	----	----	2565	1164	3729
Rye					
Bates	----	----	4034	1196	5230
Oklon	----	----	4054	980	5034
Maton	----	----	3679	1339	5018
FL Bates Sel	----	----	3641	1218	4859
Wintergrazer 70	----	----	3964	889	4853
FL PL97P20	----	----	3995	795	4790
Wren's Abruzzi AL	----	----	3900	864	4764
Elbon	----	----	3692	1024	4716
SPI Rye	----	----	3887	596	4483
FLNF94 Sel	----	----	3744	603	4347
Triticale					
Trical 2700	----	----	3860	2376	6236
Trical 336	----	----	3318	2027	5345
Trical 2115	----	----	2754	2375	5129
Trical 308	----	----	3107	1889	4996
Trical 314	----	----	2876	1721	4597
Trical 498	----	----	2570	1458	4028
Test Mean	----	----	3178	1380	4557
C.V. (%)	----	----	11	24	12
LSD(0.10)	----	----	394	418	675

TABLE 5. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE SAND MOUNTAIN RESEARCH AND EXTENSION CENTER, CROSSVILLE, ALABAMA, 2002-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	323	1156	1863	2045	5388
Oat					
Harrison	384	1547	1946	1423	5300
Horizon 314	213	1508	1889	1474	5085
Chapman	304	1417	1932	1304	4958
Horizon 474	420	1296	1883	1164	4763
Rye					
Bates	385	1829	3231	1196	6641
Oklon	404	1621	3217	980	6223
Maton	479	1029	3187	1339	6034
Wintergrazer 70	342	2596	2601	889	6427
Elbon	287	1239	3076	1024	5626
Wren's Abruzzi AL	527	2066	2430	864	5886
Triticale					
Trical 2700	497	1283	2829	2376	6985
Trical 336	184	1239	2813	2027	6263
Trical 308	493	1526	2031	1889	5939
Trical 314	745	1399	1920	1721	5785
Trical 498	650	1355	1934	1458	5397
Test Mean	415	1507	2424	1448	5794
C.V. (%)	24	15	18	23	12
LSD(0.10)	188	330	365	395	584

TABLE 6. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE SAND MOUNTAIN RESEARCH AND EXTENSION CENTER, CROSSVILLE, ALABAMA, 2001-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	lbs/acre				
Wheat					
Roberts	323	967	1815	1868	4973
Oat					
Horizon 314	213	1080	1915	2595	5803
Harrison	384	1074	1917	2477	5852
Chapman	304	931	1819	2124	5178
Rye					
Bates	385	1474	3140	1767	6767
Wintergrazer 70	342	2169	2779	1580	6868
Oklon	404	1405	3174	1698	6682
Elbon	287	1003	3137	1879	6307
Wren's Abruzzi AL	527	2875	1986	1607	6996
Maton	479	746	3184	1721	6130
Triticale					
Trical 2700	497	1051	2627	2158	6333
Trical 308	493	1505	1718	1923	5638
Trical 498	650	1228	1575	1669	5123

TABLE 7. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE BLACK BELT RESEARCH AND EXTENSION CENTER, MARION JUNCTION, ALABAMA, 2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	----------	----------	lbs/acre	----------	----------
Wheat					
Roberts	----	508	3004	347	3858
LA 90185G3-1-3-4-2	----	687	3082	83	3853
Oat					
Horizon 474	----	890	2512	796	4198
Spike Plot (LA9339)	----	1152	2198	724	4073
FL 9708-P37	----	637	2015	1212	3865
Harrison	----	720	2165	839	3723
TX01CSRH Sel 1	----	475	2043	1184	3701
Chapman	----	723	2181	719	3623
LA 9533D36-5	----	748	1878	785	3411
Horizon 314	----	645	1727	987	3359
Forage Plus	----	1209	385	806	2400
Rye					
FL PL97P20	----	738	3242	----	3980
FL Bates Sel	----	455	3446	----	3901
Oklon	----	558	2972	----	3530
FLNF94 Sel	----	318	3091	----	3409
Wren's Abruzzi AL	----	349	2949	----	3298
Bates	----	413	2847	----	3260
Elbon	----	244	2517	----	2761
Wintergrazer 70	----	198	2480	----	2678
Maton	----	100	2517	----	2617
SPI Rye	----	217	2342	----	2559
Triticale					
Trical 314	----	1541	2350	----	3892
Trical 308	----	1225	2623	----	3848
Trical 336	----	494	2896	430	3820
Trical 498	----	1411	2185	----	3596
Trical 2115	----	1184	2391	----	3574
Trical 2700	----	770	2384	337	3490
Test Mean	----	689	2460	711	3492
C.V. (%)	----	28	9	18	9
LSD(0.10)	----	273	382	176	375

TABLE 8. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE BLACK BELT RESEARCH AND EXTENSION CENTER, MARION JUNCTION, ALABAMA, 2002-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	----	1421	2947	347	4715
Oat					
Horizon 474	----	1750	1497	796	4044
Harrison	----	1766	1285	839	3889
Horizon 314	----	1514	1299	987	3800
Chapman	----	1543	1247	719	3509
Rye					
Bates	----	1244	2754	----	3998
Wren's Abruzzi AL	----	1945	2005	----	3950
Oklon	----	1157	2787	----	3945
SS Early Graze	----	1425	2462	----	3887
Elbon	----	920	2692	----	3611
Wintergrazer 70	----	1606	1991	----	3597
Maton	----	717	2741	----	3458
Triticale					
Trical 336	----	1367	2791	430	4588
Trical 314	----	2519	1488	----	4007
Trical 2700	----	1731	1737	337	3806
Trical 308	----	1969	1483	----	3452
Trical 498	----	2087	1353	----	3441
Test Mean	----	1579	1976	685	3811
C.V. (%)	----	20	16	21	10
LSD(0.10)	----	241	247	178	336

TABLE 9. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE BLACK BELT RESEARCH AND EXTENSION CENTER, MARION JUNCTION, ALABAMA, 2001-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	----	1421	4501	347	6268
Oat					
Harrison	----	1766	2967	839	5571
Horizon 314	----	1514	3046	987	5547
Chapman	----	1543	2889	719	5151
Rye					
Wren's Abruzzi AL	----	1945	4339	----	6284
Bates	----	1244	4576	----	5819
Wintergrazer 70	----	1606	4050	----	5656
Oklon	----	1157	4412	----	5569
Elbon	----	920	3752	----	4672
Maton	----	717	3890	----	4607
Triticale					
Trical 308	----	1969	3922	----	5891
Trical 2700	----	1731	3503	337	5572
Trical 498	----	2087	3374	----	5462

TABLE 10. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE PRATTVILLE EXPERIMENT FIELD, PRATTVILLE, ALABAMA, 2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
LA 90185G3-1-3-4-2	486	2227	1316	2368	6397
Roberts	628	1957	1516	1706	5807
Oat					
FL 9708-P37	771	1107	1462	4374	7715
Horizon 314	713	1128	1406	3665	6913
LA 9533D36-5	654	1504	1366	3302	6827
Spike Plot (LA9339)	663	1417	1505	3137	6723
TX01CSRH Sel 1	308	791	1360	3849	6308
Horizon 474	1019	1036	1452	2655	6162
Harrison	582	1335	1360	2606	5884
Chapman	513	1459	1526	2000	5497
Forage Plus	1210	----	----	----	1209.9
Rye					
SS Early Graze	2257	2387	1107	1110	6860
FL Bates Sel	1312	2796	1371	1220	6699
Wren's Abruzzi AL	1849	2499	1061	1247	6655
Oklon	1528	1883	2038	1136	6585
FL PL97P20	1602	2567	1170	1221	6559
Wintergrazer 70	1838	1122	1999	1456	6415
Bates	1421	1728	2104	1035	6288
SPI Rye	1532	1237	2021	1183	5973
FLNF94 Sel	1052	2182	1624	993	5852
Elbon	1308	1106	2186	1205	5805
Maton	1164	1304	2117	1128	5713
Triticale					
Trical 308	1054	1951	1065	2173	6243
Trical 2700	993	1800	1269	1951	6014
Trical 2115	767	1696	1076	2219	5757
Trical 336	484	1955	1739	1443	5621
Trical 314	982	1428	1003	1953	5367
Trical 498	776	1584	1134	1212	4705
Test Mean	1052	1674	1495	1983	6020
C.V. (%)	32	18	13	17	9
LSD(0.10)	464	376	290	387	751

TABLE 11. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE PRATTVILLE EXPERIMENT FIELD, PRATTVILLE, ALABAMA, 2002-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	628	1852	1455	1706	5641
Oat					
Horizon 314	713	1653	1230	3665	7261
Horizon 474	1019	1869	1173	2655	6716
Harrison	582	1919	1160	2606	6267
Chapman	513	2024	1228	2000	5764
Rye					
Wren's Abruzzi AL	1849	2920	1615	1247	7631
SS Early Graze	2257	2346	1596	1110	7310
Wintergrazer 70	1838	1965	1910	1456	7170
Oklon	1528	2225	2154	1136	7043
Bates	1421	2308	2229	1035	6993
Elbon	1308	1651	2129	1205	6293
Maton	1164	1581	2027	1128	5900
Triticale					
Trical 2700	993	2589	1257	1951	6791
Trical 308	1054	2404	850	2173	6480
Trical 336	484	2204	1846	1443	5977
Trical 314	982	2104	863	1953	5901
Trical 498	776	2276	925	1212	5188
Test Mean	1124	2111	1509	1746	6490
C.V. (%)	35	18	10	21	10
LSD(0.10)	474	661	228	396	789

TABLE 12. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE PRATTVILLE EXPERIMENT FIELD, PRATTVILLE, ALABAMA, 2001-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	628	1852	2170	1706	6356
Oat					
Horizon 314	713	1653	2117	3665	8148
Harrison	582	1919	1951	2606	7058
Chapman	513	2024	1969	2000	6505
Rye					
Wren's Abruzzi AL	1849	2399	2107	1247	7601
Wintergrazer 70	1838	1661	2406	1456	7362
Oklon	1528	1797	2738	1136	7198
Bates	1421	1851	2821	1035	7129
Elbon	1308	1385	2888	1205	6786
Maton	1164	1251	2596	1128	6139
Triticale					
Trical 2700	993	2095	2000	1951	7039
Trical 308	1054	2018	1526	2173	6771
Trical 498	776	1878	1439	1212	5304

TABLE 13. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE E.V. SMITH RESEARCH CENTER, PLANT BREEDING UNIT, TALLASSEE, ALABAMA, 2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	79	432	1215	337	2064
LA 90185G3-1-3-4-2	171	692	1169	----	2032
Oat					
Spike Plot (LA9339)	507	944	2218	267	3842
LA 9533D36-5	349	1032	1581	461	3423
Horizon 474	587	839	1609	231	3267
Chapman	442	907	1416	408	3173
FL 9708-P37	316	515	1805	404	3040
Horizon 314	321	728	1622	332	3002
TX01CSRH Sel 1	231	689	1579	424	2922
Harrison	345	771	1323	315	2754
Forage Plus	500	277	401	380	1302
Rye					
Bates	532	1476	1531	----	3539
Elbon	473	1037	1979	----	3489
Wintergrazer 70	502	843	2002	----	3348
FLNF94 Sel	390	1456	1492	----	3339
Maton	294	798	2245	----	3336
Oklon	436	1083	1758	----	3277
FL PL97P20	399	1874	900	----	3173
SPI Rye	389	816	1941	----	3145
Wren's Abruzzi AL	403	1892	780	----	3075
FL Bates Sel	220	1662	1151	----	3033
Triticale					
Trical 2700	179	849	1409	371	2807
Trical 336	101	873	1391	354	2720
Trical 308	281	1001	854	----	2136
Trical 498	260	1005	738	----	2002
Trical 2115	211	778	811	----	1799
Trical 314	320	677	592	----	1589
Test Mean	342	961	1389	357	2838
C.V. (%)	23	16	18	24	12
LSD(0.10)	143	244	284	111	482

TABLE 14. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE T THE E.V. SMITH RESEARCH CENTER, PLANT BREEDING UNIT, TALLASSEE, ALABAMA, 2002-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	370	728	1943	337	3377
Oat					
Horizon 474	502	1087	1882	231	3702
Harrison	351	1021	1663	315	3350
Horizon 314	294	933	1739	332	3297
Chapman	379	1161	1336	408	3284
Rye					
Elbon	540	1142	2721	----	4403
Maton	427	964	2897	----	4288
Bates	585	1455	2236	----	4275
Wintergrazer 70	615	1335	2264	----	4214
Oklon	517	1176	2369	----	4063
Wren's Abruzzi AL	580	1848	1392	----	3820
Triticale					
Trical 2700	345	1170	2007	371	3893
Trical 336	174	795	2144	354	3466
Trical 308	482	1283	1158	----	2923
Trical 498	396	1087	1045	----	2528
Trical 314	445	947	1038	----	2430
Test Mean	438	1133	1865	335	3582
C.V. (%)	26	17	10	30	11
LSD(0.10)	88	146	146	116	299

TABLE 15. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE T THE E.V. SMITH RESEARCH CENTER, PLANT BREEDING UNIT, TALLASSEE, 2001-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	655	1269	1881	337	4142
Oat					
Horizon 314	809	915	1820	332	3876
Harrison	734	1047	1777	315	3873
Chapman	970	1017	1233	408	3629
Rye					
Maton	1201	1305	2979	----	5485
Elbon	1037	1448	2752	----	5237
Oklon	1068	1562	2402	----	5032
Bates	1024	1801	2204	----	5029
Wintergrazer 70	1000	1831	2032	----	4862
Wren's Abruzzi AL	1213	2162	1289	----	4664
Triticale					
Trical 2700	892	1465	2083	371	4811
Trical 308	996	1354	1286	----	3636
Trical 498	935	1179	1151	----	3265

TABLE 16. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE BREWTON EXPERIMENT FIELD, BREWTON, ALABAMA, 2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	406	1313	1459	----	3179
LA 90185G3-1-3-4-2	490	1375	1294	----	3158
Oat					
TX01CSRH Sel 1	822	1309	1296	----	3428
Chapman	702	1278	1343	----	3322
Spike Plot (LA9339)	590	1360	1255	----	3205
Horizon 474	678	1219	1238	----	3135
Horizon 314	649	1196	1252	----	3096
FL 9708-P37	710	1163	1190	----	3064
LA 9533D36-5	786	1088	1177	----	3051
Harrison	747	948	1192	----	2888
Rye					
Wintergrazer 70	974	2009	885	----	3867
FL Bates Sel	1104	1710	1046	----	3860
Wren's Abruzzi AL	1026	1641	1093	----	3760
Bates	1151	1583	986	----	3721
Oklon	1045	1745	897	----	3687
FL PL97P20	1173	1247	1246	----	3665
SPI Rye	1153	1503	989	----	3644
Elbon	1011	1471	1153	----	3636
Maton	836	1638	1130	----	3603
FLNF94 Sel	878	2152	547	----	3578
Triticale					
Trical 2115	544	1576	1093	----	3212
Trical 308	697	1600	788	----	3085
Trical 336	384	1566	964	----	2914
Trical 314	764	1457	531	----	2752
Trical 2700	630	1326	443	----	2399
Trical 498	603	1174	550	----	2327
Test Mean	791	1448	1040	----	3278
C.V. (%)	29	23	27	----	14
LSD(0.10)	274	396	327	----	559

TABLE 17. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE BREWTON EXPERIMENT FIELD, BREWTON, ALABAMA, 2002-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	1128	1042	1776	----	3947
Oat					
Horizon 314	1724	809	1269	----	3802
Horizon 474	1552	743	1324	----	3620
Chapman	1260	770	1280	----	3310
Harrison	1322	613	1328	----	3263
Rye					
Oklon	1790	1301	1616	----	4706
Elbon	1523	1194	1918	----	4635
Maton	1500	1225	1887	----	4612
Wintergrazer 70	1749	1436	1365	----	4550
Bates	1449	1240	1789	----	4477
Wren's Abruzzi AL	1576	1251	1429	----	4257
Triticale					
Trical 336	1195	1158	1785	----	4138
Trical 308	1493	1069	1105	----	3667
Trical 2700	1377	1026	1131	----	3534
Trical 314	1643	1023	837	----	3503
Trical 498	1318	836	796	----	2950
Test Mean	1475	1046	1415	----	3936
C.V. (%)	31	23	20	----	14
LSD(0.10)	412	194	211	----	501

TABLE 18. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE EBREWTON EXPERIMENT FIELD, BREWTON, ALABAMA, 2001-2003.

Since the first small grain forage trial was conducted during the 2001/2 crop year, three-year data are not yet available for this location.

TABLE 19. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, ALABAMA, 2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	----	1089	3789	----	4878
LA 90185G3-1-3-4-2	----	1059	3338	----	4398
Oat					
Spike Plot (LA9339)	----	1401	5152	----	6553
Harrison	----	1175	4664	----	5839
Chapman	----	1051	4687	----	5739
LA 9533D36-5	----	1115	4457	----	5572
Horizon 474	----	988	4486	----	5474
FL 9708-P37	----	783	4666	----	5449
TX01CSRH Sel 1	----	829	4329	----	5158
Horizon 314	----	628	3905	----	4533
Rye					
Maton	----	1226	5256	----	6481
Wintergrazer 70	----	1370	4918	----	6288
Elbon	----	1393	4823	----	6215
SPI Rye	----	1489	4691	----	6181
Oklon	----	1767	4249	----	6016
Bates	----	1587	4116	----	5703
FLNF94 Sel	----	2075	3525	----	5600
FL PL97P20	----	2700	2792	----	5492
FL Bates Sel	----	2300	3038	----	5339
Wren's Abruzzi AL	----	2508	2688	----	5196
Triticale					
Trical 2700	----	1746	3689	----	5435
Trical 308	----	1879	2749	----	4628
Trical 336	----	938	3616	----	4553
Trical 2115	----	1341	2235	----	3576
Trical 314	----	1337	1920	----	3257
Trical 498	----	1187	1935	----	3122
Test Mean	----	1422	3835	----	5257
C.V. (%)	----	20	9	----	9
LSD(0.10)	----	358	437	----	608

TABLE 20. TWO-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, 2002-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	671	1049	3864	----	5583
Oat					
Chapman	552	973	3972	----	5498
Harrison	711	971	3807	----	5489
Horizon 474	951	858	3782	----	5591
Horizon 314	725	707	3666	----	5098
Rye					
Maton	940	1068	5364	----	7373
Oklon	936	1412	4820	----	7168
Elbon	728	1148	5065	----	6942
Wintergrazer 70	941	1379	4503	----	6823
Bates	809	1296	4402	----	6507
Wren's Abruzzi AL	1099	1948	2898	----	5945
Triticale					
Trical 2700	1024	1440	2983	----	5447
Trical 336	519	940	3511	----	4970
Trical 308	1047	1543	2060	----	4649
Trical 314	1192	1198	1597	----	3988
Trical 498	1018	973	1440	----	3432
Test Mean	866	1182	3608	----	5656
C.V. (%)	19	20	13	----	9
LSD(0.10)	173	183	433	----	462

TABLE 21. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, 2001-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	791	1448	3042	----	5281
Oat					
Harrison	1071	1298	3081	----	5449
Horizon 314	933	1189	3025	----	5146
Chapman	791	1307	2986	----	5083
Rye					
Oklon	1176	2034	3963	----	7172
Maton	1442	1422	4303	----	7167
Elbon	929	1679	4206	----	6815
Wintergrazer 70	1005	2307	3461	----	6773
Bates	1006	2033	3555	----	6594
Wren's Abruzzi AL	1282	2770	2239	----	6290
Triticale					
Trical 2700	985	2122	2541	----	5648
Trical 308	1182	2209	1770	----	5161
Trical 498	959	1445	1190	----	3594

TABLE 22. SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE, ALABAMA, 2003.

	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
LA 90185G3-1-3-4-2	----	3306	2045	----	5350
Roberts	----	2755	2314	----	5069
Oat					
FL 9708-P37	----	4655	3432	----	8088
LA 9533D36-5	----	4698	3155	----	7853
Horizon 474	----	4000	2911	----	6910
Spike Plot (LA9339)	----	4167	2560	----	6726
TX01CSRH Sel 1	----	3415	3164	----	6579
Horizon 314	----	3393	2959	----	6353
Chapman	----	3629	2576	----	6205
Harrison	----	3253	2668	----	5920
Rye					
Bates	----	3729	4215	----	7944
Oklon	----	4546	1858	----	6404
FLNF94 Sel	----	4863	1455	----	6318
SPI Rye	----	3638	2428	----	6066
Maton	----	3866	2090	----	5957
Wren's Abruzzi AL	----	4065	1457	----	5522
Wintergrazer 70	----	3243	2114	----	5356
FL PL97P20	----	3880	1248	----	5128
FL Bates Sel	----	3511	1390	----	4901
Elbon	----	2384	2195	----	4579
Triticale					
Trical 336	----	3934	2009	----	5942
Trical 2700	----	3318	2108	----	5425
Trical 308	----	3127	1781	----	4907
Trical 2115	----	3058	1760	----	4818
Trical 498	----	3007	1550	----	4556
Trical 314	----	2766	1578	----	4344
Test Mean	----	3623	2270	----	5893
C.V. (%)	----	22	37	----	20
LSD(0.10)	----	974	1002	----	1378

TABLE 23. 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, 2002-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	944	2840	2693	----	6478
Oat					
Horizon 474	2583	3142	3180	----	8905
Horizon 314	1596	3205	3210	----	8011
Harrison	1650	3059	2896	----	7606
Chapman	1095	3019	2757	----	6871
Rye					
Bates	1046	2874	3534	----	7454
Oklon	1328	3223	2361	----	6912
Wren's Abruzzi AL	1499	3128	1931	----	6558
Maton	982	2890	2565	----	6436
Wintergrazer 70	1306	2774	2259	----	6339
Elbon	1050	2252	2576	----	5878
Triticale					
Trical 336	447	2964	2305	----	5716
Trical 2700	835	2647	2049	----	5531
Trical 308	887	2539	1928	----	5354
Trical 498	1030	2265	1959	----	5255
Trical 314	1013	2126	1917	----	5057
Test Mean	1206	2809	2508	----	6522
C.V. (%)	35	17	31	----	17
LSD(0.10)	588	362	599	----	847

TABLE 24. THREE-YEAR AVERAGE SEASONAL DRY MATTER YIELD OF WHEAT, OATS, RYE, AND TRITICALE VARIETIES CUT AS FORAGE AT THE GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE, ALABAMA, 2001-2003.

Brand-Variety	Autumn	Winter	Early Spring	Late Spring	Total
	---------- lbs/acre ----------				
Wheat					
Roberts	931	3110	2323	----	6364
Oat					
Horizon 314	1609	3067	3383	----	8059
Harrison	1503	3101	3014	----	7618
Chapman	1346	2988	2760	----	7095
Rye					
Bates	1304	3070	2997	----	7372
Oklon	1527	3207	2299	----	7033
Maton	1151	2922	2568	----	6641
Elbon	1190	2500	2677	----	6367
Wintergrazer 70	1379	3017	1963	----	6359
Wren's Abruzzi AL	1573	3087	1716	----	6376
Triticale					
Trical 2700	1081	2820	2044	----	5945
Trical 308	1114	2724	1763	----	5600
Trical 498	980	2677	1852	----	5509

SEED SOURCES

WHEAT	
LA 90185G3-1-3-4-2* Plot Spike (LA 9339)	Louisiana State University Baton Rouge, Louisiana
Roberts	Univ. of Georgia, Georgia Station Griffin, Georgia
OATS	
Chapman, Horizon 314, Horizon 474, FL 9708-P37*	University of Florida Quincy, Florida
Harrison	Arkansas County Seed Co., Stuttgart, Arkansas
TX01CSRH Sel 1*	Texas A&M University College Station, Texas
RYE	
Wren's Abruzzi AL	Alabama Crop Improvement Assoc. Auburn, Alabama
Bates, Elbon, Maton, Oklon	Samuel Roberts Noble Foundation, Inc. Ardmore, Oklahoma
Wintergrazer 70 SPI Rye	Pennington Seed, Inc. Madison, Georgia
FL PL97P20*, FLNF 94 Sel*, FL Bates Sel*	University of Florida Quincy, Florida
TRITICALE	
Trical 498, Trical 336, Trical 2700 Trical 314 (formerly RSI Exp 314), Trical 308 (formerly RSI Exp 351)	Resource Seeds, Inc. Union, Kentucky

* Experimental line; not yet commercially available.