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RYEGRASS FORAGE YIELDS AT OVERTON FOR 2002-2003 AND THREE-YEAR MEANS

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Background. The annual ryegrass forage crop is an important winter annual in East and South Texas. Ryegrass has advantages over small grains in that it will produce more forage in warm weather than wheat and rye. It also will normally produce a greater total season forage yield than oats, wheat, or rye. Ryegrass can be overseeded onto warm season pastures greatly reducing the cost of preparing a seedbed. A disadvantage of ryegrass is that it often is slow to establish in the fall and if overseeded, forage may not be available until mid-February. Ryegrass forage is of high quality and grazing animals can normally graze ryegrass until about June 1.

Research Findings. An annual ryegrass forage variety test is conducted annually at the TAMU Agricultural Research and Extension Center at Overton. Commercial varieties were evaluated during the past 3 years. Fertilizer application rates and dates are noted in Table 1. The test site was on a sandy soil. Environmental conditions in the fall of 2002 were favorable for fall growth with adequate moisture through February. Below average rainfall in March and April and early May reduced late spring growth and forage production. The coldest temperature was 21°F on 24 January 2003; however, no freeze damage was noted. Planting dates were late September normally and in 2002 the planting date was 26 September. Seed were drilled into a prepared seedbed at an 1/4 inch depth at 30 lb/ac. Plot size was 4 x 12 ft with four replications. The entire plots were harvested with a Hege plot harvester at a cutting height of 2 inches on 16 December, 18 February, 17 March, 14 April, and 12 May. In the 16 December harvest, Ed, Passeral Plus, TAM 90, and Jackson were the higher producing varieties. In the second harvest on 18 February, all yields of all varieties were similar and were fairly good for the colder period. On 17 March, all entries had responded to fertilizer and warm temperatures to produce high yields. In the 14 April harvest, top yielding varieties were Beefbuilder III, Jumbo, Brigadier, Marshall, and Passeral Plus, closely followed by other entries. On the 12 May harvest, Beefbuilder III and Jumbo produced higher yields. For the total season yield, the top 6 commercial entries were Beefbuilder III, Jumbo, Brigadier, Marshall, Ed, and TAM 90. Over the last 3 years, higher yielding commercial varieties were produced by Jumbo, Ed, Prine, TAM 90, and Marshall. Crown rust ratings recorded at Beaumont are shown in Table 1.

Application. Data presented from these trials should be useful in selecting ryegrass varieties for your ranch. Depending on variety availability, compare forage yields over multiple

years if possible to determine which variety you want to plant.

Table 1. Ryegrass forage variety test at Overton, Texas for 2002-2003.

Variety	Harvest 1	Harvest 2	Harvest 3	Harvest 4	Harvest 5	Total DMY	3-Year Mean	Crown Rust Rating Beaumont
	Dec. 16	Feb. 18	Mar. 17	Apr. 14	May 12			
	-----pounds of dry matter per acre-----							0-9
Beefbuilder III	666	749	1969	2642	1220	7246	--	0.0
Jumbo	493	516	1967	2479	1046	6501	7211	0.0
Brigadier	600	688	1722	2358	876	6244	6678	0.3
Marshall	523	514	1725	2823	570	6154	6885	5.0
Ed	901	824	1760	2026	636	6147	7057	1.3
TAM 90	781	829	1785	1920	813	6128	6361	2.3
Passeral Plus	799	624	1668	2488	522	6101	6283	3.0
HyEnergy	397	631	1882	2500	658	6068	--	4.3
Prine	382	499	1670	2499	992	6042	7166	0.6
Lonestar	663	832	1886	1863	639	5883	--	0.6
Ribeye	661	863	1892	1832	622	5870	6373	2.6
WD-40	576	649	1726	2393	499	5842	6674	2.6
Jackson	881	727	1676	1894	574	5753	6520	1.6
Supergraze*	599	376	2265	1962	225	5426	--	3.0
Gulf	579	692	1636	1825	639	5372	6375	1.6
BAREXTRA	354	238	1248	2677	619	5135	--	0.3
Aubade	390	442	1462	2212	553	5059	--	4.3
BARBERIA	233	325	1271	2426	88	4343	--	0.3
Grand Mean	582	612	1733	2267	655	5845	6689	2.1
CV	60	39	14	15	70	15	--	67
LSD (10% level)	287	227	222	305	469	794	--	1.5

*Blend of rye and ryegrass.

Planted on 26 September 2002. Fertilization: Preplant 91 lb/ac of N, P₂O₅, and K₂O 9 September 2002. Topdressed with 40 lb N on 12 November, 33 lb N/ac on 21 January, 40 lb/ac of N, P₂O₅, and K₂O on 6 March and 40 lb N/ac on 15 April 2003.