

# **PUBLICATIONS**

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## RYEGRASS FORAGE YIELDS AT OVERTON FOR 2004-2005 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 or 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 Center at Overton. Commercial varieties were evaluated during the past 3 years. Fertilizer application rate and dates are noted in Table 1. The test site was on a sandy loam soil. Environmental conditions in the fall of 2004 were dry in September and favorable with adequate moisture through February. Below average rainfall in March through May reduced late spring growth and forage production. The cold temperature was 17°F on 25 December 2004; however, no freeze damage occurred on annual ryegrass. Planting dates were late September normally and in 2004 the planting date was 27 September. Seed were drilled into a prepared seedbed at an ¼ inch depth at 30 lb/ac. Plot size was 4 x 12 ft with four replications. The entire plots were harvested with a Swift plot harvester at a cutting height of 2 inches on 3 December, 8 March, 23 March, 14 April, and 19 May. In the 3 December harvest, commercial entries Jackson, Passeral Plus, Marshall and Jumbo were the highest producing varieties. In the second harvest on 8 March, Double Barrel, Angus I, and Prine produced higher yields for the colder period. On 23 March, all yields were very high with TAM 90 being the highest yielding commercial entry. In the 14 April harvest, very high yields were obtained. Top yielding varieties were Flying A, Marshall, and Rio closely followed by other entries. In the 19 May harvest, good yields were produced by all entries. For the total season yield, the top 5 commercial entries were Jumbo, Prine, Angus I, Marshall, and Flying A. Over the last 3 years, higher yielding commercial varieties were produced by Prine, Marshall, Jumbo, Beefbuilder III, and TAM 90.

**Application.** Data presented from these trials should be useful in selecting ryegrass varieties for your ranch. Depending on availability, compare forage yields over multiple years if possible, to determine which variety you want to plant.

Table 1. Total ryegrass forage yields at Overton, Texas for 2004-2005 after five harvests.

Variety	Harvest	Harvest	Harvest	Harvest	Harvest	Total DMY	3 Yr. Mean
	1 Dec. 3	2 Mar. 8	3 Mar. 23	4 Apr. 14	5 May 19		
	-----pounds dry matter/acre-----						
TXR2005-TBO*	992	1197	2356	2080	1731	8356	--†
Jumbo	1027	1188	1609	2256	1658	7738	8296
M/FLX2004 (4X) LRCT*	1230	1107	1266	2322	1803	7728	--
FLX2003 (BD) 4XLRCT*	982	1358	1236	2275	1858	7713	--
ME 94*	1516	1017	1139	2589	1312	7573	8088
Prine	1025	1222	1515	2349	1439	7550	8516
Angus I	956	1356	1502	2185	1476	7475	--
TXR2005-T3EM-L*	845	857	1998	2196	1567	7463	--
Marshall	1204	1076	1057	2609	1421	7367	8313
TXR2004-BAR*	640	766	2325	2087	1475	7293	--
Flying A	522	908	1657	2858	1293	7238	--
FLX2002 (New3) LRCT-S*	1044	1266	1263	2421	1239	7233	--
FLX2002 (New3) LRCT*	1076	1076	1261	2310	1476	7199	7566
Surrey II	1027	1025	1227	2366	1548	7193	--
Rio	900	1107	1244	2645	1293	7189	--
M/FLX2004 (New4) LRCT*	604	1145	1301	2412	1676	7138	--
Ed	927	973	1284	2399	1494	7077	7989
FLX2001 (New1) 4XLRLA*	719	1077	1354	2197	1730	7077	--
Jackson	1249	1092	1181	2007	1439	6968	7135
FL/NE2004 (Misc. 2X) L*	571	1140	1258	2572	1366	6907	--
Passerel Plus	1223	940	837	2438	1384	6822	7689
Double Barrel	661	1422	1524	2040	1166	6813	--
TAM 90	519	1060	1984	2096	1093	6752	8055
TXR2005-T3EM-E*	400	823	2101	2051	1366	6741	--
TX2004-OP	215	527	2199	2250	1512	6703	--
FLX2003 (New2) ER*	607	1275	1175	2093	1548	6698	--
Beefbuilder III	659	992	1340	2142	1421	6554	8249
BAR9TAM*	173	724	2151	2211	1275	6534	7825
DN-II*	716	658	918	2627	1548	6467	--
Brigadier	558	833	1250	2419	1403	6463	7519
Boffet	376	891	1216	2295	1457	6235	--
Diamond T	642	880	863	2329	1457	6171	--
Ribeye	357	849	1205	2377	1239	6027	6888
WD-40	402	927	1079	2302	1129	5839	--
Maximus	508	1049	1056	2110	965	5688	--
WMN 97*	678	379	611	2791	1166	5625	7564
4X*	345	575	952	2261	1111	5244	--
Shiwasuaoba	198	942	715	2444	883	5182	--
Mean	641	896	1472	2310	1359	6674	
CV	34	23	23	8	23	10	
LSD (0.10)	197	190	313	178	287	633	

Planted September 27, 2004. Fertilization: Preplant 75 lb N, 0 lb P<sub>2</sub>O<sub>5</sub>, and 100 K<sub>2</sub>O/ac, respectively. Topdressed with 40 lb N/ac on January 14, 20 lb N/ac on March 4, 50 lb N/ac on March 25, and 60 lb K<sub>2</sub>O/ac on March 25, 2005.

\*Experimental lines, seed presently not available.

†Entry not tested over past 3 years.