

# **PUBLICATIONS**

## **2002**

## WHEAT FORAGE YIELDS AT OVERTON FOR 2000-2001 AND THREE-YEAR MEANS

Jim Crowder and L. R. Nelson

**Background.** Wheat can be an important winter forage for cattlemen in Texas. Wheat is also often used as a dual purpose forage and grain crop in many areas. Wheat's growth curve is similar to rye and it normally will produce good forage in December and January. Its total season forage production is normally slightly less than ryegrass, rye, or oats. Wheat, with adequate moisture, will also grow-off rapidly after seeding in a prepared seedbed and produce forage early in the fall. Wheat normally has good winter hardiness and will not winter-kill, except under extremely cold conditions. There are significant differences between varieties over years and during the growing season.

**Research Findings.** A wheat forage variety test is conducted annually at the TAMU Agricultural Research and Extension Center at Overton. Commercial and experimental wheat varieties were evaluated during the past 3 years. Fertilizer application rates and dates for the 2000-2001 study are noted in Table 1. Planting dates were early September normally; however in 2000, due to a dry September, the planting date was 4 October. Seed were drilled into a prepared seedbed at an 1 inch depth at 110 lb/ac. Plot size was 4 x 12 ft with four replications. The plots were harvested with a Hege plot harvester at a cutting height of 2 inches on 20 February, 9 March, 30 March, and 1 May 2001. Above average rainfall in November and cool conditions reduced forage production until February. In the 20 February harvest, low forage yields were produced. Higher yields by commercial varieties were produced by 'Coker 9803' and 'Coker 9663'. In the second harvest, Coker 9663 and 'Pioneer 2566' produced the higher forage yields although they were closely followed by several varieties. In the 30 March harvest (21 days after the 2<sup>nd</sup> harvest), forage production was beginning to increase. Best commercial varieties were 'Coker 9474', 'Pioneer 2566', 'Mason', and 'Sisson', closely followed by several other lines. The 4<sup>th</sup> harvest on 1 May produced about one-half of the total season yield. Little differences in yield are apparent between entries. Differences smaller than the LSD of 832 lb may be due to chance. The total season yields are also fairly similar; however, 'Coker 9704', and Coker 9474 produced forage yields over 5000 lb/ac. For the 3-year means, Pioneer 2566 and Coker 9663 had good yields; however, two experimental lines AR 584 A-3-1 and AR 494 B-2-2 produced higher yields. We did not experience any winter freeze damage in 2000-01.

**Application.** Data presented from these trials should be useful in selecting wheat varieties

for your ranch. Depending on variety availability, compare forage yields to determine which variety you want to plant. Rye will usually out produce wheat for forage production, however, rye seed is often scarce and expensive. Therefore wheat is an attractive alternative. Note rye forage yields elsewhere in this report. Ryegrass can also be seeded with wheat and total season yield will be increased, as well as extending the production of high quality forage into late May.

Table 1. Wheat forage variety test at Overton, Texas for 2000-2001 and 3-year mean yields.

Variety	Harvest 1 Feb 20	Harvest 2 Mar 9	Harvest 3 Mar 30	Harvest 4 May 1	Total DMY	3-Year Mean Yield
-----pounds of dry matter per acre-----						
AR 584 A-3-1*	422	865	709	3390	5386	4778
AR 494 B-2-2*	566	1010	821	2782	5179	5207
Coker 9704	598	768	553	3210	5128	- <sup>a</sup>
Coker 9474	489	824	685	3019	5017	-
Coker 9803	794	771	458	2955	4979	-
Pioneer 2566	621	912	669	2776	4978	4084
Coker 9663	728	982	540	2723	4973	4381
TX98U8166*	717	778	792	2676	4962	-
Ga 91426*	537	780	548	3016	4881	-
Pioneer P25R57	601	841	512	2896	4848	-
TX98U8134*	652	912	508	2621	4693	-
TX91-167*	639	674	640	2675	4629	-
TX91-57*	405	797	556	2749	4507	4482
Mason	477	812	683	2526	4499	-
TX89-55-FW*	394	549	412	3033	4388	-
Sisson	399	826	623	2434	4282	-
Pioneer 2571	331	591	489	2796	4208	-
TX98U8184*	355	913	504	2363	4134	-
Roane	382	679	427	2398	3886	-
TAM 400	322	684	470	2325	3800	-
Coker 9134	629	628	222	1942	3421	3784
Grand Mean	527	790	563	2729	4608	-
LSD	343	322	261	832	1223	-
CV	55	34	39	26	22	-

Planted October 4, 2000. Fertilization: Preplant 400 lb 10-26-26/ac. Topdressed with 40 lb N/ac on November 22, 2000, 40 lb N/ac on January 29, 2001, 40 lb N/ac on March 5, 2001, and 40 lb N/ac on April 4, 2001. Applied Finesse at 1/3 oz ai/ac on November 16, 2000 for weed control.

\*Experimental line, seed presently not available.

<sup>a</sup>Not tested over last three years.