PUBLICATIONS 2000

WHEAT FORAGE YIELDS AT OVERTON FOR 1998-99 AND THREE-YEAR MEANS

Jim Crowder, Steve Ward 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 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 hardness and will not winter-kill, except under extremely cold conditions. There are significant differences between varieties and over years. Some varieties produce more forage in the fall while others produce higher yields in the winter or spring.

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 1998-1999 study are noted in Table 1. Planting dates were early September normally, however, in 1998 the planting date was 18 September. Seed were drilled into a prepared seedbed at an 1 inch depth at 110 lb/ac. Plot size was 4×12 ft with four replications. The plots were harvested with a Hege plot harvester at a cutting height of 2 inches on 8 December 1998, 27 January, 17 February, 16 March, and 9 April 1999. In the 8 December harvest, Quantum XH 1888 and XH 9806 two hybrid wheats, produced the higher forage yields, although they were closely followed by several varieties. In the 27 January and 17 February harvests, all yields were low indicating little forage would have been available for grazing animals. We believe most of the applied fertilizer leached out in the sandy test site due to 11 inches of rain in September, 7 inches in October and nearly 6 inches in November. Therefore, the study was top-dressed with 65 lb/ac N, P, and K on 25 February. Thereafter good forage production was obtained. In the 16 March harvest, Quantum 1888 was the top forage yielding entry. In the last harvest on 9 April, nearly 50% of the seasonal yield was produced. All entries produced high yields. Higher yielding commercial varieties were Dozier, Patton, Jaypee and Coker 9543. We did not experience any winter freeze damage in 1998-99.

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 outproduce 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.

Variety	Harvest 1 Dec 8	Harvest 2 Jan 27	Harvest 3 Feb 17	Harvest 4 Mar 16	Harvest 5 Apr 9	Total Forage Yield	3-Year Average
	pounds of dry matter per acrepounds of dry matter per acre						
Quantum XH 1888 TX90-77* TX94D5910-Ov* AR584A-3-1*	818 731 786 627 565	329 328 174 241 272	315 407 268 309 416	932 707 771 655 647	1592 1532 1585 1659	3986 3704 3584 3490 3411	
TX87-20* AR494B-2-2* Quantum Q 7406 TX91-130* TX91-57*	480 668 913 745 647	351 288 270 209 336	263 321 268 317 437	677 689 692 591 605	1634 1389 1167 1446 1254	3405 3354 3310 3306 3279	- - - 3710
TX91-27* TX91-13* TX91-92* Patton Jaypee	748 660 555 653 615	310 281 280 267 208	301 255 239 368 384	541 766 641 433 780	1366 1282 1493 1461 1159	3265 3243 3208 3180 3144	- - - 2859
Quantum XH 9806 Coker 9543 Roberts Coker 9134 TX93DB550*	511 511 670 428 536	318 338 275 243 276	195 239 246 329 357	658 530 530 692 722	145 <u>3</u> 1512 1405 1430 1144	3135 3129 3125 3122 3035	- - 3293 -
Clemens TX93DB990-Ov* FL 8868* Pio. 2566 Quantum QAP 7510	583 394 467 425 597	274 232 472 210 231	181 335 492 285 214	451 742 466 756 435	1518 1273 1020 1143 1284	3007 2975 2916 2819 2760	3097 - 2359 -
Coker 9663 Grand Mean CV LSD (0.10)	319 602 39 216	278 280 33 84	307 309 33 94	510 639 27 156	1192 1381 16 202	2606 3211 13 386	

Table 1. Wheat forage variety test at Overton, Texas for 1998-99 and 3-year average.

Planted September 18, 1998. Fertilization: Preplant 500 lb 10-20-20/ac. Topdressed with 50 lb N/ac on November 2, 40 lb N/ac on December 18, 40 lb N/ac on January 15, 500 lb 13-13-13/ac on February 25, 1999, and 25 lb N/ac on March 24, 1999.

*Experimental line, seed not available to growers.

*Variety not tested over the last 3 years.