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WHEAT FORAGE YIELDS AT OVERTON FOR 1991-92 AND 3-YEAR MEANS

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Background. Wheat is an important winter annual forage crop in East Texas. Varieties vary in total yield and distribution of forage and resistance to disease. A study is conducted each year at the TAMU Agricultural Research and Extension Center at Overton to identify the best forage wheat varieties for East Texas. Before purchasing seed, growers should be aware of the forage yield and distribution potential of wheat varieties which may be available in their area.

Research Findings. Several available commercial wheat varieties and experimental lines were evaluated during the past 3 years. Fertilizer application rates and dates are noted on Table 1. Tests were planted into a prepared seedbed one inch deep at a seeding rate of 110 lb/ac. Planting dates were early September normally, however, in 1991 the planting date was September 13. Plot size was 4 x 12 ft, with four replications. Plots were harvested on five dates with a Hege plot harvester at a cutting height of 2 inches. Wheat forage was approximately 10 inches tall during the first harvest on December 4. The commercial varieties demonstrating best seedling vigor and more rapid fall growth were DK 80, FLA 303, and FLA 302. The second harvest date was February 10, indicating fair winter growth. FLA 302 was the highest yielding variety, however, several experimental lines also yielded well. On the March 2 harvest, the experimental Noble Foundation 222 produced the highest yield and other entries were similar in yield. On the March 23 harvest, Pioneer variety 2548 and several experimentals produced the better yields. The last harvest was on May 1, when FLA 302 and Coker 9766 produced the best yields, however, these yields were not significantly better than several other lines tested. The highest total season forage yield was produced by FLA 302 followed by several experimental lines. No winterkill occurred on small grains in 1991-92. Winterkill can occur on wheat in Texas. However, wheat is significantly more winterhardy than oats. A three-year mean is presented for those few varieties tested the past three years. Over a 3-year period, there was little difference between varieties. Differences in yield between varieties of less than the LSD (note under each column) may be due to experimental error and should not be considered significant.

Application. The data presented in these experiments should be useful in selecting wheat varieties for forage production for your farm. Depending on variety availability, compare forage yields, and seed prices to determine which variety you want to plant. If the wheat may be harvested for grain, grain yields, agronomic characteristics, and disease ratings of these varieties can be found elsewhere in this field day report.

Table 1. Wheat Forage Variety Test at Overton, Texas 1991-92 and 3 year mean yields.

Variety	Harvest Dates 12-4	2-10	3-2	3-23	5-1	Total Yield	3 Yr Mean
	----------pounds dry matter per acre----------						
Fla 302	1223	1312	873	204	1426	5038	4317
TX 83-50*	892	1307	920	270	1378	4767	---[a]
TX 85-121-2*	752	293	765	1162	1586	4558	----
FL 8172-G98-L5*	948	1457	876	158	834	4274	----
TX 85-264*	703	1267	610	315	1373	4268	----
TX 83-4-2*	723	251	743	1150	1214	4080	----
Noble Foundation 222*	237	189	1107	1098	1231	3862	4504
Noble Foundation 126*	496	286	954	1026	1025	3787	4129
DK 80	1597	880	340	224	716	3756	----
Coker 9766	351	751	915	202	1404	3624	----
Pioneer 2548	141	99	814	1252	1272	3578	----
TAM 109	616	158	943	767	998	3482	----
TX 82-50-1*	564	217	799	758	1036	3374	----
Fla 303	1360	515	345	78	654	2952	----
Mean	757	641	786	619	1153	3956	
LSD (0.10)	395	189	179	174	349	744	

Planted September 13, 1991.
Fertilization: Preplant 50 lbs/ac of N, P_2O_5, 100 lbs of K_2O, and 45 lbs of S/acre.
Topdressed: 40 lbs/ac N on January 7, 40 lbs/ac N on February 21, and 30 lbs/ac of N on March 21, applied as ammonium nitrate.

*Experimental, seed not available.
[a]Variety was not tested over the past 3 years.