## **PUBLICATIONS**

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### FIELD DAY REPORT - 1996

# TEXAS A&M UNIVERSITY AGRICULTURAL RESEARCH and EXTENSION CENTER at OVERTON

### **Texas Agricultural Experiment Station Texas Agricultural Extension Service**

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#### WHEAT FORAGE YIELDS AT OVERTON FOR 1994-95 AND THREE-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 compare experimental wheat lines with varieties for best forage yield in 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 1994 the planting date was 9 September. Plot size was 4 x 12 ft, with four replications. Plots were harvested on four dates with a Hege plot harvester at a cutting height of 2 inches. Wheat forage was approximately 8 inches tall during the first harvest on 13 December. Wheat forage yields are presented in Table 1. Most of the entries were experimental lines, however 'Fla 302' and 'Fla 304' are included. The second harvest was on 24 February and overall yields were quite low. Fla 302 and Fla 304 produced the higher yields. The 3rd harvest was on 30 March when most of the experimental lines produced high forage yields, and Fla 302 and 304 had lower yields. The 4th harvest was on 25 April, and all entries produced fairly low yields indicating the wheat growth had diminished and plants were producing seed heads. For the total season forage yield, the highest yielding variety was Fla 302 with a yield of 3181 lb/ac. The highest yielding experimental lines were TX86-68, TX85-51-2, and TX85-185. The three year mean forage yields indicate that in 1994-95, yields were below normal.

Application. The data presented should be useful in selecting 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. Data from past years forage tests indicate that the soft red winter wheat varieties 'Coker 9134', 'Pioneer 2548', 'Sawyer', and 'Hickory' also have good forage yielding potential in east Texas.

Table 1. Wheat forage variety test at Overton, TX 1994-95.

Variety	HAR 1 12-13	HAR 2 2-24	HAR 3 3-30	HAR 4 4-25	Total DMY	3 Year Average
			pounds of c	lry matter per a	cre	
TX86-68	799	482	1299	758	3338	a
TX85-51-2	787	492	1497	529	3305	
TX85-185	918	329	1380	573	3200	
FLA 302	763	1127	538	753	3181	4076
TX87-57	970	319	1331	537	3157	
TX85-376-1	854	478	1102	713	3147	
TX84-29-2	983	328	1050	768	3129	
TX84-32-2-H1	732	724	1035	625	3116	
TX85-376-2	664	285	1456	698	3103	
TX85-121-2	725	486	1198	664	3073	
TX84-19-2-H	678	374	1173	749	2974	
TX84V344-2	689	218	1123	912	2942	
TX84U4094-7	760	721	583	869	2933	
18 NT	665	366	1372	516	2919	
TX88-70	675	404	1139	679	2897	
TX82-11	644	293	1412	481	2830	3968
TX84-126-2	535	385	1330	552	2802	
FLA 304	735	1019	663	305	2722	
TX86-33-1-4	656	385	1075	592	2708	
TX88-102-1	726	772	810	394	2702	
TX88-124	556	886	550	624	2616	
TX85-119	414	175	1509	482	2578	3503
TX87-78-1	610	251	1366	349	2576	
TX86-6	417	463	1286	366	2532	
TX82-58-1-2	663	591	911	330	2495	
TX85-232-1	495	282	968	412	2157	
Mean	697	486	1121	586	2890	
LSD (0.10)	293	234	279	237	505	

Planted September 9, 1994. Fertilization: Preplant 50 lbs N, 100 lb  $P_2O_5$  and 100 lbs of  $K_2O/ac$ . Topdressed with 40 lbs N/ac on November 3, 50 lbs N/ac on January 19, and 60 lbs N/ac on March 17 applied as ammonium nitrate. Herbicide: Glean was applied postemergence at the two leaf stage at a rate of 0.3 oz/ac on October 4, 1994. Insecticide: Lorsban 4E applied at a rate of 0.5 pt/ac on October 4, 1994 to control greenbugs. HM = Helminthosporium ratings were recorded on April 20. Ratings were on a 0-9 scale where 0 = no disease.

<sup>&</sup>lt;sup>a</sup>Not tested in all years.