FIELD DAY REPORT - 1992

Texas A&M University Agricultural Research and Extension Center at Overton

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WHEAT FORAGE YIELDS AT OVERTON FOR 1990-91 AND 3-YEAR MEANS

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

Research Findings. Most 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 92 lb/ac. Planting dates were early September normally, however, in 1990 the planting date was September 14. Plot size was 4 x 12 ft, with four replications. Plots were harvested with a Hege plot harvester at a height of 2 inches during five harvest dates.
Wheat forage was approximately 10 inches tall during the first harvest on November 2. The commercial variety demonstrating best seedling vigor and rapid fall growth was FLA 303, however, the experimental TX-82-58 produced the best yield. The second harvest date was November 29 indicating rapid fall growth. FLA 303 again produced the highest yield, followed closely by several other lines. A hard freeze (15°F) on December 29 caused severe winterkilling on FLA 303 and FLA 301 H, and many varieties received freeze damage as shown on Table 1. On the February 26th harvest, TAM 201B (B = seed treated with Baytan) produced the top yield. On the April 1 harvest, NF 222 (Noble Foundation) produced the best yield, closely followed by several experimental lines. The last harvest was on May 1, when Keiser was the top yielding variety. The highest total season forage yield was produced by experimental TX-82-58 followed by Pioneer 2548, and several other lines. A three-year mean is presented for those 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, winterkilling damage, and seed prices to determine which variety you want to plant. If the wheat may be harvested for grain, grain yields, agronomic characteristic, and disease ratings of these varieties can be found elsewhere in this field day report.

Table 1. Wheat forage variety test at Overton, Texas in 1990-91 and three year mean yields

Variety	Harvest Dates					Total Yield	3 Yr. Mean	Winterkill
	Nov 2	Nov 29	Feb 26	Apr 1	May 1			
	lbs dry matter/acre							%
TX-82-58	1426**	1172*	473	905	839	4815**	--	75
Pioneer 2548	578	1133*	1156	1244*	652	4763*	--	60
NF 222	694	966*	1088	1317**	682	4747*	--	50
AR 26415	1031	1038*	464	1022*	1168	4723*	--	75
NF 126	1082*	877	403	774	1339	4475*	--	90
TAM 201B	526	692	1991**	965	202	4376*	--	30
Pioneer 2157B	859	1248*	801	922	533	4363*	--	85
TAM 201	716	691	1652*	1001	198	4258*	3172	40
TAM 200	942	906	883	906	561	4198*	3189	70
Terral 101	602	863	1197	1241*	290	4193*	--	60
TX-83-70	668	907	732	903	953	4163*	--	60
Pioneer 2551	422	1169*	690	909	964	4154*	--	80
Keiser	1029	1054*	360	635	1049	4127*	--	90
TAM 202	741	930*	766	930	750	4117*	--	80
TAM 109	1214*	1159*	286	740	694	4093*	--	95
TX-82-185	1139*	976*	349	719	905	4088*	3380	65
TX-85-121-2	376	1111*	0	699	1828**	4014	--	100
TX-76-40-2	843	917*	512	768	814	3854	3274	75
TX-82-118	496	814	651	1169*	716	3846	3598	60
FL 8172-G98-L5	1110*	1051*	190	535	878	3764	--	100
TX-84-146-2	446	853	715	1139*	597	3750	--	80
TX-80-31-3	418	1093*	432	930	775	3648	3476	70
TX-84-12-2	0	0	1050	943	1543*	3536	--	50
FLA 302	788	1151*	56	426	1103	3524	3239	98
Pioneer 2551B	322	876	727	740	835	3500	--	70
Terral 877	840	1059*	815	424	0	3138	--	90
TX-85-264	551	654	534	519	796	3054	--	75
Pioneer 2157	745	933*	378	646	288	2990	--	80
FLA 303	1177*	1286**	0	0	0	2463	--	100
FLA 301 H	1141*	1060*	0	0	0	2201	--	100
Mean	790	987	717	859	813	3897		
LSD (0.10)	383	378	356	308	416	737		

Planted September 14, 1990

Fertilization: Preplant 91 lbs of N, P_2O_5 and K_2O/ac and 84 lbs of sulfur/ac. Topdressed with 50 lbs/ac of actual N on Nov. 29, Feb. 7 and April 4, applied as ammonium nitrate.

** Highest yielding entry for that harvest date.

* Not significantly different from ** based on LSD at 10% level of probability.