PUBLICATIONS

1996

FIELD DAY REPORT - 1996

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

Texas Agricultural Experiment Station
Texas Agricultural Extension Service

Overton, Texas

April 18, 1996

Research Center Technical Report 96-1

TRITICALE FORAGE YIELDS AT OVERTON FOR 1993-94

Steve Ward, Jim Crowder, and L. R. Nelson

Background. Triticale is a natural hybrid specie made by crossing rye with wheat. Triticale is a very impressive specie, which produces large and vigorous plants. Seed or grain yields have not been outstanding and flour quality has been a problem. Forage yields and forage quality have been more promising than grain yields. In past years at Overton, we have usually included a few triticale varieties in with the rye forage test. In 1993-94, we had a separate triticale experiment.

Research Findings. Eight experimental triticale lines being developed at the Texas A&M University Agricultural Research and Extension Center at Vernon and the variety Morrison were evaluated for adaptation and forage yield production. Fertilizer rates are noted on table 1. Tests were planted into a prepared seedbed at 1 inch depth at 90 lb/ac. Planting date was September 16, 1993. Plot size was 4 x 12 ft, with four replications. During the 1993-94 season, plots were harvested with a Hege plot harvester at a cutting height of 2 inches at five harvest dates. Triticale was approximately 8-inches tall at first harvest on November 22. Triticale yields in the first harvest were extremely low for all entries. The second harvest was on January 5, where yields were somewhat improved over the earlier harvest. Highest yields were produced by TX92D7787, TX92D7802, and TX91D6442, however, they were closely followed by several other entries. Very good yields were produced in the February 25 harvest. Yields in excess of 2000 lb/ac dry matter were produced by TX92D7787 and TX91D6442. In the fourth harvest on March 17, yields were less for all entries, however, yields over 1000 lb/ac were produced by TX92D7792 and TX92D7788. In the last harvest on April 22, high yields were produced with several entries producing yields in excess of 2000 lb/ac.

Total season yields for 1993-94 are indicative of forage potential of these varieties. Differences in yield between varieties of less than the LSD (927 lbs for total yield) may be due to experimental error and should not be considered significant.

Application. The data presented from this experiment should be useful in determining the forage yielding potential of triticale in East Texas. Overall season yields of other winter annuals can be compared with these forage yields. Some triticale seed has been sold the past few years, primarily for forage for dairy cattle.

Table 1. Triticale forage variety test at Overton for 1993-94.

Variety	Harvest Dates					Total Yield
	11-22	1-5	2-25	3-17	4-22	
	----------pounds of dry matter per acre----------					
TX92D7787	223	753	2298	466	2457	6197
TX91D6442	178	612	2210	656	2859	6515
TX92D7793	280	551	1767	930	2250	5778
TX92D7802	159	694	1635	790	1658	4936
TX92D7785	155	511	1948	557	2702	5873
TX92D7792	144	300	1487	1012	3013	5956
TX89D9325	80	234	1390	944	2285	4933
TX92D7788	314	133	1013	1038	2529	5027
Morrison	50	77	1413	944	2185	4669
Mean	176	429	1685	815	2437	5542
LSD (0.10)	172	217	424	324	556	897

Planted Sept. 16, 1993. Fertilization: Preplant 50 lb N, 100 lb P_2O_5 and 100 lbs of K_2O/ac. Topdressed with 50 lb N/ac, on Nov. 15, Dec. 15, and Mar. 11, applied as ammonium nitrate.

Herbicide: Glean was applied postemergence at the two leaf stage at a rate of 0.3 oz/ac.