

# **PUBLICATIONS**

## **1981**

# Forage Research in Texas

Departmental Technical Report No. 81-12

Department of Soil and Crop Sciences

Project: H 6287

Workers: J. More  
J. M. Murphy  
F. M. Rouquette, Jr.  
E. C. Holt

Location: Texas A&M Ag. Research  
Station at Pecos

#### YIELD COMPARISON OF SIX COOL-SEASON GRASSES IN THE TRANS-PECOS AREA

##### OBJECTIVES:

To determine the seasonal and total dry-matter yields of four tall wheatgrass varieties ('Jose', 'Largo', 'Alkar', and 'Platte'), 'KY 31' fescue, and NK Tetrablend 30.

##### PROCEDURES:

Five cool-season perennial grasses and one cool-season mixture of annual and perennial rye grass were planted October 17, 1978 on the Pecos Station in a randomized block design with four replications. All varieties were seeded at 25 lbs/acre in 8-inch drill widths. After establishment, plots were standardized to 5.3 by 20 foot blocks. Plots were harvested initially on April 19, 1979 and thereafter, at monthly intervals to a 3-inch stubble height. Total weights were recorded in the field and sub-samples taken for moisture determinations. Following each defoliation all plots were fertilized with 40 lbs/acre nitrogen (urea) and immediately sprinkle irrigated. The total moisture applied via precipitation and/or irrigation, was 61 inches for the 1979 season and 57 inches for 1980.

##### RESULTS AND DISCUSSION:

Dry matter yields for the six grass varieties are shown in Tables 1 and 2. Tetrablend 30, which is composed of 38 percent annual rye grass, had a rapid decline in production during the 1979 season. Plant populations decreased drastically in the 1980 season and although plots were clipped yields are not reported. Fescue had lower yields than most of the wheatgrass varieties but tended to extend production farther into the season. Largo had slightly higher production than Alkar and Jose both years, while Platte had consistently lower yields both years.

Table 1. Dry-matter yield of six cool-season grasses, 1979

Grass	Harvest Dates						
	4-19	5-22	6-22	7-26	8-23	9-25	Total
	(lbs/ac dry matter)						
Largo	1922	3444	1528	1181	1286	856	11,296
Jose	2083	3102	1011	1113	1060	849	10,072
Alkar	2436	2711	1046	1058	1065	613	9,729
Platte	1246	3031	1042	960	1010	738	8,690
Fescue	821	2351	2147	1938	1125	535	9,578
Tetralblend 30	2603	1847	999	374	642	495	7,145

Table 2. Dry-matter yield of five cool-season grasses, 1980

Grass	Harvest Dates									
	11-29	1-3	2-4	2-28	4-1	4-29	5-29	6-30	7-31	Total
	(lbs/ac dry matter)									
Largo	507	174	228	706	3386	2482	2444	1262	309	14,105
Jose	304	58	40	451	4121	2165	1585	990	330	13,070
Alkar	336	71	49	437	4206	2538	2221	1002	284	13,792
Platte	181	38	17	165	2850	2085	2197	961	324	11,299
Fescue	285	78	93	349	2031	2132	2791	1632	697	12,229