

Forage Research in Texas

1982

Perennial Grass Variety Test--Angleton

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SUMMARY

Dry matter production during the second year of a dallisgrass and hybrid bermudagrass variety test ranged from 7216 to 9622 lb/ac. Coastal, Tifton 44 and Alicia produced in excess of 9000 lb/ac.

Introduction

Hybrid bermudagrasses are the most popular and widely grown grasses in the Southeastern United States. They are primarily adapted to deep, well drained sandy and loam soils which are predominant in that area of the United States. Performance of these hybrid bermudagrasses in comparison to dallisgrass on poorly drained, clay rice soils has never been documented.

Methods and Materials

Coastal, Callie, Alicia, Tifton 44 and SS-16 bermudagrasses and dallisgrass were established in the fall of 1979 on a Lake Charles clay at Angleton. Plots were 6 x 15 ft in a Randomized Block design with four replications. Five hundred pounds of 13-13-13 per acre were applied on March 20 plus 50 lb nitrogen on June 19 and July 30. Three pounds of Princep per acre were applied on Feb. 17. Plots were harvested six times during the year.

Results and Discussion

The six grasses separated into a high yielding (Coastal, Tifton 44 and Alicia) and low yielding (dallisgrass, Callie and SS-16) group with a difference of about 2000 lb/ac (Table 1). Coastal had the most production and Callie and SS-16 the least at the first harvest. The most striking performance difference was the very low dallisgrass production (191 lb) compared to the bermudas (711 to 940 lb) at the Oct. 27 harvest. The preceding growing period was hotter and drier than normal. The morphological and physiological factors which make dallisgrass tolerant of wet soils may also limit dallisgrass growth during very dry periods. The 1980 yields are also presented for comparison.

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Table 1. Forage production of hybrid bermudagrasses and dallisgrass at Angleton.

Variety	Cutting dates							1980 Total
	May 12	June 18	July 15	Aug. 18	Sept. 18	Oct. 27	Total	
Coastal	2547 a*	1908 ab	1760 bc	1558 a	978 b	871 a	9622 a	7274 a
Tifton	1845 bc	2127 a	2057 a	1599 a	985 b	940 a	9553 a	8633 a
Alicia	2112 ab	1805 b	1961 ab	1454 ab	1114 b	711 a	9157 a	8933 a
Dallisgrass	1639 cd	1506 c	1485 c	1265 bc	1366 a	191 b	7452 b	9263 a
Callie	1356 de	1535 c	1720 bc	1033 c	993 b	747 a	7384 b	7447 a
SS-16	1147 e	1428 c	1744 bc	1172 c	921 b	804 a	7216 b	9903 a

*Yields within a column followed by the same letter are not significantly different at the .05 level, Duncan's Multiple Range Test.