



Forage Research in Texas

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EVALUATION OF EXPERIMENTAL
KLEINGRASS CULTIVARS

OBJECTIVE:

To determine the forage yield of experimental cultivars that had been selected for attributes other than vigor or yield.

PROCEDURE:

Plots were planted May 23, 1977, in 20-inch rows, 4-row plots, 20 feet long, 3-foot alley between blocks, 5 replications (blocks). Plots were fertilized each spring with 50-50-50 and top dressed after each cutting with 50 pounds of nitrogen per acre.

The test was conducted to determine the yield of cultivars developed for attributes other than yield. Synthetics 67-12, 67-13, and 70-17 Syn. were selected for seed production with no selection pressure for forage yield or plant vigor. Synthetic 75-25 resulted from intercrossing selected parent plants of 74-23 and 74-24 which had been selected and progeny tested for high IVDMD. All of the parent plants originated from 67-12 progeny. Synthetic 72-22 parent plants were selected and progeny tested for IVDMD and originated from a wide range of sources.

RESULTS:

The yield data do not indicate a wide range, plus or minus, from Kleingrass 75 which was used as the standard. The highest yield was with 72-22 which has the widest gene base but the yield was not different to K-75.

Selection 75-25 has been planted in a pasture to evaluate its performance, forage quality and stand persistence, under grazing.

Plains bristlegrass 108 is a plant introduction from Mexico, selected for its seed production in studies related to grasses for game bird use. It had not been compared with a standard. PMT 4022 is an SCS collection. Obviously selection 108 is not comparable to PMT 4022 in forage production. Selection 108 is marginal in winter hardiness for this area.

Forage Yield of Kleingrass Selections, College Station, 1978

Entry	Pounds of dry forage per acre			
	6/12	8/16	9/29	Total
72-22	6237	1438	5421	13,096
74-23 + 74-24	6475	1171	5157	12,803
K-75	6748	1193	4451	12,392
70-17 Syn.	5508	1246	4811	11,565
75-25	5508	1158	4425	11,091
67-12	4923	1441	4363	10,727
67-13	5071	1269	4280	10,620
Plains bristlegrass PMT 4022	4061	807	2437	7,305
Plains bristlegrass 108	2439	0	2077	4,516