Table ___. Forage Yield of Perennial Warm Season Grasses at the Brazos River Valley Lab, Miller Clay Soil, 1957

Species	Pounds air-dry forage per acre					
	May 23	June 27	Aug. 8	Sept.29	Oct. 8	Total
Blue Panic	4150	2750	2980	2200	1410	13490
Pretoria 90 Bluestem	3470	2580	3030	3970	300	13350
Blue Buffel	1840	3090	2590	3280	1510	12310
Rhodes	4310	2160	1880	2410	1400	12160
Setaria Sphacelata	3230	2380	1840	1510	440	9400
Kleingrass 1/	4100	1820	1640	1440	130	9130
Pretoria 62 Bluestem	1930	2320	1680	3170	---	9100
Thompsongrass 2/	3380	1920	1380	1330	---	8010
Medio Bluestem	1560	910	850	1950	---	5270

ISD (.05) for total yield = 2500. C.V. = 28.2%

1/ Panicum coloratum 2/ Panicum stapfianum
plots received 30#N per acre April 17 and July 2,
3 inches irrigation water July 2, 1957

Forage production of twelve warm season grasses,
1957, Angleton

Species	Pounds per acre of oven dry forage						
	3/2	5/10	6/21	8/5	9/10	10/25	Total
Coastal Bermudagrass	480	2980	3550	2290	1790	1080	12170
Angletongrass	0	2470	2090	2630	1300	3680	12170
Blue Buffel	1340	2330	2180	1740	1310	2690	11590
Indian Bluestem	0	1510	1410	3580	970	3840	11310
Kleingrass	1360	2360	2740	1650	1180	2000	11290
Pretoria 90 Bluestem	130	1840	1770	2330	2090	2850	11010
Medio Bluestem	210	2560	1530	2860	1150	2700	11010
Gordura	1150	2900	1960	1520	980	1770	10280
Luling Bermudagrass	1310	2600	2460	1980	1010	890	10250
Pallisgrass	2120	2600	1300	1680	560	1720	9980
Buffel T-4464	200	1800	1380	1440	1260	2620	8700
Common Bermudagrass	130	1920	1180	1500	750	600	6080
LSD .05	459	666	823	872	616	544	1432
C. V.	37.5%	20.0%	29.22%	28.9%	17.5%	17.2%	9.41%

This test is on a Lake Charles clay soil. Fertilizer was applied at the following rates per acre on the indicated dates:

3-2-57: 400 pounds 16-20-0

5-24-57: 400 pounds 16-8-8

8-6-57: 400 pounds 16-8-8

The percent of total forage production by clipping periods for twelve warm season grasses, 1957, Angleton

Species	Clipping periods					
	-3/2	3/2-5/10	5/10-6/21	6/21-8/5	8/5-9/10	9/10-10/25
Coastal Bermudagrass	3.9	24.5	29.2	18.8	14.7	8.9
Angletongrass	0.0	20.3	17.2	21.6	10.7	30.2
Blue Buffel	11.6	20.1	18.8	15.0	11.3	23.2
Indian Bluestem	0.0	13.4	12.5	31.7	8.6	33.8
Kleingrass	12.0	20.9	24.3	14.6	10.5	17.7
Pretoria 90 Bluestem	1.2	16.7	16.1	21.2	19.0	25.8
Medio Bluestem	1.9	23.3	13.9	26.0	10.4	24.5
Gordura	11.2	28.2	19.1	14.8	9.5	17.2
Luling Bermudagrass	12.8	25.4	24.1	19.3	9.6	8.8
Dallisgrass	21.2	26.1	13.0	16.8	5.6	17.3
Buffel T-4464	2.3	20.7	15.9	16.6	14.4	30.1
Common Bermudagrass	2.1	31.6	19.4	24.7	12.3	9.9

Percent protein in forage of twelve warm season grasses, 1957, Angleton

Species	Percent protein in oven dry forage			
	3/2	5/10	6/21	8/5*
Coastal Bermudagrass	13.76	8.16	9.70	6.88
Angletongrass	0.00	7.04	9.97	6.41
Blue Buffel	16.87	9.18	10.20	5.10
Indian Bluestem	0.00	9.47	10.87	7.51
Kleingrass	17.19	10.93	11.60	6.75
Pretoria 90 Bluestem	17.65	9.04	8.64	4.84
Medio Bluestem	15.84	7.33	10.42	5.74
Gordura	15.02	9.43	10.75	7.53
Luling Bermudagrass	15.72	8.04	10.39	6.18
Dallisgrass	13.67	9.23	12.00	7.17
Buffel T-4464	16.55	12.35	11.92	5.97
Common Bermudagrass	15.49	8.36	12.51	6.25
LSD .05	2.46	1.40	1.60	1.62

* No nitrogen fertilizer was applied after the June 21 clipping and this probably accounts for the low protein percentage on August 5.

Analysis for September 10 and October 25 clipping have not been completed.

Percent phosphoric acid in forage of
Twelve warm season grasses,
1957, Angleton

Species	Percent phosphoric acid in oven dry forage			
	3/2	5/10	6/21	8/5
Coastal Bermudagrass	.85	.47	.48	.34
Angletongrass	.00	.55	.75	.40
Blue Buffel	.76	.69	.75	.46
Indian Bluestem	.00	.68	.75	.30
Kleingrass	.91	.57	.64	.42
Pretoria 90 Bluestem	.71	.55	.51	.22
Medio Bluestem	.78	.48	.71	.32
Gordura	1.04	.73	.87	.55
Luling Bermudagrass	.78	.60	.59	.39
Dallisgrass	.61	.70	.59	.37
Buffel T-4464	.94	.70	.86	.42
Common Bermudagrass	.84	.48	.65	.41
LSD .05	.21	NS	.14	.12

Chemical analysis for September 10 and October 25 clipping have not been completed.

Table ___. Warm Season Grass Variety Test - Temple, 1957

Variety	Pounds per acre Air-dry forage
K.R. Bluestem	2595
Australian Beardgrass	2060
Buffel (T-4464)	1405
Blue Panic	1145
Bermuda (common)	990
Johnson	860
L.S.D.	164

Table ___. Buffel Grass Variety Test - Temple, Texas - 1957

Variety		Pounds per acre Air-dry forage
TS 35585		3819
TS 35588		3610
TS 35583		3506
T 4701		2601
T 4464		2149
	L.S.D.	426

Table ___. Side Oat Gramma Variety Test - Temple, 1957

Variety	Pounds per acre Air-dry forage
Mauldin	2570
Hope	2105
Tuscon	2065
Encinoso	1860
Elreno	1620
Texas	1430
Neb. 52	1290
A-3603	1280
Kansas	1015
Neb. 37	995
L.S.D.	348

Forage yield of Johnsongrass hybrids and Perennial Sudan varieties at Denton on San Saba clay, 1957

Variety	Pounds air-dry forage per acre			
	June 17	July 16	Oct. 4	Total
Sorghum almum	1790	1810	800	4400
Hybrid ISJ	1870	1770	720	4360
Perennial Sudan K-6459	1800	1900	680	4380
Hybrid SJ2	1600	1900	720	4220
Perennial Sudan Sel. 1/	1800	1700	670	4170
Miss. Persistent Johnson	1010	1010	510	2530
Common Johnson	960	1080	440	2480

L.S.D. (.05) for total yield = 410. C.V. = 17.2%

Test was planted April 10 in 12-inch rows, 25 feet long, 4 replications.

Table . Forage Yield of Bermudagrass Varieties at Mt. Pleasant, 1957

Variety	Pounds air-dry forage per acre						
	May 29	June 12	June 26	July 26	Aug. 26	Sept. 27	Total
Common	650	1340	1490	2740	1160	970	8360
Suwannee	190	410	900	2840	760	1400	6500
Coastal	720	1270	1500	3750	1180	1810	10230
Selection No. 3	960	1480	1620	4310	1070	1670	11110

L S D (.05) for total yields = 1750

Table . Alfalfa Variety Test, Beeville, Texas, 1957. 1/

Variety	Air-dry forage in pounds per acre				Season total	Average stand (%)
	May 17	Rank	June 27	Rank		
Indian	1390	1	1910	1	3300	93
Caliverde	1310	4	1570	2	2880	100
African	1350	2	1410	6	2760	94
Du Puits	1310	4	1450	5	2760	95
Barstow Common	1060	7	1560	3	2620	93
Buffalo	1030	8	1490	4	2520	98
Lahontan	1340	3	1120	10	2460	95
Chilean	1100	6	1350	7	2450	95
Southwest Common	1030	8	1320	8	2350	88
Chillicothe Common	970	10	1240	9	2210	90
L.S.D. .05	N.S.		350		580	

1/ Seeded 11/28/56, four replications, harvested plot was 24 sq. ft.

Table ___. Alfalfa Variety Test, Denton, Texas, 1957.

Variety	% Stand 4/9/57	Air-dry forage in pounds per acre April 9	May 21	June 18	Sept. 4	Total
Southwest Common	75	1220	1990	570	670	4450
Barstow Common	85	1500	1790	440	590	4320
Caliverde	80	1470	1780	550	490	4290
Atlantic	75	1120	2050	530	540	4240
Ranger	70	830	1810	540	590	3770
Buffalo	75	910	1780	480	580	3750
Williamsburg	80	1060	1750	380	550	3740
Clone A-224	70	670	2100	480	380	3630
Vernal	70	650	1950	450	560	3610
Nomad 1/	75	910	1970	340	380	3600
No. 919	70	560	1230	340	470	2600
DuPuits	50	350	1270	460	480	2560
*Chillicothe Common	80	150	1180	670	650	2650
*Lahontan	90	150	780	580	540	2050
*Narragansett	80	40	1060	450	500	2050
*Rhizoma 1/	65	30	590	400	350	1370
L. S. D. .05		270	490	N.S.	110	800
C. V. (%)		21.96	18.75	23.42	13.19	14.56

* First season of growth

1/ Pasture - type alfalfas, others are hay-types.

Table . Alfalfa Variety Tests Conducted at Nacogdoches and Prairie View, Texas, 1957.

Varieties	Air-dry Forage Production in Pounds per Acre 1/				
	Prairie View		Nacogdoches		
	May 24	Rank	May 20	Rank	Average
Southwest Common	830	7	1290	8	1060
Barstow Common	860	4	1390	5	1125
Chillicothe Common	850	6	1430	3	1140
Lahontan	860	4	1190	9	1025
Caliverde	760	8	1150	10	955
Du Puits	1070	2	1810	1	1440
Buffalo	920	3	1390	5	1155
Ranger	--		1600	2	--
Williamsburg	--		1430	3	--
Narragansett	--		1390	5	--
Indian	1090	1	--		--
African	720	10	--		--
Chilean	740	9	--		--
L.S.D. .05	N.S.		N.S.		

1/ Only one cutting obtained at each location.

Table . Alfalfa Variety Test, Crystal City, Texas, 1957

Variety	Air-dry Forage in Pounds per Acre			
	Jan. 21	Feb. 26	Mar. 22	Season Tot. 1/
African	1680	1490	1120	4290
Indian	1520	1350	1150	4020
Hairy Peruvian	1280	1160	1130	3570
Southwest Common	1090	1150	1190	3430
Chilean	1040	1110	1020	3170
Caliverde	--	950	1030	1980
Du Puits	--	890	930	1820
Talent	--	780	--	780
Buffalo	--	710	--	710
Ranger	--	690	--	690
Vernal	--	630	--	630
Atlantic	--	490	--	490
L.S.D. .05				1484

1/ Cercospera leaf spot and spotted alfalfa aphid caused severe damage during early spring. All plots destroyed in April by floods.

Table . Sweetclover Variety Tests at Several Locations, 1957.

Varieties	Air-dry forage production in pounds per acre				
	College Station				
	Main Station 1/	Brazos Laboratory	Nacogdoches	Prairie View	Denton
Hubam	1740	5540	1430	2570	2880 1/
Floranna	1140	6800	1570	2640	2540 1/
Israel	1130	5560	1320	2210	2810 1/
M. indica	950	--*	910	1040	1100
Madrid	---	--	--	--	3050 1/
L.S.D. .05	N.S.	N.S.	N.S.	600	590

* Winter killed.

1/ Two cuttings, all others one cutting.

Table . Annual Sweetclover Variety Tests, Beeville, Texas, 1954-57 1/

Variety	Dry-matter in pounds per acre				Stage of growth at harvest		
	March	April	June	Total	1st	2nd	3rd
			1953-54				
Floranna	210	600	660	1470	Prebloom	½ bloom	seed
Hubam	130	500	990	1620	"	¼ bloom	seed
			1954-55				
Floranna	--	600	--	600	--	¼ bloom	--
Hubam	--	490	--	490	--	Er.bloom	--
			1955-56				
Floranna	1010	1420	250	2680	Prebloom	Full bl.	seed
Hubam	1130	1210	180	2520	"	"	seed
Israel	820	1120	200	2140	"	Prebloom	Prebloom
			1956-57				
Floranna	--	2060	--	2060	--	Full bl.	--
Hubam	--	1750	--	1750	--	½ bloom	--
Israel	--	1110	--	1110	--	Prebloom	--
M. Indica	--	717	--	717	--	Seed	--

1/ LSD at 5% level in 1956-57 was 400 lbs., no significance was found in other years.