Genotype Test - Marana (Elevation 2200')

Yield of lint/acre, as a percentage of DPL-16

Genotype	1970,	1971	1972(a)	1972(b)	1973(a)	1973(b)
DPL-16	1259 (100%)	1050 (100%)	889 (100%)	713 (100%)	755 (100%)	697 (100%)
Stoneville 213	---	103.1	106.1	117.5	---	---
Tamcot 37	---	---	123.0	114.0	138.5	---
Arizona Superokra	86.5	114.1	105.7	98.5	107.8	97.0
Texas 6M-10	---	---	---	91.4	111.5	---
Texas 6-19-66-9-1	---	---	---	74.1	---	---
Superokra, Hopicala	---	---	---	85.1	101.9	100.9
Tamcot 21	---	---	---	92.0	---	---
Stoneville 7A	96.0	---	---	---	---	---
Lockett 4789A	71.3	---	---	---	---	---
Arizona Expt. #37	---	---	---	---	74.6	85.9
Arizona Expt. #39	---	---	---	---	66.5	73.3
Coker 310	---	---	---	---	---	100.3
Coker 312	---	---	---	---	100.8	---
DPL-6621	---	---	---	---	---	112.8
McNair 71317	---	---	---	---	---	129.0

BREEDING COTTON ADAPTED FOR NARROW-ROW, HIGH POPULATION CULTURE

H. Muramoto

Experimental strains of short and long staple cottons with superokra leaf designed for narrow-row, high population production systems were tested in replicated tests at Yuma, Phoenix, and Marana (2), in 1973. Results seem to indicate variable response to narrow-row, high population culture.

The Yuma test, which was programed for a double cropping culture was planted on February 15, 1973, was not harvested for yields because of poor spring weather conditions and the resulting poor stand. The crop was subjected to a simulated double cropping treatment in early August. Plants were cut at ground level, 6, 12, and 18 inches with the check left uncut. Observations made in early October showed some flowering and a few green bolls. The treatment of 12 and 18 inches seem to be the best. The whole crop appeared to be about a month late. The experiments will be tried again in 1974.

All experimental lines of superokra leaf strains that grew too tall were discarded and future selection pressure will be on short and early plants for the Yuma area.

Results from the CRC, Phoenix, and Marana tests are reported under the genotype test.

VARIETY AND SPACING TRIAL
SHORT STAPLE

Garth Lamb - Chandler — Agent-in-Charge - Chuck Farr

Variety	Seed Cotton lbs/A	Lint lb/A	Turnout 1/ Percent
DPL 16	3508	1158	33.0
DPL 66	3549	923	26.0
DPL 61	3176	924	29.1
Stoneville 213	3384	978	28.9
Coker 312	2939	723	24.6

SPACING TRIAL
Variety-Stoneville 213

Spacing	Seed Cotton lbs/A	Lint lb/A	Turnout 1/ Percent
Double row 12"	4025	1035	25.7
Double row 6"	4263	1074	25.2
Single row	3233	737	22.8

1/ Percent turnout based on commercial gin results.

CROP HISTORY: PREVIOUS CROP: Cotton. PLOT SIZE: 4 rows x 1035 ft. 40" beds, 2 rows/bed, 4 reps. PLANTED: April 8, dry and irrigated up at 50 lbs/A seed rate. IRRIGATION: Irrigated up April 10, and 9 additional irrigations with cutoff August 22. Field had a high salt condition. Soil tests indicated 4500 PPM soluble salts and water analyses averaged 4100 PPM soluble salts. DEFOLIATION: Sodium chlorate 2 gal/A. HARVEST DATE: November 9 with stripper harvester.