

Upland Regional Cotton Variety Test, Maricopa Agricultural Center, 1992

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Abstract

Eighteen short staple varieties were grown in a replicated trial at the Maricopa Agricultural Center as part of the National Cotton Variety Testing Program.

Introduction

This trial was conducted as part of the National Cotton Variety Testing Program. Included were four national and several regional standard varieties. This program allows varieties from many sources to be evaluated at various locations across the cotton belt.

Material and Methods

The trial was located in a level basin field with 850 ft. runs and was arranged in a randomized complete block design replicated 5 times. Plots were 43 ft. long 4, 40 inch rows wide. Rainfall in March prevented this field from being worked and preirrigated and eventually delayed planting. The cotton was planted in dry soil and irrigated up 18 April, 1992. Additional irrigations were on 29 April, 6 June, 25 June, 13 July, 29 July, 12 August and 20 August. The planting was defoliated on 10 and 24 October and the center 2 rows of each plot were machine harvested on 10 November. Heat units for the growing season (April 18 - Oct. 10) were 4148. The national standard varieties were PM HS26, Coker 320, DPL 50 and 1517-88.

Results and Discussion

Results of the trial are shown in Table 1. Yields ranged from 693 to 1687 lbs. lint/acre. The low plant population for Acala Royale was the result of poor emergence. High populations of whitefiles were present in the planting in late August and September and some premature defoliation resulted.

Table 1. Lint yield, boll size, lint percent and plant population for upland varieties in the regional variety test at Maricopa Agricultural Center, 1992.

Variety	Lint Yield (lb/acre)	Boll Size (g/boll)	Lint Percent	Plant Population (plants/acre)
DPL 5415	1687 a *	4.31	39.4	32046
DPL 5690	1636 ab	4.89	39.8	32046
All-Tex Max 9	1514 abc	4.68	38.6	34662
KC 311	1474 abc	4.73	38.1	36624
CB 1233	1432 abcd	5.15	37.9	32700
DPL 90	1338 bcde	4.75	38.9	38586
STV 324	1325 bcde	4.49	37.5	26814
DPL 50	1237 cdef	4.75	35.0	29430
CB 333	1186 cdefg	4.85	38.0	34008
STV 453	1186 cdefg	4.62	37.0	31392
CB 1135	1176 cdefg	5.12	37.8	33681
COKER 320	1091 defg	4.68	37.7	31392
Ark. 8518-18	1046 efg	5.20	39.2	32046
1517-88	882 fgh	4.44	36.6	29430
PM HS26	830 gh	5.30	35.3	28449
SS 9209	824 gh	5.06	35.6	26814
Acala Maxxa	818 gh	5.02	39.7	32700
Acala Royale	693 h	5.39	37.3	23871

*Means followed by the same letter are not significantly different at the 0.05 probability level.