

# Pima Regional Variety Test at the Maricopa Agricultural Center, 1998

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## ***Abstract***

*Seventeen Pima varieties were grown in a replicated trial at the Maricopa Agricultural Center as part of the national cotton variety testing program. Lint yield, boll size, lint percent, plant populations, plant heights and fiber properties are presented in this report*

## **Introduction**

This trial was conducted to evaluate Pima varieties and experimental strains under central Arizona conditions. Varieties from the USDA and private seed companies were included. This trial was part of the national cotton variety testing program with S-7 designated as the national standard and Conquistador and S-6 being regional standards.

## **Materials and Methods**

This test was located in a level basin field with 660 foot runs and was arranged in a randomized complete block design replicated four times. Plots were 4 rows wide, 43 feet long, with 40 inch spacing. The cotton was planted with cone planters in dry soil and irrigated up on 27 April. Fifty hand picked boll samples taken out of two reps were used to determine lint percent and boll size. The same sample was ginned and twenty grams of lint were analyzed for fiber properties. Following is a crop history on how the crop was managed:

### **Crop History**

***Previous crop:*** Cotton  
***Planting date:*** 17 April  
***Herbicides:*** Prowl preplant (1 pt/acre) and Staple on 3 June (1.8 oz/acre)  
***Fertilizer:*** 92 lbs of N  
***Irrigation***  
***dates:*** 27 April, 8 June, 1 July, 13 July, 27 July, 5 August, 17 August, 31 August and 14 September  
***Pix***

This is part of the 1999 Arizona Cotton Report, the University of Arizona College of Agriculture, index at <http://ag.arizona.edu/pubs/crops/az1123/>

**applications:** None  
**Insecticide applications:** Vydate on 27 June (2 pts/acre), Orthene on 10 July ( 1lb/acre), Knack on 4 August (8 oz/acre), Vydate on 4 August (2 pts/acre), Orthene on 14 August (1 lb/acre), Larvin on 14 August ( 2 pts/acre), Lorsban on 14 August (2 pts/acre), Orthene on 28 August ( 1 lb/acre)  
**Defoliations:** Ginstar on 21 October ( 10 oz/acre), Ginstar + Def on 5 November (10 oz/acre + 1 pt/acre)  
**Heat units:** 4191 (80/55 degrees) from 17 April to 21 October  
**Rainfall:** 0.83 inches from 17 April to 21 October  
**Harvest date:** 25 November

## **Results and Discussion**

Results of the test are shown in Table 1. Yields ranged from 343 to 1203 lbs lint/acre. Once again the 1998 growing season was characterized by heavy Lygus infestations. Three and four year averages of lint yield of some varieties are represented in Tables 2 and 3, respectively. Fiber properties (HVI) are listed in Table 4.

**Table 2. Three year lint yield averages of 7 varieties in the Pima Regional Variety Test at the Maricopa Agricultural Center, 1998.**

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Variety	Lint yield (lbs/acre)
OA 328	1074
OA 322	979
CONQUISTADOR	961
DPL HTO	932
DPL WHITE PIMA	917
S-7	913
S-6	692

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**Table 3. Four year lint yield averages of 5 varieties in the Pima Regional Variety Test at the Maricopa Agricultural Center, 1998.**

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Variety	Lint yield (lbs/acre)
OA 328	1089
OA 322	1014
CONQUISTADOR	981
S-7	925
S-6	703

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Variety	LEN	UR	STR	EI	MIC	Rd	b
S-6	1.37	91.6	43.9	11.0	4.5	69.6	11.7
S-7	1.39	91.5	50.2	11.0	4.6	70.6	10.8
CONQ	1.37	90.2	48.3	11.0	4.6	69.3	11.3
DP WH PIMA	1.34	90.4	45.8	12.0	4.6	77.0	8.6
DP HTO PIMA	1.36	90.4	46.6	11.0	4.5	70.2	10.9
OA 322	1.37	91.7	45.3	12.0	4.0	75.0	10.1
OA 328	1.32	88.6	41.7	11.0	4.6	72.5	10.9
OA 340	1.36	90.2	46.4	11.0	4.6	70.7	10.7
OA 338	1.37	90.6	43.4	11.0	4.6	69.2	11.0
OA 339	1.38	92.0	45.0	11.0	4.2	76.4	8.2
UA 6	1.36	90.4	44.1	11.0	4.5	71.4	11.3
UA 9	1.38	91.0	42.8	11.0	4.5	68.0	10.7
UA 4	1.39	92.0	46.1	12.0	4.5	73.8	10.1
UA 5	1.39	91.8	48.4	11.0	4.3	71.6	10.4
UA 7	1.36	90.6	50.3	12.0	4.6	73.0	10.6
OA 314	1.39	91.6	46.0	12.0	4.6	71.2	10.9
OA 316	1.40	92.1	49.9	11.0	4.4	70.0	10.5

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