

LONG STAPLE VARIETY - STRAIN TEST - 1978

There is always interest in promising strains of long staple cotton which may be released in the future. This test is a part of a coordinated effort to evaluate new strains in comparison to the standard Pima S-5. Performance knowledge gained in this manner is extremely useful once a strain is released as a variety.

In 1978 we compared 3 strains, P-39, P-37, and P-34 with S-5. The test was randomized with four replications. The low yields reported here are a result of one of the poorest long staple growing seasons in recent history. It was interesting to note that all three strains produced higher yields than S-5, however, yield alone is only one aspect of the total evaluation process.

It is difficult to predict what the yields might have been under more desirable growing conditions. Perhaps these strains can withstand more weather adversity than can S-5, but we don't know that this accounted for their good showing.

Quite often a promising strain is grown under actual grower conditions for 4 or 5 years before it is completely evaluated and released. Many strains fall by the wayside during this proving process but those that survive are well adapted to actual grower production.

Evco Farms-Marana Art Pacheco		Agent In Charge Jim Armstrong		<u>CROP HISTORY</u>
<u>Variety or Strain</u>	<u>Percent Turnout</u>	<u>Plants/A X 1000</u>	<u>Lint<sup>2/</sup> lbs./A</u>	
P-39	32.80	44.2 a <sup>3/</sup>	742 a <sup>3/</sup>	SOIL TYPE: Loam. PREVIOUS CROP: Long staple cotton. PLANTING: April 15 at 15 lbs/A. FERTILIZER: 125 lbs/A 18-40-6 preplant. HERBICIDE: .8 lb/A Caprol as a chemical hoe, directed spray 8" each side base of sprayed for Johnsongrass with DSMA. IRRIGATION: One preirrigation and 5 more, ending September 4. INSECTICIDE: Six applications for PBW. Defoliation: 3 lb/A Sodium Chlorate on November 3. HARVEST: November 22.
P-34	31.52	41.0 a	588 b	
P-37	29.70	44.6 a	546 bc	
S-5	30.34	37.6 a	489 c	
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1/ Turnouts are based on Commercial ginning results.

2/ First pick only.

3/ Values followed by the same letter are not significantly different at the .05 level by the Student-Newman Keul's Test.

LONG STAPLE VARIETY - STRAIN TEST

Art Pacheco - Marana

Agent-in-Charge - Jim Armstrong

Variety	Turnout <sup>1/</sup> %	Lint <sup>2/</sup> lbs/A	Plants/A x 1000
P-39	32.80	744 a <sup>3/</sup>	44.2 a <sup>3/</sup>
P-34	31.52	589 b	44.6 a
P-37	29.70	547 bc	41.0 a
S-5	30.34	490 c	37.6 a

<sup>1/</sup> Turnouts are based on commercial ginning results.

<sup>2/</sup> First pick only.

<sup>3/</sup> Values followed by the same letter are not significantly different at the .05 level by the Student-Newman-Keul's Test.

C.V.: Stand = 9.99%; Yield = 7.00%

CROP HISTORY: SOIL TYPE: Loam. PREVIOUS CROP: Long staple cotton.  
 PLANTING: April 15 at 15 lbs/A. FERTILIZER: 125 lbs/A 18-40-6 preplant. HERBICIDE: .8 lb/A Caparol as a chemical hoe, directed spray 8" each side base of plants.  
 Layby with 1.5 lbs/A Karmex on July 20. Spot sprayed for Johnsongrass with DSMA. IRRIGATION: One preirrigation and 5 more, ending September 4. INSECTICIDE: Six applications for PBW. DEFOLIATION: 3 lb/A Sodium Chlorate on November 3. HARVEST: November 22.