

BREEDING RESEARCH WITH LONG STAPLE COTTON

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The objective of the long staple cotton breeding program has been to develop breeding methodology whereby desirable characteristics such as high yields, good agronomic traits and superior spinning qualities can be incorporated into one strain.

Experimental #126-1, our most promising line was extensively tested in 1969. It was entered in the USDA, ARS Regional Advanced Strain Test for long staple cottons. We tested Experimental #126-1 in a replicated test with Pima S-4 at Marana, Arizona. Results of the Marana test showed no significant differences in yield between Pima S-4 and Experimental #126-1; however, the latter was ready for harvesting two weeks before Pima S-4.

Observations were made on a seed increase field planted with Experimental #126-1 at Farmers Investment Company (FICO), at Sahuarita, Arizona. Preliminary yield figures reported showed that 7,753 lbs. of lint were harvested from 14.2 acres on November 22, 1969. Gin turn-out was 33.3%. The grower reported that the field was ready for harvesting the first week in November, early for this area.

Fiber and spinning data gathered over the last few years indicate no significant differences in lint qualities between Experimental #126-1 and Pima S-4. Since Experimental #126-1 is an earlier maturing strain than Pima S-4, with no differences in yield or lint qualities, it has been submitted for consideration for release as a commercial variety.

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AGRICULTURAL EXTENSION SERVICE  
ON-FARM TEST DEMONSTRATIONS

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The on-farm testing program is a cooperative effort between growers, University of Arizona Extension Service personnel and commercial seed concerns. The tests provide on-farm yield and lint information for varieties and various cultural practices.