## Registration of Crop Cultivars

## REGISTRATION OF PIMA S-2 COTTON<sup>1</sup> (Reg. No. 57)

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'PIMA S-2' cotton (Gossypium barbadense L.) was developed by ARS-USDA in cooperation with the State Agricultural Experiment Stations of Arizona, New Mexico, and Texas.

<sup>1</sup>Registered by the Crop Science Society of America. Contribution from ARS-USDA and the State Agricultural Experiment Stations of Arizona, New Mexico, and Texas. Journal Paper No. 2499 of the Arizona Agric. Exp. Stn. Accepted 14 Apr. 1976.

Pima S-2 is a  $F_3$  selection from a cross of experimental strain 3-79 with 'Pima S-1'. It was tested as 3-79  $\times$  S-1 22-12. Pima S-2 was released in 1960 as a replacement for Pima S-1. Pima S-2 showed a 16% yield advantage over Pima S-1 in 25 tests over a 5-year period, 1956-60<sup>3</sup>. Although yield tests were made at all elevations, the highest yield advantages were obtained in the lower valleys where Pima S-2 sets a much better bottom crop than Pima S-1.

Compared with Pima S-1, Pima S-2 has shorter, more compact plants, higher percent lint, faster ginning, and essentially the same fiber properties, except for a slight but significant increase in Micronaire value. In processing, Pima S-1 and Pima S-2 are similar for yarn strength, yarn appearance, neps, and waste percentage. Pima S-2 was the major commercial American Pima variety from the time it was released and increased until 1968.

Breeder seed may be obtained by bona fide breeders upon written request to the USDA, University of Arizona Cotton Research Center, 4207 East Broadway, Phoenix, AZ 85040.

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<sup>&</sup>lt;sup>8</sup> Feaster, C. V., and Turcotte, E. L. 1962. Genetic basis for varietal improvement of Pima cottons. Crops Res. ARS 34-31.