Registration of Crop Cultivars

REGISTRATION OF PIMA S-6 COTTON

‘PIMA S-6’ cotton (Gossypium barbadense L.) (Reg. no. 81) was developed by USDA-ARS in cooperation with the State Agricultural Experiment Stations of Arizona, New Mexico, and Texas. The experimental designation was P34.

Pima S-6 is an F₄ selection from a cross of experimental strains 5934-23-2-6 and 5903-98-4-4. It was released in 1983 as a replacement for ‘Pima S-5’. The major advantages of Pima S-6 are earlier maturity and higher yield than for Pima S-5. From 1975 through 1981 the average yield advantage for Pima S-6 over Pima S-5 grown at various elevations ranged from 4 to 18%. The greatest yield advantage from Pima S-6 was obtained at high elevations (above 750 m), particularly in New Mexico and Texas.

Pima S-6, compared with Pima S-5, is a more open plant, less leafy, and equal or shorter in plant height at low elevations (up to 450 m) and equal or taller at high elevations. Pima S-6 is early, begins fruiting low on the plant, and continues fruiting throughout the season.

Compared with Pima S-5, Pima S-6 has a higher lint percentage, smaller bolls, slightly shorter 2.5% span fiber length, slightly longer 50% span fiber length, slightly shorter classifier’s staple, stronger fiber, coarser fiber, and its fiber has less reflectance and greater yellowness. In processing, Pima S-6 gives slightly stronger yarns and better yarn appearance than Pima S-5.

Breeder seed may be obtained by bonafide seed breeders upon written request to USDA-ARS, Univ. of Arizona Cotton Res. Ctr., 4207 E. Broadway, Phoenix, AZ 85040.

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References and Notes


REGISTRATION OF ACALA 1517-SR1 UPLAND COTTON

‘ACALA 1517-SR1’ cotton (Gossypium hirsutum L.) (Reg. No. 82) was released by the New Mexico Agricultural Experiment Station in 1982. It originated as a single plant selection from ‘Acala 1517-77’. Earliness and plant height are similar for the two cultivars.

Acala 1517-77BR produces premium lint averaging 30.5 mm in 2.5% span length, as 1½ in. staple. Fiber uniformity is about the same as that of Acala 1517-77. Strength of 22's yarn of Acala 1517-77 averaged 148 kNmkg⁻¹ compared with 143 kNmkg⁻¹ for Acala 1517-77BR.

Acala 1517-77BR is moderately tolerant to Verticillium dahliae Kleb. The cultivar is mildly tolerant to Fusarium oxysporum f. sp. vasinfectum (Atk.) Snyd. and Hans.

Over the 4 years of testing, Acala 1517-SR1 averaged 1% more lint yield than Acala 1517-77. Acala 1517-SR1 was released as a replacement for Acala 1517-77 because of the higher levels of bacterial blight resistance.

Breeder seed will be maintained by the New Mexico Agricultural Experiment Station, Las Cruces.

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References and Notes

3. Research specialist, professors, and associate professors of Crop and Soil Sciences, New Mexico State University. Registration by the Crop Sci. Soc. of Am. Journal Paper no. 3755, New Mexico State Univ., Las Cruces, NM 88003.