REGISTRATION OF MISCOT 7853 COTTON GERMPLASM

A GERMPLASM line of cotton (Gossypium hirsutum L.), Miscot 7853 (Reg. no. GP-421, PI 536525), was developed by the Mississippi Agricultural and Forestry Experiment Station and released in 1989. Miscot 7853, tested as 7853-53-1-1, was selected from a cross between ‘DES 24’ and ‘Cascot BR-1’.

Resistance to seed deterioration expressed by Miscot 7853 was significantly higher than that of ‘DES 422’, ‘Stoneville 825’, and most of the breeding lines that were evaluated (1). Furbeck (2) found that this line exhibited high general combining ability for resistance to seed deterioration and for low water imbibition rate. Its water imbibition rate was equivalent to that of ‘Deltapine 50’ and Stoneville 825.

Miscot 7853 is a glabrous line that is resistant to all known U.S. races of Xanthomonas campestris pv malvacaeum (Smith) Dye, the causal agent of bacterial blight. In the Regional Cotton Fusarium Wilt Test at Tallassee, AL, resistance of Miscot 7853 to fusarium wilt [Fusarium oxysporum f. sp. vasinfectum (Atk.) Snyd. & Hans.] was equal to that of ‘Deltapine 50’ and Stoneville 825.

In performance tests from 1984 through 1987 at Mississippi State, MS, and at the Delta Branch Experiment Station, Stoneville, MS, Miscot 7853 was 15% taller and yielded 5% less lint than DES 422. Plant maturity, lint fraction, and micronaire were similar but fiber length (both 2.5% SL and 50% SL) and fiber strength (T,) were ca. 9% less for Miscot 7853 than for DES 422.

Seed (25 g) of Miscot 7853 may be obtained from the Department of Agronomy, Mississippi Agricultural and Forestry Experiment Station, P.O. Box 5248, Mississippi State, MS 39762.

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References and Notes


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