REGISTRATION OF DELCOT 390 COTTON

'DELCOT 390' COTTON (Gossypium hirsutum L.) (Reg. no 84) was developed by the Missouri Agricultural Experiment Station. The experimental designation was MO 79-390.

Delcot 390 was selected as a BC1F2 plant from the cross (MO63-277BR2A × HY74-283)F1 × MO63-277BR2A. Current breeder seed of Delcot 390 is in the F4 generation. MO63-277BR2A was derived from crosses among ‘Delcot 277’, ‘MoDel’ and a bacterial blight resistant (B2B0) strain of ‘Auburn 56’. HYC 74-283 was selected from a germplasm pool derived from multiple crosses among ‘Half & Half’, ‘Quapaw’, Arkansas selection Original 59-31, ‘Paymaster 18’, MO 59-1021, MO 56-311 and multiple disease resistant germplasm designated 71-CTX18.

Delcot 390 is resistant to bacterial blight caused by Xanthomonas campestris pv malvacearum (Smith) Dye, Races 1, 2, 7, 10, 11, 12, and 18; to Fusarium wilt caused by Fusarium oxysporum Schlecht f. sp. vasinfectum Synd. & Hans and to Verticillium wilt caused by Verticillium dahliae Kleb. Delcot 390 is susceptible to root-knot nematodes caused by Meloidogyne incognita (Kofoid and White) Chitwood.

Delcot 390 matures 4 to 10 days earlier than commercial cultivars grown in Missouri. Delcot 390 produces competitively with other cultivars in early plantings but lint yields often are superior when plantings are delayed. It is best adapted to medium textured soils in the northern area of the Missouri “Botheel”. Fiber quality of Delcot 390 is equal or superior to that of most cultivars grown in the area.

Delcot 390, compared with ‘Delcot 311’, is a shorter, more determinate, more compact plant. It is faster fruiting, earlier maturing and is more susceptible to root-knot nematodes.

Compared with Delcot 311, Delcot 390 has slightly lower lint percentage, similar size bolls and seeds, similar 2.5% span length, coarser and slightly weaker fiber. In processing, yarns produced are slightly weaker than those of Delcot 311 but stronger than those for ‘Stoneville 825’ and ‘Stoneville 506’, major cultivars grown in Missouri.

Breeder seed will be maintained by the Missouri Agric. Exp. Stn., Delta Ctr., Portageville, MO 63873.

W.P. SAPPENFIELD (1)

References and Notes


REGISTRATION OF PD-2 COTTON

'PD-2' COTTON (Gossypium hirsutum L.) (Reg. no. 86) was developed by USDA-ARS and the South Carolina Agricultural Experiment Station. It was tested experimentally and released in 1984 as a replacement of ‘SC-1’, the first cultivar released in 1984 as a replacement of ‘SC-1’, the first cultivar with extra-fiber-strength genes from triple hybrid origin.

PD-2, compared with SC-1, has a more open plant type, less leafy, lighter green, and is equal or taller than most cultivars grown in South Carolina except when late on 1 and 15 June produced a average of 7.6 and 20.2% shade, respectively, more lint than ‘Coker 310’, the most popular cultivar grown in South Carolina, except when late on 1 and 15 June produced a average of 7.6 and 20.2% shade, respectively, more lint than ‘Coker 310’, the most popular cultivar grown in South Carolina. PD-2 produced yields equal to those of ‘Coker 304’, an early maturing cultivar grown in South Carolina. PD-2, compared with SC-1, has a more open plant type, less leafy, lighter green, and is equal or taller than most cultivars grown in South Carolina.

PD-2 produced yields equal to those of the most popular cultivar grown in South Carolina. PD-2 has a yield advantage during short growing seasons and has produced significantly higher yields than SC-1 in tests where boll weevil (Anthonomus grandis Boheman) and bollworm (Heliothis zea Boheman) are a factor in determining yield. Its performance to rapid fruiting and a shorter exposure period of fruiting parts to insect attacks.

References and Notes