REGISTRATION OF TAMCOT SP37H COTTON
(Reg. No. 75)

L. S. Bird

'TAMCOT SP37H' cotton (Gossypium hirsutum L.) was developed in the Texas A&M Multi-Adversity Resistance (TAMMAR) program of the Texas Agricultural Experiment Station and was released in October 1977. The new cultivar was developed from parent strains of the Tamcot SP21 (Reg. No. 61) and Tamcot SP37 (Reg. No. 63) families (2, 6). The cross (66N, B.V.65) × (526, B.V.65), was made and individual plant selection began in the F1 of the single cross. Individual plant selection was based on seed coat resistance to mold and a reduced rate of germination when held for 8 days on 1.5% water agar at 13.3 C. This was followed by selection for seedling cotyledon resistance to a mixed inoculum of races 1, 2, 7, and 14 of the bacterial blight pathogen [Xanthomonas malvacearum (E. F. Sm.) Dowson]. Selecting to the F2 gave strains H2-45-74, H2-46-74, and H2-47-74. Tamcot SP37H is a composite of these strains and was evaluated under the name TX-ČAMD-H. The described levels of resistance used for representing relative differences with respect to departure from a susceptible type have been given (4).

SP37H has high resistance to bacterial blight (conditioned by the B9, B10, and B11 genes); resistance to the Fusarium wilt root-knot nematode complex [caused by Fusarium oxysporum f. sp. vasinfectum (Atk.) Snyder and Hans. and Meloidogyne incognita (Kofoid and White) Chitwood] and Verticillium wilt (incited by Verticillium albo-atrum Reinke and Berth., MS). SP37H has partial resistance to the seedling disease complex, seed rot and seed deterioration, and intermediate resistance to early season cold conditions. It has the same delay-kill resistance (plants dying at a reduced rate) to Phymatotrichum root rot [caused by Phymatotrichum omnivorum (Shear) Dug.] as Tamcot SP37.

Tamcot SP37 is tolerant to fleahoppers [Pseudatomoscelis seriatus (Reuter)] which has been demonstrated by Tamcot SP37H yielding significantly higher than the equally pubescent Tamcot SP37 in the presence of fleahoppers (3, 5, 6, 7). Earliness is 39.5.

Average boll weight is 5.0 g seed cotton and lint percent is 39.5.

The Foundation Seed Service of the Texas Agricultural Experiment Station will produce foundation seed of Tamcot SP37H be sold only by cultivar name as a class of certified seed. This cultivar is 39.5.

REFERENCES


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