Registration of Crop Cultivars

REGISTRATION OF TAMCOT SP21, TAMCOT SP23 AND TAMCOT SP37 COTTONS
(Reg. Nos. 61, 62, and 63)

L. S. Bird

The TAMCOT SP varieties (Gossypium hirsutum L.) were developed by the Texas Agric. Exp. Stn. and released December 1971. Certificates of protection [PVP072000047 for 'Tamcot SP21' (Reg. No. 61); PVP07200045 for 'Tamcot SP23' (Reg. No. 62); and PVP07200046 for 'Tamcot SP37' (Reg. No. 63)], have been issued under the Plant Variety Protection Act and requires that these varieties be sold only by variety name as a class of certified seed. However, the right to exclude others from selling the varieties, or offering for sale, or reproducing, or importing, or using in producing a hybrid or different variety therefrom was waived.

The TAMCOT SP cultivars were selected from the hybrid pool \{K4808-5 (1&2)D X [Blightmaster X 39-11-20]\} X \{K4808-5 (1&2)A X PayM54-M-105-3\}. K4808 was derived by transferring the \(B_6B_6\) genes for bacterial blight [Xanthomonas malvacearum (E.F.Sm.) Dows.] resistance from R. L. Knight's BAR 4/16 Sakel (Gossypium barbadense L.) strain to an "Empire WR" background. "Blightmaster" is a storm resistant cultivar, having the \(B_6\) gene for bacterial blight resistance, that was developed at the Texas Agricultural Experiment Station, Lubbock, Texas. 39-11-20 was a glandless genetic stock, having the \(g_1, g_2\), genes, that came from the Cotton Research Center, Shafter, California. PayM54-M-105-3 was a Paymaster 54 breeding stock which was obtained from the ACCO Seed Company, Aiken, Texas. The TAMCOT SP cultivars are the first ones developed with the Texas Agricultural Experiment Station, Lubbock, Texas. The cultivars are highly resistant to the known 18 races of bacterial blight pathogen. They are the first cultivars developed by selecting for traits giving preservation of planting-seed quality, cool soil performance and escape from seedling disease pathogens.

SP21 has high resistance and SP23 high to moderate resistance to the Fusarium wilt-root knot nematode complex [Fusarium oxysporum f.sp. vasinfectum (Atk.) Snyd. & Hans. and Meloidogyne incognita (Kofoid & White) Chitwood] and Verticillium wilt [Verticillium albo-atrum Reinke and Berth., MS]. SP37 has low to moderate resistance to both wilt diseases.

The SP cultivars are rapid maturing types and may be harvested 2 to 3 weeks earlier than 'Deltapine 16,' 'Stoneville 7A' and 'Stoneville 213' varieties and 1 to 2 weeks earlier than many stripper varieties such as 'Lankart 57', 'West 6207', 'Paymaster 111'. Their earliness provides control of certain diseases such as Phymatotrichum root rot and Verticillium (Shear Dug.) and boll rot, and reduces insect damage. They perform well in short season programs.

The bolls are storm resistant and may be harvested by machine picking or stripping. SP21 is glabrous and SP23 and SP37 are pubescent types.

In 1968-70 yield tests the SP varieties produced 3 to 5 more lint in comparison with Lankart 57, Bollgard, Deltapine 3840, Stoneville 7A, Stoneville 213, Deltapine 39-11-20, Lockett BxL', 'Paymaster 101' and Paymaster 111. SP21 lint length is 25.4 to 26.9 mm, strength 593 to 634 MPa, and micronaire 3.8 to 4.2. Lint percent ranges from 38 to 41% and is maintained by the Texas Agric. Exp. Stn. and released December 1971. Certificates of protection [PVP072000047 for 'Tamcot SP21' (Reg. No. 61); PVP07200045 for 'Tamcot SP23' (Reg. No. 62); and PVP07200046 for 'Tamcot SP37' (Reg. No. 63)], have been issued under the Plant Variety Protection Act and requires that these varieties be sold only by variety name as a class of certified seed. However, the right to exclude others from selling the varieties, or offering for sale, or reproducing, or importing, or using in producing a hybrid or different variety therefrom was waived.

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REGISTRATION OF MINCO PROSO MILLET
(Reg. No. 39)

R. G. Robinson

'Minco' proso millet (Panicum miliaceum L.) was released by the Minnesota Agric. Exp. Stn. on 1 April 1976 and designated from a single plant selected in a breeding nursery at Rosemount, Minn. in 1968. The nursery consisted of selections from common white proso millet and Minco (Minn. 499) was tested from 1970 through 1975 at Rosemount and from 1973 through 1975 at Elk River. It is a high yielding millet cultivar in the Northeast and with other white proso millets, it lodges less than, test weight, medium seed weight, medium test weight and protein content are more uniform.

Minco is uniform in appearance and possesses a compact, erect panicle. The seeds (florets) are ovoid and weigh about 0.65 g per 100 and 70 kg per hectoliter. The plants are pubescent, and height ranges from 111 to 1.11 on silt loam soil. The plants head about 50 days after budding and are mature about 89 days after planting.

The seed is used primarily for feeding and for livestock feed. The cultivar is tolerant of atrazine [2-chloro-4-(ethylamino)-6-(isopropylamino)-s-triazine] herbicide. Consequently, it can be planted on land previously treated with atrazine and from 1973 through 1975 at Elk River. The cultivar is adapted to a large area and is recommended for both Minnesota and Colorado.

Seed classes of Minco will include breeder, foundation, registered, and certified. The Dept. of Agronomy, Univ. of Minnesota, St. Paul, MN 55108 will maintain breeder, foundation, registered, and certified.