

5. Pederson, G.A., and M.R. McLaughlin. 1988. Performance of Southern Regional Virus Resistant (SRVR) white clover germplasm. p. 57-58. In Proc. 10th Trifolium Conf., Corpus Christi, TX. 24-25 Mar. 1988. Texas Agric. Exp. Stn., College Station, TX.
6. P.B. Gibson, retired (formerly USDA-ARS, Clemson, SC 29634); O.W. Barnett, Dep. of Plant Path. and Physiol., Clemson Univ., Clemson, SC 29634; G.A. Pederson and M.R. McLaughlin, USDA-ARS, Forage Res. Unit, P.O. Box 5367, Mississippi State, MS 39762; W.E. Knight, retired (formerly USDA-ARS, Forage Res. Unit, Mississippi State, MS 39762); J.D. Miller, USDA-ARS, Coastal Plain Exp. Stn., P.O. Box 748, Tifton, GA 31793; W.A. Cope, retired (formerly USDA-ARS, Forage Res. Unit, Oxford, NC 27565); and S.A. Tolin, Dep. of Plant Pathology, Physiology, and Weed Sci., Virginia Polytechnic Inst. and State Univ., Blacksburg, VA 24601. Contribution of USDA-ARS in cooperation with the Mississippi Agric. and For. Exp. Stn. Journal Article no. 6916 of the Mississippi Agric. and For. Exp. Stn. Registration by CSSA. Accepted 30 July 1988. \*Corresponding author.

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### REGISTRATION OF TWO RED CLOVER INTERSPECIFIC HYBRID GERMPLASMS

TWO INTERSPECIFIC hybrid germplasms involving red clover (*Trifolium pratense* L.) were released by the Kentucky Agricultural Experiment Station in 1988. The hybrid *T. pratense* × *T. diffusum* Ehrh. (Reg. no. GP-17) (PI 204517) was produced after doubling the chromosome number of *T. diffusum* and crossing it as male with plants from the red clover cultivar R-28 (2). The hybrid is intermediate between the parents in most characteristics and is highly fertile. It possesses 30 somatic chromosomes, 14 from *T. pratense* and 16 from *T. diffusum*. Reproduction more closely resembles the allogamy of *T. pratense* than the autogamy of *T. diffusum*. Seeds produced by cross pollination under field conditions, are yellow to brown, kidney shaped and approximately the same size as tetraploid *T. pratense*. Flowering is slightly later than that of the 'Kenland' cultivar. All hybrid plants are annual, and apparently do not possess characters desirable for transferring to *T. pratense*, but may be useful as a bridge for further interspecific hybridizations.

The hybrid *T. sarosiense* Hazsl. × *T. pratense* (Reg. no. GP-18) (PI 520608) was produced by in vitro embryo rescue following hand crosses (1). It is intermediate between the strongly perennial *T. sarosiense* (PI 292827) and the weakly perennial *T. pratense* ('Kenstar') and possesses 31 chromosomes, 24 from *T. sarosiense* and 7 from *T. pratense*. It is strongly perennial and somewhat less rhizomatous than *T. sarosiense* and is completely sterile, exhibiting almost complete lack of meiosis. Plants are maintained vegetatively. If the sterility could be overcome, the hybrid may have potential for transferring genes for perenniality to *T. pratense*.

Up to 100 seeds of the *T. pratense* × *T. diffusum* hybrid germplasm and up to 5 vegetative propagules of the *T. sarosiense* × *T. pratense* hybrid germplasm may be obtained from the Department of Agronomy, Agricultural Science Building -N., University of Kentucky, Lexington, KY 40546-0091.

NORMAN L. TAYLOR\* AND G. B. COLLINS (3)

#### References and Notes

1. Phillips, G.C., G.B. Collins, and N.L. Taylor. 1982. Interspecific hybridization of red clover (*Trifolium pratense* L.) with *T. sarosiense* Hazsl. using in vitro embryo rescue. Theo. Appl. Genet. 62:17-24.
2. Taylor, N.L., W.H. Stroube, G.B. Collins, and W.A. Kendall. 1963. Interspecific hybridization of red clover (*Trifolium pratense* L.). Crop Sci. 3:549-552.
3. Univ. of Kentucky, Lexington, KY 40546-0091. The investigation reported in this paper was in connection with a Project of the Agric. Exp.

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### REGISTRATION OF MISCOT 7918 COTTON GERMPLASM

A GERMPLASM line of cotton, (*Gossypium hirsutum* L.), Miscot 7918 (Reg. no. GP-362) (PI 520750), developed by the Mississippi Agricultural and Forestry Experiment Station was released in 1988. Miscot 7918, tested as 7918-1-2, was developed from a cross between 'Stoneville 825' and LEB0-2-78, an advanced line from the Texas A&M University Multi-Adversity Resistance program (1).

Miscot 7918 is a nectariless line that is resistant to all known U.S. races of *Xanthomonas campestris* pv *malvacearum* (Smith) Dye, the causal agent of bacterial blight. This germplasm line combines the bacterial blight resistance of LEB0-2-78 with the nectariless character and regional adaptability of Stoneville 825.

In tests at Mississippi State, MS from 1985 to 1987 and at the Delta Branch Experiment Station, Stoneville, MS from 1984 to 1987, Miscot 7918 was 15% taller, but yielded 7% less than 'DES 422'. Plant maturity and lint fractions of the two genotypes were similar. Micronaire and fiber length (2.5% SL and 50% SL) of Miscot 7918 were 9% greater and 5% less, respectively, than DES 422 in tests at Mississippi State, but were equal to DES 422 in tests at the Delta Branch Experiment Station. Across all tests, fiber strength (T<sub>1</sub>) of Miscot 7918 was 4% less than DES 422.

Seed (25 g) of Miscot 7918 may be obtained from the Department of Agronomy, P.O. Box 5248, Mississippi State, MS 39762.

F. M. BOURLAND\* AND B. W. WHITE (2)

#### References and Notes

1. Bird, L.S. 1982. The MAR (Multi-Adversity-Resistance) system for genetic improvement of cotton. Plant Dis. 66:172-176.
2. F.M. Bourland, Dep. of Agronomy, Univ. of Arkansas, Fayetteville, AR 72701 (formerly, Dep. of Agronomy, Mississippi State Univ., Mississippi State, MS 39762); and B.W. White, Dep. of Agronomy, Mississippi State Univ., Mississippi State, MS 39762. Registration by CSSA. Accepted 30 July 1988. \*Corresponding author.

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### REGISTRATION OF MISCOT 7803-51 AND MISCOT 7803-52 GERMPLASM LINES OF COTTON

Two germplasm lines of cotton, (*Gossypium hirsutum* L.), Miscot 7803-51 (Reg. no. GP-363) (PI520751) and Miscot 7803-52 (Reg. no. GP-364) (PI520752), developed by the Mississippi Agricultural and Forestry Experiment Station were released in 1988. Miscot 7803-51, tested as 7803-51-1, and Miscot 7803-52, tested as 7803-52-6-4, are sister lines developed from a cross between 'DES 56' and MAR-22-74, an advanced line from the Texas A&M University Multi-Adversity Resistance program (1).

In tests from 1984 to 1987, lint yields of Miscot 7803-51 were equivalent to those of 'DES 422'. Miscot 7803-51 yielded 14% less than Miscot 7803-52 in Mississippi Delta environments but 9% higher in Mississippi hill environments. Both lines were equal to or earlier maturing than DES 422. Miscot 7803-51 was 15% shorter in height than DES 422 and Miscot