Published May, 1989

Reference and Notes

1. Texas Agric. Exp. Stn., Lubbock, TX 79401. Contribution TA no. 23683, Texas Agric. Exp. Stn., Texas A&M University, College Station, TX 77843. This research was supported in part by grant funds from Lamesa Cotton Growers, Lamesa, TX; Plains Cotton Growers, Inc., Lubbock, TX; and Plains Cotton Improvement Program, Lubbock, TX. Registration by CSSA. Accepted 30 Oct. 1988. *Corresponding author.

Published in Crop Sci. 29:833–834(1989).

REGISTRATION OF EIGHT COTTON GERMPLASM LINES

EIGHT germplasm lines of cotton (*Gossypium hirsutum* L.), designated CA-3022 through CA-3029 (Reg. nos. GP-374 through GP-381), (PI 525482 through PI 525489), were released by the Texas Agricultural Experiment Station in 1985. These germplasm lines combine increased fiber length and tensile strength.

These eight lines originated from individual plant selections out of El Paso Source Materials (EPSM). Historical records did not permit the determination of accurate pedigrees of these materials. However, the records indicated that these lines were the original germplasm utilized by the late Paul J. Lyerly in the initiation of his fiber quality research program.

CA-3022 exhibited a very low lint percentage of 28%. The four commercial check cultivars, Acala SJ-5, Dunn 219, Paymaster 303, and Tamcot 788, showed lint percentages ranging from 34.2 to 36.9%. CA-3028 had a lint percentage of 35.1%. Lint percentages of the other lines ranged from 31.1 to 33.8%.

Boll size of these lines was comparable to that of the commercial checks with the exception of CA-3022, which produced very small bolls. Storm resistance ratings for seven of the eight lines were similar to that of Acala SJ-5. CA-3026 exhibited a boll conformation similar to that of Paymaster 303.

CA-3022, CA-3026, and CA-3028 are segregating for seed fuzz density. Seed fuzz density is normal for the remaining lines.

Fiber length and tensile strength of these lines exceeds those values for the four commercial check cultivars. Fiber length ranged from 27.2 to 30.0 mm while strength ranged from 296.3 to 323.7 $kNmkg^{-1}$. Micronaire readings were all within the premium range.

Breeder seed are maintained by the Texas Agricultural Experiment Station and may be obtained in germplasm quantities from John R. Gannaway, Texas Agricultural Experiment Station, Route 3, Box 219, Lubbock, TX 79401-9757.

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Reference and Notes

1. Texas Agric. Exp. Stn., Lubbock, TX. 79401. Contribution TA no. 23777, Texas Agric. Exp. Stn., Texas A&M University, College Station, TX. 77843. This research was supported in part by grant funds from Lamesa Cotton Growers, Lamesa, TX., Plains Cotton Growers, Inc., Lubbock, TX., and Plains Cotton Improvement Program, Lubbock, TX. Registration by CSSA. Accepted 30 Oct. 1988. *Corresponding Author.

Published in Crop Sci. 29:834 (1989).

REGISTRATION OF TWELVE COTTON GERMPLASM LINES

TWELVE germplasm lines of cotton (*Gossypium hirsutum* L.), designated CA-3008 through CA-3011, and CA-3014 through CA-3021 (Reg. no. GP-382 through GP-393), (PI 525470 through PI 525481), were released by the Texas Agricultural Experiment Station in 1985. These germplasm lines possess unique combinations of various fiber properties that are needed by some segments of the textile industry.

These twelve lines originated from individual plant selections of El Paso Source Materials (EPSM). Historical records did not permit determination of accurate pedigrees of these materials. Pima, Del Cerro, and Acala cultivars, along with other unknown parents, were used in developing these germplasm lines.

The commercial cultivars used for comparisons were Acala SJ-5, Dunn 219, Paymaster 303, and Tamcot 788. Lint percentages of the germplasm lines were generally lower than those of the commercial check cultivars. CA-3014 exhibited a lint percentage greater than that of Tamcot 788 but lower than those of the other check cultivars.

CA-3008, CA-3009, and CA-3014 produced bolls larger than those of the check cultivars, while bolls produced by CA-3010 and CA-3011 were comparable to those cultivars. The remaining seven lines produced relatively small bolls. CA-3008 and CA-3011 exhibited a boll conformation similar to that of Paymaster 303. The remainder exhibited boll types similar to that of Acala SJ-5.

Four of these lines, CA-3008 through CA-3011, are segregating for seed fuzz density. The other lines exhibited normal seed fuzz density with the exception of CA-3019, which has reduced density.

Fiber properties of these lines are generally better than the commercial check cultivars. CA-3021 is the only line that did not produce fiber exceeding the fiber length of the longest fibered check cultivar, Acala SJ-5. Fiber tensile strengths for these twelve lines ranged from 304.1 to 363.0 $kNmkg^{-1}$. The range of the four commercial cultivars was from 240.3 to 277.6 $kNmkg^{-1}$. With the exception of CA-3015 and CA-3017 through CA-3019, all of the germplasm lines produced micronaire values in the premium range. The four exceptions had micronaire values below 3.5.

These germplasm lines have not been evaluated for resistance to any diseases or insects.

Breeder seed are maintained by the Texas Agricultural Experiment Station and may be obtained in germplasm quantities from John R. Gannaway, Texas Agricultural Experiment Station, Route 3, Box 219, Lubbock, TX, 79401-9757.

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Reference and Notes

1. Texas Agric. Exp. Stn, Lubbock, Texas, 79401. Contribution TA no. 23778, Texas Agric. Exp. Stn., Texas A&M Univ., College Station, TX. 77843. This research was supported in part by grant funds from Lamesa Cotton Growers, Lamesa, TX; Plains Cotton Growers, Inc., Lubbock, TX; and Plains Cotton Improvement Program, Lubbock, TX. Registration by CSSA. Accepted 30 Oct. 1988. *Corresponding author.

Published in Crop Sci. 29:834 (1989).

REGISTRATION OF BELDAK-RUST RESISTANT -1 AND -2 PINTO DRY BEAN GERMPLASM

TWO pinto dry bean (*Phaseolus vulgaris* L.) germplasm lines, 'Beldak-Rust Resistant' (RR) -1 (Reg.No.GP-76) (PI *527310*) and -2 (Reg.No.GP-77) (PI *527311*), were released by USDA-ARS and the North Dakota Agricultural Experiment Station in July 1988. They are the first pinto dry bean germplasm lines developed specifically for homozygous resistance to the 33 available North American races (races 38 through 70) of