REGISTRATION OF GEORGIA SUPER D COTTON GERMPLASM¹
(Reg No. GP 19)
Shelby H. Baker and T. Don Canerday²

GEORGIA SUPER D cotton (Gossypium hirsutum L.), a breeding line, was released to plant breeders in April 1973 by the University of Georgia Coastal Plain Experiment Station, Tifton, Georgia. Georgia Super D is unique in that it contains five genetically controlled characters that have shown resistance to boll weevil (Anthonomus grandis), bollworms (Heliothis sp.), and boll-rotting organisms. These characters are red plant color, frego bract, okra leaf, smooth leaf, and nectariless. The line is also homozygous for glandless stem (gl1) and has reduced glands in seed and foliage (gl4) but is not homozygous and a small percentage of plants with normal glands in foliage and seed can be found.

Georgia Super D resulted from crosses involving an M8 smooth leaf, glandless, and nectariless line from USDA-ARS, Mississippi State University; a frego bract line designated 29B, BV67, RI-67 237 from the Texas Agricultural Experiment Station, and an unknown source of okra leaf. The red okra leaf, CP 152, was a rogue plant from a F2 population of ‘Pope’ × ‘Stardel’ obtained from Dekalb Seed Company.

When evaluated in small plots with commonly grown cultivars and other nonpreferred strains, Georgia Super D has consistently shown significantly less insect injury. Results from sprayed and unsprayed plots clearly show an expression of resistance. Alternate row planting of 24 rows of Georgia Super D and 8 rows of commercial cultivar resulted in 50% less boll weevil damage with 40% less pesticide applied to the Georgia Super D.

Three of the characters, frego bract, okra leaf, and nectariless have contributed to the abatement of boll rot losses. Georgia Super D has less boll rot when compared with presently grown cultivars and breeding strains with the exception of frego bract alone.

The agronomic properties of Georgia Super D are commercially inadequate. Yield, lint percent, and fiber length are significantly below commercial cultivars but fiber strength is equal to that of available cultivars.

Seed will be maintained and distributed in small quantities on request by the Agronomy Department, University of Georgia Coastal Plain Experiment Station, Tifton, GA 31794.

¹ Registered by the Crop Science Society of America. Received June 24, 1974.
² Instructor, Agronomy Department and Associate Professor, Entomology and Fisheries Department, University of Georgia Coastal Plain Experiment Station, Tifton, GA 31794.

REGISTRATION OF AUBURN 623 RNR COTTON GERMPLASM¹
(Reg. No. GP 20)
R. L. Shepherd²

Auburn 623 RNR cotton (Gossypium hirsutum L.) is an elite breeding line released to plant breeders in March 1970 by the Auburn University (Alabama) Agricultural Experiment Station, Auburn, AL 36830.

Auburn 623 RNR germplasm is available upon request from the Auburn University (Alabama) Agricultural Experiment Station, Auburn, AL 36830.

REGISTRATION OF MAIZE INBRED COTTON GERMPLASM¹
(Reg. No. GP 50)
A. A. Fleming²

GA 209 is a white-kerned, dent inbred line (Zea mays L.) with good combining ability and a tolerance to maize dwarf mosaic (MDMV), corn earworm (Helicoverpa zea), downy mildew (Sclerotinia sclerotiorum), northern leaf blight (Helminthis maydis), and northern yellow leaf blight (Helminthis verticillata). It is susceptible to corn leaf blight (Sorghum bicolor) and is not recommended for commercial planting.

¹ Registered by the Crop Science Society of America. Received November, 1974.
² Professor of Plant Genetics.

Auburn 623 RNR has significantly lower wilting percentage than any of 13 other G. hirsutum lines and varietal comparisons. It has good seed yield with two ears per plant, excellent grain quality, and a white cob. The line resulted from crosses involving an M8 smooth leaf, glandless, and nectariless line from USDA-ARS, Mississippi State University; a frego bract line designated 29B, BV67, RI-67 237 from the Texas Agricultural Experiment Station, and an unknown source of red okra leaf. The red okra leaf, CP 152, was a rogue plant from a F2 population of ‘Pope’ × ‘Stardel’ obtained from Dekalb Seed Company.

When evaluated in small plots with commonly grown cultivars and other nonpreferred strains, Georgia Super D has consistently shown significantly less insect injury. Results from sprayed and unsprayed plots clearly show an expression of resistance. Alternate row planting of 24 rows of Georgia Super D and 8 rows of commercial cultivar resulted in 50% less boll weevil damage with 40% less pesticide applied to the Georgia Super D.

Three of the characters, frego bract, okra leaf, and nectariless have contributed to the abatement of boll rot losses. Georgia Super D has less boll rot when compared with presently grown cultivars and breeding strains with the exception of frego bract alone.

The agronomic properties of Georgia Super D are commercially inadequate. Yield, lint percent, and fiber length are significantly below commercial cultivars but fiber strength is equal to that of available cultivars.

Seed will be maintained and distributed in small quantities on request by the Agronomy Department, University of Georgia Coastal Plain Experiment Station, Tifton, GA 31794.

¹ Registered by the Crop Science Society of America. Received June 24, 1974.
² Instructor, Agronomy Department and Associate Professor, Entomology and Fisheries Department, University of Georgia Coastal Plain Experiment Station, Tifton, GA 31794.

REGISTRATION OF AUBURN 623 RNR COTTON GERMPLASM¹
(Reg. No. GP 20)
R. L. Shepherd²

Auburn 623 RNR cotton (Gossypium hirsutum L.) is an elite breeding line released to plant breeders in March 1970 by the University of Georgia Coastal Plain Experiment Station, Tifton, GA 31794. When evaluated in small plots with commonly grown cultivars and other nonpreferred strains, Georgia Super D has consistently shown significantly less insect injury. Results from sprayed and unsprayed plots clearly show an expression of resistance. Alternate row planting of 24 rows of Georgia Super D and 8 rows of commercial cultivar resulted in 50% less boll weevil damage with 40% less pesticide applied to the Georgia Super D.

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The agronomic properties of Georgia Super D are commercially inadequate. Yield, lint percent, and fiber length are significantly below commercial cultivars but fiber strength is equal to that of available cultivars.

Seed will be maintained and distributed in small quantities on request by the Agronomy Department, University of Georgia Coastal Plain Experiment Station, Tifton, GA 31794.

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