REGISTRATION OF ‘GREGG’ SOYBEAN

‘GREGG’ soybean [Glycine max (L.) Merr.] (Reg. no. 207) (PI 510675) was developed by the Louisiana Agricultural Experiment Station and released in 1983 to provide a productive Maturity Group VII cultivar with resistance to both the soybean cyst nematode (SCN) [Heterodera glycines Ichinohe (race 3)] and the reniform nematode (Rotylenchulus reniformis Linford and Oliviera). The cross was made and early generations were evaluated at Baton Rouge, LA. Gregg, an F2 selection from the cross ‘Bragg’ × ‘Pickett 71’, was evaluated as breeding line LA74-4656.

The F2 seedlings were screened in the greenhouse against SCN. Progeny of resistant F2 plants were bulked and tested for resistance to reniform nematode in the greenhouse. In addition to being screened for reniform nematode and SCN, Gregg was screened for Phytophthora root rot (race 3) (caused by Phytophthora megasperma Drechs. f. sp. glycinea Kuan & Erwin). Resistance to Phytophthora root rot is provided by the gene Rps,c. Gregg also has resistance to bacterial pustule [caused by Xanthomonas phaseoli (E. F. Smith) Dows. var. sojensis (Hedges) Starr & Burkh.]. Gregg is moderately susceptible to stem canker [caused by Diaporthe phaseolorum (Cke. & Ell.) Sacc. var. caulivora Athow & Caldwell].

In yield trials, Gregg matured approximately 1 d earlier than ‘Braxton’. Distinguishing characteristics include purple flowers, tan pod walls, yellow seed coats, black hila, tawny pubescence, and determinate growth style. Plant height averaged 5 cm < Braxton. Seed of Gregg averaged 19.5% oil content and 43.2% protein (in same tests, Braxton averaged 5 cm shorter in mature plant height, has seed with 5% greater seed yield, better standability, is about 1 percentage unit lower seed oil, and has a 1 percentage unit lower seed oil, and has a better visual seed quality score. Gregg has greater resistance to brown spot (caused by Phomopsis seed decay (caused by Phomopsis longicolla), purple seed stain (caused by Cercospora kikuchii Hobbs), purple seed stain (caused by Cercospora kikuchii Hobbs), purple seed stain (caused by Cercospora kikuchii Hobbs), purple seed stain (caused by Cercospora kikuchii Hobbs), purple seed stain (caused by Cercospora kikuchii Hobbs)), and reniform nematode (Heterodera glycines Ichinohe).

Plants of Morgan have white flowers, tan pod walls, mature seed yellow seed coats, and black hila. Breeder seed of Morgan was increased at the Agricultural Experiment Station in 1986 and released to foundation seed growers of the Maryland Crop Improvement Association for 1987 planting. The soybean varieties of similar maturity.

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References and Notes

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REGISTRATION OF ‘TCP 81-3058’ SUGARCANE

‘TCP 81-3058’ sugarcane (Reg. no. 72) (PI 510670) was developed through the search of the Texas Agricultural Experiment Station, USDA-ARS, and the Rio Grande Valley Sugarbeet Improvement Association. ‘TCP 81-3058’ was developed through the cooperative research of the Texas Agricultural Experiment Station, USDA-ARS, and the Rio Grande Valley Sugarbeet Improvement Association.