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 Oliivera). The cross was made and early generations were evaluated at Baton Rouge, LA. Gregg, an F₁ selection from the cross 'Bragg' × 'Pickett 71', was evaluated as breeding line LA74-4656.

The F₁ seedlings were screened in the greenhouse against SCN. Progeny of resistant F₁ 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. sojenstis (Hedges) Starr & Burkh.]. Gregg is moderately susceptible to stem canker [caused by Diaporthe phaseoli (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 42.3% protein (in same tests, Braxton averaged 19.5% oil content and 42.5% protein).

Breeder seed of Gregg will be maintained by the Louisiana Agricultural Experiment Station, and foundation seed will be produced by the Louisiana Foundation Seed Program.

B. G. Harville,* W. M. Elkins, W. Hall, and M. A. Green (1)

References and Notes

1. B. G. Harville, W. M. Elkins, W. Hall, Dep. of Agronomy, Agric. Exp. Stn., Louisiana State Univ. Agric. Ctr., Baton Rouge, LA 70803; and M. A. Green, Biology Dep., Univ. of Tennessee, Chattanooga, TN 37403 (formerly, Dep. of Agronomy, Louisiana State Univ. Agric. Ctr.) Approved for publication by the director of the Louisiana Agric. Exp. Stn. as Manuscript no. 87-09-1082. Registration by CSSA. *Corresponding author. Accepted 30 July 1987.