REGISTRATION OF ‘LESLIE’ SOYBEAN

‘LESLIE’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-295, PI 557011) was developed by the Minnesota Agricultural Experiment Station. It was released in February 1991 because of its high yield compared with other public cultivars of similar maturity.

Leslie was derived from an F₄ plant selected from the cross ‘Hodgson 78’ × ‘Pella’ (1,3). The pedigree method was used in advancing the population in Chile and Minnesota. Leslie was tested for yield in Minnesota from 1984 through 1990 under the designation M83-108. It was evaluated in the Uniform Soybean Tests, Northern States, Preliminary Test I in 1987 and in Uniform Test I from 1988 through 1990 (5).

Leslie is classified as Group I maturity (relative maturity 1.9), averaging ~4 d later than ‘Sibley’ (4). It is best adapted from 43 to 45 °N lat. Leslie has an indeterminate growth habit, purple flowers, gray pubescence, and tan pods at maturity. Seeds are yellow, with imperfect black hilum and intermediate seed-coat luster. In comparison with Sibley, Leslie has a yield advantage of ~7% the Uniform Soybean Tests, better lodging resistance, and similar height. In Minnesota tests, Leslie has yielded 3% more than ‘Hardin’ (2). Seeds of Leslie are 7 mg heavier, similar in protein and oil content, and slightly poorer in seed quality (2.1 vs. 1.9 on a scale of 1 = very good to 5 = very poor) compared with seeds of Sibley. The iron deficiency chlorosis scores of Leslie and Sibley are similar (3.9 on a scale of 1 = resistant to 5 = susceptible). Leslie has the Rps1 gene for resistance to phytophthora root rot [caused by Phytophthora megasperma (Drechs.) f. sp. glycinea T. Kunø & D. C. Erwin].

Leslie was released on 15 Feb. 1991 to approved seed growers in Minnesota and South Dakota. Breeder seed of Leslie will be maintained by the Minnesota Agricultural Experiment Station. Plant Variety Protection for Leslie is pending.

J. H. Orf* and B. W. Kennedy (6)

References and Notes


Published in Crop Sci. 32:829 (1992).

REGISTRATION OF ‘HAGOOD’ SOYBEAN

‘HAGOOD’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-296, PI 555453) was developed by the South Carolina Agricultural Experiment Station and cooperatively released by the Georgia, North Carolina, and South Carolina Agricultural Experiment Stations in November 1990 because of its high seed yield and multiple nematode resistance.

Hagood was derived from an Fₑ plant selection composed in the F₄ from the cross ‘Centennial’ × ‘Young’ (4,6) made at Clemson, SC, in 1981. The Fₑ plants were grown in Puerto Rico during the winter of 1981. An Fₑ plant selection made at Clemson in 1982 was advanced by the bulk method through the F₄ generation in Puerto Rico and South Carolina. The line was evaluated in South Carolina for nematode resistance, agronomic traits, and seed yield from 1985 to 1989. Hagood, previously identified as SC84-818, was evaluated in the Uniform Soybean Tests, Southern Region, Preliminary Group VII, in 1987 (5) and in Uniform Group VII from 1988 to 1990 (7).

Hagood is a late maturity Group VII cultivar that matures ≈1 d later than ‘Thomas’ (3) and ≈3 d later than ‘Stonewall’ (9). It has a determinate growth habit, white flowers, gray pubescence, and tan pod walls at maturity. Mature plants of Hagood average 10 cm taller than Thomas and lodging scores are slightly higher (7). Seed size averages 14.2 g/100 seed, 8% and 10% smaller than Thomas and Stonewall, respectively, with seed quality slightly better. Seed are yellow with variable buff hilum color. Seed protein and oil averaged 42.3% and 20.1% (dry wt. basis), respectively, which is 1.2% more protein and 0.5% more oil than Thomas (7). Hagood has averaged 8% higher in seed yield across 69 environments (1988 to 1990) than Thomas (7).

Hagood is resistant to the soybean cyst nematode Race 3 (Heterodera glycines Ichinohe) and moderately resistant to the southern root-knot nematode [Meloidogyne incognita (Kofoid & White) Chitwood] (7,8). Hagood has performed well in fields infested with Columbia lance nematode (Hoplolaimus columbus Sher), outyielding intolerant ‘Braxton’ (2) by 36% (8). It is also resistant to the foliar diseases bacterial pustule [caused by Xanthomonas campestris pv. phaseoli (Nakano) Dye] and races of frogeye leafspot (caused by Cercospora sojina K. Hara) prevalent in the southern USA.

Breeder seed of Hagood was distributed to foundation seed organizations in 1991. The South Carolina Agricultural Experiment Station will be responsible for the maintenance of breeder seed. A small quantity of seed is available upon request from the corresponding author.

E. R. Shippe, J. D. Mueller, S. A. Lewis, H. L. Musen, and P. F. Williams, Jr. (10)

References and Notes