Registration of 'Buckshot 723' Soybean

Buckshot 723 soybean [Glycine max (L.) Merr.] (Reg. no. CV-307, PI543832) was developed by the Louisiana Agricultural Experiment Station. It was released in 1990 because of its improved yield potential and resistance to stem canker, caused by Diaporthe phaseolorum (Cook & Ellis) Sacc. f. sp. meridionalis, as compared to other cultivars of similar maturity.

Buckshot 723 is a selection from the cross 'Tracy/ N72-3213(4). N72-3213 is from D67-135/N64-2451. D67-135 is from D61-5141/D63-6042. D61-5141 is from 'Dorman'®/PI 181537In(11). D63-6042 is from the cross D49-2491®/PI 163453. D49-2491 is from 'S10CNS' (sister line of 'Lee') (5). N64-2451 is from N55-5931/N45-3818/2/D56-1185. N55-5931 is from 'Roanoke'/ D49-2491 (8). N55-3818 is from the cross N45-2994/ 'Ogden'/2/N44-92/N48-1867 (8). D56-1185 is from 'Perry'/Lee(10). N45-2994 is from 'Ralsoy'/Ogden(8). N44-92 is from 'Haberlandt'/Ogden (2). N48-1867 is from Roanoke/N45-745. N45-745 is from the cross Ogden/CNS.

Buckshot 723 was developed using a modified pedigree selection system through the F$_6$ generation. After planting the F$_2$ seed in a single row, 10 individual plants were selected and planted as individual rows for the next three generations. A single F$_5$ plant was selected as the nearly homozygous line LA79-11123. Stem canker resistance was identified in replicated yield trials in an infected nursery. Buckshot 723 was evaluated from 1990 through 1992 in the Louisiana commercial cultivar trials (7).

Buckshot 723 was highly resistant to stem canker and is resistant to frogeye leafspot (Cercospora sojina K. Hara). Stem canker resistance is probably imparted to Buckshot 723 through Tracy. Buckshot 723 was consistently among the top cultivars for yield and disease resistance at all locations tested in Louisiana over a 3-yr period (7) and was among the top yielding cultivars in clay soils in Mississippi in 1992 (1). In Louisiana the seed of Buckshot 723 were similar in size and protein content to Stonewall (9). This cultivar is taller than many cultivars, usually growing in excess of 80 cm, lodging is usually not a problem. Buckshot 723 had the highest 3-yr average yield for early-planted Group VII cultivars when averaged across locations in North Carolina in 1990-92 (3).

In Louisiana, Buckshot 723 matures approximately the same time as 'Bragg' (5), a late Group VII cultivar. Distinguishing plant characteristics include white flowers, tan pod walls, tawny pubescence, and a determinate growth habit. Hypocotyls are green with bright red bands. Seeds have yellow seed coats with black hilum. Breeder seed of Buckshot 723 will be maintained by the Louisiana Agricultural Experiment Station. Foundation seed will be increased by Delhi Seed Co., Delhi, LA, which has exclusive production and marketing rights for Buckshot 723. Plant Variety Protection Certificate No. 9000236, Soybean, ‘Buckshot 723’ was issued 30 June 1992. Seed will be available for commercial production in 1992. Breeder seed of Buckshot 723 is maintained by the Louisiana Agricultural Experiment Station. Seed for research purposes is available upon request from the corresponding author for at least five years.

References and Notes


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References and Notes