REGISTRATION OF ‘AMCOR 89’ SOYBEAN

‘AMCOR 89’ SOYBEAN [Glycine max (L.) Merr.] (Reg. no. CV-289, PI 546375) was jointly developed by the USDA-ARS and the Ohio Agricultural Research and Development Center. It was released in 1989 as a Phytophthora megasperma Drechs. f. sp. glycines T. Kuang and D.C. Erwin (Pmg) resistant backcross version of the indeterminate cultivar ‘Amcor’ (4). It has specific adaptation to marginal (drought prone) soils and for late planting in a double cropping system.

Amcor 89 was developed using Amcor as the recurrent parent and ‘Williams 82’ (1) as the source of the Rps-8 gene. Five backcrosses were made. The initial cross was made in 1980. To screen for resistance, two cycles were grown per year, one in the field and one in the greenhouse. Because of the cleistogamy of Amcor in the greenhouse, usually only one backcross per year was possible. Hypocotyl inoculation with culture suspension (injected with a hypodermic needle) was used in the greenhouse (5,7). The detached-cotyledon inoculation technique was used on field grown plants (6). Race 5 of Pmg was used as the source of inoculum. In 1985, 33 homoyzous resistant BCS F₂ or F₂-derived lines were identified in the fall greenhouse. These 33 lines were tested for seed yield in Ohio in 1986 and 1987. Eight of these lines were bulked to form breeder seed of Amcor 89 for planting in 1988. Amcor 89 was tested in the Uniform Soybean Tests, Northern States in 1988 under the designation HC Amcor.

Amcor 89 is an indeterminate Maturity Group II cultivar, which is similar in all respects to the recurrent parent, Amcor, with the exception of the addition of the Rps-8 gene for resistance to phytophthora rot. It has purple flowers, grey pubescence, brown pods at maturity and shiny yellow seeds with yellow hilum. Amcor 89 averages 100 cm in plant height compared with 80 cm for Century 84 (9), and is better adapted to marginal (drought prone) soils and for late planting in a double cropping system.

Breeder seed of Amcor 89 was provided to Ohio Foundation Seeds for planting in 1989. Breeder seed of Amcor 89 will be maintained by the Ohio Agricultural Research and Development Center, Wooster, OH 44691. Plant Variety Protection for Amcor 89 is pending.


References and Notes


REGISTRATION OF ‘SARAH’ CHICKPEA

‘SARAH’ (Reg. no. CV-88, PI 543921) chickpea (Cicer arietinum L.) was developed cooperatively by the USDA-ARS and Agricultural Research Center of the College of Agriculture and Home Economics, Washington State University and released in 1990.

Sarah (CP830006) was developed by pure-line selection from an accession (PI315787) obtained from the USDA-ARS Regional Plant Introduction Station, Pullman, WA. The accession originated from a line, ‘C-235’, developed by the Punjab Agricultural University, Ludhiana, India (M.M. Verma, personal communication). Advanced yield trials that included Sarah were conducted at four sites in eastern Washington and northern Idaho in 1983 and at Pullman, WA, in 1984. Testing of Sarah was discontinued in 1985 and 1986 due to an epidemic of Ascochyta blight incited by Phoma rabiei (Pass.) Khune & J.N. Kapoor [= Ascochyta rabiei (Pass.) Labrousse] that developed in the northern Idaho, and eastern Washington region. Testing resumed in 1987. Results of screening tests indicated that Sarah has a high degree of resistance to Ascochyta blight.

Seed yields of Sarah were equal to or better than those of other desi-type chickpea lines from 1983 to 1989. It has a branched upright growth habit with fern-type leaves. Sarah flowers in 56 d and matures in about 110 d from planting, which is earlier than most cultivars. Sarah has reddish-tan seeds that are uniform in size and weigh about 15.8 g per 100 seeds. Cotyledons are bright yellow. Sarah has good drought tolerance and has performed well in shallow soils that are common in some of the more eroded areas of the Palouse region.

Breeder and foundation seed of Sarah will be maintained by the Washington State Crop Improvement Association under the supervision of the Department of Agronomy and Soils, College of Agriculture and Home Economics, Washington State University; and the USDA-ARS, Pullman, WA 99164-6421.

F. J. MUEHLBAUER* and W. J. KAISER (1)

References and Notes


REGISTRATION OF ‘CRIMSON’ LENTIL

‘CRIMSON’ LENTIL (Lens culinaris Medikus) (Reg. no. CV-5, PI 543920) was developed cooperatively by the USDA-ARS and Agricultural Research Center of the College of Agriculture and Home Economics, Washington State University, and released in 1990.

Crimson, selection LC800024, was derived by pure-line selection from a germplasm line introduced from Egypt via