infested soils at Stoneville and northeast Arkansas. It was evaluated in the Uniform Preliminary Group V Nursery at 8 locations in 1979 and in the Uniform Group V Nursery at 30 locations in 1980-1982. Epps is superior in productivity to the SCN Race 4 resistant variety ‘Nathan’ and is approximately 4 days earlier in maturity than Bedford. Its 3-year mean seed yield in the uniform regional trials closely approximates that for ‘Essex.’

Seed was distributed for increase in 1983 in Tennessee, Mississippi, Arkansas, and Kentucky. The Tennessee AES will be responsible for maintenance of pure seed.

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References and Notes
2. Research agronomist, USDA-ARS, working in cooperation with the Delta Branch, Miss. Agric. and For. Exp. Stn., P.O. Box 196, Stoneville, MS 38776. Registration by Crop Sci. Soc. of Am. Accepted 24 Apr. 1984.

REGISTRATION OF MIAMI SOYBEAN

‘Miami’ soybean [Glycine max (L.) Merr.] (Reg. no. 177) is a composite of 69 F3 lines from the backcross ‘Wells II’ \( \times \) PRX9-274 and is resistant to Races 1 through 11, 13 through 18, and 21 of Phytophthora megasperma Drechs f. sp. glycinea Kuan and Erwin. PRX9-274 is an F3 selection from PI 86962-I (\( R_{ps3} \)) \( \times \) PI 54615-1 (\( R_{ps1} \)), homozygous for both genes.

The initial cross, Wells II (\( R_{ps1} \)) \( \times \) PRX9-274 (\( R_{ps1} \)\( R_{ps3} \)) was made in 1977. Since both Wells II and PRX9-274 contained the gene \( R_{ps1} \), the F1 plants from each backcross generation were inoculated with Race 4 of P. megasperma f. sp. glycinea to identify those plants carrying the gene \( R_{ps3} \). Surviving plants were backcrossed to Wells II, and this process was repeated for six successive backcrosses, two in the greenhouse and one in the field each year. F2 plants of Wells II \( \times \) PRX9-274 were inoculated with Race 4 of the pathogen to eliminate homozygous susceptible plants. Seeds from 156 resistant F2 plants were planted 10 cm apart in rows 1 m apart in the field in 1980. The F3 lines that appeared phenotypically identical to Wells II were harvested individually and progeny from each line were tested in the greenhouse for reaction to Race 4 (\( R_{ps3} \)) and Race 7 (\( R_{ps1} \)) of P. megasperma f. sp. glycinea. Sixty-nine lines that were uniformly resistant in their reaction to the above races, indicating they were homozygous for the genes \( R_{ps1} \) and \( R_{ps3} \), were composited and evaluated as Wells II BC\(_6\) in the Uniform Soybean Tests, northern States, in 1982 and 1983. These tests were conducted by research workers in USDA-ARS units cooperating in soybean improvement studies in Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, New Jersey, Ohio, Pennsylvania, South Dakota, Tennessee, and Wisconsin. Miami was released in Indiana, Nebraska, and Ohio in 1983.

Publicity on Miami was released 1 Aug. 1984, and foundation seed was produced by releasing states to maintain breeder seed.

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References and Notes
1. Professor (K.L.A.), associate professor (F.A.L.), Dep. of Plant Pathology, Purdue Univ.; supervisory research geneticist (J.R.W.), Dep. of Agronomy, Purdue Univ.; and professor (T.S.A.), Dep. of Agronomy, Purdue Univ. Research on the development and production of the soybean cultivar ‘Miami’ was supported by ARS-USDA and in cooperating state experiment stations.

REGISTRATION OF WINCHESTER SOYBEAN

‘WINCHESTER’ soybean [Glycine max (L.) Merr.] (Reg. no. 178) is an F3 line from the backcross Williams \( \times \) PRX12-112 and is resistant to Races 1 through 9, 11, 13-18, 21 and 22 of Phytophthora megasperma f. sp. glycinea Kuan and Erwin. PRX12-112 is an F3 selection from PI 84637 (\( R_{ps1} \)) homozygous for both genes.

The initial cross, Williams \( (r_{ps1} R_{ps3}) \) \( \times \) PRX12-112 \( (R_{ps1} R_{ps3}) \) was made in 1977. Since no major genes for resistance have been identified in Williams and PRX12-112, the genes \( R_{ps1} \) and \( R_{ps3} \), the F1 plants from each backcross generation were inoculated with Races 2 and 7 of P. megasperma f. sp. glycinea to identify those plants carrying the genes \( R_{ps1} \) and \( R_{ps3} \). Surviving plants were backcrossed to Williams and this process was repeated for six successive backcrosses, two in the greenhouse and one in the field each year. F2 plants of Williams \( \times \) PRX12-112 were inoculated with Races 2 and 7 of the pathogen to eliminate homozygous susceptible F2 plants. Seeds from 144 resistant F2 plants were planted 10 cm apart in rows 1 m apart in the greenhouse. The F3 lines that appeared phenotypically identical to Williams were harvested individually and progeny from each line were tested in the greenhouse for reaction to Race 4 (\( R_{ps3} \)) and Race 7 (\( R_{ps1} \)) of P. megasperma f. sp. glycinea. Three lines were uniformly resistant in the greenhouse to Races 2 and 7, indicating they were homozygous for the genes \( R_{ps1} \) and \( R_{ps3} \). Two of these lines took several days later than Williams and were discarded. The line, PRX7BC6-1-1 was multiplied and evaluated in Wisconsin, BC\(_6\) in the Uniform Soybean Tests, Northern States, in 1982. These tests were conducted by research workers in ARS-ARS-USDA and in cooperating state experiment stations.