Pennyrile is susceptible to phytophthora rot [caused by *Phytophthora megasperma* (Drechs.) f. sp. *glycines* Kuan and Erwin] and to the soybean cyst nematode (*Heterodera glycine* Ichinohe).

The Illinois Agricultural Experiment Station, Urbana, participated in the release of Pennyrile. Title 5 Plant Variety Protection has been applied for and breeder seed was distributed to the foundation seed organizations in the participating states for planting in 1987. Breeder seed will be maintained by the Kentucky Foundation Seed Project, Kentucky Agricultural Experiment Station, Lexington, KY 40546-0091.


REFERENCES AND NOTES

4. T. W. Pfeiffer, Dep. of Agronomy, Univ. of Kentucky, Lexington, 40546, and J.H. Orf, Dep. of Agronomy and Plant Genetics, Univ. of Minnesota, St. Paul, 55101 (formerly Dep. of Agronomy, Univ. of Kentucky). This research was supported in part by a grant from the Kentucky Soybean Fund Utilization Committee. This paper (87-3-230) is published with the approval of the director of the Kentucky Agric. Exp. Stn. Registration by CSSA. Accepted 29 Feb. 1988. *Corresponding author.

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REGISTRATION OF ‘SHARKEY’ SOYBEAN

‘SHARKEY’ soybean [*Glycine max* (L.) Merr.] (Reg. no. 213) (PI 515960) was developed by the USDA, ARS, in cooperation with the Delta Branch, Mississippi Agricultural and Forestry Experiment Station. It was released in 1987 to provide a highly productive, multiple pest resistant cultivar of Group 6 maturity. Prior to release the breeding line designation was D79-6162.

Sharkey is the increase of an F1 line from the cross ‘Tracy’ × ‘Centennial’ which was made at Stoneville, MS in 1975. The F1 plants were grown in the greenhouse during the winter of 1975-1976. An F2 population was grown in the field at Stoneville in 1976. Progeny of F2 plants were screened for reaction to the soybean cyst nematode (SCN), *Heterodera glycines* Ichinohe race 3, in the greenhouse at Jackson, TN. Those F2 plants uniformly susceptible were discarded. The F3, F4, and F5 lines were grown in the field at Stoneville on Sharkey clay where soybeans had been monocropped for more than 30 yr. A pedigree breeding system was used. Each F1 line selected for further evaluation traced to an individual F2 plant. The F3 lines were evaluated in the greenhouse at Stoneville for reaction to phytophthora rot (caused by *Phytophthora megasperma* Drechs. f. sp. *glycinea* Kuan and Erwin) and to the herbicide metribuzin (4-Amino-6-(1,1-dimethyl-1H)-1,2,4-triazin-5(4H)-one). Sharkey has been evaluated in replicated trials at Stoneville and the Northeast Branch of the Mississippi Agricultural and Forestry Experiment Station, Verona where the disease stem canker [caused by *Diaporthe phaseolorum* (Cke. & Ell.) Sacc. *caulivora* Athow & Cald.] caused injury to susceptible lines. It was evaluated in The Uniform Soybean Tests, Southern Regional Preliminary Group 6 in 1982 and in Uniform Group 6 in 1983-1987. It has been evaluated along with ‘Tracy-M’ and ‘Centennial’ in supplemental irrigation management studies on Sharkey clay at Stoneville.

Sharkey is resistant to bacterial pustule [caused by *Xanthomonas phaseoli* (E. F. Sm.) Dows, var sojensis (Hedges) Starr & Burkh.], and to the root knot nematode *Meloidogyne incognita* (Kofoid and White, 1919) Chipwood. It carries the genes *Rps9* and *Rps12* conditioning resistance to phytophthora rot and the genes *Rdp1* and *Rdp2*, conditioning resistance to stem canker. Sharkey is similar in maturity to Centennial. It is best adapted for production on soils where many cultivars of Maturity Group VI do not make adequate growth. Plants have a determinate growth type, have white flowers, tawny pubescence, and tan pod walls. Seeds are yellow with black hilar and average 14.7 g/100 as compared with 12.5 g/100 for Centennial.

Seed of Sharkey were increased in Mississippi and Arkansas. The Miss. Agric. and For. Expt. Sta. will be responsible for maintaining Breeder Seed. Application for U.S. Plant Variety Protection has been made. Additional information has been published in MAFES Research Report.

E. E. HARTWIG,* T. C. KILEN, AND C. J. EDWARDS (1)

References and Notes


Irrigation studies were conducted by L.G. Heatherly, P.O. Box 196, Stoneville, MS 38776.

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REGISTRATION OF ‘SHIELD’ WHEAT

‘SHIELD’, SD 8026, Reg. no. 734, PI 491570, is a hard red spring wheat (*Triticum aestivum* L.) with resistance to Hessian Fly [*Mayetiola destructor* (Say)] developed and released in 1986 by the South Dakota Agricultural Experiment Station, South Dakota State University, Brookings, in cooperation with USDA-ARS. It is an F1-derived plant selection from the single cross between ‘Coteau’ (CI 17749) spring wheat and ‘Dawn’ (CI 17801) winter wheat, made in 1977. The F1 generation was grown in the greenhouse at Brookings in the spring of 1978 and the F2 was grown in replicated yield trials at Brookings and Redfield that same year. The F3 head selections were evaluated for Hessian fly resistance at Manhattan, KS and resistant selections were transplanted and grown in the greenhouse, at Brookings. The F4 plant rows were grown at Brookings, harvested as single plants, and again evaluated for Hessian fly reaction. Remnant F6 seed was grown in a winter nursery in Mexico. Rows representing resistant plants were harvested in bulk. One of the plant rows was designated SD 8026. The F4 and F5 generations were also evaluated for Hessian fly reaction to insure that SD 8026 was homozygous resistant. All Hessian fly evalu-