than 'S-208', a commercially grown cultivar developed by Seedtec International, Woodland, CA. In Montana and North Dakota, the average number of days to maturity for Oker is 117 days. Oker matures 4 to 5 days earlier than S-208. Mature plants of Oker are similar in height to S-208, and have greater resistance to Alternaria leaf spot and bacterial blight. Seeds are lower in test weight than S-208, averaging 1.0 kg ha\(^{-1}\) less in nine tests conducted at Sidney and Williston over a 3-yr period.

The seed oil content of Oker is similar to S-208 under dryland conditions but 2.8% higher under irrigated conditions. Oker is 2% higher in seed protein content and 5% lower in seed hull percentage than S-208. The oil iodine number of Oker is similar to S-208 but its oil averaged 2.3% less in linoleic acid. Oker has a smaller seed size than Hartman, averaging 1 mm less in width and 2 mm less in length. The seed yield and oil percentage of Oker over the 5-yr period averaged 1755 kg ha\(^{-1}\) and 45.0% respectively. The seed yield and oil percent of S-208 during the same period averaged 1751 kg ha\(^{-1}\) and 44.5%, respectively.

Oker was released for irrigated production in eastern Montana and western North Dakota, and for production under conditions where maturity is a factor such as delayed planting and in areas with shorter growing seasons. Its production reduces the risk of yield loss due to early fall frosts and the diseases Alternaria leaf spot and bacterial blight. Breeder seed will be maintained by the Eastern Agricultural Research Center, P.O. Box 393, Sidney, MT 59270. The Montana Agricultural Experiment Station has applied for protection of this variety under the provisions of the Plant Variety Protection Act with the certification option.

J. W. BERGMAN, G. CARLSON, G. KUSHNAK, N. R. RIVE-LAND, AND G. STALKNECHT (1)

References and Notes


REGISTRATION OF 'HACK' SOYBEAN

'Hack' soybean [Glycine max (L.) Merr.] (Reg. no. 185) was developed by the USDA-ARS, in cooperation with the Delta Branch of the Mississippi Agricultural and Forestry Experiment Station and the West Tennessee Unit of the Tennessee Agricultural Experiment Station. It was released in 1984 to provide a productive cultivar of Group 6 maturity with resistance to race 4 of the soybean cyst nematode (SCN) Heterodera glycines Ichinohe. The breeding line designation was D77-6166.

Leflore is similar in maturity and growth characteristics to 'Centennial', but differs from Centennial in that it is resistant to race 4 of SCN. It has a determinate growth type, purple flowers, tawny pubescence, and tan pod walls. Seeds are yellow with black hila. It is resistant to races 3 and 4 of SCN; bacterial pustule, caused by Xanthomonas phaseoli (E. F. Sm.) Dows. var. sojensis (Hedgis) Starr & Burkh.; and the root knot nematode Meloidogyne incognita (Kofoid and White, 1919) C. E. M. Chamberlain. It carries the gene Rp\(^5\) giving it resistance to phytophthora rot, caused by Phytophthora megasperma Drechs. f. sp. glycines Kuan and Erwin.

Leflore is the increase of an F\(^5\) line from the cross Cen-
tennial X J74-47. The F\(^5\) line was developed at the USDA-ARS, in cooperation with the Delta Branch of the Mississippi Agricultural and Forestry Experiment Station and the West Tennessee Unit of the Tennessee Agricultural Experiment Station. It was released in 1984 to provide a productive cultivar of Group 6 maturity with resistance to race 4 of the soybean cyst nematode (SCN) Heterodera glycines Ichinohe. The breeding line designation was D77-6166.

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Leflore is the increase of an F\(^3\) line from the cross Centennial X J74-47. J74-47 was an SCN race 4 resistant line selected from the cross 'Forrest' (2) X (D68-18 X PI 88788). This line is closely related to 'Bedford' (1). The cross was made at Stoneville in 1974 and F\(^3\) plants were grown at the greenhouse at Stoneville the following winter. The seeds from F\(^3\) plants were planted in SCN race 4 infested soil in the greenhouse at Jackson, TN in May 1975. Seedlings were evaluated approximately 30 days after emergence. Plants receiving low ratings for cyst development were re-

REGISTRATION OF 'LEFLORE' SOYBEAN

'Leflore' soybean [Glycine max (L.) Merr.] (Reg. no. 186) was developed by the USDA-ARS, in cooperation with the Delta Branch of the Mississippi Agricultural and Forestry Experiment Station and the West Tennessee Unit of the Tennessee Agricultural Experiment Station. It was released in 1984 to provide a productive cultivar of Group 6 maturity with resistance to race 4 of the soybean cyst nematode (SCN) Heterodera glycines Ichinohe. The breeding line designation was D77-6166.

Leflore is similar in maturity and growth characteristics to 'Centennial', but differs from Centennial in that it is resistant to race 4 of SCN. It has a determinate growth type, purple flowers, tawny pubescence, and tan pod walls. Seeds are yellow with black hila. It is resistant to races 3 and 4 of SCN; bacterial pustule, caused by Xanthomonas phaseoli (E. F. Sm.) Dows. var. sojensis (Hedgis) Starr & Burkh.; and the root knot nematode Meloidogyne incognita (Kofoid and White, 1919) C. E. M. Chamberlain. It carries the gene Rp\(^5\) giving it resistance to phytophthora rot, caused by Phytophthora megasperma Drechs. f. sp. glycines Kuan and Erwin.

Leflore is the increase of an F\(^3\) line from the cross Centennial X J74-47. This line is closely related to 'Bedford' (1). The cross was made at Stoneville in 1974 and F\(^3\) plants were grown in the greenhouse at Stoneville the following winter. The seeds from F\(^3\) plants were planted in SCN race 4 infested soil in the greenhouse at Jackson, TN in May 1975. Seedlings were evaluated approximately 30 days after emergence. Plants receiving low ratings for cyst development were re-

Reference and Notes

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