REGISTRATION OF 'AVERY' SOYBEAN

'AVERY' soybean (Glycine max L. Merr.) (Reg. no. 214) (PI 518663) was developed by the Missouri Agricultural Experiment Station and released jointly by the Missouri, Maryland, and Virginia Agricultural Experiment Stations and the USDA in July 1987. Avery was selected from the cross 'Bedford' × 'Crawford'. Bedford (2) is a soybean cyst nematode (SCN) resistant cultivar in Maturity Group V with indeterminate growth habit, whereas Crawford (3) is in Maturity Group IV and is an indeterminate cultivar. Early generation selection and testing were done at the Delta Center of the University of Missouri at Portageville, MO. Individual F1 plants of the cross were evaluated in the greenhouse for resistance to races 3 and 4 of SCN. The resistant lines were further evaluated in the cyst nematode nursery at the Rhodes Farm, near Clarkton, MO. The progeny of an F1 plant was bulked for seed yield evaluation. Avery was also evaluated in the Regional SCN 4 tests for 3 yr (1984 through 1986) and compared with, among other cultivars, 'Douglas', 'Sparks', 'Egyptian', and 'Franklin'.

The seed yield of Avery equaled that of Douglas and Pershing in the absence of SCN. In SCN infested land, Avery yielded more than the susceptible cultivars Douglas and Sparks and somewhat better than SCN resistant cultivars Franklin and Egyptian. When planted late (in the third and fourth week of June) after wheat (Triticum aestivum L.) at Portageville, MO., Avery yielded slightly better than 'Forrest'.

Avery is highly resistant to the soybean cyst nematode (Heterodera glycines) and moderately resistant to root-knot nematode (Meloidogyne incognita). Avery is also resistant to bacterial leaf blight (incited by Xanthomonas phaseoli E. F. Smith) and is a late Maturity Group IV cultivar with indeterminate growth habit. It has white flowers, tawny pubescence, and tan pod walls. The seeds of Avery are yellow with dull yellow seedcoats and buff hilum. Compared to Essex, it matures 8 to 10 d later than Douglas. It is resistant to root-knot nematode (incited by Meloidogyne incognita). Avery is also resistant to bacterial leaf blight (incited by Xanthomonas phaseoli E. F. Smith) and is a late Maturity Group IV cultivar with indeterminate growth habit. It has white flowers, tawny pubescence, and tan pod walls. The seeds of Avery are yellow with dull yellow seedcoats and buff hilum. Compared to Essex, it matures 8 to 10 d later than Douglas. It is resistant to root-knot nematode (incited by Meloidogyne incognita). Avery is also resistant to bacterial leaf blight (incited by Xanthomonas phaseoli E. F. Smith)

The Missouri Agricultural Experiment Station will be responsible for maintaining breeder seed. The seed will be maintained as one generation each of breeder, registered and certified seed. Application for plant variety protection is being submitted.

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References & Notes


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REGISTRATION OF 'HUTCHESON' SOYBEAN

'Hutcheson' soybean [Glycine max (L.) Merr.] (Reg. no. 215) (PI 518664) was developed by the Virginia Agricultural Experiment Station and was released jointly in 1987 by The Virginia, Alabama, Georgia, Kansas, Missouri, and Tennessee Agricultural Experiment Stations and the North Carolina Agricultural Research Service. It was released because of its high productivity in both full season and double crop plantings and its resistance to soybean mosaic, peanut mottle, and peanut stunt viruses.

Hutcheson originated as an F1 selection from the cross 'V68-1034' × 'Essex'. The cross was made and advanced in bulk to the F2 generation at the Eastern Virginia Agricultural Experiment Station, Warsaw. V68-1034 was a selection from the cross 'York' × PI 71506. Reaction to the three viruses was determined in the field at Blacksburg, VA. Plants were inoculated with viruses by an airbrush method (1) about 3 wk after planting and observed for symptoms throughout the growing season.

Hutcheson is resistant to bacterial pustule (Xanthomonas campestris pv. phaseoli (Smith) Dows. var. sojensis (Hedge)) soybean mosaic virus, peanut mottle virus, and peanut stunt virus. Reactions of Hutcheson to the organisms causing these viruses were similar to those of Essex. Mature plants are taller than Essex. Seeds of Hutcheson have average seed quality scores of Hutcheson are slightly better than Essex. Seeds of Hutcheson have yellow cotyledons and are similar to those of Essex. Mature plants are taller than Essex. Seeds of Hutcheson have yellow cotyledons and are similar to those of Essex.

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