REGISTRATION OF CROP CULTIVARS

Burkholder, wildfire [Pseudomonas tabaci (Wolf & Foster)] F. L. Stevens, and target spot [Corynespora cassicola (Berk. & Curt.)] Wei. Seed holding is excellent.

Govan was screened for resistance to phytophthora rot in the greenhouse at Stoneville and in the field at Stoneville where it was grown on Sharkey clay heavily infested with phytophthora rot in a continuous soybean cropping system. Early screening against the root-knot nematode (M. arenaria) was done in the greenhouse at Gainesville, Florida. Field screening against M. arenaria was conducted near Blackville, South Carolina.

Govan was evaluated in regional trials in 1968-1970. It was further evaluated in 1976-1977 after M. arenaria was identified as a problem in the Coastal Plain region of South Carolina. In the absence of M. arenaria, Govan averages slightly lower in yield than Bragg. In the presence of M. arenaria, Govan will produce a successful crop where Bragg is a complete failure.

Seed was distributed for increase in South Carolina, North Carolina, and Alabama in 1977. The South Carolina Agric. Exp. Stn. will be responsible for maintaining breeder seed.

REGISTRATION OF BEDFORD SOYBEANS¹
(Reg. No. 118)

E. E. Hartwig and J. M. Epps²

`BEDFORD' soybean [Glycine max (L.) Merr.] originated as an F1 line selected from the crosses `Forrest'(2) × (D68-18 × PI 88788). Bedford was developed in a cooperative program of FR-SEA-USDA, and the Mississippi and Tennessee Agric. Exp. Stns. Bedford was identified as J74-46 before release. It is classified as “late Group V” maturity.

Bedford has white flowers, tawny pubescence, tan pods, yellow seedcoats, and black hila. It is highly resistant to Races 1, 3, and 4 of the soybean cyst nematode (Heterodera glycines Ichnoche), and moderately resistant to the root-knot nematode [Meloidogyne incognita (Kofoid & White)], and has excellent field resistance to phytophthora rot (Phytophthora megasperma Drechs var. sojae Hildebrand). It is resistant to the foliar diseases bacterial pustule [Xanthomonas phaseoli (Smith) Dowson var. sojensis (Hedges)] Starr & Burkholder, wildfire [Pseudomonas tabaci (Wolf & Foster)] F. L. Stevens, and target spot [Corynespora cassicola (Berk. & Curt.)] Wei. Shatter resistance is excellent.

A modified backcrossing program was used in the development of Bedford. D68-18, a line resistant to cyst nematode Races 1 and 3, and 4 of the soybean cyst nematode (Heterodera glycines Ichnoche), and moderately resistant to the root-knot nematode [Meloidogyne incognita (Kofoid & White)], and has excellent field resistance to phytophthora rot (Phytophthora megasperma Drechs var. sojae Hildebrand). It is resistant to the foliar diseases bacterial pustule [Xanthomonas phaseoli (Smith) Dowson var. sojensis (Hedges)] Starr & Burkholder, wildfire [Pseudomonas tabaci (Wolf & Foster)] F. L. Stevens, and target spot [Corynespora cassicola (Berk. & Curt.)] Wei. Shatter resistance is excellent.

where Race 4 was a problem. As a mean of 15 comparisons where Race 4 was not a problem, Bedford in seed yield and has produced yields that for Forrest where Race 4 was a problem.

Seed was distributed in 1977 for increase in Missouri, Arkansas, Mississippi, and Kentucky. Agric. Forestry Exp. Stn. will be responsible for maintenance of breeder seed. Other information on Bedford is in Mississippi Information Sheet 1280, January 1978.

¹ Registered by the Crop Sci. Soc. of Am. Apr. 25, 1978.
² Respectively, research agronomist, AR-SEA-USDA, in cooperation with the Delta Branch, Mississippi Agric. Forestry Exp. Stn., Stoneville, MS; and nematologist, Western Tennessee Agric. Exp. Stn., Jackson, TN.

REGISTRATION OF HARCOR SOYBEANS³
(Reg. No. 119)

R. I. Buzzell⁴

`HARCOR' soybean [Glycine max (L.) Merr.] was developed by the Agriculture Canada Research Station, Harrow, Ontario, Canada. It originated as an F1 plant selection of 'Corsoy' by OX238 which is a selection from Corsoy 63'. Prior to release in 1975, Harcor was denominated S215. It is similar to Corsoy in plant type and yield but 2 days later. Regional and provincial tests indicated it is similar in maturity but is higher yielding than Corsoy. Harcor is adapted to the Maturity Group II and to the 3,100 to 3,500 — heat-unit area in Canada.

Harcor is resistant (Rp5) to races 1 and 2 of megasperma Drechs. var. sojae Hildebrand. (Pms) but to other races. Harcor has better field tolerance to races 4. Harcor has better field tolerance to other races. It was identified as J74-46 before release. It is classified as “late Group V” maturity compared with 39% for Harsoy 63.

Distinguishing characteristics are purple flower, black hila, brown pods, and shiny, yellow seed coats, and black hila. In addition it has high peroxidase activity (P3) is susceptible to powdery mildew caused by Microsphaera diffusa Cke & Pk., is in leaf-flavonol class 2t (Cle & Pk.) and gives an insensitive response (es) to fluor conditions. Other information on Harcor is available from the Harrow Research Station will maintain Harcor. Seed was distributed to Illinois, Iowa, Kansas, Nebraska, Ohio, and South Dakota for increase and distribution of the respective state seed-certification agency.

⁴ Soybean breeder, Harrow, Ontario, NOR 1G, Canada.

REGISTRATION OF SAWTELL WHEATa
(Reg. No. 603)

R. J. Govan and L. I. Anderson

'SAWTELL' Wheat (Reg. No. 118)

R. J. Govan

'SAWTELL' Wheat (Reg. No. 118)

R. J. Govan

'SAWTELL' Wheat (Reg. No. 118)

R. J. Govan