cyst nematode [SCN (Heterodera glycines Ichinohe)] Races 3, 4, and 5. It is the first soybean cultivar to be released to have the multiple race resistance. Prior to release it was identified as D82-2397A.

Cordell was developed in a cooperative research program of the USDA-ARS with the Delta Branch, Mississippi Agricultural and Forestry Experiment Station and the West Tennessee branch of the Tennessee Agricultural Experiment Station. Parents are 'Bedford' and D72-8927. D72-8927 was originally developed to provide a more productive strain with resistance to SCN Race 2. It was later determined to have a high level of resistance to SCN Race 5. D72-8927 is from the cross D66-12392 × ('Hill'3 × PI 90763). PI 90763 provided resistance to SCN Races 2 and 5. Cordell has not been evaluated for reaction to SCN Race 2. D66-12392 was a selection from D63-6100 × Dyer (2). D63-6100 was a selection from Hill × PI 171442. Of 200 F1 lines, each tracing to an individual F2 plant, from the cross 'Bedford' × D72-8927 selected for resistance to SCN Race 4, all but two were rated susceptible to SCN Race 5. D82-2397 gave a variable reaction to SCN Race 5. As an advanced F2 line in the F3 generation, 100 single plants were harvested and evaluated for reaction to SCN Race 5 in the greenhouse at Jackson, TN. Four progeny were grown in the greenhouse at Stoneville from plants rated resistant to SCN Race 5. The F3 lines were grown in the field at Stoneville. Progeny of each line was evaluated for reaction to SCN Races 3, 4, and 5. Four F3 lines, the progeny of a single F3 plant, rated resistant to SCN Races 3 and 5 and moderately resistant to Race 4, were composited to form D82-2397A.

Cordell is equal in productivity to Bedford in the absence of SCN Race 5, and superior when SCN Race 5 is present at a high level. It has a determinate growth type very similar to Bedford. It averages 2-d earlier in maturity than Bedford. Plants have white flowers, brown pubescence, and tan pods at maturity. Seeds are yellow with black hila with a 100 seed weight of 10 g. It is resistant to the foliar disease bacterial pustule [caused by Xanthomonas phaseoli (E. F. Sm.) Dowson var. sojensis (Hedges) Starr & Burkholder], downy mildew [caused by Peronospora manshurica (Naoum) Syd. ex Gaum], and powdery mildew [caused by Microsphaera diffusa Cke. and PL].

Burlison has white flowers, brown pubescence, tan pods at maturity, and seeds are dull yellow with black hila. Burlison is resistant to bacterial pustule [caused by Xanthomonas phaseoli (E. F. Sm.) Dowson var. sojensis (Hedges) Starr & Burkholder], downy mildew [caused by Peronospora manshurica (Naoum) Syd. ex Gaum], and powdery mildew [caused by Microsphaera diffusa Cke. and PL]. Breeder seed of Burlison was distributed to foundation seed organizations in Illinois, Indiana, Iowa, Nebraska, and Wisconsin for planting in 1988. Breeder seed will be maintained by the Illinois Agricultural Experiment Station, Urbana.

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References and Notes


REGISTRATION OF ‘BURLISON’ SOYBEAN

‘BURLISON’ soybean [Glycine max (L.) Merr.] (Reg. no. 243, PI 533655) was developed at the Illinois Agricultural Experiment Station and released in August 1988. It was released because of its multiple race resistance (Rps*, Rps) to phytophthora rot [caused by Phytophthora megasperma (Drechs) f. sp. glycinea Kuan and Erwin.], and higher yield when compared with cultivars of similar maturity.

Burlison is a F2 plant selection from the cross of K74-113-76-486 × ‘Century’ (5) made at the Illinois Agricultural Experiment Station. K74-113-76-486 is a high yielding phytophthora rot resistant soybean line selected from the cross ‘Tracy’ × ‘Pomona’ (1,3). The F1 and F2 generations of K74-113-76-486 × Century were advanced by single-seed descent at the University of Puerto Rico Agricultural Experiment Station. Burlison was evaluated as LN82-9648 in Illinois for phytophthora rot resistance, metribuzin tolerance, and agronomic performance during 1982 to 1987. It was evaluated in the Uniform Soybean Tests-Northern States; Preliminary Test IIA in 1986, and Uniform Test II in 1987 to 1988.

Burlison is classified as Maturity Group II (relative maturity 2.9), averaging 4 d later than ‘Elgin 87’ and 3 d later than ‘Century 84’ (2,4). It is best adapted to approximately 42 to 44 °F lat. When compared with Elgin 87, Burlison averages 4% higher yield, better lodging resistance, 2.4 g/100 heads heavier seed weight, 3.2 percentage units higher seed protein, and 1.8 percentage units lower seed oil. Burlison has the hns gene and is sensitive to metribuzin. It has more tolerance to the spider mite (Tetranychus spp.) when compared with Elgin 87 and Century 84.

Burlison has white flowers, brown pubescence, tan pods at maturity, and seeds are dull yellow with black hila. Burlison is resistant to bacterial pustule [caused by Xanthomonas phaseoli (E. F. Sm.) Dowson var. sojensis (Hedges) Starr & Burkholder], downy mildew [caused by Peronospora manshurica (Naoum) Syd. ex Gaum], and powdery mildew [caused by Microsphaera diffusa Cke. and Pk].

Breeder seed of Burlison was distributed to foundation seed organizations in Illinois, Indiana, Iowa, Nebraska, and Wisconsin for planting in 1988. Breeder seed will be maintained by the Illinois Agricultural Experiment Station, Urbana.

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REGISTRATION OF ‘CP 80-1827’ SUGARCANE

‘CP 80-1827’ sugarcane (a complex hybrid of Saccharum officinarum L., S. spontaneum L., and S. barberi Jeswiet) (Reg. no. 77) (PI 532837) was selected from progeny of the cross ‘CP 70-1133’ (1) × CP 73-1311, which was made at