to Rico Agricultural Experiment Station. It was released in 1987 as a special purpose cultivar for use in the production of vegetable soybeans or the Japanese fermented product miso.

LS301 was derived from an F_4 plant selected from the cross A79-140022 X A79-140011. Both parents were large-seeded experimental lines, developed at Iowa State University, whose parentages trace to Disoy (2), Prize (4), Provar (5), Magna (3), and Amsoy (1). The single-cross population was advanced to the F_4 generation at Ames, IA, and Isabela, PR. Selection for large seed size was practiced during each segregating generation by measuring the pod width of individual plants and harvesting in bulk a similar number of seeds from plants with pods as large or larger than the large-seeded check cultivars. LS301 was tested for yield in Iowa from 1982 to 1986 under the designation A83-378001.

LS301 is of Maturity Group III, averaging 2 d later than 'Prize' (4). It has purple flowers, gray pubescence, brown pods at maturity, and dull yellow seeds with yellow hilum. LS301 has an average seed size of 254 mg seed⁻¹, which is similar to Prize. It has ≈15% higher seed yield than Prize and similar plant height and lodging resistance. LS301 has 404 g kg⁻¹ seed protein and 222 g kg⁻¹ seed oil on a moisture-free basis. LS301 is moderately susceptible to Fe-deficiency chlorosis when grown on calcareous soil. It is susceptible to Phytophthora root rot (caused by Phytophthora megasperma Drechs.), T. Kuan et al. and D.C. Erwin.

Breeder seed of LS301 will be maintained by the Iowa Agriculture and Home Economics Experiment Station, Ames.

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References and Notes

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REGISTRATION OF ‘HAMILTON’ SOYBEAN

‘HAMILTON’ SOYBEAN [Glycine max (L.) Merr.] (Reg. no. 264, PI 540554) was developed at the Illinois Agricultural Experiment Station and released in August 1989. It was released because of its higher yield when compared with cultivars of similar maturity.

Hamilton is a F_4 plant selection from the cross of ‘Sprite’ X L75-3632 made at the Illinois Agricultural Experiment Station. L75-3632 is a selection from the cross ‘Corsoy’ X Lee 68 (1,2). The F_4 and F_5 generations of ‘Sprite’ X L75-3632 were advanced during the winter at the Puerto Rico Agricultural Experiment Station by single-seed descent. Hamilton was evaluated as LN82-2366 in Illinois for agronomic performance during 1982 to 1988. It was evaluated in the Uniform Soybean Tests–Northern States Preliminary Test IVA 1983 and Uniform Test IV 1986 to 1989.

Hamilton is classified as Group IV maturity (relative maturity 4.0), averaging 5 d earlier than ‘Spencer’ (3). It is best adapted to approximately 38 to 40° N lat. When compared with Spencer, Hamilton averaged 2% higher yield and 10 cm shorter plant height, and had better seed quality, protein and oil content.

Hamilton has white flowers, gray pubescence, brown pods at maturity, and shiny yellow seeds with buff hilum. Hamilton is susceptible to Phytophthora root rot (Races 1, 4, and 7) [caused by Phytophthora megasperma (Drechs.) T. Kuan & D.C. Erwin].

Breeder seed of Hamilton was distributed to foundation seed organizations in Illinois, Indiana, Missouri, Nebraska, and Ohio for planting in 1989. Breeder seed will be maintained by the Illinois Agricultural Experiment Station, Urbana.

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References and Notes
4. Depot of Agronomy, Univ. of Illinois, 1102 S. Goodwin, Urbana, IL 61801.
5. Contribution from the Illinois Agric. Exp. Stn., Urbana. Research was supported in part by the Illinois Soybean Program Operating Board and the Illinois Crop Improvement Assoc. Registration by CSSA. Accepted 30 Apr. 1990. *Corresponding author.

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REGISTRATION OF ‘BELL’ SOYBEAN

‘BELL’ SOYBEAN [Glycine max (L.) Merr.] (Reg. no. 263, PI 540554) was developed at the Illinois Agricultural Experiment Station and released in August 1989. It was released because of its resistance to Races 3 and 4 of the soybean cyst nematode (SCN) (Heterodera glycines Ichinohe) derived from PI 88788 and higher yield when compared with cultivars of similar maturity grown in SCN-infested soil.

Bell originated as an F_4 plant selection from the cross of ‘Fayette’ X LN80-10398 made at the Illinois Agricultural Experiment Station and released in August 1989. It was released because of its resistance to Races 3 and 4 of the soybean cyst nematode (SCN) (Heterodera glycines Ichinohe) derived from PI 88788 and higher yield when compared with cultivars of similar maturity grown in SCN-infested soil.

Bell originated as an F_4 plant selection from the cross of ‘Fayette’ X LN80-10398 made at the Illinois Agricultural Experiment Station and released in August 1989. It was released because of its resistance to Races 3 and 4 of the soybean cyst nematode (SCN) (Heterodera glycines Ichinohe) derived from PI 88788 and higher yield when compared with cultivars of similar maturity grown in SCN-infested soil.

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