

## REGISTRATION OF 'HP203' SOYBEAN

'HP203' SOYBEAN [*Glycine max* (L.) Merr.] (Reg. no. 259, PI 539864) was developed cooperatively by the Iowa Agriculture and Home Economics Experiment Station and the Puerto Rico Agricultural Experiment Station. It was released in 1988 as a special-purpose cultivar for use in the production of tofu and other food products.

HP203 was derived from a  $BC_1F_3$  plant selected from the cross ('Vinton 81'  $\times$  'B216')  $\times$  Vinton 81. Vinton 81 (2) is a high-protein cultivar of Maturity Group I. B216 is a high-yielding cultivar of Maturity Group II developed by the Northrup King Co. from the cross 'Corsoy' (3)  $\times$  'Wayne' (1). The backcross population was advanced to the  $BC_1F_3$  generation at Ames, IA, and Isabela, PR, by harvesting in bulk three seeds from each plant and planting a random sample of the seed to obtain the next generation. HP203 was tested in Iowa during 1983 to 1987 under the designation A85-182010.

HP203 is of Maturity Group I, averaging the same maturity as Vinton 81. It has white flowers, gray pubescence, tan pods at maturity, and dull yellow seeds with yellow hila. HP203 has an average of 420 g  $kg^{-1}$  seed protein and 210 g  $kg^{-1}$  seed oil on a moisture-free basis and a seed weight of 210 mg  $seed^{-1}$ . Compared with Vinton 81, HP203 has  $\approx 10\%$  higher seed yield and similar plant height and lodging resistance. HP203 is moderately susceptible to Fe-deficiency chlorosis when grown on calcareous soil. It is susceptible to phytophthora rot (caused by *Phytophthora megasperma* Drechs. f. sp. *glycinea* T. Kuan & D.C. Erwin).

Breeder seed of HP203 will be maintained by the Iowa Agriculture and Home Economics Experiment Station, Ames.

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### References and Notes

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3. Weber, C.R., and W.R. Fehr. 1970. Registration of Corsoy soybeans. *Crop Sci.* 10:729.
4. W.R. Fehr and G.A. Welke, Dep. of Agronomy, Iowa State Univ., Ames, IA 50011; and S.R. Cianzio, Dep. of Agronomy, Iowa State Univ., and Dep. of Agronomy and Soils, Univ. of Puerto Rico, Mayaguez, PR 00708. Joint contribution from the Iowa Agric. Home Economics Exp. Stn., Ames, IA, Journal Paper no. J-13717, Project no. 2475; and the Puerto Rico Agric. Exp. Stn., Mayaguez, PR 00708. The research was supported by a grant from the Iowa Soybean Promotion Board. Registration by CSSA. Accepted 31 Mar. 1990. \*Corresponding author.