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REGISTRATION OF 'HP204' SOYBEAN

'HP204' SOYBEAN [*Glycine max* (L.) Merr.] (Reg. no. 260, PI 539865) 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.

HP204 was derived from a BC_1F_3 plant selected from the cross ('Vinton 81' × 'Hardin') × Vinton 81. Vinton 81 (2) is a high-protein cultivar of Maturity Group I, and Hardin (1) is a high-yielding cultivar of Maturity Group I. 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. HP204 was tested in Iowa during 1983 to 1987 under the designation A85-182004.

HP204 is of Maturity Group I, averaging ≈ 2 d later than Vinton 81. It has purple flowers, gray pubescence, tan pods at maturity, and dull yellow seeds with yellow hila. HP204 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 220 mg $seed^{-1}$. Compared with Vinton 81, HP204 has ≈ 10% higher seed yield and similar plant height and lodging resistance. HP204 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 HP204 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. 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.
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