Registration of 'KS4895' Soybean

'KS4895' soybean [Glycine max (L.) Merr.] (Reg. no. CV-378, PI 595081) was developed by the Kansas Agricultural Experiment Station. It was released because of its high yield potential. Prior to release, KS4895 was designated K1192. KS4895 originated as an F4 single-plant selection from the cross 'Sherman' x 'Bay' (2,4). The population was advanced by the single-pod bulk method to the F4 generation in Belize and in Kansas. KS4895 was tested for yield in Kansas from 1988 through 1993 (5). KS4895 was evaluated in the Uniform Soybean Tests—Southern States (group IVS test) from 1990 through 1993 (3).

KS4895 is classified as Group IV maturity (relative maturity 4.8), about 2 d later than 'Delsoy 4710' (1). It is best adapted to latitudes 36 to 38° N for full-season production. In regional trials, seed yield of KS4895 was about 7% greater than Delsoy 4710. KS4895 has an indeterminate growth habit, purple flowers, gray pubescence, and tan pods at maturity. Seeds are yellow, with buff hila and a dull seed coat luster. Lodging score for KS4895 is 1.4, compared with 2.0 for Delsoy 4710. Seed weight is 35 mg seed⁻¹ less, plant height and oil content are similar, and protein content is 2.1 g kg⁻¹ more than Delsoy 4710. Seed quality score for KS4895 is 1.8, compared with 2.6 for Delsoy 4710. KS4895 has no major genes for resistance to phytophthora rot (caused by Phytophthora sojae M.J. Kaufmann & J.W. Gerdemann) or to brown stem rot [caused by Phialophora gregata (Allington & D.W. Chamberlain). W. Gams] and to iron chlorosis. KS4895 is susceptible to brown stem rot [caused by Fusarium solani (Mart.) Sacc.] and to iron chlorosis. KS4895 has exhibited moderate resistance to soybean sudden death syndrome [caused by Fusarium oxysporum (F.A. Fern.) var. meridionalis F.A. Fern.].

Cultivar protection of KS4895 under the U.S. Plant Variety Protection Act, Public Law 91-577, is pending (PVP Certificate no. 9600287). Breeder seed will be maintained by the Kansas Agric. Exp. Stn., Manhattan, KS 66506. Small quantities of seed for breeding and research purposes can be obtained from the corresponding author for at least 5 yr.

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References and Notes
6. Dep. of Agronomy, Kansas State Univ., Manhattan, KS 66506-5501. Work supported in part by grants from the Kansas Soybean Commission and the Kansas Crop Improvement Assoc, Contribution no. 96-544-J from the Kansas Agric. Exp. Stn. Registration by CSSA. Accepted 31 Oct. 1997. *Corresponding author (schao0035@ksu.edu).

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Registration of ‘Magellan’ Soybean

‘Magellan’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-379, PI 595362) was developed by the Kansas Agricultural Experiment Station and released by the Missouri Agricultural Experiment Station. It was released because of its high yield potential. Prior to release, Magellan was tested as experimental K1207. Magellan originated as an F4 single-plant selection from the cross ‘Sherman’ x ‘Harper’ (2,6). The population was advanced by the single-pod bulk method to the F4 generation in Belize and in Kansas (3). Magellan was tested in preliminary yield tests in Kansas in 1988 and advanced yield tests in Kansas in 1989 and 1990 and entered into the Uniform Soybean Tests—Northern States (Preliminary Group IV test) in 1991 (9). Magellan was evaluated further in Missouri (7).

Magellan is classified as Group IV maturity (relative maturity 4.3), about 2 d later than ‘Spencer’ (10). It is best adapted to latitudes 38 to 40° N for full-season production. In yield trials in Missouri (averaged from 1990 to 1994), Magellan yielded 4% higher than ‘Corsica’ (4), 8% higher than ‘Hamilton’ (8), 11% greater than ‘Flyer’ (5), and 4% greater than Spencer. Magellan has an indeterminate growth habit, purple flowers, gray pubescence, and tan pods at maturity. Seeds are yellow, with buff hila, a shiny seed coat luster, and a weight of approximately 150 mg seed⁻¹, compared with 170 mg seed⁻¹ for ‘Delsoy 4210’ (1). Seed composition averages 405 g kg⁻¹ protein and 214 g kg⁻¹ oil on a dry weight basis, and seed quality scores average 2.0, compared with 2.2 for Delsoy 4210. Lodging score averages 2.1, compared with 1.8 for Delsoy 4210. Plant height averages 91 cm, compared with 97 cm for Delsoy 4210. Magellan is susceptible to soybean cyst nematode (Heterodera glycines Ichnohe), brown stem rot [caused by Phialophora gregata (Allington & D.W. Chamberlain) W. Gams], phytophthora rot (caused by Phytophthora sojae M.J. Kaufmann & J.W. Gerdemann), and iron chlorosis.

Cultivar protection of Magellan under the U.S. Plant Variety Protection Act, Public Law 91-577, is pending (PVP Certificate no. 9600319), specifying that seed be sold by variety name only as a class of certified seed. Classes of seed production are limited to Breeder, Foundation, and Certified. Breeder seed of Magellan will be maintained by the Missouri Agricultural Experiment Station. Small quantities of seed for breeding and research purposes can be obtained from D.A. Sleper for at least 5 yr.

W. T. Schapaugh, Jr.,* P. A. Owen, K. M. Clark, AND D. A. Sleper (11)

References and Notes