Registration of ‘Cisne’ soybean

‘Cisne’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-348, PI 593256) was developed by the Illinois Agricultural Experiment Station at the University of Illinois and released in August 1995. This is a Maturity Group IV cultivar, released because of its resistance to phytophthora rot (Races 1 and 7) (caused by Phytophthora sojae M.J. Kaufmann & J.W. Gerdemann) and higher yield compared with cultivars of similar maturity.

Cisne originated as a F4-derived line from the cross ‘Burlison’ × ‘Asgrow A3733’ made at the Illinois Agricultural Experiment Station (3). Asgrow A3733 is a selection from Elf × ‘Asgrow A3127’ (2). Asgrow A3127 is a selection from ‘Williams’ × ‘Essex’ (1,4). The original cross was made in the field in the summer of 1987, and the F1 generation was grown in the field at Urbana, IL, in 1988. The F2, F3, and F4 generations were advanced by a modified single-seed-descent procedure in Puerto Rico during the winter of 1988–1989 and at Urbana in the summer of 1989. The F5 generation was grown as plant rows in 1990. Single plant rows were selected, composited, and evaluated in replicated yield trials in Illinois in 1991 and 1992. Cisne was evaluated as LN90-4129 in Preliminary Test IVA in 1993 and in Uniform IV Test in 1994 of the Uniform Soybean Tests—Northern Region Test (5).

Cisne is an indeterminate Group IV maturity (relative maturity 4.4) cultivar, similar to ‘Spencer’ (6). It is best adapted to 38 to 41° N lat. Compared with Spencer, Cisne averaged 2% higher seed yield, 25 mg seed\(^{-1}\) higher seed weight, 8 g kg\(^{-1}\) higher seed protein concentration, and 12 cm shorter plant height. Cisne is similar to Spencer in seed quality scores and seed oil concentration.

Cisne has purple flowers, tawny pubescence, tan pods at maturity, and dull yellow seeds with black hila. Cisne has \(\text{Rps}_1\) and \(\text{Rps}_3\) genes for resistance to phytophthora rot (Races 1 and 7). Cisne is susceptible to brown stem rot (caused by Phialophora gregata (Allington & D.W. Chamberlain) W. Gams) and Fusarium sojae (M.J. Kaufmann & J.W. Gerdemann) and is moderately resistant to sudden death syndrome (caused by Fusarium solani (Mart.) Sacc.) and Phytophthora sojae (M.J. Kaufmann & J.W. Gerdemann) and brown stem rot (caused by Fusarium solani (Mart.) Sacc.).

Application has been made for U.S. plant variety protection for ‘Cisne’, permitting only production of Foundation seed beyond Breeder seed. Seed of Cisne is being increased by seed organizations in Illinois, Iowa, Kansas, Kentucky, Missouri, Nebraska, and Wisconsin for planting in 1995. Foundation seed will be available to qualified certified seed producers in Illinois, Iowa, Kansas, Kentucky, Missouri, Nebraska, and Wisconsin for planting in 1996.

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Registration of ‘Macon’ Soybean

‘Macon’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-350, PI 593258) was developed by the Illinois Agricultural Experiment Station at the University of Illinois and released in August 1995. This is a Maturity Group III cultivar, released because of its higher yield compared with cultivars of similar maturity.

Macon originated as an F4–plant selection from the cross ‘Sherman’ × ‘Resnik’ made at the Illinois Agricultural Experiment Station (1,2). The original cross was made in the field in the summer of 1986, and the F1 generation was grown in the field in 1987. The F2, F3, and F4 generations were advanced by a modified single-seed-descent procedure in Puerto Rico during the winter of 1987–1988 and at Urbana, IL, in the summer of 1988. The F5 generation was grown as plant rows in 1989. Single plant rows were selected, composited, and evaluated in replicated yield trials in Illinois in 1990 and 1991. Macon was evaluated as LN90-295 in Preliminary Test IVA in 1993 and in Uniform IV Test in 1994 of the Uniform Soybean Tests—Northern Region Test (5).

Macon is best adapted to 39 to 41° N lat. Compared with Resnik, Macon averaged 2% higher seed yield, 25 mg seed\(^{-1}\) higher seed weight, 8 g kg\(^{-1}\) higher seed protein, 4 g kg\(^{-1}\) lower seed oil, and 5 cm taller plant height. Macon is similar to Resnik in lodging and seed quality scores. Macon is susceptible to brown stem rot (caused by Phytophthora sojae M.J. Kaufmann & J.W. Gerdemann) and Fusarium sojae (M.J. Kaufmann & J.W. Gerdemann) and is moderately resistant to sudden death syndrome (caused by Fusarium solani (Mart.) Sacc.).

Application has been made for U.S. plant variety protection for ‘Macon’, permitting only Foundation seed beyond Breeder seed. Breeder seed of Macon was distributed to foundation seed organizations in Illinois, Iowa, Kansas, Kentucky, Missouri, Nebraska, and Wisconsin for planting in 1995. Foundation seed will be available to qualified certified seed producers in Illinois, Iowa, Kansas, Kentucky, Missouri, Nebraska, and Wisconsin for planting in 1996.

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