Registration of ‘LN89-3264’ Soybean

‘LN89-3264’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-382, PI 597383) was developed by the Illinois Agricultural Experiment Station at the University of Illinois and released in August 1996. This is a Maturity Group II cultivar, released because of its resistance (Rps1-k gene) to Phytophthora sojae M.J. Kaufmann & J.W. Gerdemann) and higher yield compared with cultivars of similar maturity.

LN89-3264 originated as an F4-plant selection from the cross of ‘Hobbit 87’ × ‘Elgin 87’ made at the Illinois Agricultural Experiment Station (1,2). The Hobbit 87 × Elgin 87 cross was made in the field in the summer of 1986, and the F1 generation grown in the field in 1987. The F2 and F3 generations were advanced by single-seed descent in Puerto Rico during the winter of 1987–1988 and the F4 generation was grown at Urbana in the summer of 1988. The F5 generation was grown as plant rows in 1989 and single-plant rows were selected, composited, and evaluated in replicated yield trials in Illinois, 1990 through 1995. LN89-3264 was evaluated in the Preliminary Test IIB in 1994 and Uniform II Test in 1995 of the Uniform Soybean Tests—Northern Region Test: 1995 (3).

LN89-3264 is classified as Group II maturity (relative maturity 2.8) 5 d later than ‘IA2021’. It is best adapted to 40 to 42° N lat. When compared with IA2021, LN89-3264 averaged 3% lower yield, lower seed quality score (1.3 vs. 2.0), and lower lodging score (1.2 vs. 1.5). LN89-3264 is similar to IA2021 in plant height, seed protein and oil content.

LN89-3264 has white flowers, tawny pubescence, brown pods at maturity, and shiny yellow seeds with black hila. LN89-3264 has the Rps1-k gene, which confers resistance to multiple races of P. sojae, and is susceptible to brown stem rot [caused by Phialophora gregata (Allington & D.W. Chamberlain) W. Gams.] and sudden death syndrome [caused by Fusarium solani (Mart.) Sacc.].

LN89-3264 is a nonexclusive release for the use by seedsmen for brand labeling. Parent seed of LN89-3264 will be maintained and distributed by Illinois Foundation Seeds, Inc., Route 45 South, Champaign, IL. A research assessment fee of $0.70 per 50-pound unit (= 22.7 kg) of the commercial class of seed sold will be collected. A small sample of seed of LN89-3264 may be obtained from the authors for research purposes for at least five years.

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References and Notes

4. Dep. of Crop Sciences, Univ. of Illinois, 1102 S. Goodwin, Urbana, IL 61801. The uniform soybean tests, northern states: 1995. USDA-ARS, West Lafayette, IN.

Registration of ‘LN89-3615’ Soybean

‘LN89-3615’ soybean [Glycine max (L.) Merr. (Reg. no. CV-383, PI 597384)] was developed by the Illinois Agricultural Experiment Station at the University of Illinois and released in August 1996. This is a Maturity Group IV cultivar, released because of its resistance (Rps1-k gene) to Phytophthora sojae M.J. Kaufmann & J.W. Gerdemann) and higher yield compared with cultivars of similar maturity.

LN89-3615 originated as an F4-plant selection from the cross of ‘Hobbit 87’ × Asgrow ‘A3205’ made at the Illinois Agricultural Experiment Station (4). Asgrow A3205 was developed by Northrup King ‘S1474’ × Asgrow ‘S1474’ is a selection from ‘Hark’ × ‘Wayne’; it is a selection from ‘Williams’ × ‘Essex’. Asgrow A3205 cross was made in the field in 1988. The F5 generation was grown in the field and the F6 generation grown in the field during the winter of 1987 and 1988 and the F7 generation grown at Urbana in the summer of 1988. Single-plant rows were advanced by single-seed descent in Puerto Rico during the winter of 1987–1988 and the F7 generation grown in the field during the winter of 1987 and 1988. LN89-3615 is classified as Group IV maturity (relative maturity 2.8) maturing 6 d later than ‘Flyer’ (5). It is best adapted to 41° N lat. Compared with Flyer, LN89-3615 averaged 4.3% higher yield, 45 mg seed” larger seeds, and 10 g kg” lower seed protein content.

LN89-3615 has purple flowers, tawny pubescence, brown and tan pods at maturity, and shiny yellow seeds with black hila. LN89-3615 has the Rps1-k gene, which confers resistance to multiple races of P. sojae; it is susceptible [caused by Phialophora gregata (Allington & D.W. Chamberlain) W. Gams.] and sudden death syndrome [caused by Fusarium solani (Mart.) Sacc.].

LN89-3615 is a nonexclusive release for the use by seedsmen for brand labeling. Parent seed of LN89-3615 will be maintained and distributed by Illinois Foundation Seeds, Inc., Route 45 South, Champaign, IL. A research assessment fee of $0.70 per 50-pound unit (= 22.7 kg) of the commercial class of seed sold will be collected. A small sample of seed of LN89-3615 may be obtained from the authors for research purposes for at least five years.

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References and Notes


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