REGISTRATION OF ‘DUNBAR’ SOYBEAN

‘DUNBAR’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-292, PI 552538) was developed by the Nebraska Agricultural Experiment Station. It was released in 1991 because of its superiority in yield to public cultivars of similar maturity, especially in Nebraska environments.

Dunbar was derived from an F4 plant selected from the cross ‘Platte’ × ‘A3127’(4). A3127 is a cultivar from the Asgrow Seed Co., Kalamazoo, MI, which was selected from the cross ‘Williams’ × ‘Essex’ (1,3). The population from which Dunbar was selected was advanced to the F4 generation at the Nebraska Agricultural Experiment Station Lincoln Agronomy Farm by harvesting a bulk of two pods per plant in the F2 and F3 generations. Dunbar was evaluated for yield in Nebraska from 1985 through 1990, and in the Uniform Soybean Tests, Northern States, from 1988 through 1990 under the designation U85-74089.

Dunbar is a Maturity Group III cultivar, with maturity similar to ‘Resnik’, and is best adapted as a full season cultivar from approximately 40 to 42° N lat. It has an indeterminate growth habit, purple flowers, gray pubescence, brown pods, and shiny yellow seeds with imperfect black hila. Compared with ‘Resnik’ (2) in regional tests, Dunbar has similar lodging resistance and plant height, 9 mg seed-1 lower seed weight, similar seed quality and protein and oil content, and better tolerance to Fe-deficiency chlorosis on calcareous soil. Dunbar averaged 8% higher yield than Resnik in Nebraska environments.

Dunbar is resistant to races 1 and 4 of Phytophthora rot [Phytophthora megasperma (Drechs.)], pod and stem blight [caused by Diaporthe phaseolorum (Cooke & Ellis) Sacc., and soybean mosaic virus. Dunbar is susceptible to purple stain [caused by Cercospora kikuchii (Matsumoto & Tomoyasu) M.W. Gardner], brown stem rot [caused by Phialophora gregata (Allington & D.W. Chamberlain) W. Gams] and bacterial tan spot [caused by Curtobacterium flaccumfaciens pv. flaccumfaciens (Hedges) Collins & Jones].

Breeder seed of Dunbar was distributed to the foundation seed organization in Nebraska for planting in 1991. Breeder seed will be maintained by the Nebraska Agricultural Experiment Station, Lincoln.

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References and Notes


REGISTRATION OF ‘COOK’ SOYBEAN

‘COOK’ soybean [Glycine max (L.) Merr.] (Reg. no. CV-293, PI 553045) was developed by the Georgia Agricultural Experiment Stations and cooperatively released by the Alabama and Florida Agricultural Experiment Stations in May of 1991 because of its multiple disease resistance and high productivity. It was tested in the experimental designation G83-266.

Cook was derived from an F5 plant from the cross ‘Platte’ × ‘Young’ (1,2). The generations were advanced to the single pod-bulk method to the F4 generation at the Georgia Agricultural Experiment Stations and cooperatively released in Georgia, Alabama and Florida Agricultural Experiment Stations. It has a determinate growth habit, gray pubescence, and tan pod walls. Seed is dark brown with dull seed coats and black hila. The black pigment in the hilum can vary across environments, and even on different seeds from the same plant. Cook is resistant to the common races of frogeye leaf spot (caused by Cercospora sojina K. Harp) [caused by Diaporthe phaseolorum (Cooker var. caulivora Athow & Caldwell), powdery mildew (caused by Microsphaera diffusa Cooke & Peck), and bacterial pod and stem blight (caused by Xanthomonas campestris pv. glycines Xanthomonas campestris pv. glycines) Dye]. It is resistant to races 1 and 4 of Phytophthora rot [Phytophthora megasperma (Drechs.)], and has moderate resistance to the southern root-knot nematode [Meloidogyne incognita (Kofoid & White) Chitwood]. It is susceptible to soybean cyst nematode (Heterodera glycines Ichinohe) (3,4).

Breeder seed of Cook was distributed to the Georgia Agricultural Experiment Stations in 1991. The Georgia Agricultural Experiment Stations will be responsible for the maintenance of breeder seed.


References and Notes