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 indefinite 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 & Tonomasu) 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 in Alabama and Florida Agricultural Experiment Stations in May of 1991 because of its multiple disease resistance and high productivity. It was tested under the experimental designation G83-266.

Cook was derived from an F₅ plant from ‘Jones’ × ‘Young’ (1,2). The generations were tested under the single pod-bulk method to the F₅ generation in Alabama and Puerto Rico. The line was tested in Georgia in 1983 to 1989. It was released in the Uniform National Region (Uniform Group VIII) from 1983 to 1989.

Cook has a determinate growth habit, tawny pubescence, and tan pod walls. Seed coats are dull black with dull seed coats and black hila. The intensity of the black pigment in the hilum can vary across environments and even on different seeds from the same population. Cook is of Maturity Group VIII and matures the same day or 1 d later than ‘Coker 6738’ (1,3). It is similar in plant height and lodging to Coker 6738. Its seed weight averaged 27% greater than Kirby and 20% greater than Coker 6738. It is similar in protein and oil content to Kirby. Cook averaged 12 and 25% higher in seed yield across environments than Coker 6738 and Kirby, respectively.

Cook is resistant to the common races of soybean mosaic virus, brown stem rot [caused by Cercospora sojina (K. Hara), stem canker [caused by Phytophthora megasperma (Drechs.)], pod and stem blight [caused by Diaporthe phaseolorum (Cooke & Ellis) Sacc., var. caulivora Athow & Caldwell], powdery mildew (caused by Microsphaera caulivora A. Gams] and bacterial tan spot [caused by Xanthomonas campestris pv. glycinea (Dye) (3,4). It 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 foundation seed organizations in 1991. The Georgia Agricultural Experiment Stations will be responsible for the maintenance of breeder seed.


References and Notes

3. Hartwig, E.E. 1990. The uniform tests, southern research station, USA-ARS, Stoneville, MS.