

cm mature plant height, 14.8 g 100-seed weight, 421 g kg⁻¹ protein, and 201 g kg⁻¹ oil in the seed on a dry weight basis.

Athow is an indeterminate Maturity Group III cultivar (relative maturity 2.3) that has purple flowers, tawny pubescence, and tan pods at maturity (up to 2% of plants may have brown pods) containing dull yellow seeds with black hila and high peroxidase activity in the seedcoat. This cultivar is adapted to production from 38° to 41° N lat in the USA where Maturity Group III cultivars have been successfully grown. Athow has the *Rps1-k* allele that confers resistance to *P. sojae* Races 1 through 11, 13 through 15, 17, 18, 21 through 24, 26, 36, 37, and 42 through 44. Athow has scores of 3.2 and 2.0 for iron chlorosis (on a scale of 1 for no chlorosis to 5 for severe chlorosis) (8). Athow is susceptible to brown stem rot [caused by *Phialophora gregata* (Allington & D.W. Chamberlain) W. Gams] and to sudden death syndrome (SDS) [caused by *Fusarium solani* (Mart.) Sacc. f. sp. *phaseoli* (Burk.) W.C. Snyder & H.N. Hans.].

Additional information on the performance and characteristics of Athow are reported in the Uniform Soybean Tests Northern Region 1995 (8). Foundation seed of Athow was produced in the releasing states Illinois and Indiana in 1996 and will be available for production of registered seed in 1997. U.S. plant variety protection of Athow soybean is pending (PVP 9700247). A small sample of seed of Athow for research purposes may be obtained from the authors for at least 5 yr.

JAMES R. WILCOX* AND T. SCOTT ABNEY (11)

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Registration of 'Benning' Soybean

'Benning' soybean [*Glycine max* (L.) Merr.] (Reg. no. CV-367, PI 595645) was developed by the Georgia Agricultural Experiment Stations and released in January of 1996 because of its disease and nematode resistance and high productivity. Benning was derived from an F₄ plant from the cross 'Hutcheson' × 'Coker 6738' (2,4). The generations were advanced by the single pod–bulk method to the F₄ generation in Georgia and Puerto Rico. The line was tested in Georgia for disease resistance, agronomic performance, and seed yield from 1989 to 1995 (5,6,7). It was evaluated in the Uniform Soybean Tests, Southern Region (Uniform Group VII) from 1992

to 1995 (8). It is adapted to the southeastern USA where Maturity Group VII soybean cultivars are commonly grown. It was tested under the experimental designation G88-3266.

Benning has a determinate growth habit, purple flowers, tawny pubescence, and tan pod walls. Seeds are yellow, with shiny seedcoats and brown hila of varying intensity. Benning is Maturity Group VII (relative maturity 7.8) and matures 1 d earlier than 'Haskell' and 4 d later than 'Stonewall' (1,9). It is similar in plant height (86 cm) to Haskell and lodging (score of 1.6 on a scale of 1 to 5, where 1 = all plants upright and 5 = all plants prostrate) to Stonewall. Seed quality (score of 1.8 on a scale of 1 to 5, where 1 = excellent and 5 = poor) and seed weight (150 mg seed⁻¹) of Benning are similar to Haskell. Seed of Benning averages 2 g kg⁻¹ more oil and 6 g kg⁻¹ more protein than Haskell. Benning averaged 2 and 8% higher in seed yield across 51 southern U.S. environments than Haskell and Stonewall, respectively (5,6,7,8).

Benning is resistant to southern stem canker [caused by *Diaporthe phaseolorum* (Cooke & Ellis) Sacc. var. *meridionalis* F.A. Fern. (3)] and bacterial pustule [caused by *Xanthomonas campestris* pv. *glycines* (Nakano) Dye] (8). It has resistance to the southern [Meloidogyne incognita (Kofoid & White) Chitwood], peanut [M. arenaria (Neal) Chitwood], and javanese [M. javanica (Treub) Chitwood] root-knot nematodes (5,8). It is moderately resistant to the prevalent races of frogeye leaf spot (caused by *Cercospora sojina* K. Hara) and is resistant to Race 3 of the soybean cyst nematode (*Heterodera glycines* Ichinohe) (5,8).

Breeder seed of Benning was provided to the Georgia Seed Development Commission in 1995. The Georgia Agricultural Experiment Stations will be responsible for the maintenance of breeder seed. The University of Georgia Research Foundation, Inc., has licensed the marketing rights of Benning to Southern Elite Genetics Association, Inc. Small quantities of seed for research purposes can be obtained from the corresponding author.

H. R. BOERMA,* R. S. HUSSEY, D. V. PHILLIPS, E. D. WOOD, G. B. ROWAN, AND S. L. FINNERTY (10)

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