creased summer forage production and early seed maturation at Tifton, Ga. (Other forage cultivars of the hyacinth bean do not produce seed at this latitude.) It was tested as Tifton Elite Line No. 1. The germplasm was derived from crosses of the forage cultivar ‘Rongai’ to line 67-13 (PI 316899), a bushy, early-maturing introduction from Brazil. Vigorous, early-flowering F₃ lines were bulked to form Tift-1.

Tift-1, a summer annual legume, has a semi-erect growth habit with some tendency to vining. Leaflets of the trifoliate leaves have a broad-ovate shape. Cream colored flowers are self-pollinated and are borne in racemes and have a distinct odor. Seed pods are flat or inflated. Seeds are fairly large (about 1 cm long) and vary in color from light to dark brown. The seed coat is smooth and the prominent hilum is white in color. Seed yields are good, but the seeds mature over several weeks. Forage yields of over 2 metric tons/ha have been obtained. Beef cattle graze Tift-1 more readily than do dairy animals.³

Tift-1 is very attractive to the corn earworm (Heliothis zea Boddie), tobacco budworm (H. virescens Fabricius), and other Heliothis spp., and has been used by Gross et al.⁴ to propagate these insects for research purposes.

Seed of the germplasm will be maintained at Tifton by USDA-ARS. Small quantities (up to 100 grams) will be made available to researchers who wish to evaluate this germplasm. Address requests to Dr. John D. Miller, USDA-ARS, Agronomy Dep. or Dr. Homer D. Wells, USDA-ARS, Plant Pathology Dep., both at the Coastal Plain Station, Tifton, GA 31793.

REGISTRATION OF A SOYBEAN GERMPLASM POPULATION¹
(Reg. No. GP 42)

J. W. Burton and C. A. Brim²

The soybean [Glycine max (L.) Merr.] population, NC-1, was developed cooperatively by the North Carolina Agricultural Research Service and the USDA-ARS. NC-1 is a composite population with high percent seed protein, made of eight advanced F₂ families (lines) which were advanced without selection through the F₅ generation. The lines are in Maturity Group VII and were derived in the seventh cycle of recurrent selection for increased percent protein in the seed in population IA. Population IA originated from a set of 247 F₄ derived lines from a cross between the parents, D55-4110 and N56-4071. The details of the selection method have been described elsewhere². The eight lines making up NC-1 were originally tested and selected in the F₃ generation and then advanced to the F₅ generation. In the F₅ generation they were tested along with two released cultivars, ‘Ransom’ and ‘Bragg’, in two replications at two locations. In those tests the eight lines had a mean percent protein of 49.4 and ranged from 47.9 to 50.2. Mean percent oil was 16.9. Yields of the eight lines ranged from 2,704 to 2,018 kg/ha with a mean of 2,273. Bragg and Ransom had protein concentrations of 42.1 and 43.6%, respectively.

A4 is resistant to race 1 of phytophthora root rot [caused by Phytophthora megasperma (Drechs.) A. A. Hildebrand, and target spot caused by Corynespora phaseolorum (Cke. & Ell.) var. sojae Wehm.] and do not imply its approval to the exclusion of other products of vendors. A4 is an F₄ plant selection from the cross L15 × PI 84.946-2. PI 84.946-2 is the original source of resistance to brown stem rot. F₄ seed of the population was obtained from Improved Variety Research, Inc., and advanced the population by single-seed descent. A4 was evaluated in Iowa for brown stem rot resistance during 1976 to 1977 and for agronomic performance during 1977. It was evaluated in the Uniform Soybean Tests, Northern States, during 1976 to 1977 under the designation A75-332035. AP68-1016 was selected from a line derived from Improved Variety Research, Inc., and has desirable agronomic characteristics. A4 is resistant to race 1 of phytophthora root rot [caused by Phytophthora megasperma (Drechs.) A. A. Hildebrand, and target spot caused by Corynespora phaseolorum (Cke. & Ell.) var. sojae Wehm.] and do not imply its approval to the exclusion of other products of vendors.