Registration of ‘AC Skipper’ Navy Bean

‘AC Skipper’ navy bean (*Phaseolus vulgaris* L.) (Reg. no. CV-130, PI 590540) was developed at the Research Centre, Agriculture and Agri-Food Canada, Lethbridge, AB, Canada, and was released in 1995. AC Skipper was derived from an F3.6 bulk of the complex cross ‘Redcloud’/Kentwood*2/2/Swan Valley*4/Redcloud/Kentwood*2/2/Swan Valley/3/Kentwood. The final cross was made in 1987 at the Lethbridge Research Centre by Gavin Kemp, and early-generation populations were advanced indoors. Twenty F3.5 bulks originating from 20 individual F3.4 rows were established in a pedigree nursery at Lethbridge in 1989 and eight F3.6 bulks were selected for early maturity and plant type. The eight bulks were further evaluated in the field at Lethbridge in 1990 and the line A8701-B5-S1 was selected for its early maturity, improved yield and plant uniformity. The progenies of 100 single plants selected from A8701-B5-S1 were bulked to produce AC Skipper.

AC Skipper was evaluated in the Western Canada Bean Cooperative Trials during 1991 to 1993 under the designation of LRS91-1. These trials (24 location-years) were conducted at four rainfed and five irrigated sites in wide (45 to 70 cm) and narrow (23 to 30 cm) rows. AC Skipper flowered less than 1 d earlier, matured 2 to 3 d earlier, and was less susceptible to lodging than the check ‘OAC Seafort’. AC Skipper yielded 2266 kg ha⁻¹ (12% more than the check) under irrigation and 1962 kg ha⁻¹ (6% more than the check) overall (24 location-years). It performed exceptionally well in narrow row trials, where it yielded 1858 kg ha⁻¹ (18% more than the check). The seed weight of AC Skipper was 186 mg seed⁻¹, compared with 175 mg seed⁻¹ for OAC Seafort.

Seed samples obtained from all trial locations in 1991 were canned according to industrial procedures and AC Skipper was the best entry compared with OAC Seafort (which was deemed unacceptable). AC Skipper and OAC Seafort had good soak up and drain weights, but AC Skipper showed almost no matting in the can, whereas OAC Seafort had matting levels ranging from slight to moderate. AC Skipper showed consistent canning quality across locations and the general appearance of the canned product was rated very good.

AC Skipper has a determinate short bush (CI), erect growth habit, green hypocotyl, white flowers, and gray seed coat. In the cooperative trials, it was similar to OAC Seafort for resistance to cortical root rot caused by *Fusarium* Schlechtend.:Fr. e.g., *phaseoli* J.B. Kendrick & W.C. Snyder, and root rots caused by *Pythium* spp. and *Rhizoctonia solani* blights caused by *Xanthomonas campestris* pv. *p. phaseoli* Young et al., and white mold caused by *Sclerotinia* (Lib.) de Bary.

The production of navy bean is geographically restricted in western Canada because the short growing season prevents existing cultivars to reach full maturity in most years. AC Skipper’s early maturity and very good canning characteristics will permit producers in the short growing season areas of western Canada to access canning quality markets on a consistent basis.

The excellent performance of AC Skipper in the trials will also make it attractive to producers interested in canning beans in solid stands to reduce input costs.

Exclusive seed production and marketing rights have been established with J. Klemm, P.O. Box 150, Lake, AB, T0K 0Z0, Canada. Small quantities of seed for and experimental purposes may be obtained from the Research Centre.

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References and Notes


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Registration of ‘AU GroundCover’ Caleypea

‘AU GroundCover’ (Reg. no. CV-129, PI 576132) caleypea (*Lathyrus hirsutus* L.) was jointly developed and released by Auburn University, Alabama Agricultural Experiment Station, and the USDA-NRCS in 1994. The cultivar had its beginning in 1983, when a collection of caleypea and other legume cover crops was screened at the Americus Plant Material Center in Georgia. The best 23 ecotypes from 140 accessions collected from fields and roadsides in central and northern Alabama by the USDA-NRCS were tested in Alabama and Georgia. Single plant selection was used to develop this cultivar. AU GroundCover, originally designated Composite C3, was derived from the five plants most uniform in maturity and morphology.

Breeder seed of AU GroundCover will be jointly maintained by Auburn University, Alabama Agricultural Experiment Station, and the USDA-NRCS.

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