Registration of ‘Vernal’ Soybean

‘VERNAL’ SOYBEAN [Glycine max (L.) Merr.] (Reg. no. CV-305, PI no. 564261) was developed by the Agricultural Research Service, U.S. Department of Agriculture in cooperation with the Mississippi Agricultural and Forestry Experiment Station, Stoneville, MS. Vernal was released in 1992 because of its superior productivity in early plantings in Mississippi and in plantings from early March to early August in the lower Rio Grande Valley of Texas. Prior to release it was identified as D82-2740.

Vernal was developed from an F₅ line selected from the cross D77-12244/‘Bedford’ (4). D77-12244/1 is a selection from ‘Tracey’/‘Hill’/PI 159925 (2, 6), which has the characteristic “long juvenile period under short-day conditions.” PI 159925 is the source of this character. Vernal was observed for the long juvenile character in winter plantings in Puerto Rico and at Culiacan, Mexico. It has been evaluated for seed yield in May and early June plantings at Stoneville from 1983 to 1991, in April 20 plantings at Stoneville 1986–1991, and in plantings made at 30 d intervals from early March to early September in the lower Rio Grande Valley of Texas in 1988 and 1989.

Seed yield (2825 kg ha⁻¹, date mature (16 October), and plant height at maturity (106 cm) were nearly similar for Vernal and ‘Centennial’ (3) when plantings were made during May or early June at Stoneville. However, when planted 20 April the two cultivars differ appreciably in seed yield, early bloom date, plant height, and date mature (Table 1). In plantings made in the lower Rio Grande Valley of Texas (lat. approximately 26°) in early March, and in April, Vernal yielded 3940 kg ha⁻¹ and Centennial 860 kg ha⁻¹. The average number of days to maturity for Vernal was 140. Cultivars of Group IX maturity flowered early, then became vegetative, and did not mature until late November, and produced little seed. In June or July plantings, optimum for Group IX cultivars, Vernal equaled ‘Santa Rosa R’ (7) in seed yield and was superior to ‘Jupiter R’ (5).

Vernal has a determinate growth type, plants have white flowers, grey pubescence, and pods are tan at maturity. Seeds are yellow with buff hila and average 136 mg. Vernal is resistant to stem canker caused by Diaporthe phaseolorum f. sp. meridionalis (Cooke and Ellis) Sacc. f sp. meridionalis.

Meridian was developed for irrigated cereal production areas along the Snake River Plain of Idaho.

Meridian is a hard red winter (HRW) wheat bred at Oregon State University in the irrigated cereal production areas along the Snake River Plain of Idaho.

Registration of ‘Meridian’ Wheat

‘MERIDIAN’ WHEAT (Triticum aestivum L., Reg. no. CV-788, PI 557013) was released in 1992 jointly by the Agricultural Research Service, U.S. Department of Agriculture and USDA, Agricultural Research Service. Meridian is a hard red winter (HRW) wheat bred for irrigated cereal production areas along the Snake River Plain of Idaho.

Meridian is a pureline selection from A75232W-3-2, a cross of A68231W-A-7-5-3 with A71111W-5-1. A-7-5-3 was an Aberdeen winter wheat breeding pedigree ‘Cheyenne’/‘Lee’/‘Transfer’/‘Santa Rosa R’/‘Rex’/‘Rio’/‘Nebred’. The breeding line A71111W-5-1 is a cultivar of ‘Cheyenne’/‘Lee’, which is resistant to stem canker caused by Diaporthe phaseolorum f. sp. meridionalis (Cooke and Ellis) Sacc. f sp. meridionalis.

Seed is being increased in Mississippi and seed will be maintained by the Delta Branch, Mississippi Agricultural and Forestry Experiment Station. Seed for research purposes will be available for at least 5 yr from Soybean Production Research Unit, P.O. Box 196, Stoneville, MS 38776.

References and Notes
