of the seed appears dark maroon, similar to its Anasazi parent. USWA-27 should be useful to breeders who want to modify this novel germplasm for wider adaptation and production.

A limited quantity of seed of USWA-27 is available from Phillip N. Miklas, Vegetable and Forage Crop Production Research Unit, USDA-ARS, 24106 N. Bunn Rd., Prosser, WA 99350-9687. It is requested that appropriate recognition be made if this germplasm contributes to the development of a new breeding line or cultivar. Genetic material of this release will be deposited in the National Plant Germplasm System, where it will be available for research purposes, including development and commercialization of new cultivars.

M. J. Silbernagel, A. N. Hang,* and P. N. Miklas (2)

References and Notes

1. Anasazi as a name for this type of mottled bean is a registered trademark of the Adobe Bean Co., Dove Creek, CO.


Registration of C1944 and C1945 Soybean Germplasm with High Seed Protein and Moderate Seed Oil Concentration

C1944 (Reg. no. GP-259, PI 599584) and C1945 (Reg. no. GP-260, PI 599585) are soybean [Glycine max (L.) Merr.] germplasms that average 486 g kg\(^{-1}\) seed protein and 186 g kg\(^{-1}\) seed oil on a moisture-free basis, and have moderately good seed yield. The source of high seed protein in both C1944 and C1945 is the cultivar Pando (1). These germplasm lines were developed by the USDA-ARS and Purdue University Agricultural Research Programs, in their cooperative soybean breeding and genetics project. The lines will be useful for increasing seed protein while minimizing reductions in seed oil content.

C1944 is an F\(_4\)-derived line from the cross CRS3-998-24-1 x HC85-2206, designated CX1517. The parent CRS3-998-24-1, from a recurrent-selection population for high seed protein content, has averaged 514 g kg\(^{-1}\) seed protein and 152 g kg\(^{-1}\) seed oil (6). The parent HC85-2206 is a determinate selection from the cross ‘Elf x Williams’ (2,3) and was evaluated in Uniform Test IV of the Uniform Soybean Tests—Northern States in 1991 (4).

The cross was made in the field in 1991 at West Lafayette, IN, and the F\(_1\) generation grown in Puerto Rico during the winter of 1991–1992. The F\(_2\) through F\(_4\) generations were advanced by single-seed descent at West Lafayette, in the greenhouse and in the field. The F\(_4\) generation was grown in plant rows in 1994. Indivi-

dual families were selected on the basis of high seed protein and intermediate seed oil in the F\(_4\) and evaluated in two experiments: 1) at West Lafayette in 1995 in a field trial with 50 cultivars and 2) at West Lafayette and Champaign in 1995 in a head-to-head competition. C1944 has averaged 514 g kg\(^{-1}\) seed protein and 152 g kg\(^{-1}\) seed oil.

C1945 is an F\(_4\)-derived line from a recurrent selection for high seed protein concentration (6). An S\(_0\) plant that had 506 g kg\(^{-1}\) protein and 174 g kg\(^{-1}\) oil in Cycle 4 of the recurrent selection population was used as a progeny of this plant during three successive generations of breeding averaged 479 g kg\(^{-1}\) seed protein and 107 g kg\(^{-1}\) seed oil.

The F\(_4\)-derived line that became C1945 was evaluated in appropriate performance tests at West Lafayette, IN, and the same tests, 3-yr mean data for C1945 were 3160 kg ha\(^{-1}\) seed yield, 27 September maturity date, 1.8 lodging score, 102 cm mature plant height, 419 g kg\(^{-1}\) seed protein, and 107 g kg\(^{-1}\) seed oil. C1945 is an indeterminate line that has pubescence, and brown pods at maturity, with seeds with black hila.

Packets of 100 seeds of C1944 and C1945 will be available from the author, upon request, for at least 5 yr from the date of this publication. Appropriate recognition of the source should be made if these germplasms are used in research or contribute to the development of new breeding lines or cultivars.

References and Notes

7. J.R. Wilcox, USDA-ARS Crop Production and Protection Research, Dep. of Agronomy, Purdue Univ. West Lafayette, IN. C1944 and C1945 was supported by the Soybean Development Council and the United Distribution of the USDA-ARS and Purdue Univ. A paper no. 15411 of the Purdue University Agriculture by CSSA. Accepted 31 Dec. 1997. *Corresponding author (ahang@beta.ticity.wsu.edu).

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Registration of Early-Maturing Peanut Germplasm ICGV 92196, ICGV 92206, ICGV 92234, and ICGV 92243