kg ha⁻¹ at Pullman in 1999 (trial mean = 369 kg ha⁻¹) to 4331 kg ha⁻¹ at Pullman in 2000 (trial mean = 3859 kg ha⁻¹). Seed yield of spring sown cultivars in the Pacific Northwest from 2001 to 2006 averaged 2538 kg ha⁻¹, while Windham averaged 2616 kg ha⁻¹ during the same time period, indicating a modest yield advantage. Winter survival was 100% in trials conducted in Wyoming in 2004 and the Pacific Northwest in 2004 and 2006. Both years experienced harsh winter conditions resulting in differential killing of less winter hardy entries in the trials.

Breeder and Foundation seed of Windham will be maintained by the Washington State Crop Improvement Association and the Montana State Crop Improvement Association. Supervision will be provided by the Department of Crop and Soil Sciences, College of Agriculture, Home Economics and Natural Resource Sciences, Washington State University; Department of Plant Science and Plant Pathology, Montana State University, Bozeman, MT; and the USDA-ARS.

Small quantities of seed of Windham can be obtained from the corresponding author for at least five years from the date of publication. Seed of this release is deposited in the Plant Germplasm System where it will be available for research purposes, including development and commercialization of new cultivars. It is requested that appropriate recognition be made if this cultivar contributes to the development of new germplasm or cultivars. U.S. Patent will not be sought for Windham.

References


Registration of ‘Specter’ Winter Feed Pea

K. E. McPhee* and F. J. Muehlbauer

‘Specter’ (Reg. No. CV-26, PI 641005) is a winter feed pea (Pisum sativum L.) developed by the USDA-ARS in cooperation with the Washington Agricultural Research Center, Pullman, WA, the Idaho Agricultural Experiment Station, Moscow, ID, the North Dakota Agricultural Experiment Station, Fargo, ND, Oregon State University, Corvallis, OR, and released in 2006. Specter was released based on significant winter hardiness and tolerance to harsh winter conditions. This cultivar offers a unique opportunity for producers to establish a legume crop in the fall and transfer a significant portion of field preparation to the fall, avoiding cold, wet soil conditions in the spring. It is the first winter-hardy feed pea to be released in the USA that lacks pigmentation of the seed and foliage.

Specter, PS9830F009, originated as an F₆ selection from the cross, PI 167253/D258-1-3/B686-320-0/4/FENN*3/WIS7105 made in 1992 by F.J. Muehlbauer. PI 167253 is an accession having tall plant habit (Le), pigmented seeds; it was chosen as a parent based on its high degree of winter hardiness. D258-1-3 is a winter hardy breeding line with semi-dwarf plant habit (le) and conventional seeds; it was chosen as a parent based on its high degree of winter hardiness. D258-1-3 is a winter hardy breeding line with semi-dwarf plant habit (le) and conventional seeds; it was chosen as a parent based on its high degree of winter hardiness. B686-320-0 is a multivirus resistant line (Provvidenti et al., 1991) that blooms at the 9–10th node, has semi-dwarf plant habit (le), and bears two white flowers. Functionally, it has the dominant I gene for yellow seed color, the recessive r gene for wrinkled seeds. ‘Fenn’ is a white flowered selection from the initial introduction of the winter pea (Murray and Slinkard, 1973). It has lower (Le) with conventional leaf morphology (Af), pigmented seeds, round seed shape (R), and marbled cotyledons. WIS7105 is a processing pea germplasm line used in a three-way cross between ‘New Season’, PI 167253 (Hagedorn and Gritton, 1971). WIS7105 has tall stature conferred by recessive le and is somewhat determinate.