UNITED STATES DEPARTMENT OF AGRICULTURE Agricultural Research Service Washington, D.C. 20250

and

AGRICULTURAL RESEARCH CENTER
Washington State University
Pullman, Washington 99164

and

IDAHO AGRICULTURAL EXPERIMENT STATION
University of Idaho
Moscow, Idaho 83844

and

NORTH DAKOTA AGRICULTURAL EXPERIMENT STATION North Dakota State University Fargo, ND 58105

NOTICE OF RELEASE OF 'STIRLING' DRY PEA

The Agricultural Research Service of the United States Department of Agriculture, the Washington Agricultural Research Center, the Idaho Agricultural Experiment Station, and the North Dakota Agricultural Experiment Station announce the release and naming of a green cotyledon spring pea (*Pisum sativum* L.), 'Stirling.' Stirling was developed by the U.S. Department of Agriculture, Grain Legume Genetics and Physiology Research Unit at Pullman, Washington, in cooperation with the College of Agriculture, Agricultural Research Center of Washington State University. Stirling, selection PS610152, originated as an F₅ selection made in 1995 from the cross Alaska 81/2/PS810088/Alaska 81/3/Radley made by F.J. Muehlbauer in 1993.

Stirling was yield tested in eastern Washington, northern Idaho, Montana and North Dakota for a total of thirty-two site-years. It outyielded 'Columbian', 'Alaska 81' and/or 'Joel' in seventeen of twenty yield tests within the Pacific Northwest. Stirling outyielded 'Columbian', the current industry standard, by an average of 18% over four years (2263 vs. 1920 kg/ha) (2022 vs. 1715 lbs/acre) in the Palouse region of eastern Washington and northern Idaho, the most likely region for production of this cultivar. Stirling outyielded 'Lifter', a recent release, by 25% in trials outside the Pacific Northwest (2001 vs. 1612 kg/ha) (1787 vs. 1440 lbs/acre). In addition to its improved yield potential, it has excellent green seed color that is resistant to seed bleaching.

Stirling flowers at the 14th node, reaches 50% flowering in 56 days after planting and matures in 104 days, approximately 4 days later than Columbian and 4 days earlier than Lifter. It has a semi-dwarf plant habit and an average height of 51 cm (21 inches). It has semi-leafless leaf morphology and maintains upright growth through maturity. Weight of 100 seeds for Stirling is twenty percent greater than Columbian (21.5 vs. 17.8 g) and is comparable to other cultivars currently being grown. Stirling is resistant to Fusarium wilt race 1 (caused by *Fusarium oxysporum* Schlecht. emend. Synd. and Hans. f. sp. *pisi*.) and powdery mildew (caused by *Erysiphe polygoni* DC).

Breeder seed will be maintained by the Washington State Crop Improvement Association. Foundation seed will be available from the Washington State Crop Improvement Association, Washington State University, Pullman, Washington, 99164.

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 varieties/cultivars. The Agricultural Research Service of the United States Department of Agriculture will seek a Plant Variety Protection Certificate for **Stirling** dry pea.

Release date for publicity purposes shall be effective on the date of final signature of the release notice.

It is requested that appropriate recognition be made if this germplasm contributes to the development of a new breeding line or cultivar.

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Director, Idaho Agricultural Experiment Station University of Idaho

Director, North Dakota Agricultural Experiment Station North Dakota State University

Administrator, Agricultural Research Service

U.S. Department of Agriculture

January 12, 2004

Date

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