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

and

## AGRICULTURAL RESEARCH CENTER Washington State University Pullman, Washington

and

## IDAHO AGRICULTURAL EXPERIMENT STATION University of Idaho Moscow, Idaho

## NOTICE OF RELEASE OF 'LIFTER' DRY PEA

The Agricultural Research Service of the United States Department of Agriculture, the Washington Agricultural Research Center and the Idaho Agricultural Experiment Station announce the release and naming of a green cotyledon spring pea (*Pisum sativum* L.), 'Lifter'. Lifter 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. Lifter, selection PS510718, originated as an F<sub>4</sub> selection from the cross PS810102/Alaska 81/2/PS810106/3/PS010838 made by F.J. Muehlbauer in 1993.

Lifter was yield tested in eastern Washington, northern Idaho, Montana and North Dakota for a total of twenty-five site-years. It outyielded 'Columbian', 'Alaska 81' and/or 'Joel' in nineteen of twenty-five yield tests (Table 1). Lifter outyielded 'Columbian', the current industry standard, by an average of 40% over three years (2464 vs. 1769 kg/ha) in the Palouse region of eastern Washington and northern Idaho, the most likely region for production of this cultivar. In addition to its improved yield potential, it has excellent dark green seed color which is retained under conditions conducive to seed bleaching.

Lifter flowers at the 17<sup>th</sup> node, reaches 50% flowering in 64 days after planting and matures in 104 days, approximately 2-5 days later than Columbian. It has a semi-dwarf plant habit and an average height of 31 inches (80 cm). It has normal leaf morphology and tends to lodge at maturity. Weight of 100 seeds for Lifter is twenty percent greater than Columbian (21.4 vs 17.8 g) and is comparable to other cultivars currently being grown. Lifter is resistant to fusarium wilt race 1 (caused by *Fusarium oxysporum* Schlecht. emend. Synd. and Hans. f. sp. *pisi*.), pea enation mosaic virus and powdery mildew (caused by *Ersiphe polygoni* DC). Lifter also has tolerance to fusarium root rot.

Lifter was named based on the expectation that this will be the last dry pea cultivar released by the USDA breeding program that will require lifters to be placed on combines for harvest. 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.

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

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. Plant variety protection will not be pursued for this variety.

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

Director, Agricultural Research Center Washington State University

ctor, Idaho Agricultur eriment Station University of Idaho

Administrator, Agricultural Research Ser U.S. Department of Agriculture

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Date