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

RELEASE OF A COMMERCIAL CULTIVAR OF LENTIL, PALOUSE

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 large-seeded yellow-cotyledon lentil cultivar, 'Palouse'. 'Palouse', was derived from a selection (WA256112), made in 1982 by F.J. Muehlbauer from an F_4 bulk population from the cross of 'Laird' x 'Precoz'. Laird is a large-seeded, yellow-cotyledon lentil cultivar developed by A.E. Slinkard at Saskatoon, Saskatchewan, Canada and Precoz is a medium-sized yellow lentil cultivar developed by E.A. Riva in Argentina. Laird is tall, weakly-upright, late flowering and late maturing; whereas Precoz is medium height, early flowering, early maturing and tends to have a determinant flowering habit. Selections within the Laird x Precoz cross were made for large seededness, absence of seed coat mottling and early maturity. After preliminary evaluations of those selections, Palouse (WA256112) was chosen for further tests. Palouse was evaluated for adaptation to the Palouse region of eastern Washington and northern Idaho by the U.S. Department of Agriculture, Grain Legume Genetics and Physiology Research Unit in cooperation with the Agricultural Research Center of Washington State University.

Palouse is released based primarily on its seed quality traits that include large seededness (100 seeds weigh an average of 6.8 g compared to 6.0 g for Brewer), and the lack of seed coat mottling. Seeds of Palouse have blunt edges, unlike most large-seeded cultivars. The blunt seed edge trait imparts good resistance to mechanical damage during threshing and processing. These seed quality traits are distinguishing features of the cultivar that should appeal to markets in the U.S. and internationally. Limited cooking trials, where Palouse was compared to Brewer, indicated a surprisingly similar cooking time of 25 minutes for each. However, the cooking liquid for Palouse was noticeably lighter than that of Brewer where a distinct brown liquid was noted after 15 minutes of cooking. Texture and taste of Palouse, as determined in a taste panel conducted by B.G. Swanson, Food Scientist at WSU, were preferred to that of Brewer.

Advanced yield trials that included Palouse were conducted at three locations each year from 1984 to 1987 in the Palouse region. When compared to Brewer, the most commonly grown cultivar in the region, Palouse was similar in yielding ability when all trials over the four year period were considered. Palouse has averaged 3 cm shorter than Brewer and 4 cm shorter than Chilean 78. Palouse was 1 day earlier to bloom than Brewer and 2 days earlier to bloom when compared to Chilean 78. Maturity of Palouse is comparable to Brewer and 2-3 days earlier than Chilean 78. Breeder seed of Palouse 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.

M. E. Carter — [p] Mary E. Carter, 1-5-88

Mary E. Carter, Acting Administrator — Date
Agricultural Research Service
U.S. Department of Agriculture

James Zuiches — 6/3/88

James Zuiches, Director — Date
Agriculture Research Center
College of Agriculture and Home Economics
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Gary Lee — 6-16-88

Gary Lee, Director — Date
Agricultural Experiment Station
University of Idaho