

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

and

AGRICULTURAL RESEARCH CENTER
Washington State University
Pullman, WA 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 'CEDAR' LENTIL

The Agricultural Research Service of the United States Department of Agriculture announces the release and naming of a red cotyledon zero-tannin lentil (*Lens culinaris* Medik.), 'CEDAR'. CEDAR was developed by the U.S. Department of Agriculture, Grain Legume Genetics and Physiology Research Unit at Pullman, Washington in cooperation with Washington State University Agricultural Research Center, University of Idaho Agricultural Experiment Station and North Dakota State University Agricultural Experiment Station. CEDAR, selection LC00600917RZ, originated as an F₇ selection from the cross of PI345635/'Palouse'/'Brewer'/'3/'Crimson' (cross number X95L005) made by F.J. Muehlbauer (retired USDA-ARS Research Geneticist) in 1995. Palouse is a large-seeded yellow cotyledon cultivar derived from the cross, 'Laird'/'Precoz' and developed by F.J. Muehlbauer. PI 345635 is a yellow cotyledon plant introduction accession with green seed coat pigmentation. Brewer is large-seeded yellow cotyledon cultivar developed by F.J. Muehlbauer at USDA-ARS. Crimson is a small-seeded red cotyledon cultivar developed by F.J. Muehlbauer. CEDAR was selected in the field in 2000 as selection number **LC00600917RZ**.

CEDAR was yield tested in eastern Washington and northern Idaho for a total of 8 site-years from 2001 to 2007. When averaged over site years, **CEDAR** produced 1151 kg/ha. Seed size of **CEDAR** is similar to Richlea and averages 4.7 grams per 100 seeds. The seed coat of **CEDAR** lacks tannin and will not discolor when held in storage for extended

periods of time. Also, in comparison to other lentil cultivars, **CEDAR** has nearly transparent seedcoats that allows the red cotyledons of the seeds to be visible through the seedcoats which imparts a light overall color to the seeds. The absence of seed coat pigmentation gives this cultivar a unique characteristic with value in niche markets and is the primary reason for the release of **CEDAR**.

CEDAR flowers an average of 57 days after planting and matures in 98 days. Therefore, crop development is very similar to that of other lentil market classes and approximately 10 days earlier to mature than other zero-tannin breeding lines. It has an upright plant habit with an average vine length of 35 cm (14 inches) at peak flowering and 33 cm (13 inches) at maturity. **CEDAR** is branched at the base and remains somewhat upright at maturity with a plant height index (ratio of canopy height at maturity to total vine length) of 0.94.

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, WA, 99164 and North Dakota Foundation Seedstocks, P.O. Box 5051, Fargo, ND 58105.

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 cultivar.

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

Date

Director, Idaho Agricultural Experiment Station
University of Idaho

Date

Director, North Dakota Agricultural Experiment Station
North Dakota State University

Date

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

Date