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REGISTRATION OF 'BREWER' AND 'EMERALD' LENTIL

'BREWER' (Reg. no. 3) (PI 508090) and 'Emerald' (Reg. no. 4) (PI 508091) lentils (*Lens culinaris* Medikus) were developed cooperatively by the USDA-ARS and the College of Agriculture Research Center, Washington State University. They were released in 1984 and 1986, respectively.

Brewer (LC711981) is an F_3 derived line from a cross of 'Tekoa' with a small black-seeded line obtained from Dr. Fred Elliot at Michigan State University, East Lansing, MI. The cross was made in 1969 by Dr. Al Slinkard, University of Idaho. Selection LC711981 was made by F.J. Muehlbauer from the F_3 population grown in the greenhouse in 1971.

Preliminary yield tests were conducted in 1972 and 1978. Brewer was 23% higher yielding than 'Chilean' in advanced yield trials conducted in eastern Washington and northern Idaho from 1979 to 1982. Brewer matures 4 to 7 days earlier than Chilean and has larger, more uniform seeds. Quality evaluations conducted by the Home Economics Department, Washington State University indicated no detectable differences between Brewer and Chilean.

Brewer is characterized by semiupright stems that are about 32 to 42 cm long with leaves that have large leaflets. Plants are profusely branched and have flowers that are white with blue to pale-blue to pale-purple veins in the throat of the standard. Single, double, or triple flowers are borne on peduncles that originate from stem axes. Pods contain one or two seeds. Flowering and maturity dates are 4 to 7 days earlier than Chilean. Seeds are beige with slight mottling, and are consistently 6.0 to 6.5 mm in diam. and 2.0- to 2.2-mm thick. One-hundred seeds weigh about 6.0 g compared to 5.6 g for Chilean. Similar to Chilean, Brewer has yellow cotyledons.

Emerald (VW000504) was originally selected in 1972 by V.E. Wilson from a bulk population obtained from Plant Introduction, Pullman, WA, accessions and tested as Selection no. 504. The line was reselected by F.J. Muehlbauer in 1980 and yield tested by the USDA at several locations in the Palouse, WA region from 1982 to 1985. In those trials, Emerald produced seed yields that were similar to Chilean.

Emerald is characterized by semiupright stems that are about 32 to 42 cm long with leaves that have large leaflets. Plants are profusely branched and flowers are white with blue to pale-blue to pale-purple veins in the throat of the standard. Single, double, or triple flowers are borne on peduncles that originate from stem axes. Pods contain one or two seeds. Flowering and maturity dates are 2 to 3 days later than Chilean, the most commonly grown type. Seeds are green and are consistently 5.5 to 6.0 mm in diam. and 1.5- to 2.0-mm thick. Emerald has uniform green seed coats and distinctive bright green cotyledons. These seed quality traits are distinguishing features of the cultivar that should appeal to certain specialty markets in the USA and internationally. No serious disease or insect problems were observed on Brewer or Emerald, or on the other cultivars in field trials or commercial plantings.

Breeder seed of Brewer and Emerald 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.

F. J. MUEHLBAUER (1)

References and Notes

1. Research geneticist, USDA-ARS, Dep. of Agronomy and Soils, Washington State Univ., Pullman, WA 99164-6421. Contribution from USDA-ARS, in cooperation with the College of Agric. and Home Economics, Agric. Res. Ctr., Washington State Univ., Pullman, WA 99164. Scientific Paper no. 7654. Registration by the Crop Sci. Soc. of Am. Accepted 30 Mar. 1987.

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