REVISED RELEASE OF SMALL RED DRY BEAN CULTIVAR 'LEBARON'

The Agricultural Research Center of Washington State University, the Idaho Agricultural Experiment Station of the University of Idaho, and the Agricultural Research Service, U.S. Department of Agriculture jointly announce the release of a new small red dry bean 'LeBaron'. This cultivar has upright plant growth habit and very early maturity, making it valuable as a second crop following peas and other early-season crops in the U.S. Pacific Northwest. A team of researchers, An Hang (Washington State University), Matt Silbernagel (ARS-retired), Phil Miklas (ARS-Prosser), and George Hosfield (ARS-East Lansing), contributed to this release.

LeBaron was derived from a bulk of F₉ single plant selections possessing upright architecture, early maturity and preferred seed type from ARS-R93008, a small red germplasm line. R93008 (X88403/'Revolucion-79'/P86297) was developed and released as an F₂ derived F₉ line by USDA-ARS and the Michigan Agricultural Experiment Station. X88403, developed by J. D. Kelly of the Michigan Agricultural Experiment Station, is a selection from a complex crossing scheme involving six parents with the final cross made to the small red cultivar 'Ember' (Roger Seed Co., Nampa, Idaho). 'Revolucion-79' is a small red tropical bean cultivar from Nicaragua. P86297--a Michigan Agricultural Experiment Station line and full-sib of 'Sierra' pinto bean--is an upright pinto bean with Type IIa growth habit. LeBaron carries the recessive bc-t² gene for resistance to BCMV. The bc-t² gene protects plants against systemic infection caused by Pathgroups I, II, III, and V of the virus and is also thought to condition tolerance to the NL-3 strain of bean common mosaic necrosis virus (BCMNV). LeBaron
is susceptible to bean rust caused by *Uromyces appendiculatus* (Pers.:Pers) Unger. LeBaron (previously tested as LB-4803 and USRM-11) has more upright plant habit (IIa to IIb) than typical commercial small reds and is less susceptible to lodging than 'NW-63'. LeBaron averaged 3523 kg ha\(^{-1}\) seed yield at the Othello, WA Research Unit during the last five years, from 1994 to 1998; which was 9% lower than NW-63 but matured 8 to 10 days earlier than industry standards NW-63, UI-259 and Rufus. At Othello, LeBaron outyielded Rufus by 2%. LeBaron has been yield tested at 60-location years in the US and Canada. The average bean yield at these locations was 2485 kg ha\(^{-1}\), 7% and 9% lower than NW-63 and UI-259, respectively. Seed of LeBaron is larger than NW-63, 36.4 g vs. 32.9 g 100 seeds\(^{-1}\). LeBaron was an acceptable canner in trials conducted by USDA-ARS and the Michigan Agricultural Experiment Station from 1995 to 1998.

LeBaron will be released as a protected variety with the option that LeBaron may be sold for seed by variety name only under the certified class. Breeder and foundation seed will be maintained by the Washington State Crop Improvement Association, Foundation Seed Service--WSU Seedhouse, Pullman, WA 99164-6420. Phone: (509) 335-4365; FAX: (509) 335-7007, or email Greg Volmer <wscia@wsu.edu>. A research fee will be assessed on each unit of foundation seed sold. Plant Variety Protection application is in process.

---

Ralph P. Carroll  
Director, Washington Agricultural Research Center  
4/11/2000  
Date

Richard C. Steinbeck  
Director, Idaho Experiment Station  
Date

Edward B. Kempf  
Administrator, Agricultural Research Service  
4/27/2000  
Date