

Washington Agricultural Research Center  
Washington State University  
Pullman, Washington

and

United States Department of Agriculture  
Agricultural Research Service  
Washington, D.C.

and

Oregon Agricultural Experiment station  
Oregon State University  
Corvallis, Oregon

and

Idaho Agricultural Experiment Station  
University of Idaho  
Moscow, Idaho

Announce the release of

**EDWIN**  
**SOFT WHITE CLUB WINTER WHEAT CULTIVAR**

The Washington Agricultural Research Center, Idaho Agricultural Experiment Station, Oregon Agricultural Experiment Station, and the Agricultural Research Service, United States Department of Agriculture, jointly released 'Edwin', a soft white club winter wheat (*Triticum aestivum* L.).

Edwin was selected by Ed Donaldson and Stephen S. Jones, Washington State University Winter Wheat Breeders, from a cross generated by Richard Hoffman at the WSU Dryland Research Station, near Lind, WA. Edwin is being released as a replacement for 'Moro' in the semi-arid club wheat production regions of the Pacific Northwest. It has excellent straw strength, emergence and winterhardiness. Edwin also has superior yield and end-use quality.

Edwin (WA7834, H9109703, D88030) was derived from the cross Jacmar/Stephens//Tres/4/PI167822/CI13438//Luke/3/Paha. It was advanced to the F<sub>5</sub> generation through a bulk breeding method where selection was made for emergence, winterhardiness, plant height and general adaptation. Heads were selected from the bulk population in 1989 from dryland plantings at Lind, Washington. Subsequent plant rows were recurrently selected for straw strength, emergence and resistance to local races of stripe rust.

Edwin is a short standard height wheat with mid-season maturity; dense awnless, white glumed spikes with kernels that are white, short, soft, and ovate; small germ with a midwide crease, rounded cheeks and a midshort to short brush.

Edwin has adult plant stripe rust resistance (*Puccinia striiformis* West.), is moderately susceptible to leaf rust (*Puccinia recondita* Rob. ex Des.) and stem rust (*P. graminis* Pers.:Pers.). It expresses moderate resistance to eyespot foot rot (*Pseudocercospora herpotrichoides* (Fron.) Deighton), fungus stripe (*Cephalosporium gramineum* Nis.& Ika.) and snow mold (*Typhula idahoensis* Rems.).

In 24 tests conducted over 5 years, the grain yields of Edwin exceed those of Moro by an average of 540kg/H. Edwin has a mean grain volume weight (test weight) that is approximately 22 g/l heavier than Moro. It is approximately 5 to 7.5 cm shorter than Moro and exhibits excellent straw strength. Field tests of Edwin confirmed superior winterhardiness and emergence that is equal to Moro.

Tests conducted by the USDA-ARS Western Wheat Quality Laboratory established that Edwin has excellent grain properties, generally better than Moro, Tres, Rohde, and Rely. Protein and hardness are low, and kernels are heavy and consistent. Milling properties are very good, equal to or better than all of the checks. Physical dough and end product testing reveals flour that is equal to checks of known high quality.

Breeder and foundation seed of Edwin will be maintained by the Washington State Crop Improvement Association under supervision of the Department of Crop and Soil Sciences College of Agriculture and Home Economics Research Center, Washington State University, Pullman; WA 99164-6420. The proposed release date for publicity shall be on the date of final signature of the release notice. Genetic material of this release will be deposited in the National Plant Germplasm System following Plant Variety Protection certification.