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

NOTICE OF RELEASE OF FINLEY (PI586757) HARD RED WINTER WHEAT CULTIVAR

'Finley', a hard red winter wheat (*Triticum aestivum L.*), was jointly released by the Washington Agricultural Research Center, Idaho Agricultural Experiment Station, Oregon Agricultural Experiment Station, and the Agricultural Research Service, United States Department of Agriculture. Finley was developed by Edwin Donaldson, Washington State University Agronomist. It is a tall wheat adapted to the low yield production zones of the Pacific Northwest region of the United States. Finley is being released because of its resistance to stripe rust (*Puccinia striformis*, Westand) and its excellent milling and baking quality.

Finley was selected from the cross 'Weston', 'Hatton sib'/TX69A450-1. TX69A450 is a Texas selection from a short wheat/Scout composite. It was advanced to the F_5 generation by the bulk method where selection was made for test weight, emergence, and

general adaptation. Heads were selected from the bulk population in 1989 from dryland plantings at Lind, Washington. Subsequent plant rows were selected for resistance to local races of stripe rust, straw strength, tillering, test weight, protein content, and grain hardness. Preliminary testing of Finley was conducted under the breeder number N9102104. In 1994 it was given the number WA007773 and advanced to the Western Regional Nursery where it was tested for three years. The Washington State Crop Improvement Association developed breeder seed.

Finley is a tall, brown chaffed, awned, hard red winter wheat. Foliage is blue green, but less blue than the foliage of Hatton. At maturity the heads of Finley are less upright than those of Hatton, but not as pendant as those of Weston. It has an awned lax spike with long, midwide, brown glumes. The kernels are elliptical, midlong with a shallow crease, and red hard, but it may have up to 25 white seeds per kilogram. The germ is midsized. Finley has excellent winterhardiness, moderate straw strength, and matures equal to Weston.

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Finley is also resistant to common bunt (caused by *Tilletia caries* (DC.) Tul. & C. Tul. and *T. laevis* Kuhn in Rabenh); and dwarf smut (caused by *T. controversa* Kuhn in Rabenh). It is moderately susceptible to leaf rust (caused by *Puccinia recondita* Roberge ex Desmaz); and stem rust (caused by P. Graminis Pers.:Pers.).

Finley was included in the 1994 - 1996 Western Regional Hard Winter Wheat Nursery. When the grain production was averaged across its area of adaptation, Finley yielded 10% more than Hatton and Weston.

Finley is 2.5 cm taller than Hatton and 2.5 cm shorter than Weston. The straw strength of Finley is slightly less than Hatton and slightly more than Weston. It is similar to Hatton and Weston in maturity and whole grain protein. Volume weight of Finley is equal to Weston and slightly less than Hatton.

Tests conducted by the USDA-ARS Western Wheat Quality Laboratory have established that Finley has very good milling and baking quality. The milling quality of Finley is equal to Hatton and its loaf volume is equal to Weston.

Breeder and foundation seed of Finley will be maintained by the Washington State Crop Improvement Association under supervision of the Crop and Soil Sciences Department, College of Agriculture and Home Economics Research Center, Washington State University, Pullman, WA 99164-6420.