WASHINGTON AGRICULTURAL RESEARCH CENTER Washington State University Pullman, Washington

and

OREGON AGRICULTURAL EXPERIMENT STATION Oregon State University Corvallis, Oregon

and

IDAHO AGRICULTURAL EXPERIMENT STATION University of Idaho Moscow, Idaho

and

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

RELEASE OF WAWAWAI (PI574538), A SOFT WHITE SPRING WHEAT

The Washington Agricultural Research Center, the Oregon Agricultural Experiment Station, the Idaho Agricultural Experiment Station, and the Agricultural Research Service, USDA, announce the release of Wawawai, PI574538, a soft white spring wheat (*Triticum aestivum* L.), to certified seed growers. Wawawai was developed at Washington State University, and cooperatively with the Oregon and Idaho Agricultural Experiment Stations, and the United States Department of Agriculture.

The purpose of the release is to provide growers a Hessian fly-resistant soft white spring wheat with higher yielding capacity and improved soft white wheat milling and baking properties as compared to Penawawa and Wakanz, with resistance to stripe rust and stem rust.

Wawawai, selection WA7712, was developed by a modified bulk-pedigree selection scheme, from the cross ID000190//POTAM 70/FIELDER/5/TIFTON 3725/WALLADAY// FIELDER/POTAM 70/3/N7000315/ID00065/4/ID00065/POTAM 70, at Washington State University, and evaluated cooperatively by the Idaho and Oregon State Experiment Stations, and the United States Department of Agriculture, Agricultural Research Service. It was evaluated for 4 years in Washington State trials, and for three years in Washington regional and Tri-state regional trials under low rainfall-fallow, annual crop, and irrigated production conditions in the Tri-State region.

Wawawai is a single gene semidwarf, with common, white chaffed and awned spikes. It has medium maturity, heading 1-3 days earlier than Wakanz and 1-2 days later than Penawawa. Wawawai typically outyields Wakanz and will outyield Penawawa when infested with Hessian fly. Also, in a recent tests under limited moisture, rain-fed conditions, its grain test weights exceeded those of Penawawa and Wakanz, suggesting it may possess greater water use-efficiency. Collaborative tests by the Western Wheat Quality Laboratory, USDA/ARS, Pullman, Washington have shown Wawawai to have milling and baking quality properties superior to those of Penawawa. Wawawai is primarily a pastry wheat, but its grain will be used in all soft wheat products.

Wawawai appears to carry adult plant resistances to stripe and stem rust, as expected from its parentage, and also moderate resistance to leaf rust. It carries the gene H_3 resistance to the Hessian fly.

Seed classes will be breeder, foundation, registered and certified. These classes of seed will be maintained by the Washington State Crop Improvement Association, 414 S. 46th Avenue, Yakima, WA 98908.

The release date is March 15, 1994.

Director

College of Agricultural Research Center Washington State University Pullman, Washington

Administrator Agricultural Research Service U.S. Department of Agriculture

IMAR

Idaho Agricultural Experiment Station University of Idaho Moscow, Idaho

Director Oregon Agricultural Experiment Station Oregon State University Corvallis, Oregon

Date

Date