# WASHINGTON AGRICULTURAL RESEARCH CENTER Washington State University Pullman, Washington

and

# OREGON AGRICULTURAL EXPERIMENT STATION Oregon State University Corvallis, Oregon

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### IDAHO AGRICULTURAL EXPERIMENT STATION University of Idaho Moscow, Idaho

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

#### RELEASE OF ALPOWA (PI566596), 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 Alpowa, PI566596, a soft white spring wheat (*Triticum aestivum* L.), to certified seed growers. Alpowa 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 soft white spring wheat with higher yielding capacity, high test weight and improved soft white wheat milling and baking properties as compared to Penawawa. Alpowa's best feature is its high test weight.

Alpowa, selection WA7677, was developed by a modified bulk-pedigree selection scheme, from the cross Fielder/Potam 70//Walladay/3/Walladay/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 has been 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.

Alpowa is a single gene semidwarf, with common, white chaffed, awned spikes, producing soft, white grain of high volume weight for soft wheats. It is of medium maturity,

heading 1-3 days later than 'Penawawa' but maturing one or more days earlier, thus, Alpowa appears to have a more rapid grain fill rate than most other spring wheats. In a recent test under limited moisture, rain-fed conditions, its grain yield test weights exceeded those of 'Penawawa', suggesting it may also be more drought tolerant. Collaborative tests by the Western Wheat Quality Laboratory, USDA/ARS, Pullman, Washington have shown Alpowa to have milling and baking quality properties superior to those of 'Penawawa'. Alpowa is primarily a pastry wheat; however, its grain can be used in all types of soft wheat products.

Alpowa appears to carry moderate adult plant resistances to stripe rust. Alpowa apparently also has acquired resistances to leaf and stem rusts from its Potam 70 parent. It is susceptible to the Hessian fly and the Russian wheat aphid.

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

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