

WASHINGTON AGRICULTURAL RESEARCH CENTER
Washington State University
Pullman, Washington

and

OREGON AGRICULTURAL EXPERIMENT STATION
Oregon State University
Corvallis, Oregon

and

CALIFORNIA AGRICULTURAL EXPERIMENT STATION
University of California
Davis, California

and

IDAHO AGRICULTURAL EXPERIMENT STATION
University of Idaho
Moscow, Idaho

and

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

RELEASE OF CALORWA (PI566594), A SOFT WHITE SPRING CLUB WHEAT

The Washington Agricultural Research Center, the California Agricultural Experiment Station, the Oregon Agricultural Experiment Station, the Idaho Experiment Station, and the Agricultural Research Service, USDA, announce the release of Calorwa, PI566594, a soft white spring club wheat (*Triticum aestivum* ssp. *compactum* L., amend, Bowden and Morris) to certified seed growers. Calorwa was developed at the University of California, Department of Crop and Range Sciences, Davis California, and cooperatively by Washington State Agricultural Research Center, the United States Department of Agriculture, and Oregon State Agricultural Experiment Station.

The purpose of the release is to provide growers a soft white spring club wheat for reseeding winter-injured stands of winter club wheat to maintain market class and quality, and for planting as a spring crop to meet the increasing market demand for club grain.

Calorwa, selection CA790125-101S-1D-2D-4D-2D-1D-2D-0D, was developed by pedigree selection from the cross AUS221/INIA/2*SHASTA/3/TINCURRIN/ANZA, at the University of California, Davis, CA. The line, identified as WUC657 was initially distributed for evaluation in the Tri-State Cooperation by Oregon State University. WUC657 was identified by Washington State University scientists and USDA collaborators as having flour quality properties typical of the winter club wheats. WUC657 was then evaluated extensively for agronomic productivity and pastry quality over a wide range of growing environments for two to three seasons, in collaboration with the University of California and Oregon and Idaho Agricultural Experiment Stations.

Calorwa carries at least one semidwarfing gene, either Rht1 or Rht2, erect, awned typical "compactum" (club) spikes, which are short, elliptical, dense, with white chaff, awns and straw. It has the 2, 12 Glu1D protein composition common to the better quality winter club wheats. Its height is slightly shorter than that of Penawawa. Calorwa appears to carry resistance to local forms of stripe, leaf and stem rusts, as well as powdery mildew. Its resistance to stripe rusts may be of the adult plant type. Calorwa has adequate resistance to lodging and is of early-medium maturity. Pre-Breeder seed stocks were selected at Washington State University, and Breeder Seed increases were produced by Washington State Crop Improvement Association.

Collaborative tests by the Western Wheat Quality Laboratory, USDA/ARS, Pullman, Washington have shown Calorwa to have satisfactory soft white club wheat milling and baking properties. Calorwa is a pastry wheat with weak mixing properties, complementary to the soft white winter club wheats.

Seed Classes of Calorwa will be breeder, foundation, registered and certified. These seed classes will be produced by the Washington State Crop Improvement Association, 414 S. 46th Avenue, Yakima, WA 98908 and The California Agricultural Experiment Station.

The proposed release date is March 15, 1994.

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3/4/98
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5-12-98
Date