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PULLMAN, WASHINGTON

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OREGON AGRICULTURAL EXPERIMENT STATION
OREGON STATE UNIVERSITY
CORVALLIS, OREGON

AND

UNITED STATES DEPARTMENT OF AGRICULTURE
SCIENCE EDUCATION ADMINISTRATION
WASHINGTON, DC

RELEASE OF 'PENAWAWA' (P.I.495 916) SOFT WHITE SPRING WHEAT

The Washington Agricultural Research Center, the Science Education Administration of the United States Department of Agriculture, and the Oregon Agricultural Experiment Station announce the joint release of Penawawa, P.I. 495 916, soft white spring wheat (Triticum aestivum L.) to certified seed growers. It was developed cooperatively by the Washington Agricultural Research Center and Science Education Administration of the United States Department of Agriculture.

'Penawawa' was selected from the cross: Potam 70/Fielder made in 1974 at Pullman. The F₁ and F₂ generations were grown at Pullman. The F₃ and F₅ generation selections were increased off season at the Gore, New Zealand Station via cooperation of the Crops Research Division of the Department of Science and Industrial Research (DSIR) Christchurch, New Zealand. As WA6920 Penawawa was evaluated over 4 prior (1980-1984) seasons' trials in Washington and over 3 seasons' trials (1981-1984) in other states via the Western Regional Spring Wheat Nursery Coordinated by the USDA.

Description:

Penawawa is a mid season semidwarf soft white spring wheat variety with stiff straw, and white chaff and awns. The spike is erect, semi lax and oblong with medium long awns. The glumes are glabrous and mid long and terminate in a short(0.5-1 cm) awn-tipped beak. The shoulders of glumes on basal spikelets are almost wanting, but widen on spikelets upward on the spike, the glumes on upper spikelets having elevated shoulders. Kernels are white, soft, mid long, ovate and with a large brush and a medium size round ovate germ.

Penawawa heads 1 day later than its sib Edwall and is about the same height as Edwall and Waverly. Penawawa appears to carry a combination of the race specific stripe rust resistance of Fielder and the adult plant resistance of Potam 70, as well as resistance to leaf from Potam 70. Penawawa also inherits resistance to local stem rust races from both its parents, Potam 70 and Fielder, but is moderately susceptible to mildew and susceptible to the hessian fly. Penawawa is not known to carry major resistance genes against common bunt. Therefore, it is desirable to treat seed for bunt control.

The yield potential of Penawawa is superior to that of Edwall, Waverly and Dirkwin. It's special advantage however, established over several years tests, is the ability to produce grain of 1-1.5 lbs/bu, higher test weight than that of Edwall or about 0.5 to 1 lb/bu greater than that of Waverly.

Collaborative tests by the United States Department of Agriculture, Science Education Administration, Western Wheat Quality Laboratory at Pullman, Washington, have shown Penawawa to have satisfactory milling and pastry quality processing properties.

Seed classes of Penawawa will be Breeder, Foundation, Registered and Certified. The Washington State Crop Improvement Association will maintain Breeder and Foundation classes of seed. Foundation seed will be available for distribution to selected growers in the fall of 1985 or spring of 1986. Seed requests should be sent to: Washington State Crop Improvement Association, N. 513 Front St., Yakima, WA 98901. The U.S. Department of Agriculture has no seed for distribution.

The official release date for Penawawa will be October 1, 1985.

Director
Washington Agricultural Research Center
Washington State University
Pullman, Washington

Date

Director
Oregon Agricultural Experiment Station
Oregon State University
Corvallis, Oregon

Date

Deputy Director for Federal Research
Science Education Administration
United States Department of Agriculture
Washington, D. C.

Date