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and

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and

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE WASHINGTON, D.C.

NOTICE OF NAMING AND RELEASE OF THE WHITE WINTER CLUB WHEAT VARIETY

TEMPLE
92CL0054

The Oregon, Idaho, and Washington Agricultural Experiment Stations and the United States Department of Agriculture announce the release of the white winter club wheat variety **TEMPLE**.

Description

Selection 92CL0054 is a soft white winter club wheat. Standard height with white, moderately stiff straw. The spike is awnless, elliptical, dense and erect. Glumes are glabrous, white, short; shoulders are narrow, rounded; beaks are obtuse, 1 to 2 mm. The kernels are white, short, soft, ovate, with hump, with a small midsize germ and narrow, shallow crease with rounded cheeks. The brush is small.

Pedigree and History

Selection 92CL0054 was developed from a cross between Tres and VPM 1. It was an F_4 -derived F_6 line. The cross was made at the Hyslop Crop Science Laboratory, with F_2 plants selected at the same site with F_3 rows evaluated at the Rugg's site. Subsequently, the advanced generations and selections were done at the Columbia Basin Research Center.

Area of Adaptation

Selection 92CL0054 is adapted to the lower rainfall areas of Eastern Oregon where traditional club type wheats are grown.

Disease Resistance

The disease reactions of 92CL0054 to Stripe Rust (<u>Puccinia striiformis</u>) and Columbia Basin Strawbreaker (<u>Pseudocercosporella herpotrichoides</u>) are noted in Table 1. These are the major diseases limiting club wheat production in Oregon. As seen in the Table, the cultivars Rohde and Tres are susceptible to Strawbreaker foot rot.

Shattering, lodging, height and heading date information for 92CL0054 are provided in comparison with six commercial cultivars in Table 2. Data are provided for both the Pendleton and Moro sites. When compared to the checks, 92CL0054 is somewhere in the middle for most agronomic traits being shorter and earlier than Paha and Omar, taller than Tres, Hyak, and Rohde at the Moro site, but similar in height and heading date at Pendleton. Depending on the specific year, some shattering and lodging were observed at Moro and lodging at Pendleton.

Grain Yield

Yield for 92CL0054 is compared to the cultivar Rohde in Table 3. Rohde is regarded today as one of the highest yielding commercial club wheats. At the Moro site for the period 1990-94, 92CL0054 yielded 11 bushels more than Rohde. In 1996 it yielded one bushel less. No data are available for 1995 at this site. For the Pendleton site 92CL0054 (1990-94) was 18 bushels higher than Rohde being similar in 1995 with 92CL0054 being slightly less in 1996 at this location.

Results across all locations from the Western Regional Uniform White Winter Wheat Nursery are provided for 92CL0054 and the club check varieties Moro, Tres, and Paha in Table 4. Information provided suggests that yieldwise 92CL0054 is widely adapted to the Pacific Northwest club wheat production regions.

Milling and Baking

Milling and baking attributes for 92CL0054 compared to Tres, Paha, and Omar are provided in Table 5. It can be observed that 92CL0054 is superior for test weight, flour yield, overall mill score, and cookie diameter, being slightly less for cake volume when compared to the check varieties.