REGISTRATION OF 'COPPER' WHEAT

'COPPER' (Reg. no. 732) (PI 502644) hard red spring wheat (Triticum aestivum L.) was selected as an F₄ line from the cross 'Borah'/3/'Moran'/3/‘Penjamo’ sib/‘Gabo 55’, made in 1972. It was developed cooperatively by the Idaho Agricultural Experiment Station and USDA-ARS. Copper was tested in the Idaho yield nurseries as IDO238 for 10 yr (1976–1985), in the Tri-State Nursery in 1981, and in the Western Regional Spring Wheat Nursery for 3 yr (1982–1984). It was released jointly by the Idaho and Oregon Agricultural Experiment Stations and USDA-ARS in 1986. Copper is a semi-dwarf cultivar that has erect to inclined, oblong, mid-dense, awned spikes. Glumes are brown, long, and wide, with mid-wide to wide, square shoulders. Beaks are mid-wide, acuminate, and 2 to 10 mm long. The kernels are hard, red, mid-long, and ovate, with rounded cheeks and a mid-deep crease. Copper has average 1-d later than Borah and equal to 'Pondera' in maturity. It has had an average height of 81 cm, equal to Borah, and 5 cm shorter than Pondera. The straw strength of Copper is similar to that of Borah but weaker than that of Pondera.

Copper is resistant to Pacific Northwest races of stripe rust (caused by Puccinia striiformis West.), moderately resistant to leaf rust (caused by P. recondita Rob. ex Desm. f. sp. tritici), powdery mildew (caused by Erysiphe graminis DC. f. sp. tritici E. Marchal), and black chaff (caused by Xanthomonas translucens f. sp. undulosa).

The average yields of Copper, Pondera, and Borah during 6 yr of testing in two southern Idaho irrigated nurseries were 5924, 5623, and 4944 kg ha⁻¹, respectively. Grain weights of the respective cultivars were 773, 761.9 and 751.3 kg m⁻³.

The 3-yr average protein content of grain on a moisture basis obtained from Copper, Pondera, and Borah, in the yield trials was 126, 138, and 130 g kg⁻¹, respectively. Fertility studies (unpublished data) have shown that Copper and Pondera, when properly fertilized, produce a protein content above 140 g kg⁻¹. The milling, mixing properties, and bread baking characteristics of Copper have been very satisfactory.

Breeder and Foundation seed of Copper will be maintained by the University of Idaho, Aberdeen Research and Extension Center, P.O. Box AA, Aberdeen, ID 83210.

D. W. Sunderman* AND BRENDAN O'CONNELL

REGISTRATION OF 'BLANCA' WHEAT

'BLANCA' (Reg. no. 733) (PI 501533) soft white spring wheat (Triticum aestivum L.) was selected as an F₄, line from the cross of ID0045/5/2*A6514S-A-102-1/4/A6535S-443-101/3/‘Springfield’/PI 227196/A63166S-A-2-8 made at the University of Idaho Research and Extension Center at Aberdeen in 1972. ID0045 was a selection from the cross Yaktana 54 A*4//‘Norin 10’/‘Brevor’/3/2/‘Yaqui 50’/4/‘Norin 10’Brevor//‘Baart’/Onas’. A6514S-A-102-1 was from the cross Yaktana 54 A*4/‘Norin 10’/Brevor/5/‘Norin 10’Brevor//3/‘Lemhi 53’/3/‘Lemhi 62’/4/5/‘Lemhi 53’/7/‘Lee’/‘Transfer’. A6535S-443-101 is a sister selection of ‘Fielder’ and ‘Fieldwin’, and A63166S-A-2-8 is a sister selection of ‘Twin’. It was developed cooperatively by USDA-ARS and the Idaho Agricultural Experimental Station. Blanca was tested in the Idaho yield trials for 3 yr (1979–1983), in the Western Regional Spring Wheat Nursery in 1983, and in the San Luis Valley of Colorado for 3 yr (1983–1985). It was released.

Blanca is an awned, medium height, white glumed cultivar maintained by Colorado State University. Seed may be requested by writing to the Foundation Seed Project, Agronomy Department, Colorado State University, Fort Collins, CO 80523.

References and Notes

1. D.W. Sunderman, Dep. of Plant, Soil and Entomological Sciences, Colorado State University, Fort Collins, CO 80523. *Corresponding author.

Published in Crop Sci. 28:577 (1988).