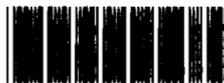


REGISTRATION OF 'PORTOLA' WHEAT

'PORTOLA', CI17415, (*Triticum aestivum* L.) (Reg. no. 701) was developed jointly by International Maize and Wheat Improvement Center (CIMMYT) and the California Agricultural Experiment Station, and was released in California in 1975. Portola was selected from the cross ('Ciano'-'Siete Cerros 66' × Ciano-'Penjamo 62') which produced a group of lines known as Jilguero at CIMMYT. The cross and selection number of the line named Portola is II-25917-13Y-13M-1Y-OM-(1-44D). Portola was reselected from an F₆ line and 44 progenies were composited to produce breeders seed. This line was tested in California as D7159. Performance data were published in 1975 (1). Portola was considered to be a replacement for 'Anza' at the time of its release because of its generally higher grain protein content, and better milling and baking performance. However, its grain yield was lower in some trials and Portola tended to lodge more than Anza in highly productive environments. Its shatter resistance was less than Anza, but better than 'Inia 66R' or 'Yecora Rojo'. Portola is an early maturing cultivar with spring growth habit, being 6 to 8 days earlier than Anza in time of heading.

The grain of Portola is red, hard, and gives a high test weight. The spikes are white, fully awned, moderately dense, and tend to nod at maturity. The peduncle is S-shaped. Glume awns are intermediate in length (3 to 5 mm), compared to Anza and Inia 66R (1 to 3 mm), which have short glume awns, and Yecora Rojo and 'Cajeme 71' (8 to 10 mm), which have long glume awns. Portola is a short-statured cultivar, about 90 to 100 cm in most environments in California; it is equal to Anza, but about 5- to 10-cm taller than

Seed stock
Plant Material



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References and Notes

1. Qualset, C.O., J.D. Prato, H.E. Vogt, W.F. Lehman, W.H. Isom, and J.A. Rupert. 1975. Performance and description of three new wheat varieties for California—Portola, Tanori 71, and Yecora Rojo. Univ. Calif. Agron. Prog. Rep. no. 64.
2. Professor and staff research associate, Dep. of Agronomy and Range Sci., Univ. of California, Davis, CA 95616; former director Wheat Program, CIMMYT, Apd. 6-641, Londres 40, Mexico 6, DF Mexico. Registration by the Crop Sci. Soc. of Am. Accepted 9 May 1985.

REGISTRATION OF 'YECORA ROJO' WHEAT

'YECORA ROJO', CI 17414, wheat (*Triticum aestivum* L.) (Reg. no. 702) was released by the California Agricultural Experiment Station in 1975. It was developed by the International Maize and Wheat Improvement Center (CIMMYT) in Mexico and introduced into California in a CIMMYT Elite Strains Yield trial in 1970. This cultivar is one of several selected and used worldwide from hybrid II-23584 known as the Bluebird family of cultivars having the parentage ('Ciano' × 'Sonora 64'-'Klein Rendidor') × 3/II 8156. 'Yecora 70' was released by the National Institute for Agricultural Research (INIA) National Wheat Program in Mexico. Yecora Rojo and Yecora 70 are similar except that the former has red grain, the latter amber grain color. The selection identification number for Yecora Rojo is II-23584-26Y-2M-1Y-OM-302M and was designated Yecora "S" (R) in CIMMYT trials. It had the experimental designation D7188 in regional California performance trials. During initial seed increase, off-type plants were eliminated

and the remainder were bulked to produce breeders seed. Several years later (1500) progeny rows were screened for uniformity and about 1200 were bulked to produce a more uniform seed lot. Yecora Rojo is short-statured and regularly produces plants taller than normal at about 0.1% frequency.

Yecora Rojo became the dominant common wheat cultivar in the San Joaquin and Imperial Valleys of California soon after its release. In recent years large quantities of seed have been exported to other countries. Extensive performance data were published in 1975 (1). Its grain yield at the time of release was about 10% lower than 'Anza' and 4% higher than 'Inia 66R'. Because of its good test weight, protein content, and milling and baking quality, it rapidly replaced most of the plantings of Inia 66R and Anza in the San Joaquin Valley. Yecora Rojo has not performed well in the Sacramento Valley because of its tendency to shatter before harvest and its lower grain yields than Anza. Its grain yield was about 7% more than 'Cajeme 71', another red-grained Bluebird-derived cultivar.

Yecora Rojo, at about 75- to 85-cm height at maturity, is 10- to 15-cm shorter than Anza and 15- to 20-cm shorter than Inia 66R in irrigated production sites and has excellent lodging resistance. It has spring growth habit with early maturity. Its heading time is about 2 days later than Inia 66R, 4 days earlier than Cajeme 71, and 6 days earlier than Anza. Yecora Rojo has less tendency to shatter than Inia 66R, but greater than Anza. The kernels are light red in color, large, and moderately hard. Test weight and protein content of the grain are very good. The spikes are white, fully awned, have a long glume awn, moderately lax, and tend to nod at maturity. With reference to current races or strains of various pathogens in relevant production sites in California, it is resistant to *Puccinia striiformis* West, and susceptible to *P. recondita* Rob. ex Desm. f. sp. *tritici*, *Septoria tritici* Rob. in Desm., *Erysiphe graminis* DC. f. sp. *tritici* E. Marchal, *Tilletia caries* (DC.) Tul., and barley yellow dwarf virus.

Seed stocks are maintained by the Foundation Seed and Plant Materials Service, University of California, Davis.

C. O. QUALSET, H. E. VOGT, AND N. E. BORLAUG (2)

References and Notes

1. Qualset, C.O., J.D. Prato, H.E. Vogt, W.F. Lehman, W.H. Isom, and J.A. Rupert. 1975. Performance and description of three new wheat varieties for California—Portola, Tanori 71, and Yecora Rojo. Univ. Calif. Agron. Prog. Rep. 64.
2. Professor and staff research associate, Dep. of Agronomy and Range Sci., University of California, Davis, CA 95616; former director Wheat Program, CIMMYT, Apd. 6-641, Londres 40, Mexico 6, DF, Mexico. Registration by the Crop Sci. Soc. of Am. Accepted 9 May 1985.

REGISTRATION OF 'SIOUXLAND' WHEAT

'SIOUXLAND' wheat (*Triticum aestivum* L.) (Reg. no. 703), PI 483469, is a hard red winter wheat originating as an F₅-derived line from the 1972 backcross of 'Warrior'*5/'Agent'/'Kavkaz' to Warrior*5/Agent. Warrior*5/Agent (68F6635) was developed by the Colorado Agricultural Experiment Station. Kavkaz is an introduction from the USSR. Siouxland was developed cooperatively by the Nebraska Agricultural Experiment Station and the USDA-ARS. It was identified as a line in 1978 and tested as NE78668 in Nebraska yield tests beginning in 1979, in the Southern Regional Performance Nursery in 1981 to 1983, and in the Northern Regional Performance Nursery in 1984.