Wheat Nursery during 1988–1990. Verne has shown consistent yield superiority to cultivars currently grown in Kentucky. In 4 yr of testing at seven locations, grain yield of Verne was 106% of Cardinal and 109% of Saluda. Test weight of Verne is high, being only slightly lower than that of Saluda. In several years of testing at the USDA Soft Wheat Quality Lab in Wooster, OH, Verne has had good milling quality (equivalent to ‘Caldwell’) and acceptable baking quality.

Verne possesses resistance to powdery mildew, caused by Erysiphe graminis DC. f. sp. tritici Em. Marchal, and leaf blotch caused by Septoria tritici Roberge in Desmaz., and is tolerant to glume blotch, caused by Phaeosphaeria nodorum (E. Müller) Hejljaroude, and leaf rust, caused by Puccinia recondita Roberge ex Desmaz. Verne is moderately susceptible to wheat spindle streak mosaic virus, and is susceptible to all biotypes of the Hessian fly, Mayetiola destructor (Say).

Seed classes of Verne will be breeder, foundation, and certified. Breeder and foundation seed will be maintained by the Foundation Seed Project, Dep. of Agronomy, University of Kentucky, Lexington, KY 40546-0091. Application for plant variety protection of Verne will be submitted.

D. A. Van Sanford,* C. R. Tutt, C. S. Swanson, and W. L. Pearce (1)

References and Notes
1. Dep. of Agronomy, Univ. of Kentucky, Lexington, KY 40546-0091. The investigation reported in this paper (90-3-136) is in connection with a project of the Kentucky Agric. Exp. Sta. and is published with the approval of the director. Registration by CSSA. Accepted 28 Feb. 1991. *Corresponding author.


REGISTRATION OF ‘KARL’ WHEAT

‘KARL’ (Reg. no. CV-762, PI 527480) (KS831374) is a hard red winter wheat (Triticum aestivum L.) developed cooperatively by the Kansas Agricultural Experiment Station and the USDA-ARS. It was released to seed producers in 1988. Karl was selected from the cross ‘Plainsman V’/3/’Kaw’/‘Atlas 50’//‘Parker’*5/’Agent’, made by E.G. Heyne at Kansas State Univ. in 1977. Karl is an increase from an F2 population from the cross was maintained as a bulk for 4 yr (F3–F5) with natural selection for local climatic conditions. The F5 population from the cross was maintained as a bulk for 4 yr (F5–F6) with natural selection for local climatic conditions. Its winterhardiness is better than ‘Kaw’. Karl was evaluated in the Kansas advanced performance tests from 1984 to 1988, in the Kansas Wheat Performance Tests from 1987 to 1988, and in the 1987 and 1988 Southern Regional Performance nurseries. Karl is best adapted to central and eastern Kansas. Its grain yield and grain volume weight have been superior to the most commonly grown cultivars in these regions, Arkan and Newton.

Hard wheat milling and bread-making qualities of Karl are excellent. It has a 15 to 20 g kg⁻¹ flour-extraction advantage over currently grown hard wheats. Mixing time of Karl, as measured by the mixograph, is ~0.5 to 1.0 min longer than for ‘Eagle’. It is rated equal to Eagle in baking quality. Grain protein concentration of Karl is 10 g kg⁻¹ above Eagle and 20 g kg⁻¹ above Newton.

Karl is resistant to soilborne mosaic virus and spindle streak mosaic virus. It has effective levels of resistance to leaf rust (caused by Puccinia recondita Roberge ex Desmaz.), powdery mildew (caused by Erysiphe graminis DC. f. sp. tritici Em. Marchal), septoria leaf blotch (caused by Septoria tritici Roberge in Desmaz) and tan spot (caused by Pyrenophora trichostoma [Fr.] Fucel). Karl is moderately susceptible to stem rust (caused by F. graminis Pers.: Pers.). It is susceptible to Hessian fly (Mayetiola destructor Say) and wheat streak mosaic virus.

Application for cultivar protection under the Plant Variety Protection Act, Public Law 91-577, has been made. Breeder seed of Karl will be maintained by the Kansas Agricultural Experiment Station, Manhattan, KS 66506.


References and Notes


REGISTRATION OF ‘BATUM’ WHEAT

‘BATUM’ (Reg. no. CV-76, PI 495013) is a hard red winter wheat (Triticum aestivum L.) developed cooperatively by the College of Agriculture, Washington State University, and the USDA-ARS. It was jointly released to growers by USDA-ARS and the Washington and Oregon Agricultural Experiment Stations in 1985. Batum was selected in the F5 generation from the cross C113438/‘Redmond’//C113694/5/PI178383/C113431//C113441/3//‘Itana’/4//‘Bezostaja-l’//C113438/‘Burt’. The population from the cross was maintained as a bulk for 4 yr (F5–F6) with natural selection for local climatic conditions of low rainfall. Subsequent selection of the cultivar was maintained without further selection or purification.

Batum is winter habit, midseason to late, and semidwarf (Rh1t). It has a strong white stem with an awned, inclined spike oblong to fusiform, middense to lax. The glumes are...