REGISTRATION OF 'NORKAN' WHEAT

'NORKAN' (Reg. no. 725, PI 506345, KS82H4) is a hard red winter wheat (Triticum aestivum L.) developed cooperatively by the Kansas Agricultural Experiment Station and the USDA-ARS. It was jointly released to seed producers in 1986 by the developing institutions and the Nebraska Agricultural Experiment Station. Norkan was selected from the cross 'Plainsman V/3/2*(KS76H3705)/Larned'/'Eagle'/ 'Sage'. The cross was made by the late R.W. Livers at the Fort Hays Branch Agricultural Experiment Station in the winter of 1976-1977. Norkan is an increase of an F1 plant row grown at Hays, KS in 1981.

Norkan is medium to medium-late maturing and heads about 1 d later than 'Newton'. Norkan has semidwarf stature and is slightly shorter than Newton, with a coleoptile length equal to that of Newton. Winter survival of Norkan has equaled 'Scout 66' in the 1983 to 1985 Uniform Winter-hardiness Nurseries. Leaves of Norkan are distinctly pubescent on the adaxial surface. Leaf hairs are rather sparse and are up to 0.5 mm long. Norkan’s spikes are oblong to fusiform and middense. Glumes are white, midlong, and narrow. Shoulders are narrow and wanting in basal glumes, approach square at midspike, and range to apiculate at the top of the spike. Beaks are narrow, acuminate, and 1 to 4 mm long. The kernel is red, hard, midlong, and elliptical to ovate; the germ is small; the crease is midwide and middeep; the cheeks are angular; and the brush is midsized, midlong, and has no collar.

Norkan was evaluated in Kansas advanced tests from 1983 to 1986, in the Kansas Wheat Performance Test in 1986, and in the 1983 and 1986 Regional Performance Nurseries, and appeared adapted to production in northern Kansas. Its yield and volume weight have been superior to that of New and 'Arkab', the most commonly grown cultivars in Kansas.

Hard wheat milling and bread making qualities are excellent and very similar to those of Eagle, with a slightly lower loaf volume than Eagle, but better crumb color. The grain and flour protein contents are equal to those of Eagle and 1 percentage point less than those of Newton.

Norkan has resistance to wheat scabborne leaf rust (caused by Puccinia recondita Rob. ex Tritici Eriks), stem rust (caused by P. graminis Tritici Eriks and E. Henn.), and biotypes GP, H., and KS of Hessian fly (Mayetiola destructor Say), which is controlled by the H5 gene derived from Larned. It is susceptible to wheat streak mosaic virus.

Application for cultivar protection under the Federal Plant Protection Act, Public Law 91-577 has been made. Norkan breeder’s seed will be maintained at the Fort Hays Branch Agricultural Experiment Station, Hays, KS 67601.


References and Notes