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)‘Larred’/‘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 F₄ 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 Winterhardiness 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 hard, red, 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 yield tests from 1983 to 1986, in the Regional Performance Test in 1986, and as a Regional Performance Non-Adapted to production in 1985. Grain and test weight have been stable. ‘Arkan’ and ‘Arkan’, the most commonly grown hard red winter wheat in Kansas.

Hard wheat milling and end-use properties are excellent and very similar to those of ‘Eagle’ with a slightly lower loaf volume and crumb color. The grain and flour yield and composition are equal to those of ‘Eagle’ and ‘Newton’.

Norkan has resistance to UG leaf rust (caused by Puccinia graminis tritici Erichs), stem rust (caused by Puccinia triticci Erichs and E. J. Hennig), and the H3 gene derived from wheat streak mosaic virus (WSMV).

Application for cultivar registration under the Plant Protection Act, Public Law 92-222, 1972, for breeder’s seed will be made to the Kansas State University, Agricultural Experiment Station, Hays, Kansas.

T. J. MARTIN, R. G. SEARS, D. L. WETZEL

References
