REGISTRATION OF CROP CULTIVARS

Crop Improvement Association, 1900 Hendon Ave., St. Paul, MN 55108.


References and Notes

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REGISTRATION OF ‘VANCE’ WHEAT

‘VANCE’ (Reg. no. 752, PI 532150) is a hard red spring wheat (Triticum aestivum L.) developed cooperatively by the Minnesota Agricultural Experiment Station and the USDA-ARS and was released in February 1989. Vance originated from the cross of ND560/MN7595 made in 1979. ND560 is a North Dakota State University line originating from the cross ‘Butte’/‘Olaf. MN7595 is from the cross MN7262/MN7260. MN7260 has ‘Lovrin 11’ and MN7262 has ‘Ciano 67’ and both have ‘Era’ and ‘Tobari’ in their pedigrees. Vance originated as an F5-derived line in 1981. About 250 headrows from F5 were grown at Weslaco, TX for winter increase, and phenotypically similar rows were bulked to form breeder seed for increase at St. Paul, MN in 1987.

Vance was tested as MN82354 in Minnesota state-wide trials from 1982 to 1988 and in the Uniform Regional Hard Red Spring Wheat Nursery from 1986 to 1988. Vance was similar in grain yield to ‘Marshall’ after 5 yr of state testing, but was about 5% less than ‘Wheaton’. In 52 trials in the Uniform Regional Nursery, Vance has yielded 7% more than Era. Vance is similar to Marshall in days to head and lodging resistance but is about 4-cm taller. It is moderately resistant to shattering. Vance possesses at least a 0.5 percentage point increase in protein content and superior breadmaking quality compared to Marshall. The spike of Vance is awned, fusiform to oblong, and middense. The glumes are glabrous and white, shoulders are wide and elevated, and beaks are tapering and midlong. The kernel shape is ovate, midsize, and white, shoulders are wide and elevated, and beaks are fusiform to oblong, and middense. The Federal Grain Inspection Service judged Vance’s kernel type as typical hard red spring wheat.

Vance is highly resistant to prevalent races of stem rust [caused by Puccinia graminis (Pers.) f. sp. tritici (Eriks. and E. Henn.)] and leaf rust [caused by Puccinia recondita (Rob. ex Desm.) f. sp. tritici]. It is moderately resistant to loose rust (caused by Puccinia hordei (= P. recondita f. sp. hordei E. Henn.). Vance is highly resistant to prevalent races of stem rust [caused by Puccinia graminis (Pers.) f. sp. tritici (Eriks. and E. Henn.)] and leaf rust [caused by Puccinia recondita (Rob. ex Desm.) f. sp. tritici]. It is moderately resistant to loose rust (caused by Puccinia hordei (= P. recondita f. sp. hordei E. Henn.).

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REGISTRATION OF ‘KIRK’ CRESTED WHEATGRASS

‘KIRK’ crested wheatgrass (Agropyron cristatum (Canada Reg. no. 2788) (Reg. no. 17, PI 5676) was developed by the Agriculture Canada Research Station at Saskatoon, Saskatchewan, Canada and released in 1987. The Saskatoon experimental designation, K2C 3N2, which was applied to a 1968 introduction from the Botanical Garden, University of Turku, Turku, Finland, was allowed to outcross with nine local strains and four European introductions of the tetraploid type. This was followed by two cycles of phenotypic selection in 1973 and 1978. Selection was made for vigor, fertility, resistance to Heading, lodging, and shattering of seed, and reduced awn development.

Kirk is tetraploid (2n = 28) with the tall growth habit of ‘Fairway’. Spikelets are ovate to oblong, and 1-cm long. Seeds are white, rounded, and flat. The awn is yellow, to 1-cm long, and straight. Kirk is adapted to the general area of crested wheatgrass distribution with best performance under moderately moist rather than drought conditions. Kirk is suitable for early use with best performance under moderately moist rather than drought conditions. Kirk is suitable for early use with best performance under moderately moist rather than drought conditions.

Kirk showed superior emergence from deep seeding. Kirk is highly resistant to prevalent races of stem rust [caused by Puccinia graminis (Pers.) f. sp. tritici (Eriks. and E. Henn.)] and leaf rust [caused by Puccinia recondita (Rob. ex Desm.) f. sp. tritici]. It is moderately resistant to loose rust (caused by Puccinia hordei (= P. recondita f. sp. hordei E. Henn.). Kirk is highly resistant to prevalent races of stem rust [caused by Puccinia graminis (Pers.) f. sp. tritici (Eriks. and E. Henn.)] and leaf rust [caused by Puccinia recondita (Rob. ex Desm.) f. sp. tritici]. It is moderately resistant to loose rust (caused by Puccinia hordei (= P. recondita f. sp. hordei E. Henn.).

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