Registration of ‘Vista’ Wheat

‘Vista’ (Reg. no. CV-789, PI 562653) is a hard red winter wheat (Triticum aestivum L.) developed cooperatively by the Nebraska Agricultural Experiment Station and the USDA-ARS. It was jointly released to seed producers in 1992 by the developing institutions. Vista was selected from the cross NE68513/NE68457/‘Centurk’3/‘Warrior’/‘Atlas 66’/‘Comanche’3/‘Comanche’/‘Ontario’. NE68457 is ‘Ponca’/‘Centurk’/‘Illinois’1/‘Chinese Spring’ *2/‘Triticum timopheevi’/‘Cheyenne’/‘Tenmarq’/‘Mediterranean’/‘Hope’3/‘Sando’60. Vista is an increase of an F3-derived F4 line that was identified in 1987 and tested as NE87615. Vista was released because of its high yield potential, and disease and insect resistances.

Vista is an awned, white glumel cultivar. The awns are usually white, but in some environments may have a bronze cast. The spike is middense and generally fusiform but may be tapering to clavate. The foliage is green with a waxy bloom at anthesis. The glume is midlong and midwide to wide. The glume shoulder is midwide and sloping to square. The beak is acuminate and medium to moderately long. The kernel is short, red colored, hard textured, and elliptical to ovate. The kernel has no collar, rounded cheeks, midsize germ, large brush, and a narrow, shallow crease.

Vista has been tested in Nebraska yield nurseries starting in 1988, and in the Uniform Southern Regional Winter Wheat Performance Nursery in 1990 and 1991. In four years of testing (17 location-years) in the Nebraska Instate Nursery, Vista’s grain yield (2570 kg ha−1) was similar to ‘Rawhide’, 11% more than ‘TAM107’, and 2, 3, and 4% less than ‘Arapahoe’, ‘Redland’, and ‘Siouxland’, respectively. In 2 yr of testing (1991 and 1992) in the Nebraska Fall-Sown Small Grain Variety Tests (28 location-years), Vista (3050 kg ha−1) was 4, 5, 11, 13, and 14% higher yielding than Redland, Arapahoe, Siouxland, Rawhide, and TAM107, respectively. In the Uniform Southern Regional Winter Wheat Performance Nursery, Vista (3680 kg ha−1) was the highest yielding line of those tested in both years across the region (48 location-years) and yielded 2% more than TAM107. Vista is best adapted to the northern high plains region (southwest Nebraska, western Kansas, and northeastern Colorado). In this region (10 location-years), Vista (3420 kg ha−1) yielded 6% more than TAM 107. Vista is a semidwarf cultivar that is one cm shorter than TAM107 and 15 cm shorter than ‘Scout 66’, a conventional height wheat. Vista has a short coleoptile (63 mm) compared to TAM107 (80 mm) and Scout 66 (103 mm). Vista is not recommended for very dry wheat growing conditions (less than 38 cm of annual precipitation) because its short coleoptile and short plant height may cause seeding

References and Notes


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