Registration of ‘Sylvan’ Wheat

‘Sylvan’ (Reg. no. CV-825, PI 578867) hard red spring wheat (Triticum aestivum L.) was developed by the Utah and Colorado Agricultural Experiment Stations and was released to seed producers in March 1994. Sylvan was released because of its high grain yield, superior grain volume weight, and excellent bread-making quality under irrigated conditions in the San Juan Basin of southwestern Colorado. Sylvan is an F₅-derived line selected in the F₆ generation at Logan, UT, in 1986 from the cross UT78S147-209/‘Westbred 906R’ made in 1981. Westbred 906R is an early-maturing, semidwarf, hard red spring wheat released by Western Plant Breeders in 1982. UT78S147-209 is a Utah breeding line from the cross UT70W498-259/‘Prospur’. The F₁ generation of the Sylvan cross was produced in the greenhouse during the 1981–1982 winter. The F₂ through F₅ generations were grown in the field in spaced-planted modified bulk populations, and desirable plants were visually selected during 1982 to 1985. Sylvan was yield tested in Utah as UT86S688-2464 beginning in 1987 and as UT002464 in the Western Regional Spring Wheat Nursery (1989–1990) and in Colorado. Breeder seed was produced from a rogued 0.25-ha plot at Yellow Jacket, CO, in 1993.

Sylvan is an awned, white-glumed semidwarf cultivar that is most similar to Westbred 906R in appearance. The spike is semilax and tapering. The foliage is green at booting stage, with a waxy bloom at anthesis. The glume is midlong and midwide, with an oblique shoulder and an acuminate beak. The coleoptile color is white; juvenile growth habit is erect. The kernel is red, medium length, hard textured, and ovate. The kernel has no collar, rounded cheeks, midsize germ, short brush, and a wide, shallow crease.

In 3 yr (1991–1993) of testing in irrigated yield nurseries in southwestern Colorado near Yellow Jacket, Sylvan’s grain yield (7062 kg ha⁻¹) was 11% higher than the current highest yielding hard red spring wheat cultivars, Spillman and Oslo. Grain volume weight was about 26 g L⁻¹ higher than Oslo and Spillman in those trials. Sylvan was 5 d later in maturity than Spillman and 8 d later than Oslo. Sylvan averaged 5 cm shorter than ‘Blanca’ and is similar in straw strength.

Based on tests conducted in the wheat quality laboratory at Colorado State University, Sylvan has excellent bread-making quality for domestic and export use. It has been intermediate between Oslo and ‘Klasic’ in dough mixing time and tolerance to mixing as determined by the mixograph. Flour extraction is satisfactory, and interior and exterior loaf characteristics are superior to Oslo and similar to Klasic.

Breeder seed of Sylvan will be maintained by the Colorado Agricultural Experiment Station. Foundation seed will be produced and distributed by Colorado Foundation Seed, Dep. of Soil and Crop Sciences, Colorado State Univ., Fort Collins, CO 80523.

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References and Notes

Registration of ‘Catoctin’ Wheat

‘Catoctin’ soft red winter wheat (Triticum aestivum L. cv. CV-821, PI 584500) was developed by the Maryland Agricultural Experiment Station, Department of Agronomy, College Park, MD 20742. Catoctin originated from the crossing Holley/Purdue 67137B12-3//Virginia 70-520 made in 1978 and was designated MD 80071. Segregating generations of Catoctin were evaluated in preliminary yield trials from 1986 through 1990 and was tested in statewide trials from 1990 through 1994. Catoctin was released because of its high grain yield, superior grain volume weight, and excellent bread-making qualities under irrigated conditions in the San Juan Basin of southwestern Colorado. Catoctin is an Fs-derived line selected in the field in spaced-planted modified bulk populations, and desirable plants were visually selected during 1982 to 1985. Catoctin was yield tested in Utah as UT86S688-2464 beginning in 1987 and as UT002464 in the Western Regional Spring Wheat Nursery (1989–1990) and in Colorado. Breeder seed was produced from a rogued 0.25-ha plot at Yellow Jacket, CO, in 1993.

Catoctin is an awned, white-glumed semidwarf cultivar that is most similar to Westbred 906R in appearance. The spike is semilax and tapering. The foliage is green at booting stage, with a waxy bloom at anthesis. The glume is midlong and midwide, with an oblique shoulder and an acuminate beak. The coleoptile color is white; juvenile growth habit is erect. The kernel is red, medium length, hard textured, and ovate. The kernel has no collar, rounded cheeks, midsize germ, short brush, and a wide, shallow crease.

In 3 yr (1991–1993) of testing in irrigated yield nurseries in southwestern Colorado near Yellow Jacket, Catoctin’s grain yield (6930 kg ha⁻¹) was 11% higher than the current highest yielding hard red spring wheat cultivars, Spillman and Oslo. Grain volume weight was about 21 g L⁻¹ higher than Spillman and Spillman in those trials. Catoctin was 5 d later in maturity than Spillman and 8 d later than Oslo. Catoctin averaged 5 cm shorter than ‘Blanca’ and is similar in straw strength.

Based on tests conducted in the wheat quality laboratory at Colorado State University, Catoctin has excellent bread-making quality for domestic and export use. It has been intermediate between Oslo and ‘Klasic’ in dough mixing time and tolerance to mixing as determined by the mixograph. Flour extraction is satisfactory, and interior and exterior loaf characteristics are superior to Oslo and similar to Klasic.

Breeder seed of Catoctin will be maintained by the Colorado Agricultural Experiment Station. Foundation seed will be produced and distributed by Colorado Foundation Seed, Dep. of Soil and Crop Sciences, Colorado State Univ., Fort Collins, CO 80523.

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References and Notes

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