REGISTRATION OF US H21 SUGARBEET1
(Reg. No. 6)
Gerald E. Coe and George J. Hogaboam2

'US H21' sugarbeet (Beta vulgaris L.) was developed by the Agricultural Research Service, USDA. It was released in cooperation with the Beet Sugar Development Foundation, the Farmers and Manufacturers Beet Sugar Association, and the Michigan Agricultural Experiment Station. This hybrid cultivar was produced by crossing a monogerm cytoplasmic male-sterile seed-bearing parent with a multigerm pollinator. The lines used were SP 69550-01 × SP 6322-0.

In the Great Lakes region, US H21 produces about 99% as much recoverable white sugar per hectare as 'US H20,' 92% of the yield of roots, and 108% as much recoverable white sugar per metric ton of roots. This higher quality is achieved with a 6% improvement in sucrose content and an 0.8% improvement in clear-juice purity. Tests by others have indicated that US H21 has high quality in Iowa, North Dakota, and Minnesota.

When leaf-spot ratings are on a scale from 1 to 10 (10 represents complete necrosis), US H21 rates at least 1.2 points better than US H20 under heavy infection. US H21 is equal to US H20 in resistance to black root. The leaves of US H21 tend to be smaller, with shorter petioles, and less upright than those of US H20.

US H21 is recommended for use in the sugarbeet districts of the Great Lakes region.

Breeder seed is maintained by the Agricultural Research Service, USDA, Beltsville Agricultural Research Center, Beltsville, MD 20705.

1 Registered by the Crop Science Society of America. Cooperative investigation of Agricultural Research Service, USDA; Beet Sugar Development Foundation; Farmers and Manufacturers Beet Sugar Association; and Michigan Agricultural Experiment Station. Approved for publication as Journal Article No. 6493, Michigan Agricultural Experiment Station. Received Oct. 20, 1973.

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REGISTRATION OF COULEE WHEAT1
(Reg. No. 536)
R. E. Allan and O. A. Vogel2

'COULEE' wheat (Triticum aestivum L., CV. 14483) is a semidwarf hard white, bread-type cultivar selected from the cross 'Suwon 92'x'Burt' made at Pullman, Washington in 1961. Coulee was developed cooperatively by the Agricultural Research Service, USDA and the College of Agriculture, Washington State University. It was jointly released to growers by the Agricultural Research Service and College of Agriculture Research Center, Washington State University in 1971.

Coulee has short, white straw that varies from 60 to 90 cm in height. The ears of Coulee are shorter and stouter than those of Burk. The glumes are either glabrous or slightly pubescent. Occasional spikelets have either awnless glumes or awn points. The awns are white, 1 to 5 cm long.

Coulee is similar to Burk in growth habit, hardiness, and test weight. It is superior to Burk in resistance to lodging and shattering. Coulee emerges ahead of Burk but generally poorer than 'Nugaines,' but generally poorer than 'Nugaines.'

Coulee is resistant to the races of stripe rust in the Pacific Northwest and is less damaged by black root (strawbreaker) than Burk. Coulee is likely to common bunt, resistance to flag smut, susceptible to races of dwarf bunt, and high susceptibility to Fusarium. It is more susceptible to powdery mildew.

Coulee is recommended primarily for 28 to 38 cm rainfall areas of Washington, especially for intensive systems and conditions where stripe rust is a problem. Coulee is more productive than Burk in these areas, respectively, during a 4-year period. Coulee yielded slightly less than Wanser in the 28 to 38 cm rainfall areas, but it outyielded Wanser by 8% in the 39 to 46 cm rainfall areas. When grown under conditions of severe freezing temperatures and in the absence of fungicide treatment has shown no advantage over Wanser.

Like Burk, Coulee has satisfactory milling quality characteristics. It should be handled like common soft white and club wheats to prevent the varieties with distinctly different end-use qualities.

Breeder seed of Coulee will be maintained by the Crop Improvement Association at Washington State University, Pullman, WA 99163.

REGISTRATION OF SLATE INTERMEDIATE WHEATGRASS1
(Reg. No. 10)
L. C. Newell2

'SLATE' is a cool-season forage cultivar of intermediate wheatgrass [Agropyron intermedium (Host)] Beauv. developed cooperatively with the Washington Agricultural Experiment Station and the Agricultural Research Service, USDA. The cultivar was released in 1973 to increase on farms.

Slate is a synthetic variety produced from two parental strains. A slate-colored strain of 'Nebraska 50,' developed as a decrease of 60 clones, and one of 'Amur,' from a decrease of 57 clones, were selected as the complementary unred parental strain of 'Nebraska 50,' widely grown from 1950 to 1965. One of the Nebraska 50 selection from P.I. 98586, which originated in the U.S.S.R. Amur traces to P.I. 131532, introduced from the Amur River in Manchuria, eastern Asia.

Plants of Slate are strongly spreading by rhizomes, with reasonable uniformity in height, leaf color, and flowering. Leaf blades are broad and flat, not strongly veined or rolled. As they mature, plants are slate-green in color, intermediate between the bright green and glaucous blue-green of other cultivars. The inflorescence is a well developed spike with multiflowered spikelets, usually with awns, either glabrous or slightly pubescent. Occasional spikelets have awnless glumes or awn points. Seed production is low.