REGISTRATION OF WOODVALE BARLEY

Wade G. Dewey

'WOODVALE' spring barley (Hordeum vulgare L. emend. Lam.), CI 13813, was developed cooperatively by the Utah Agricultural Experiment Station and the Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture.

Woodvale was selected from a headrow increase of the cultivar 'Vale.' Two hundred heads of Vale were sent to Yuma, Arizona, for a winter increase in 1964. Segregation was observed for glossy vs. nonglossy heads, for maturity and for height. Twenty-seven of the shorter, earlier-maturing, glossy-headed rows were harvested and competed to constitute the breeding line tested as 'Gleas Vale' and later named Woodvale. It was released to seed producers in the spring of 1969.

Woodvale is a six-rowed, white aleuroned, smooth-awned, stiff-strawed food barley. It has averaged about 5 days earlier and 3 to 5 inches shorter than Vale and 'Bonneville,' the cultivars with which it primarily competes in Utah. The shorter straw makes Woodvale particularly appealing to growers with heavy, irrigated land where lodging frequently is a problem. It has demonstrated a slight yield advantage over Vale and Bonneville.

Woodvaile is resistant to loose smut.

Woodvale is recommended for the irrigated valleys of northern Utah. Breeder seed will be maintained by the Utah Agricultural Experiment Station, Logan, Utah 84321.

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REGISTRATION OF COASTCROSS-1 BERMUDAGRASS

Glenn W. Burton

'COASTCROSS-1' bermudagrass, Cynodon dactylon (L.) Pers., was released in 1967 by the Georgia Agricultural Experiment Stations and Plant Science Research Division, Agricultural Research Service, U. S. Department of Agriculture. Coastcross-1 is a sterile F1 hybrid between Coastal and P.I. 255445, obtained from A. V. Bogdan, Research Station, Kitele, Kenya, in 1958. This hybrid, previously described as 'Coastal' X 'Kenya' #14, grows taller and has broader, softer leaves than Coastal. It has glabrous sheaths, an abundance of hairs 3 to 4 mm long attached at the ligule and sparse hairs 2 to 3 mm long on both surfaces of the leaf blade. The stigmas of Coastcross-1 are rose colored fading to light pink at their tips. It is highly resistant to foliar diseases and the sting nematode.

Coastcross-1 has rapidly spreading, above-ground stolons but fails to develop the rhizomes characteristic of most bermudagrasses. Its lack of rhizomes makes it easier to eradicate but also makes it more vulnerable to winter injury. Coastcross-1 has small growing points at or near the soil surface from which new growth is initiated each spring. These have limited capacity for storing reserves. Coastcross-1 makes more growth in the fall than Coastal but does this at the expense of building up reserves for winter.

Coastcross-1 is generally established by broadcasting and disking into moist soil, green stems cut at the hay stage. It establishes faster than Coastal bermudagrass and can often be grazed 4 to 6 weeks after planting.

At Tifton, Coastcross-1 has yielded about the same as Coastal, but the forage from Coastcross-1 has consistently been 11 to 12% more digestible. This difference in digestibility enabled dairy heifers eating Coastcross-1 to make up to 30% better gains than those consuming Coastal, while eating the same amount of each grass. These hayes were harvested at the same time at an early growth stage from uniformly fertilized, adjacent plots and were artificially dried in wagon dryers.

In a replicated grazing experiment, steers grazing Pennsacola bahiagrasses, Coastal and Coastcross-1 bermudagrasses made average daily gains for a 3-year period of 49, 55 and 71 kg, respectively. ADGs on Coastcross-1 held up much better in late summer and fall than on the other grasses. Per acre live weight gains of steers grazing Coastcross-1 exceeded those of steers grazing Coastal bermuda by as much as 50%.

Coastcross-1 is less winterhardy than Coastal bermuda. It has suffered loss of stand at Tifton following temperatures of 6 F, but has quickly re-established itself the following spring. It has failed to survive severe winters at Athens, Georgia and is not recommended north of an isotherm passing through Macon, Georgia.

Breeder and foundation stock are maintained and distributed by the Georgia Coastal Plain Experiment Station.

REGISTRATION OF SHERMAN BIG BLUEGRASS

J. L. Schwendiman

'SHERMAN' big bluegrass, Poa ampla Merr., was developed by the Soil Conservation Service, U. S. Department of Agriculture, and was released in 1945 in cooperation with Washington, Idaho and Oregon Agricultural Experiment Stations. It was isolated after several generations of backcrossing Coastal and P. ampla var. P-2716, and Oregon Agricultural Experiment Stations. It was isolated after several generations of backcrossing Coastal and P. ampla var. P-2716, and Oregon Agricultural Experiment Stations. It was isolated after several generations of backcrossing Coastal and P. ampla var. P-2716.

Sherman is adapted to the native range of big bluegrass in the Pacific Northwest and Great Basin States at elevations of 91 to 2,400 m (300 to 8,000 ft) on well-drained sites where the annual precipitation averages 25 to 50 cm (10 to 20 in). Strems grazing Pennsacola bahiagrasses, Coastal and Coastcross-1 bermudagrasses made average daily gains for a 3-year period of 49, 55 and 71 kg, respectively. ADGs on Coastcross-1 held up much better in late summer and fall than on the other grasses. Per acre live weight gains of steers grazing Coastal exceeded those of steers grazing Coastal bermuda by as much as 50%.

Sherman is a leafy, long-lived apomictic, perennial bunchgrass with long, flat leaves and broad, flat ligules. It produces numerous fine, early-heading stems with cleft panicles containing abundant seed. Seeds shatter readily and germinate when moisture is available. The 63-chromosome plants with both deep and extensively shallow root systems remain dormant during hot, dry summers and resume growth with cooler temperatures and fall rains.

Sherman is adapted to the native range of big bluegrass in the Pacific Northwest and Great Basin States at elevations of 91 to 2,400 m (300 to 8,000 ft) on well-drained sites where the annual precipitation averages 25 to 50 cm (10 to 20 in).4

The variety starts growth very early in spring and its palatable forage is ready for grazing four weeks earlier than crested big bluegrass.

4 Registered by the Crop Science Society of America. Received Sept. 29, 1971.