REGISTRATION OF 'RAWHIDE' WHEAT

'Reawhide' (Reg. no. CV-772, PI 543893) 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 1990 by the developing institutions and the South Dakota Agricultural Experiment Station. Rawhide was selected from the cross 'Warrior'5/'Agent'//'Kavkaz'/4/'Parker'4/Agent/'Beloterkovskaia 198Y'/Lancer'/3/'Vona' made in 1977 by J. W. Schmidt. Rawhide is an increase of a F3-derived F4 line that was identified in 1983 and tested as NE33498. It was released because of its high yield potential, winterhardiness, relative earliness, and ability to perform well in stressed conditions (hence its name).

Rawhide is an awned, white-glumed cultivar. The foliage is blue-green, with a waxy bloom at anthesis. The spike is middense and mostly oblong. At maturity, the spike is inclined to nodding. The glume is midlong and midwide. The beak is acuminate and medium with a range of moderately short to long.

Rawhide has satisfactory test weight characteristics, superior to Redland and similar to Siouxland. It has very adequate winterhardiness (superior to Vona and similar to 'Scout 66') and is a medium height (semidwarf) with moderately strong straw. The coleoptile length of Rawhide (67 mm) is 66% of Scout 66 (102 mm) and 81% of 'TAM 107' (83 mm). Rawhide is about 75 mm taller than TAM 107, slightly shorter (25 mm) than Redland and Arapahoe, and 100 mm shorter than Siouxland. Rawhide is 1 d later than TAM 107, 1 d earlier than Siouxland, and 2 d earlier than Redland and Arapahoe. Yield, test weight, height, and anthesis date will vary with the environment.

Rawhide is moderately resistant to the currently prevalent races of stem rust (incited by Puccinia graminis Pers.: Pers.,) contains Sr17, Sr24, and is heterogenous for Sr31 which indicates it is heterogenous for 1B/1R translocation). It expresses the heterogeneous reaction to the Great Plains biotype of Hessian fly (Mayetiola destructor Say) which is believed to indicate the 'Marquillo'-'Kawvale' genes for resistance. It is susceptible to leaf rust (incited by P. recondita Roberge ex Desmz., wheat soilborne mosaic virus, and wheat streak mosaic virus.

The overall bread-making properties of Rawhide are average. Using composite samples from field trials in Nebraska, Rawhide is similar to Arapahoe and Scout 66 in wheat and flour protein content and higher than 'Centurk 78'. Rawhide is also similar to Arapahoe, less than Scout 66, and greater than Centurk 78 for milling extraction. Baking absorption was similar for Rawhide, Arapahoe, Centurk 78, and Scout 66. Rawhide has strong mixing characteristics as determined by the mixograph. The loaf volume of Rawhide was less than Arapahoe and Scout 66, and was similar to Centurk 78. Internal and external loaf characteristics were acceptable. The kernels of Rawhide have been classified, using the existing standards, by the Federal Grain Inspection Services as being hard red winter wheat.

Breeder seed of Rawhide will be maintained by the Nebraska Agricultural Experiment Station. Rawhide will be submitted for registration and plant variety protection under P.L. 91-577 with the certification option.


References and Notes

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REGISTRATION OF 'HI-LINE' WHEAT

'Hi-Line' (Reg. no. CV-771, PI 549275) is a hard red spring wheat cultivar (Triticum aestivum L.) developed cooperatively by the Montana Agricultural Experiment Station and the USDA-ARS and released in 1991. The cultivar was an F3-derived F4 plant selection from the cross of MT 7336/'Shortana'. The female parent, MT 7336, was selected from the cross PK 176/'Sheridan'. Hi-Line was evaluated as MT 8402 in a single-row yield nursery in Bozeman in 1983, was entered into the Preliminary Yield Nursery at four Montana locations in 1984, and has been tested in the Advanced Yield Nursery at 11 Montana locations since 1985. MT 8402 was also grown in the Uniform Regional Hard Red Spring Wheat Nursery in 1986 and 1990.

Hi-Line has white straw and chaff; the spike is awned,