Publicity on Winchester was released 1 Aug. 1984, and foundation seed was produced by releasing states in 1983. The Purdue University Agricultural Experiment Station will maintain breeder seed.

K. L. Athrow, F. A. Laviolette, J. R. Wilcox, and T. S. Abney (1)

References and Notes

1. Professor (K. L. A.), associate professor (F. A. L.), Dep. of Botany and Plant Pathology, Purdue Univ.; supervisory research geneticist USDA-ARS and professor (J. R. W.), Dep. of Agronomy, Purdue Univ.; research plant pathologist, USDA-ARS, and associate professor (T. S. A.), Dep. of Botany and Plant Pathology, Purdue Univ., W. Lafayette, IN 47907. Cooperative investigations of the USDA-ARS and the Purdue Univ. Agric. Exp. Stn. Journal Paper No. 9797 of the Purdue Univ. Agric. Exp. Stn. This research was supported in part by a grant from the Indiana Crop Improvement Association. Registration by the Crop Sci. Soc. of Amer. Accepted 24 Apr. 1984.

REGISTRATION OF AGASSIZ WHEAT

'Agassiz', PI 478771, is a hard red winter wheat (Triticum aestivum L.) (Reg. no. 689) originating as a F3-derived line from the cross YTO-117/'Trader' made at the North Dakota Agricultural Experiment Station in 1969. The pedigree of YTO-117 is 'Yogo'2/'Turkey'/'Oro'. Agassiz was designated ND7687 while tested in the 1977 through 1982 North Dakota yield trials and the 1983 and 1984 Northern Regional Performance Nursery.

Over 4 years in the eastern half of North Dakota, Agassiz outyielded 'Roughrider' by 10%. Agassiz is 1 day later in maturity than Roughrider, slightly less winterhardy, and 3 to 4 cm taller. The spike of Agassiz is awned, middense, and fusiform. The glumes are white and glabrous, shoulders are midwide and oblique, and beaks are acute. The kernels are hard, red; kernel shape is ovate and midlong, with midwide and shallow crease. The brush is midsize and not collared.

Agassiz has shown field resistance to the prevalent races of stem rust (incited by Puccinia graminis Pers. f. sp. tritici Erks. and Henne.). Seedlings and adults were moderately susceptible to cultures of stem rust races 15(TNM), 151(QSH), and 11-32-113 (RTQ) in greenhouse tests. It is susceptible to leaf rust incited by Puccinia recondita Rob. ex Desm. f. sp. tritici and has displayed intermediate field reactions to tan spot incited by Pyrenophora tritici-repentis (Died.) Drechs.

The milling and baking quality of Agassiz has been satisfactory. It was faulted for lower loaf volume than Roughrider and slightly inferior crumb color and grain and texture. It is similar to Roughrider in grain and flour protein percentage.

Agassiz was named and released by the North Dakota Agricultural Experiment Station in 1983. Breeders seed will be maintained by the Agronomy Dep., Virginia Polytechnic Inst. and State Univ., Blacksburg, VA 24061.

T.M. Starling, C.W. Roane, and H.M. Camper, Jr. (1)

REGISTRATION OF MASSEY WHEAT

'Massey', CI 17958, is a soft red winter wheat (Triticum aestivum L.) (Reg. no. 689) developed by the North Dakota Agricultural Experiment Station and released according to records, parentage of the cross from which Massey was selected is 'Blueboy'/'Knox 62'. Massey has some resistance to stem rust (caused by Pers. f. sp. tritici Erks. and Henne.) which is not found in either parent. Therefore, it is possible that an outcross was involved at some stage in its development. The cultivar has many traits which are similar to the presumed Blueboy and Knox 62 parents. The cross from which seedling head selections were made in the F3, and developed from an F3 head selection out of one of the F3 head selections.

Massey has been evaluated extensively, was an entry in the Uniform Southern Soft Red Wheat Nursery in 1979, 1980, and 1981 and in the Northern Soft Red Wheat Nursery in 1982 and 1983. Preliminary evaluation was under the experimental designation Va. 76-52-12. In 33 trials conducted in Virginia from 1978 through 1982, yield of Massey has been higher than 'Wheeler', 'McNair 1003', and 'Tyler', respectively, and 5% less than 'Tyler'. Test weight has been higher than that of McNair 1003 and slightly less than that of Coker 747 and Wheeler. Milling and baking characteristics are satisfactory, being similar to those of the Blueboy and Knox 62 parents.

Massey is midtall and matures in midseason. Stems are white and moderately stiff, but not as stiff as those of Tyler and Wheeler. Spikes are fusiform, middense, and grayish green, the white awns ranging in length up to 4 cm. Glumes are white, long, midwide, and scabrous, but pubescent towards the base, and sessile. The spike of Agassiz is awned, middense, and fusiform. The glumes are white and glabrous, shoulders are midwide and oblique, and beaks are acute. The kernels are hard, red; kernel shape is ovate and midlong, with midwide and shallow crease. The brush is midsize and not collared.

Agassiz has shown field resistance to the prevalent races of stem rust (incited by Puccinia graminis Pers. f. sp. tritici Erks. and Henne.). Seedlings and adults were moderately susceptible to cultures of stem rust races 15(TNM), 151(QSH), and 11-32-113 (RTQ) in greenhouse tests. It is susceptible to leaf rust incited by Puccinia recondita Rob. ex Desm. f. sp. tritici and has displayed intermediate field reactions to tan spot incited by Pyrenophora tritici-repentis (Died.) Drechs.

The milling and baking quality of Agassiz has been satisfactory. It was faulted for lower loaf volume than Roughrider and slightly inferior crumb color and grain and texture. It is similar to Roughrider in grain and flour protein percentage.

Agassiz was named and released by the North Dakota Agricultural Experiment Station in 1983. Breeders seed will be maintained by the Agronomy Dep., Virginia Polytechnic Inst. and State Univ., Blacksburg, VA 24061.

T.M. Starling, C.W. Roane, and H.M. Camper, Jr. (1)

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