Registration of 'Siouxland 89' Wheat

'Siouxland 89' (Reg. no. CV-804, P1543007) is a white-chaffed, awned, semidwarf hard red winter wheat (Triticum aestivum L.) developed by the Texas Agricultural Experiment Station from a series of selections from the cultivar Siouxland. Siouxland was developed by the University of Nebraska and the USDA-ARS and cooperatively released by the University of Nebraska, the USDA-ARS, and the Texas Agricultural Experiment Station (TAES) (1). In 1984, initial breeder seed production of Siouxland was grown at Vernon, TX. Field seed increases indicated that Siouxland was photoperiod polymorphic when grown in Texas and could not be considered for advance to foundation seed. Three thousand head selections were taken from the breeder seed block and grown at Vernon in 1985. Spike and seed samples of 1000 headrows were examined for uniformity and 297 were retained for further field and laboratory testing. Leaf rust resistance analysis at the TAES Research and Extension Center in Dallas, indicated that Siouxland was polymorphic for leaf rust resistance. From the 297 lines, 108 were tested for seedling reaction to selected races of Puccinia recondita Roberge ex Desmaz. In the final analysis, we identified resistant reactions of 20 of the lines to P. recondita races MBB and MFB, as well as resistant reactions of 37 of the lines to Races MBB, MDB, and MCB. These lines, which were uniform in appearance and yet differed in leaf rust reaction, were combined to form Siouxland 89. Siouxland 89 has been tested widely in Texas and Nebraska and was approved for release by the TAES on 30 June 1989.

Siouxland 89 is similar to Siouxland in area of adaptation and performance but is different from Siouxland in that it lacks the tall late plants seen in the original cultivar. It also has different gene frequencies for leaf rust resistance. Like Siouxland, Siouxland 89 is resistant to all powdery mildew races of Erysiphe graminis DC. f. sp. tritici Em. Marchal present in Texas. At Chillicothe, TX, it flowers ≈3 d earlier and is ≈3 cm shorter than 'Scout'. The glumes are short and of medium width, with rounded shoulders and acuminate beak; the seed is ovate, with angular cheeks; the brush is not collared.

Foundation seed of Siouxland 89 will be maintained by the Texas Foundation Seed Service, College Station, TX 77843-2581. Application has been made for U.S. plant variety protection.


References and Notes

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Registration of 'TAM-109' Wheat

'TAM-109' (Reg. no. CV-805, P1554606) is a hard red winter wheat (Triticum aestivum L.) developed and released by the Texas Agricultural Experiment Station. TAM-109 was selected from the cross 'TAMW-101'*5/Citr 9321 made by Dr. K. B. Porter at the Texas Agricultural Experiment Station at Amarillo, TX. Citr 9321 is an awnletted spring wheat used in research on host plant resistance to greenbug [Schizaphis graminis (Rondani)] Biotype C. In 1985–1986, 50 awnletted BC-3 headrows were grown at Bushland, TX. In the 1986–1987 season, rows were harvested and seed grown in unreplicated plots at Bushland. TAM-109 was derived from one of these single plots that showed no segregation for awned and awnletted plants. TAM-109 (tested as TX87A6821) was included in performance tests in Bushland in 1988 and in uniform performance tests in the Texas Rolling Plains and High Plains in 1989. In 1990, TAM-109 entered statewide uniform performance trials.

TAM-109 is a semidwarf, awnletted cultivar with white chaff. Its foliage is erect during juvenile growth stages and the flag leaf is erect. It reaches 50% spike emergence ≈1 d later than TAMW-101 and is ≈8 cm shorter than 'Scout'. Phenotypically, TAM-109 is similar to TAMW-101, except that TAM-109 is awnletted and TAMW-101 is awned.

Grain yields, diseases, and insect responses have been nearly identical for TAM-109 and TAMW-101. TAM-109 is susceptible to the endemic races of leaf rust (caused by Puccinia recondita Roberge ex Desmaz.) and powdery mildew (caused by Erysiphe graminis DC. f. sp. tritici Em. Marchal) currently prevalent in Texas. It also is susceptible to greenbug and Russian wheat aphid [Diuraphis noxia (Mordvilko)]. TAM-109 has slightly less propensity to lodge than TAMW-101 and has slightly (but not significantly) lower volume weight. Analyses of end-use characteristics of TAM-109 and TAMW-101 indicate that only negligible differences exist, except in mixing time. TAM-109 consistently requires longer mixing time than TAMW-101.

TAM-109 was released to provide Texas small-grain producers with an awnletted multipurpose hard red winter wheat. Yield is not competitive with most recent hard red winter wheats released in Texas, although grain yield is identical to the recurrent parent. Lack of awns provides producers the following options: harvest for grain, graze throughout the season, or harvest as hay.

Foundation seed of TAM-109 is maintained and distributed by the Texas Foundation Seed Service, College Station, TX 77843-2581.

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References and Notes
1. W. D. Worrall, Texas A&M Res. & Ext. Ctr., P.O. Box 1658, Vernon, TX 76385; K. B. Porter and M. D. Lazar, 6500 Amarillo Blvd. West, Amarillo, TX 79106; M. H. Gomez and M. E. McDaniel, Dept. of Soil and Crop Sciences, Texas A&M Univ., College Station, TX 77843; D. S. Marshall, 17360 Coit Rd., Dallas, TX 75252; and L. R. Nelson, Drawer E, Overton, TX 75684. Registration by CSSA. Accepted 31 Dec. 1994. *Corresponding author.

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Registration of 'TAM-200' Wheat

'TAM-200' (Reg. no. CV-806, P1578255) is a semidwarf, awned, white-chaffed hard red winter wheat (Triticum aestivum L.) released in 1986 by the Texas Agricultural Experiment Station and state agricultural experiment stations in Oklahoma, New Mexico, and Nebraska. TAM-200 was tested in state and