Registration of ‘Tech Turf I’ Buffalograss


Tech Turf I buffalograss (Buchloë dactyloides (Nutt) Engelm.) (Reg. No. CV-250, PI 635043) was developed through joint efforts between Texas Tech University and Frontier Hybrids, Inc., Abernathy, TX. It was released by Texas Tech University in 2004. Tech Turf I was tested under the designation FH-8 and Frontier Turfallo.

Tech Turf I is a seed propagated, turf-type buffalograss variety derived from a heterogenous accession, having both male and female plants, collected from La Feria, Texas in 1990. The original collection consisting of 13 accessions (FH-1 to FH-13) was vegetatively propagated in Abernathy, Texas. In 1993, Texas Tech University received vegetative plugs of these accessions. Each accession (plug) contained both male and female plants. Individual plants within an accession were divided and increased in a greenhouse. During the spring of 1994, the accessions were screened for growth habit, leaf texture, and color under field conditions. Plants representing FH-8 proved superior to other accessions and in August of 1994, all FH-8 plants were planted in a polycross on the Texas Tech University campus. Single plants were evaluated for persistence, drought tolerance, and turf characteristics through 1998. Seed was bulk harvested from plants that survived in the polycross and had desirable turf characteristics.

Tech Turf I is a dioecious, diploid with a somatic chromosome number of 20. AFLP analyses showed Tech Turf I to be genetically distinct from ‘Texoka’, ‘Topgun’, ‘Bison’ (Taliaferro, 1994), and ‘UCLH-1’ (Wright and Kebede, unpublished data, 2005). It is a fine-textured grass appropriate for use as a turf. Its rapid stolon growth results in quick establishment from seed (Morris, 2003). It has a medium green color which remains well into fall, delaying dormancy. During spring it is slower to achieve adequate green cover than most cultivars. Delayed fall dormancy and spring greenup (Morris, 2005) may contribute to the poor performance of Tech Turf I in Kansas and Nebraska.

Tech Turf I, like other buffalograss cultivars, has reduced water requirements due to biological mechanisms; it is recommended for use where low- to medium-maintenance turfgrass is desired (Beard and King, 1989). Tech Turf I appears to be well adapted to semiarid, temperate climates of the U.S., western regions of Plant Hardiness Zones 5, and central and western regions of Plant Hardiness Zones 6 to 10.

A breeder’s increase block was established on the Texas Tech campus in August 1999. Breeder seed was initially harvested from this block in August 2000. Seed and plugs are available through Frontier Hybrids, Inc., Abernathy, TX. U.S. Plant Variety Protection of Tech Turf I has been filed (PVP Application No. 200400229). Seed of Tech Turf I is deposited in the National Plant Germplasm System where it will be available after the expiry of the Plant Variety Protection for research purposes, including development and commercialization of new cultivars. It is requested that appropriate recognition be made if this germplasm contributes to the development of new germplasm or cultivars.

References


