Registration of ‘TifEagle’ Bermudagrass

‘TifEagle’ bermudagrass [Cynodon dactylon (L.) Pers × C. transvaalensis Burt-Davy] (Reg. no. CV-38, PI 606545) was cooperatively released by the USDA-ARS and the University of Georgia Coastal Plain Experiment Station in August 1997. TifEagle is a high-quality turf bermudagrass cultivar for golf course greens and other applications requiring close mowing. TifEagle produces better quality turf than ‘Tifdwarf’ when mowed daily at 4 mm or less. TifEagle was tested as TW-72.

TifEagle was selected in 1990 as a dense, fine-textured, offtype genotype within a plot of an induced mutation (Mutant no. 2). Mutant no. 2 was one of 48 putative mutants induced in ‘Tifway 2’ with 70 Gy (7000 rads) of Cobalt-60 γ-radiation in 1988. These 48 mutants were propagated in separate plots and mowed three times a week at 6 mm in 1989 and 1990. TifEagle is a vegetatively propagated cultivar that was selected for its ability to produce high-quality turf under close mowing (4 mm or less), lack of seedhead formation at Tifton, GA, and Auburn, AL, and lower levels of tawny mole cricket (Scapteriscus vicinus Scudder) infestation compared with Tifdwarf after the establishment year at Tifton and Savannah, GA.

TifEagle was superior or equal in performance to Tifdwarf in four experiments mowed at 6 mm at Tifton from 1991 to 1996. It was superior in turf quality to Tifdwarf on greens mowed at 3 or 4 mm on one golf course in North Carolina since 1993, three golf courses in Georgia and Florida since 1994, one golf course in Florida since 1995, one golf course in Tennessee since 1996, and research plots in Florida and Alabama since 1993 and 1996, respectively. Stimp meter values were higher for TifEagle than for Tifdwarf when mowed at 3 mm. Rough bluegrass (Poa trivialis L.) can be successfully overseeded into TifEagle. TifEagle produces more thatch than Tifdwarf, which needs to be controlled by regular verticutting, top-dressing, and/or grooming. TifEagle produces more stolons and has shorter and narrower leaves than Tifdwarf, while internode length is similar for the two cultivars.

Registration of ‘Mahigan’ Barley

‘Mahigan’ is a six-row spring feed barley (Hordeum vulgare L.) (Reg. no. CV-276, PI 605699) released in 1998 by The Field Crop Development Centre of Alberta Agriculture, Food and Rural Development, Lacombe, AB, Canada (Canadian Reg. no. 4751). It was derived from a single semismooth awned variant spike selection of the early-maturing cultivar ‘Kasota’ (1,2). It is from the cross ‘Celaya’//‘Mesquite’//‘Godiva’//‘Trompillo’.

Mahigan is a semismooth-awned, strong-strawed, early-maturing hulled cultivar. It has a green coleoptile and intermediate juvenile leaf length. The auricles are purple. The flag leaf blade of 3 to 10 cm. The collars vary from slightly V-shaped to closed. Mahigan’s six-rowed spikes are dense, semierect, and short. Lateral kernels overlap on the top one-quarter to one-half of the spike. Glumes are half the length of the lemma; dorsal surfaces are covered with short hairs, and are rough and purple at the tip. Lemma awns are semismooth, long, and purple-tipped. The first internode of the rachis is medium straight. Rachilla length varies from short to medium, with short hairs. Kernels are short to medium length and narrow in width, with a yellow aleurone. The veins are green, with few barbs on the lateral.

Mahigan was tested as M79108001013A in Alberta yield trials from 1994 to 1996 and as SD 511 in the Western Co-operative Semidwarf Barley Test of the Canadian Prairie Registration Test in Alberta, Mahigan yielded 7726.2 kg ha" sup(-1) compared with 7022.8 kg ha" sup(-1) for CDC Earl, and 102% of the checks (22 station-years of the Western Co-operative Semidwarf Barley Test). Mahigan matured 1 d later than Kasota, 3 d earlier than CDC Earl, and 2 d earlier than Tukwa. In the same test, Mahigan had a high test weight of 63.4 kg ha" sup(-1), compared with 62.7 kg ha" sup(-1) for CDC Earl, and 62.6 kg ha" sup(-1) for Kasota. The mean kernel weight of Mahigan was 35.7 mg, compared with 37.0 mg for Tukwa, 35.5 mg for CDC Earl, and 35.8 mg for Kasota. Mahigan's six-rowed spikes are dense, semierect, and short. Mahigan has later maturity and is taller than its sib Kasota. In 22 trials, Mahigan had a high test weight of 63.4 kg ha" sup(-1), compared with 62.7 kg ha" sup(-1) for CDC Earl, and 62.6 kg ha" sup(-1) for Kasota. Mahigan has later maturity and is taller than its sib Kasota. In 22 trials, Mahigan had a high test weight of 63.4 kg ha" sup(-1), compared with 62.7 kg ha" sup(-1) for CDC Earl, and 62.6 kg ha" sup(-1) for Kasota.

Mahigan was superior or equal in performance to Tifdwarf in four experiments mowed at 6 mm at Tifton from 1991 to 1996. It was superior in turf quality to Tifdwarf on greens mowed at 3 or 4 mm on one golf course in North Carolina since 1993, three golf courses in Georgia and Florida since 1994, one golf course in Florida since 1995, one golf course in Tennessee since 1996, and research plots in Florida and Alabama since 1993 and 1996, respectively. Stimp meter values were higher for TifEagle than for Tifdwarf when mowed at 3 mm. Rough bluegrass (Poa trivialis L.) can be successfully overseeded into TifEagle. TifEagle produces more thatch than Tifdwarf, which needs to be controlled by regular verticutting, top-dressing, and/or grooming. TifEagle produces more stolons and has shorter and narrower leaves than Tifdwarf, while internode length is similar for the two cultivars.

References and Notes


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Breeder material (vegetative) will be maintained by the USDA-ARS, Coastal Plain Experiment Station, Tifton, GA 31793-0745. The patent application has been filed for TifEagle. It will be licensed under a sublicense agreement so that (i) research can be made on limited growing locations to make a highly visible dwarf grass on golf greens where it is advantageous and (ii) there is an incentive for qualified growers to promote the use of this high-quality cultivar. TifEagle is available for research purposes, including development of new cultivars. It is requested that appropriate recognition be made if TifEagle contributes to the development of new cultivars or germplasm.

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