REGISTRATION OF CULTIVARS

Registration of ‘Award’ Kentucky Bluegrass

‘Award’ Kentucky bluegrass (Poa pratensis L.) (Reg. no. CV-55, PI 599222) is a turf-type cultivar released in August 1996 by Simplot Turf and Horticulture, Post Falls, ID. The experimental designations for Award were 91-3376 and J-3376.

Award originated as a highly apomictic, single-plant selection from hybrid cross number 89-1037, made in the field in July 1989. Pollen from ‘Midnight’ Kentucky bluegrass (2) was used to pollinate plants of ‘Limousine’ (1). Seed harvested from the Limousine mother plants was individually sown into cells of greenhouse flats during the spring of 1990. The resulting plants were grown in a spaced-plant field nursery of 33 500 plants. Offspring with characteristics dissimilar to Limousine, the female parent, were flagged during maturation in the spring of 1991. Plant number 91-3376 was identified as being different from Limousine by its seedhead characteristics at maturity. Seed harvested from this plant was used to establish a turf trial in September 1991, a replicated seed yield trial in August 1992, and a plant variety protection (PVP) trial in June 1994, near Post Falls.

Award was selected for density and color traits similar to its pollen parent, Midnight. However, it can be differentiated from Midnight based on 11 botanical measures (as recorded in Award’s U.S. PVP application no. 9700382), which include a shorter panicle, greater panicle density in seed production, and a later reproductive maturity. Award demonstrated a significantly \( P = 0.01 \) shorter flag leaf sheath length than Midnight in 2 yr of field evaluations.

Progeny trials were conducted in spaced-plant nurseries established near Post Falls in May 1994 to determine the level of apomixis. Of 1580 Award plants, 2.7% were variants in the vegetative (preheading) stage, 1.2% were heading maturity variants, 0% seedhead variants, 0.7% miniature plants, and 0.1% were headless plants. In spaced-plant nurseries, Award averaged 95% apomictic, but varied from 90 to 99% depending upon weather and year.

About 1 out of every 100 Award plants are shorter in mature culm length, averaging 28 cm versus 55 cm for the majority form, but with a similar panicle appearance. Only about one out of every 500 plants exceeds the majority plant form in culm length, making Award appear very uniform in seed production. These taller variants have similar panicles with slightly less purple coloration and culms up to 87 cm in length. Aberrant progeny are rogued from seedstock fields to ensure continued uniformity and stability, but they will continue to occur in every generation.

Award was equal to the top-rated cultivar in overall turf quality in the National Turfgrass Evaluation Program (NTEP) trials for Kentucky bluegrass, established in 1995 (3). In the following years, Award continued uniformity and stability, but they will continue to occur in every generation.

In 5 yr of commercial seed production, Award has shown the potential for high yields of quality seed, with freedom from ergot [caused by Claviceps purpurea (Fr.) Tul. and Sacc.] or ergot [caused by Claviceps purpurea (Fr.) Tul. and Sacc. or Magnaporthe purpurea (Fr.) Tul. and Pers.], head smut (caused by Claviceps purpurea (Fr.) Tul. and Pers.), and sclerotia. Award has exhibited no adverse effects from the labeled Kentucky bluegrass pesticides.

Award is recommended for lawns, golf courses, and sports turf in areas where Kentucky bluegrass is selected for turf. It can be grown in full sun or some shade, and is compatible in blends and mixtures with other cool-season grasses.

Breeder seed, first harvested in 1995, is maintained by Simplot Turf and Horticulture. Seed propagation is from 4 cycles of increase: Breeder, Foundation, Registration, and Certified. U.S. Plant Variety Protection status for Kentucky bluegrass has been applied for (PVP certificate no. 9700382).

A. Douglas Brede*

References and Notes


Published in Crop Sci. 41:583 (2001).

Registration of ‘Liberator’ Kentucky Bluegrass

‘Liberator’ Kentucky bluegrass (Poa pratensis L.) (Reg. no. CV-56, PI 603099) is a turf-type cultivar released in August 1997, by Simplot Turf and Horticulture, Post Falls, Idaho. Liberator was tested under the experimental designation ZPS-2572.

Liberator was developed from a highly apomictic, single-plant selection from hybrid cross number 90-0336, made in the greenhouse during winter of 1990. Pollen from ‘Glade’ Kentucky bluegrass (1) was used to pollinate plants of breed-50-14. Breeding line 50-14 originated from a collection of Kentucky bluegrass from the late Arden Jacklin made in the northern USA during the 1970s.

Seed harvested from plants of 50-14 were individually sown into cells of greenhouse flats during the spring of 1992. Offspring with characteristics different from Limousine by its seedhead characteristics and susceptibility to powdery mildew (caused by Erysiphe graminis DC. ex Merat). cultivar, ‘Midnight’ (2); however, Liberator can be differentiated from it based on 11 botanical measures (as recorded in Award’s U.S. PVP application no. 9700382), which include a shorter flag leaf sheath length than Midnight in 2 yr of field evaluations.

Progeny trials were conducted in spaced-plant nurseries established near Post Falls in May 1994 to determine the level of apomixis. Of 1580 Award plants, 2.7% were variants in the vegetative (preheading) stage, 1.2% were heading maturity variants, 0% seedhead variants, 0.7% miniature plants, and 0.1% were headless plants. In spaced-plant nurseries, Award averaged 95% apomictic, but varied from 90 to 99% depending upon weather and year.

About 1 out of every 100 Award plants are shorter in mature culm length, averaging 28 cm versus 55 cm for the majority form, but with a similar panicle appearance. Only about one out of every 500 plants exceeds the majority plant form in culm length, making Award appear very uniform in seed production. These taller variants have similar panicles with slightly less purple coloration and culms up to 87 cm in length. Aberrant progeny are rogued from seedstock fields to ensure continued uniformity and stability, but they will continue to occur in every generation.

Award was equal to the top-rated cultivar in overall turf quality in the National Turfgrass Evaluation Program (NTEP) trials for Kentucky bluegrass, established in 1995 (3). In the following years, Award continued uniformity and stability, but they will continue to occur in every generation.

In 5 yr of commercial seed production, Award has shown the potential for high yields of quality seed, with freedom from ergot [caused by Claviceps purpurea (Fr.) Tul. and Sacc.] or ergot [caused by Claviceps purpurea (Fr.) Tul. and Sacc. or Magnaporthe purpurea (Fr.) Tul. and Pers.], head smut (caused by Claviceps purpurea (Fr.) Tul. and Pers.), and sclerotia. Award has exhibited no adverse effects from the labeled Kentucky bluegrass pesticides.

Award is recommended for lawns, golf courses, and sports turf in areas where Kentucky bluegrass is selected for turf. It can be grown in full sun or some shade, and is compatible in blends and mixtures with other cool-season grasses.

Breeder seed, first harvested in 1995, is maintained by Simplot Turf and Horticulture. Seed propagation is from 4 cycles of increase: Breeder, Foundation, Registration, and Certified. U.S. Plant Variety Protection status for Kentucky bluegrass has been applied for (PVP certificate no. 9700382).

A. Douglas Brede*

References and Notes


Published in Crop Sci. 41:583 (2001).