Registration of ‘Cobra’ Creeping Bentgrass

‘Cobra’ creeping bentgrass (Agrostis palustris Huds.) (Reg. no. CV-4, PI 564594) was developed by the cooperative efforts of International Seeds, Inc., Halsey, OR, and the New Jersey Agricultural Experiment Station. It was released in October 1987 by International Seeds, Inc. Cobra was tested under the experimental designation HK. It is an advanced-generation synthetic cultivar selected from progeny of seven clones. Germplasm utilized in the development of Cobra is the result of a long-term bentgrass improvement program initiated at Rutgers University in 1974.

Parental clones of Cobra were selected in a breeding program based on phenotypic recurrent selection and clonal evaluation in closely mowed turfs of germplasm collected from old golf course fairways in New Jersey and Kentucky. From 1978 to 1980, vegetative sprigs of red leaf spot resistant genotypes were dug and transplanted under isolation in western Oregon. From 1979 to 1986 selected genotypes were evaluated for semiupright tillering, dark-green color, fine leaf texture, early maturity, seed yield potential, and maintenance of leaf turgor and dark-green blade color under soil moisture stress in a spaced-plant nursery in western Oregon. Open-pollinated seed from selected parents was harvested and established in spaced-plant nurseries and seeded turf trials near Tangent, OR, in spring 1982. Progeny were evaluated in 1983 for overall turf quality, uniformity of plant type, leaf texture, dark-green color, early maturity, seed yield potential, and maintenance of leaf turgor and dark-green blade color under soil moisture stress. In 1983, seven genotypes (AG 314, AG 563, AG 32, AG Twin Orchard, AG 25, AG 26, and AG 52), that had uniform appearance, high overall turf, and high ratings for texture, color, seed yield, and maturity as spaced plants and polycross progeny were identified as HK bentgrass. Syn 1 seed was produced from this block. A 0.8-ha Syn 2 breeder seed field was established in the fall of 1984 near Junction City, OR. This Syn 2 block underwent a cycle of selection for semiupright tillering, dark-green turf color, fine leaf texture, early maturity, and uniformity in plant type during 1985. Breeder seed was produced from selected plants in this population in 1985. Foundation seed increase was initiated in 1986. Certified seed became commercially available in 1988.

Cobra is a medium dark-green, leafy, semierect, fine-textured creeping bentgrass. It forms an even putting surface due to its uniform semierect growth habit. Cobra has a lower tiller density than some other creeping bentgrasses which may result in lower thatch accumulation. Elevated mowing heights during summer stress can be practiced without limiting playability or increasing secondary disease invasion due to excessive thatch accumulation. Cobra exhibits good heat and cold tolerance and often retains its dark-green color under moderate drought and heat stress. Cobra also has high wear tolerance and good recuperative ability due to its capacity for production of aggressive stoloniferous shoots and rooting nodes. It has shown moderate levels of resistance to dollar spot incited by Lanzia and Moellerodiscus spp. and red leaf spot incited by Drechslera erythropia (Drechs.) Shoemaker. Cobra is recommended for new seedings, interseeding, and reseeding of golf course putting greens, croquet courts, and bowling greens where low mowing height and uniform turf are desired. It is also recommended for golf course fairways and tees, alone or blended with improved turf-type perennial ryegrasses (Lolium perenne L.) or other improved creeping bentgrasses. Cobra is also utilized for winter overseeding of dormant warm-season turfgrass, alone or blended with other improved creeping bentgrasses or in mixtures with improved rough bluegrass (Poa trivialis L.) improved Chewing’s fescue (Festuca rubra L. subsp. commutata Gaud.), and improved slender creeping fescue [Festuca rubra L. subsp. litoralis (Meyer) Augier].

Breeder seed of Cobra will be produced and maintained by International Seeds, Inc., Halsey, OR. Seed increase is limited to three generations of increase from breeder seed, one each of foundation, registered, and certified. United States Plant Variety Protection Certificate no. 8900086 was issued for Cobra on 31 Dec 1991.

Registration of ‘Midlawn’ Turf Bermudagrass

‘Midlawn’ bermudagrass [Cynodon dactylon (L.) Pers. × C. transvaalensis Burt-Davy] (Reg. no. CV-22, PI 572304) was developed by the Kansas Agricultural Experiment Station and released cooperatively by the Kansas and Oklahoma Agricultural Experiment Stations through the Kansas State University Research Foundation (KSURF) in June 1991.

Midlawn originated in the 1960s as a natural interspecific hybrid between tetraploid (2n = 4x = 36) C. dactylon and diploid (2n = 2x = 18) C. transvaalensis. The maternal parent was a hardy common bermudagrass (C. dactylon) collected on the Michigan State University campus. The paternal parent was one of several C. transvaalensis accessions maintained in the germplasm nursery at the Hays Branch Experiment Station, Hays, KS. Midlawn is a triploid (2n = 3x = 27) and is highly male and female sterile.

Midlawn was extensively evaluated under the experimental designation A-22. It was included in the 1986 National Turf Bermudagrass Evaluation Test. Midlawn consistently ranked high for cold tolerance, spring green-up, texture and density of sod, dark-green color, and overall turf quality relative to other turf bermudagrass cultivars (1,2). It has demonstrated good stand persistence and frost tolerance. Its level of cold tolerance is substantially better than that of ‘Tifgreen’, but may be inferior to that of ‘Midiron’ and ‘Vamont’.

Compared with Midiron, it has a finer texture and greater sod density and strength. Healthy Midlawn sod remains intact when cut and handled by conventional techniques. It is slower growing, and consequently less aggressive, than Midiron and ‘Midfield’ (3). Under moderate to intense management, Mid-