Registration of ‘Bordeaux’ Kentucky Bluegrass

‘Bordeaux’ Kentucky bluegrass (Poa pratensis L.) (Reg. no. CV-85, PI 631178) is a turf-type cultivar released by Lebanon Seaboard, Inc., Lebanon, PA, in September 2001. Germplasm from the New Jersey Agricultural Experiment Station (NJAES) was used in the development of Bordeaux. A95-1135 and LTP-1135 were its experimental designations. The first Certified seed was produced in 2001.

Bordeaux originated as a single highly apomictic plant selected from the open-pollinated progeny of C-74. C-74 is a dark, low-growing, vigorous highly apomictic plant collected from an old turf at Exeter, RI, in 1987. C-74 is similar in appearance and performance to ‘Unique’ (Rose-Fricke et al., 1999) and ‘America’ (Funk et al., 1982) Kentucky bluegrasses. C-74 was open-pollinated by typical plants of ‘Princeton P-105’ and ‘Rita’, as well as other Kentucky bluegrasses collected from Delaware, Maryland, New Jersey, and Pennsylvania. Four plants of Poa ampla Merr. and P. ampla × P. pratensis were also included in the randomized open-pollinated crossing block. A total of 153 plants comprised this block during the late winter of 1992–1993 in a greenhouse located on the Cook College campus of Rutgers University, New Brunswick, NJ. Greenhouse conditions were modified before anthesis to increase sexual reproduction of facultative apomictic Kentucky bluegrasses (Bashaw and Funk, 1987; Hintzen and van Wijk, 1985; Pepin and Funk, 1971). Seed from the C-74 maternal parent was harvested in the early spring of 1993.

Seedlings were grown in a greenhouse maintained under short daylength and cool temperatures during the winter of 1993-1994, and promising hybrids were phenotypically identified. Selected hybrid plants were established in a spaced-plant nursery at the Rutgers University Plant Biology and Pathology Research and Extension Farm at Adelphia, NJ, during the spring of 1994. During the following summer, an attractive, dark-green, low-growing plant with medium-early reproductive maturity, high seed yield potential, and excellent floret fertility was identified and seed was harvested on 23 June 1995. In the fall of 1995, this seed was planted in a turf plot at the Adelphia, NJ, farm and given the designation A95-1135. Seed was sent to Lebanon Seaboard Corporation to evaluate seed yield potential in Oregon during the fall of 1998. An experimental Breeder seed production field was established near Imbler, OR, in the fall of 1999. The first seed stock was harvested in 2000.

Bordeaux has relatively short mature plant stature, medium-fine leaf texture, above average leaf spot [caused by Drechslera poae (Baudys) Shoemaker] resistance, and good turf quality under high maintenance (Bonos et al., 2000). Bordeaux exhibited moderately good resistance to billbug (Sphenophorus spp.) damage and above average overall turf quality under a low maintenance regime (Bonos et al., 2002). Bordeaux excelled in terms of dark genetic color and seedling vigor, along with resistance to the leaf spot and melting-out syndrome [caused by Drechslera poae (Baudys) Shoemaker]

improved dark-green fine-leaved fescues (Festuca type tall fescues (Festuca arundinaceaefescues), but not perennial ryegrasses (Lolium perenne L.).

Bordeaux has been an excellent seed producer, and has been harvested in Kentucky bluegrasses, and in mixtures with other elite Kentucky bluegrasses and in mixtures with Medicago sativa and Brassica napus. La Grande (William Merrigan, personal communication, Aug. 2002) and Madras (AL Short, personal communication, 25 Aug. 2002) seed production areas of Oregon also has medium-sized seed that is largely free of powdery mildew (caused by Erysiphe graminis) and is relatively easily cleaned (William Merrigan, personal communication, 23 Aug. 2002).

Freshly harvested seed of Bordeaux, like other elite Kentucky bluegrasses, can exhibit after-ripening dormancy during warm soil temperatures of late summer, so faster germination and establishment may be enhanced if seed is harvested and stored until after-ripening dormancy has biologically been overcome before sowing (Funk and edranath and Funk, 1977, 1981).

Breeder seed of Bordeaux will be maintained by Lebanon Seaboard Corporation. Seed propagation is in generations from Breeder seed: one each of Foundation, Reg-crossing, and van Wijk, 1985; Pepin and Funk, 1971). Seed from the C-74 maternal parent was harvested in the early spring of 1993.

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References


Merr. and Poa ampla Merr. and van Wijk, 1985; Pepin and Funk, 1971). Seed from the C-74 maternal parent was harvested in the early spring of 1993.