improved turf performance, increased disease resistance, lower growth profile, and darker green color.

Simultaneous germplasm improvement programs were conducted in New Jersey and Oregon. Eleven parental clones were developed in New Jersey from two cycles of phenotypic selection in spaced-plant nurseries, with each cycle followed by single-plant half-sib progeny tests of selected plants in closely mowed turf trials. Nine parental clones developed in Oregon originated from crossing germplasm resistant to stem rust (caused by *Puccinia graminis* Pers.:Pers.) with clones selected from the breeding program in New Jersey. Progenies of these crosses were subjected to three cycles of phenotypic recurrent selection for resistance to stem rust, crown rust (caused by *P. coronata* Corda), net blotch (caused by *Drechslera dictyoides* (Drechsler) Shoemaker f. *sp. perene Bravetman & Graham*), and leaf scald (caused by *Rhynchosporium orthisporum* R.M. Caldwell and *R. secalis* (Oudem.) J.J. Davis). Selection was also practiced for darker green color, improved turf performance, and seed yield potential.

During the summer of 1988, plants selected from progenies of the 11 New Jersey clones were established in an isolated spaced-plant nursery near Hubbard, OR, with replicated propagules of the nine stem rust resistant clones developed in Oregon. Seed was subsequently harvested from the 276 plants showing the best performance. During the fall of 1989, an isolated spaced-plant nursery was established from this seed in Oregon for production of breeder seed. Plants were discarded from this nursery prior to anthesis to further improve disease resistance, uniformity of plant type, attractiveness, and uniform maturity. Breeder seed was subsequently harvested from 1460 plants. The first certified seed was harvested in 1992.

Each of the 20 parental clones of Prelude II contained an endophytic fungus, *Acremonium lolii* Latch, Christensen, & Samuels, which has been shown to enhance resistance to a number of harmful insect pests, including billbugs (*Sphenophorus* spp.), chinch bugs (*Blissus leucoperatus hirtus* Montandon), and many lepidopterous species of sod webworms (1,2,3).

Prelude II is an attractive, leafy, persistent, turf-type perennial ryegrass. It has a dark green color, fine leaves, medium-low growth profile, and increased resistance to brown patch (caused by *Rhizoctonia solani* Kühn). Prelude II has shown improved heat tolerance, good summer performance, and above-average winter-hardiness in New Jersey tests. It has improved mowing qualities and the ability to produce an attractive turf. Most improved turf-type perennial ryegrasses typically have excellent seedling vigor, excellent tillering ability under close mowing, and the ability to establish rapidly and grow on a wide range of soils. They normally produce little or no objectionable thatch, possess moderate shade tolerance, and have good recuperative ability, especially during cool, favorable growing conditions.

Prelude II is recommended for use on lawns, school play areas, parks, institutional grounds, sports fields, and golf courses in regions where perennial ryegrasses are well adapted. It should normally be mixed with a blend of well-adapted Kentucky bluegrasses (*Poa pratensis* L.) and strong creeping red fescues (*Festuca rubra* L. subsp. *rubra*). Prelude II is also recommended for the fall and winter overseeding of dormant warm-season turfgrasses throughout the southern USA and similar climatic regions of the world.

Breeder seed of Prelude II will be produced and maintained by Lofts Seed, Inc., with the cooperation of Pure-Seed Testing, Inc., and the New Jersey Agricultural Experiment Station. Seed classes will be restricted to one generation each of breeder, foundation, registered, and certified. Application (no. 9200210) has been made for U.S. Plant Variety Protection.


References and Notes


5. R.H. Hurley and V.G. Lehman, Lofts Seed, Inc., P.O. Box 146, Bound Brook, NJ 08805; W.A. Meyer and Crystal A. Rose-Fricke, Pure-Seed Testing, P.O. Box 449, Hubbard, OR 97032; and C.R. Funk, Plant Sci. Exp., New Jersey Agric. Exp. Sta., Cook College, Rutgers Univ., New Brunswick, NJ 08903. Publication no. D 15166-5-93, New Jersey Agric. Exp. Sta. Some of this work was conducted as part of New Jersey Agric. Exp. Project no. 15166, supported by New Jersey Agric. Exp. Sta. funds, other grants, and gifts. Additional support was received from the U.S. Golf Assoc.—Golf Course Superintendents Assoc. of America Res. Fund. Registration by CSSA. Accepted 31 Dec. 1993. *Corresponding author.*

Appreciation is extended to all participants in the National Turfgrass Evaluation programs for their assistance in the evaluation of Prelude II.

Published in *Crop Sci.* 34:1129-1130 (1994).

Registration of 'Eldorado' Tall Fescue

'Eldorado' tall fescue (*Festuca arundinacea* Schreb.) (Reg. no. CV-56, PI 539933) was developed by Pure-Seed Testing, Inc., Hubbard, OR. The experimental designations of Eldorado were PST-5D1 and PST-5D1R. Eldorado was released by Turf Seed, Inc., in September 1989, and the first certified seed was produced and available for sale the same year.

Eldorado is an advanced-generation cultivar selected from the progeny of 21 clones. Parental germplasm of Eldorado traces to selections from old turf areas in Alabama, North Carolina, Georgia, and New Jersey. Twenty-one plants were selected for dark-green color, early maturity, and dwarf growth habit from two germplasm populations. These two populations were subjected to three to four cycles of recurrent selection for population improvement prior to selection of the parental clones of Eldorado. The 21 plants were progeny tested in trials in Oregon and New Jersey for turf performance and brown patch (caused by *Rhizoctonia solani* Kühn) resistance.Poly-cross progenies of the 21 clones were transplanted to an isolated spaced-plant nursery near Hubbard, OR. Selection within this nursery was directed towards uniformity, crown rust (caused by *Puccinia coronata* Corda) and stem rust (caused by *Puccinia graminis* Pers.:Pers.) resistance, dark-green color, low growth profile, and medium-early maturity. Plants not meeting these requirements were removed from the nursery prior to anthesis. Subsequently, seed was harvested from 120 plants to produce breeder seed of Eldorado. These 120 plants are being maintained at Pure-Seed Testing, Inc., for future breeder seed production.

Eldorado is an attractive, low-growing, turf-type tall fescue.