from half-sib progenies of 42 clones selected from five breeding populations. Most of the parenteral germplasm used in the development of these populations traces its origin to plants selected from old turfs in New York, New Jersey, Pennsylvania, and Maryland. Additional germplasm was selected from Loretta, a cultivar of European origin. Breeding procedures included several cycles of both phenotypic and genotypic recurrent selection and a modified backcrossing program. From 1962 to 1987, this program screened 250,000 seedlings for disease resistance, examined 700,000 plants in spaced-plant nurseries, and evaluated over 11,000 single-plant progenies in seeded turf trials subjected to frequent, close mowing. In September 1988, half-sib, single-plant progenies of 702 plants selected from five breeding populations were established in a turf trial at Adelphia, NJ. During a period of severe heat stress in the summer of 1989, 4116 tillers were selected from the 42 best-performing progenies and transferred to an isolated spaced-plant nursery near Hubbard, OR. Breeder seed of Prizm was subsequently harvested from 380 plants that were selected from this nursery.

Prizm was evaluated in the 1990 National Perennial Ryegrass Test (1) and elsewhere. It consistently ranked high for turfgrass quality, early spring greenup, and mowing quality. It showed improved resistance to leafspot (caused by Drechselfa spp.) and red thread [caused by Laetisuria fuciformis (McAlpine) Burdass]. Prizm exhibited dark-green color, medium-fine leaf texture, and medium-high turf density (1). Prizm has performed well in New Jersey turf trials and showed moderately good resistance to large brown patch (caused by Rhizoctonia solani Kühn).

Prizm is recommended for use on home lawns, industrial sites, sports fields, school grounds, and golf course tees, fairways, and cart paths in regions where perennial ryegrasses are well adapted for turf usage. It is also well suited for winter overseeding of dormant warm-season turfs.

Each of the 42 parental clones of Prizm contained an endophytic fungus, Acremonium lolii Latch, Christensen & Samuel. This endophyte has been associated with enhanced resistance to many harmful insect pests of turf, including billbugs (Sphenophorus spp.) (2), hairy chinch bug (Blissus leucopterus hirtus Montandon) (3), and many lepidopterous species of sod webworms (4). Endophyte-infected ryegrass is not recommended for forage (5).

Breeder seed of Prizm will be produced and maintained by Pure-Seed Testing. Seed classes will be restricted to one generation each of breeder, foundation, registered, and certified. U.S. plant variety protection has been applied for (Application no. 9300129).

**References and Notes**


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