REGISTRATION OF CROP CULTIVARS

United States Plant Variety Protection Certificate no. 8200181 has been issued for Midnight Kentucky bluegrass.

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References and Notes

1. President and research director, Pure-Seed Testing, Inc., P. O. Box 449, Hubbard, OR 97052; president, Turf-Seed, Inc., P. O. Box 250, Hubbard, OR; associate research scientist, Soils and Crops Dep.; and professor, Soils and Crops Dep., New Jersey Agric. Exp. Stn. Publication no. D-15166-1-84, New Jersey Agric. Exp. Stn., Cook College, Rutgers Univ., New Brunswick, NJ 08903. Some of this work was performed as part of NJAES Project no. 15166, supported by New Jersey Agric. Exp. Stn. funds, other grants, and gifts. Additional support was received from the United States Golf Assoc. Green Section Res. and Educ. Fund, Inc. Registration by the Crop Sci. Soc. of Am. Accepted 12 Mar. 1984.

REGISTRATION OF GATOR PERENNIAL RYEGRASS

‘GATOR’ perennial ryegrass (Lolium perenne L.) (Reg no. 90) was developed and released by International Seeds, Inc. of Halsey, Oregon, using germplasm obtained from the New Jersey Agricultural Experiment Station. Gator is an advanced generation synthetic cultivar selected from the progenies of 56 clones. Eighteen plants selected from ‘Loretta’ perennial ryegrass were used as female parents of the 56 clones used in the development of Gator. Selection was based on seedling resistance to crown rust (caused by Puccinia coronata Corda) and attractive appearance in spaced-plant nurseries. The pollen parents of the clones used in the development of Gator were selected from four breeding composites designated H74-412, H75-969, H75-1076, and AW. Plants collected from old turfs in Maryland, New Jersey, New York, and Pennsylvania were the original source of the germplasm used in the development of these breeding composites. Two cycles of recurrent restricted phenotypic selection for disease resistance, stress tolerance, attractive appearance, mowing quality, and turf performance were used in the development of the four breeding composites. The selection of the 56 parental clones of Gator involved the screening of over 50 000 seedlings for crown rust resistance, the evaluation of over 10 000 clones in spaced-plant nurseries, and the study of 648 single plant progenies in seeded turf trials. Progenies of the 56 parental clones of Gator were subjected to interplant competition, disease, and environmental stress in closely mowed turf plots. A total of 6100 tillers were selected from these turf plots and transferred to an isolated, spaced-plant nursery at Adelphia, N.J. Selection within this nursery was based on freedom from disease, a bright dark green color, soft leaves, attractive appearance, and uniform maturity. Nearly soils. It has excellent wear tolerance when conditions are favorable. It has shown good winter hardiness and improved summer performance in initial trials. Gator performs well under different mowing conditions ranging from full sun to moderate shade. Plants are superior to most ryegrasses currently grown in the United States, and it has shown good resistance to the large brown patch disease caused by Rhizoctonia solani Kuhn, a winter disease of turfgrasses. This cultivar is recommended for use on home lawns; athletic fields; industrial sites; school grounds; and golf tees, fairways, and cart paths in regions where perennial ryegrasses are well adapted. It is often mixed with other adapted Kentucky bluegrasses (Poa pratensis) for use in sport fields. Gator is also recommended for the winter overseeding of dormant warm season turfs. It has medium seed production and a high seed yield potential.

Breeder seed is produced by International Seeds, Inc. Propagation of seed is limited to two generations from breeder seed, one generation of foundation and certified.

Application (no. 8300179) has been made for United States Plant Variety Protection.

C. R. FUNK, K. J. McVEIGH, AND H. L. CLARK

References and Notes

1. Professor, Soils and Crops Dep., New Jersey Agric. Exp. Stn., director, International Seeds, Inc., P. O. Box 168, 97389 (former research director, International Seeds, Inc., P. O. Box 168, 97389, New Jersey Agric. Exp. Stn., Cook College, Rutgers Univ., New Brunswick, NJ 08903. Some of this work was performed as part of NJAES project no. 15166, supported by NJAES Fund, Inc. Registration by the Crop Sci. Soc. of Am. Accepted 12 Mar. 1984.

REGISTRATION OF MANHATTAN II PERENNIAL RYEGRASS

‘MANHATTAN II’ perennial ryegrass (Lolium perenne L.) (Reg no. 91) was developed and released through cooperative efforts of the New Jersey Agricultural Experiment Station, Pure-Seed Testing, Inc., and the Manhattan Ryegrass Growers Association. ‘Manhattan II’ is an advanced generation synthetic cultivar selected from the progenies of 22 clones. Plants resistant to crown rust (caused by Puccinia coronata Corda F. sp. lolii Erikss.) were selected from 197,270 (Finland), ‘Sprinter,’ and germplasm collections obtained from old turfs in New Jersey and Maryland. Selection involved the screening of over 30 000 seedlings for crown rust resistance, the evaluation of over 10 000 clones in spaced-plant nurseries, and the study of 648 single plant progenies in seeded turf trials. Progenies of the 56 parental clones of Gator were subjected to interplant competition, disease, and environmental stress in closely mowed turf plots. A total of 6100 tillers were selected from these turf plots and transferred to an isolated, spaced-plant nursery at Adelphia, N.J. Selection within this nursery was based on freedom from disease, a bright dark green color, soft leaves, attractive appearance, and uniform maturity. Nearly