REGISTRATION OF ‘SATURN’ PERENNIAL RYEGRASS

‘SATURN’ PERENNIAL RYEGRASS (Lolium perenne L.) (Reg. no. CV-141, PI 537567) was developed by Pure-Seed Testing, Inc., of Hubbard, OR. It was released September 1986 by Turf-Seed, Inc., of Hubbard, OR, and Zajac Performance Seeds of North Haledon, NJ. The experimental designation of Saturn is Pure-Seed 2PM. First certified seed was produced in 1988.

The four hundred parental clones of Saturn trace back to crosses among selections of ‘Citation II’ × ‘Manhattan II’, Citation II × ‘Prelude’, ‘Jazz’ × Manhattan II, and Jazz × Prelude. Progeny from these crosses were selected for resistance to seed production diseases, an attractive dark green color, and improved seed yield. Saturn was subsequently evaluated for turf performance, mowing quality, turf density and resistance to turf diseases in Oregon, California, and New Jersey.

Saturn is a medium maturing cultivar with a 50% heading date 7 d later than ‘Pennfine’. Saturn is an improved turf-type perennial ryegrass cultivar capable of producing a persistent, dense, fine-textured turf with a dark green color. This cultivar also has improved seed yield production as a result of higher reproductive tiller formation.

Saturn has very good resistance to winter net blotch (Puccinia coronata Corda), and stem rust, caused by Puccinia graminis Pers.:Pers. They were crossed with 12 clones selected from old turf areas in New Jersey. Seedlings from these crosses were put in a spaced-plant nursery to initiate the first cycle of phenotypic selection for dark green color; high number of seed heads; and resistance to stem rust caused by Puccinia coronata Corda, and net blotch caused by Drechslera dictyoides (Shoemaker). After two cycles of recurrent selection, 165 dark green plants were chosen as the parents of 246. Certified seed was produced in 1987.

‘246’ PERENNIAL RYEGRASS

‘246’ PERENNIAL RYEGRASS (Lolium perenne L.) (Reg. no. CV-142, PI 537568) was developed by the plant breeders at Pure-Seed Testing, Inc., Hubbard, OR. Its experimental designation was 246.

246 is an advanced generation synthetic cultivar from four cycles of recurrent phenotypic selection. Plants were selected from ‘Citation II’ and ‘Manhattan II’ for resistance to stem rust incited by Puccinia graminis Pers.:Pers. They were crossed with selections from old turf areas in New Jersey. Seedlings from these crosses were put in a spaced-plant nursery to initiate the first cycle of phenotypic selection for dark green color; high number of seed heads; and resistance to stem rust caused by Puccinia coronata Corda, and net blotch caused by Drechslera dictyoides (Shoemaker). After two cycles of recurrent selection, 165 dark green plants were chosen as the parents of 246. Certified seed was produced in 1987.

246 is a medium maturing, lower-growing, turf-type cultivar capable of producing a dark green turf with a reduced rate of vertical growth. It has good resistance to net blotch, brown patch incited by Rhizoctonia solani (Kühn), and stem rust. 246 has performed well over a range of soil types at several locations in the United States. It is recommended for the cool-season areas where turf-type perennial ryegrasses are adapted. The dark green color and more prostrate growth have made 246 an outstanding cultivar for the overseeding of dormant bermudagrasses, nodon dactylon (L.) Pers., in the southern parts of the USA.

This cultivar is used for home lawns, parks, athletic fields, industrial sites, cemeteries, golf course tees, cartpaths.

Breeder seed of 246 is produced by Pure-Seed Testing, Inc. Propagation is limited to two generations of increase from breeder seed, one generation each of foundation and certified. United States Plant Variety Protection Certificate no. 8700084 has been issued for 246 perennial ryegrass.

W. A. MEYER, C. A. ROSE-FRICKER,* AND C. R. FUNK (1)

References and Notes

1. C. A. Rose-Fricker and W. A. Meyer, Pure-Seed Testing, Inc., Hubbard, OR 97032; and J. Zajac, Zajac Performance Seeds, North Haledon, NJ 07508. Appreciation is expressed to all participants in the National Turfgrass Evaluation Program for their assistance in the evaluation of Saturn perennial ryegrass. Registration by CSSA. Accepted 31 Dec. 1990. *Corresponding author.