REGISTRATION OF CROP CULTIVARS

Breeder seed will be maintained by T.A. Campbell, Germplasm Quality and Enhancement Laboratory, Plant Genetics and Germplasm Institute, Beltsville Agricultural Research Center—West, Beltsville, MD 20705. Producers of foundation seed must be approved and certified by the state agriculture department within the state of production.


References and Notes

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REGISTRATION OF 'FLORALAWN'
ST. AUGUSTINEGRASS

'FLORALAWN' St. Augustinegrass [Stenotaphrum secundatum (Walt.) Kuntze] (Reg. no. 101) is vegetatively propagated from an open-pollinated seedling derived from FA-23 which was originally selected from 'Roselawn' St. Augustinegrass (1). In 1960, FA-23 along with 43 other St. Augustinegrass selections were randomly cross-pollinated under natural conditions in a field planting at Gainesville, FL. Ten seedlings were derived from the maternal clone, FA-23, four of which were subsequently found to be resistant to St. Augustine decline virus (2, 8). No other selection produced offspring with such a high frequency of resistant types to St. Augustine decline virus. One of the four seedlings from FA-23 is the parental material of Floralawn while another seedling was the original parental material of 'Floratam' St. Augustinegrass (7). Floralawn was developed by the Florida Agricultural Experiment Station (5) and released 12 Nov. 1985.

Floralawn is a long-day plant which flowers best under photoperiods of 12 h or more (3). Its maximum flowering period is June through July, although it may produce inflorescences with purple anthers and purple stigmas from April to August. Seedhead production was equal to Floratam (5). Floralawn produced 1.9% self-pollinated seed per spikelet or 0.4 seed per inflorescence (Dudeck, unpublished data). Thus, it is important to control selfing by either restricted to large plots of established turf, or by timely mowing to control seedhead production.

Floralawn is resistant to St. Augustine decline virus, southern chinch bug (Blissus insularis Barber), and downy mildew incited by Sclerophthora macrospora (Sacc.) Thirum. Shaw, and Naras. (2, 8, 9). It is tolerant to sod webworms (Herpetogramma phaeopteralis Guenne) under low to moderate fertility (Reinert and Busey, unpublished data). Like Floratam, it is not as shade tolerant as 'Floratine' (4); it is equally coarse in leaf and stolon texture; and it is sensitive to winter injury (10). However, Floralawn can be distinguished from other commercially available St. Augustinegrass cultivars by electrophoretic banding patterns for alcohol dehydrogenase (6) and by morphological characteristics. Floralawn should be grown only in semitropical environments along the Gulf Coast region in full sun to moderate shade. Fertility regime should be only low to moderate.

The Florida Agricultural Station, Gainesville, will maintain breeder stock.

A. E. DUDECK, J. A. REINERT, AND P. BUSEY

References and Notes


REGISTRATION OF 'FLORIDA 80'
ANNUAL RYEGRASS

'FLORIDA 80' annual ryegrass (Lolium multiflorum Lam.) (Reg. no. 102) was developed from selected volunteer diploid plants that had reseeded in Florida pastures for 2 yr or more (3). The first selection cycle included the rust-resistant commercial cultivars 'Florida Rust Resistant' 31%, 'Magnolia' 7%, 'Gulf' 5%, 'Kinderlou' 43%, and a mixture of the first three cultivars, 11%. Kinderlou (2) is a reseeding population of rust-susceptible diploid ryegrass of unknown origin collected on the Langdale Farm at Kinderlou (Lowndes County), GA. The remaining 3% of plants were from reseeding ecotypes collected at Jay and Quincy, FL. The cultivar was developed through five cycles of stratified mass selection. Plants were space planted in grids and the best plants, based on rust resistance, vigor and other disease resistance, of each unit selected for the next generation. Every fifth row in the nursery was planted to a solid stand of 'Manhattan' perennial ryegrass (L. perenne L.) to act as a spreader for crown rust (Puccinia coronata Cda.).

Population size was 6800 plants in the first cycle, 10 000 plants in the second cycle, 25 000 plants in the third cycle, and 30 000 plants in the fourth cycle. In the first three cycles, 40 to 60% of the plants were rouged before pollination because of poor growth and/or rust or other disease susceptibility; in the last cycle 80% of the plants were rouged. Seed of surviving plants in the cycle four nursery were bulk harvested to become breeder seed.