Suppression of Bermudagrass
In Perennial Ryegrass Turf Using Selective Herbicides

By D.M. Kopec and J.J. Gilbert

Bermudagrass, when not the primary desired turf, is a problematic ground cover. Elimination of bermudagrass by cultural means in a mixed polystand is virtually impossible. Usually, the only effective remedy is a full renovation of the area, which includes loss of all vegetation, using a non-selective herbicide (glyphosate) or a sterilization treatment. Repeated use of a selective herbicide would be beneficial if activity against bermudagrass is demonstrated and tolerance to ryegrass is acceptable.

A three-year-old stand of turf-type perennial ryegrass was used to test the efficacy of two herbicides for bermudagrass suppression at the University of Arizona’s Desert Turfgrass Research Facility in Tucson during the summer of 1994. Treatments included Turflon Ester applied at 1.0 AI/A, Acclaim applied at 0.38 lbs. AI/A, a tank mix of the two herbicides at the above rates and an untreated control (check plot).

Each plot received two four-inch plugs of the cultivar ‘Midiron’ as transplants on June 6. The plugs received a solution of water soluble nitrogen on June 17. An additional 0.25 lb. of nitrogen per 1,000 square feet was applied to the entire field the day after transplanting. The turf site was mowed regularly to 2.5 inches with a rotary push mower and irrigated at 100 percent reference ET, derived from the on-site weather station (Penman based model). The soil was a Gila sandy loam with a pH of 7.6.

The aggressive spreading ability of bermudagrass makes it difficult to control in cool-season turfgrasses with selective herbicides.