Postemergence Annual Bluegrass Management

Ronald Calhoun Department of Crop and Soil Sciences

The management decisions made by turfgrass professionals will either favor, disfavor, or maintain the Poa population in a turfgrass stand. It is widely known that plant growth regulators suppress certain grass species more than others. Rates for Poa suppression are listed on the labels of TGR, Trimmit (paclobutrazol) and Primo (trinexapac-ethyl). The idea is that the PGRs will suppress/injure the Poa and allow the bentgrass fill in. Plots were established on an 80-90% Poa annua fairway at the Hancock Turfgrass Research Center. Treatments included commercially available and experimental PGRs and grass herbicides. Treatments were applied three times in both 2000 and 2001 to determine the long-term effects of these products. Bentgrass plugs were placed in each plot at the beginning of the experiment. These plugs were used to determine the safety of each treatment and to measure spread of the bentgrass into the plots. After two years, several plots are showing a dramatic increase in bentgrass. The most effective treatments have been the Scott's TGR on fertilizer and an experimental herbicide V-10029. These plots now contain 80-95% bentgrass. Unfortunately, the transition happened very quickly, consequently the plots were quite ugly for much of 2000. Managing Poa with these products may be more appropriate where the infestation is 20% or less. Conversely, the plots treated with Proxy have not transitioned at all. The Poa in the Proxy treated plots has shown increased vigor, uniformity, and density over the duration of the experiment. Dollar spot incidence was reduced in the Proxy treated plots during the summer of 2000. Seedhead production was also reduced in these plots in the spring of 2001. To date, this study has created more questions than it has answered, and has something to offer all turf professionals, whether you choose to favor, irritate, or eliminate your Poa.