

Postemergence Annual Bluegrass Management

Ronald Calhoun and Aaron Hathaway

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 labels of TGR, Trimit (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 2000, 2001 and 2002 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 and spread of the bentgrass into the plots.

After three years, several plots are showing a dramatic increase in bentgrass. The most effective treatments have been the Scott's TGR on fertilizer and two experimental herbicides HM9930 and V-10029. These plots now contain 80-95% bentgrass. The transition happened very quickly with the Scott's TGR and particularly V-10029, consequently the plots were quite ugly for much of 2000. The transition was more subtle in the plots treated with HM9930. The transition in these plots was not as evident until after the second season of treatments. Beacon (primisulfuron) has been reported to have activity on *Poa* and was included in this trial. Beacon has demonstrated some injury to the bentgrass and did not provide a significant transition after two seasons of treatments. However, the amount of bentgrass in these plots has increased markedly in 2002. Managing *Poa* with any of these products may be more appropriate where the infestation is 20-25% or less. 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.

Another *Poa* management study was started on creeping bentgrass maintained at greens height. This trial was initiated in June of 2001 on a two-year old 'Providence' native soil green. Treatments in this study included V-10029 at 5 grams of active ingredient per acre (g ai/A) every 7 days and 20 g ai/A every 28 days. Trimit (paclobutrazol) treatments were also included at 0.06 lb ai/A every 7 days and 0.24 lb ai/A every 28 days. Application cycles were followed for 12 weeks in 2001 totaling 60 g ai/A and 0.75 lb ai/A for the V-10029 and Trimit plots, respectively. Percent *Poa* was determined in the spring of 2002. V-10029 applied every 7 days showed the largest reduction of *Poa* of any treatment. The Trimit plots did not differ statistically from the control plots. These treatments were continued in 2002 (16 weeks).