Velocity Herbicide – Caution: This Will Work!

Ronald Calhoun and Aaron Hathaway
Department of Crop and Soil Sciences

Turfgrass management professionals have spent years trying to eradicate annual bluegrass from their turf swards. Annual bluegrass (*Poa*) is one of the most invasive weeds in turfgrass stands. It is also one of the most difficult to control.

Currently, no reliable selective postemergence control of *Poa annua* exists in the marketplace. Research at MSU has been conducted to determine the effectiveness of commercially available and experimental products for this purpose. Velocity Herbicide has provided the most remarkable results from these experiments. Plots treated with Velocity Herbicide yielded >95% annual bluegrass control within 45 days after the initial treatment in 2000 with no damage to the bentgrass. After three seasons of treatment these plots now contain between 80-95% bentgrass. The activity of Velocity represents a quantum leap from currently labeled products. In the past two seasons several trials have examined the effects of Velocity Herbicide under trafficked conditions to ascertain its potential in 'real world' situations.

The results provided by Velocity Herbicide look very promising. A reliable postemergence partner would profoundly change our ability to manage *Poa annua*. Velocity Herbicide received special registration for Michigan in June 2003 representing a novel chemical option for sod farms and golf courses. It is important to remember that chemical controls are single component in a multi-faceted management system. Chemical control of *Poa annua* without consideration of management and environmental factors will not provide a long-term solution to such a complex problem. However, to this point, the management of *Poa annua* has been hampered by the lack of an effective and reliable postemergence herbicide partner.

Many superintendents have indicated that they would like the effect of Velocity Herbicide to be more subtle. Current research is focused on fine-tuning the application rate and interval to maximize efficacy while minimizing number of potential dead patches that can occur when the Velocity works too quickly. We are examining the merits of frequent low-dose applications on fairways. These treatments have effective on greens height trials providing *Poa* reduction with little-to-no surface disruption.

Much of our weed research focuses on the conditions that allow weeds to out compete the turf in the first place. Coupling an understanding of why weeds invade improves our ability to use a product like Velocity Herbicide to curtail the impact of persistent plants, such as *Poa annua*.