

Midwest Fact Sheet

Monthly flurprimidol applications to reduce annual bluegrass in creeping bentgrass fairway

Limiting annual bluegrass (*Poa annua*) encroachment is a constant struggle in creeping bentgrass fairways. Several root-absorbed plant growth regulators like paclobutrazol (Trimmit, TGR, and others) and flurprimidol (Cutless) have traditionally been the tools of choice to limit annual bluegrass expansion in fairways. Often these products were applied only during the fall or spring months when annual bluegrass is most active. Our latest research examined Cutless applied monthly over two years with and without triexapc-ethyl (PrimoMaxx) to reduce annual bluegrass populations in fairway height creeping bentgrass. Applications were made monthly from May through October in 2004 and 2005 to a recently established creeping bentgrass stand containing approximately 30% annual bluegrass. The most effective treatments for reducing annual bluegrass were Cutless 50W alone at 16 oz/A or Cutless 50W + PrimoMaxx at 16 + 6 oz/A (Table 1). Our results showed that even with annual bluegrass populations of about 30%, monthly Cutless applications can gradually reduce population to a more tolerable, 10%, or less. We can add flurprimidol to the toolbox of annual bluegrass control products that also includes other growth regulators like paclobutrazol, and the herbicides Progress and Velocity. These products work best when combined with sound cultural practices like adequate fertility, a reasonable mowing height, proper irrigation and compaction/thatch management.

The full text of this article can be found in the online journal Applied Turfgrass Science at <http://www.plantmanagementnetwork.org/ats/> or from Jennifer Biehl at biehlj@purdue.edu.

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Table 1. Effect of monthly applications of Cutless with and without PrimoMaxx on annual bluegrass in a creeping bentgrass fairway

		Percent change in annual bluegrass from May 2004 ^y	
PGR	oz/A	5 Nov. 2004	5 May 2006
Cutless 50W	8	- 39 a ^z	- 79 ab
Cutless 50W	16	- 24 ab	- 75 abc
Cutless + PrimoMaxx	4 + 6	- 28 a	- 38 d
Cutless + PrimoMaxx	8 + 6	- 19 ab	- 52 bcd
Cutless + PrimoMaxx	16 + 6	- 36 a	- 87 a
PrimoMaxx	12	+ 11 b	- 4 e
Untreated	---	+ 13 b	- 44 cd

^y Percentage annual bluegrass reductions were calculated based on initial populations recorded prior to growth regulator treatment on 15 May, 2004.

^z Means in the same column followed by the same letter are not significantly different according to Fisher's protected LSD t-test ($p=0.05$).

Learn more about plant growth regulators at our Field Day on July 17, registration information is available at www.agry.purdue.edu/turf/.

Midwest Regional Turf Foundation Calendar of Events

2007

- June 1 **2007-08 MRTF Member Renewal**
July 17 **Turf Field Day,**
Daniel Center, West Lafayette
- October 11 **Golf Day,**
Coyote Crossing, West Lafayette
- November 14-15 **Turf & Ornamental Seminar,**
Daniel Center, West Lafayette
- December 10 **Basic Training, Fort Wayne**
December 18 **Basic Training, Indianapolis**

2008

- January 14-16 **Indiana Green Expo,**
Indiana Convention Center, Indianapolis
- January 22 **Basic Training, Evansville**
- February 11-14 **IN-IL Short Course, Location TBD**
- February 25-28 **IN-IL Short Course, Willowbrook, IL**

Reminder:

Turf Field Day

July 17, 2007

Daniel Center

West Lafayette, IN

Preregistration deadline:

June 29, 2007

See registration information at

www.agry.purdue.edu/turf or

call Jennifer at (765)494-8039

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