



Amicarbazone, a Newer Herbicide for Annual Bluegrass Control In Bentgrass

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Goal: Remove *Poa annua* without causing injury to creeping bentgrass.

Locations: Two golf course fairways in play.

- 1) Sunshine Course's 1 green approach – Lemont, Illinois
- 2) North Shore Country Club's 8 fairway – Glenview, Illinois

Background: Annual bluegrass (*Poa annua*) is a weed that many superintendents often manage instead of making efforts to control. Its persistence, invasiveness and ability to tolerate the closest of mowing heights and reproduce from year to year, make it an excellent 'plant out of place'. Annual bluegrass is a summer annual, but with daily and careful management, we are able to manage this grass as a perennial system. Until recently, superintendents have had few tools for adequate post-emergent control of this weed, but companies have begun to introduce and test new products to selectively control *Poa annua* from creeping bentgrass. Velocity (Valent) has gained increasing use and popularity. Two newer experimental products may offer future selective control; Amicarbazone (Arysta) and Cumyluron or HM993 (Helena Chemical).

Material and Methods: The study was conducted at two locations on established L-93 creeping bentgrass fairways with similar levels of annual bluegrass invasion (3-10%); Sunshine Course in Lemont, IL and North Shore Country Club in Glenview, IL. Treatments (Table 1) included Amicarbazone at 2 oz and 3 oz/acre, with and without the growth regulator Trimmit, Velocity Herbicide at a 6 oz/acre rate (shown on label for 'rapid conversion') and Cumyluron at a 6 oz/acre rate. Two 14 day interval applications were made, starting June 9, 2010. Data collected were; percent *Poa annua*, percent turf injury, visual quality, and percent dollar spot.

Results:

- Visual Quality. At rates tested, only Cumyluron was without a level of injury versus untreated, followed by Amicarbazone 2 oz/A + Trimmit 2 fl oz/A. (Fig. 1)
- Turf Injury. Most injury occurred with Velocity 6 oz/A and least injury occurred with Cumyluron 6 fl oz/A on a L-93 creeping bentgrass fairway. (Table 2)

- Poa control. Thirty days after two applications Velocity and all Amicarbazone treatments reduced *Poa annua*, and Cumyluron was similar to untreated. (Fig. 3)
- Best treatment. Given 2 applications Amicarbazone 2 oz/A + Trimmit 2 fl oz/A is promising because it removed *Poa annua* and caused minor turf injury. (Figs. 2 ,3)

Table 1. Treatments used for selective removal of *Poa annua* from a 'L-93' creeping bentgrass fairway at two locations in 2010.

Treatments and rate	NI Surfactant (0.25% v/v)	9-Jun	23-Jun
1. Untreated	---	----	----
2. Amicarbazone 2 oz/A	yes	X	X
3. Amicarbazone 2 oz/A + Trimmit 2 fl oz/A	yes	X	X
4. Amicarbazone 3 oz/A	yes	X	X
5. Amicarbazone 3 oz/A + Trimmit 3 fl oz/A	yes	X	X
6. Cumyluron 6 fl oz/A	no	X	X
7. Velocity 6 oz/A	no	X	X

Figure 1. At rates tested, only Cumyluron was without a level of injury versus untreated, followed by Amicarazone 2 oz/A + Trimmit 2 fl oz/A on a L-93 creeping bentgrass fairway at North Shore Country Club, Glenview, IL in 2010.

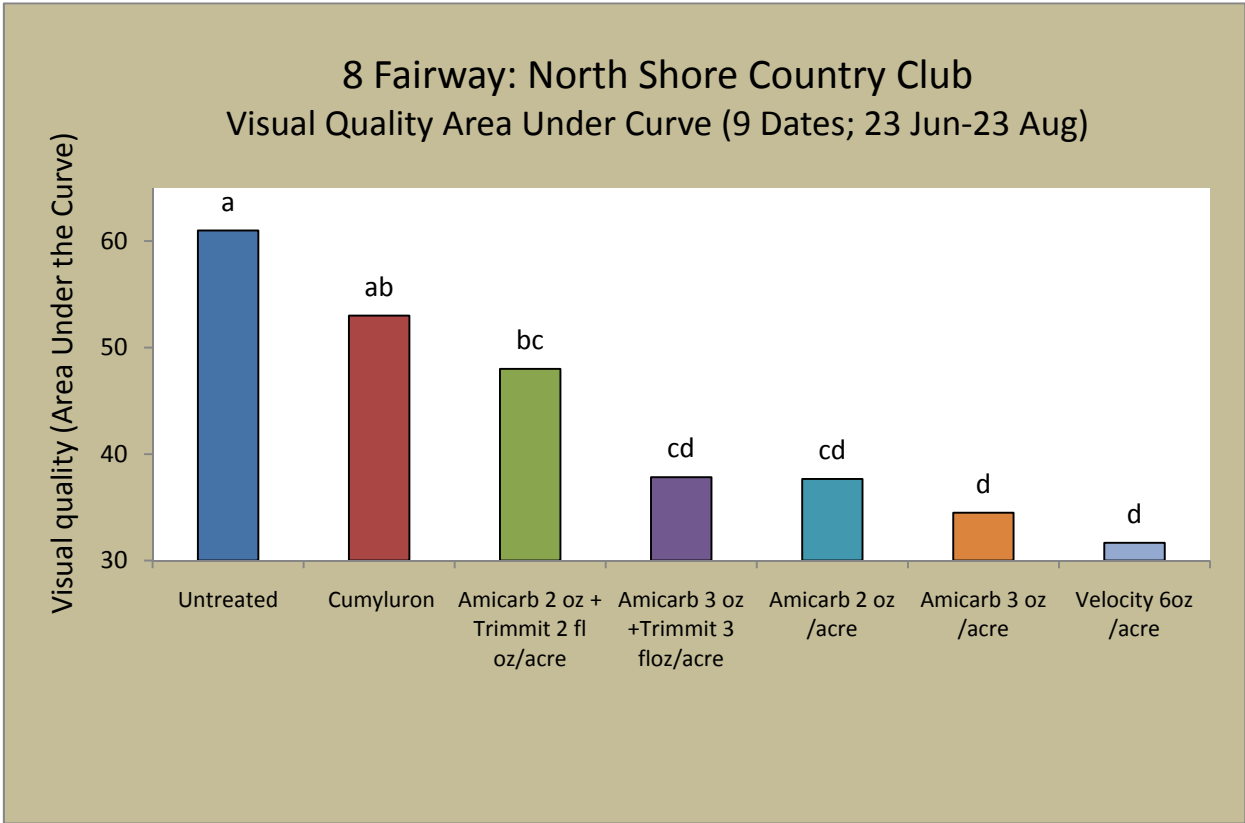


Figure 2. Most turf injury was with Velocity 6 oz/A and least injury was with Cumyluron 6 fl oz/A on a 'L-93' creeping bentgrass fairway at North Shore Country Club, Glenview, IL in 2010.

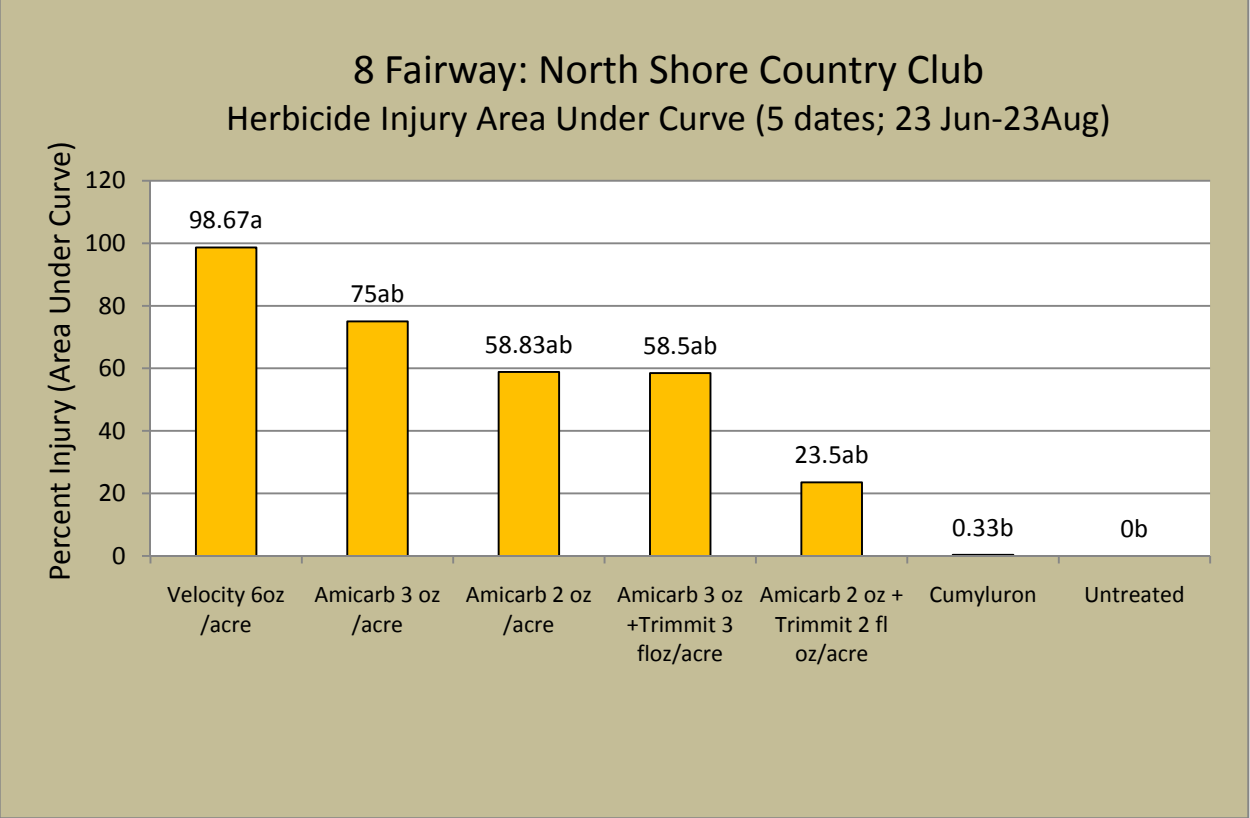


Figure 3. Thirty days after two applications Velocity and all Amicarbazone treatments reduced *Poa annua*, whereas Cumyluron did not and appeared similar to untreated on a 'L-93' creeping bentgrass fairway at North Shore Country Club, Glenview, IL in 2010.

