# Green Solutions

update

## Timing of Proxy<sup>®</sup> for Seedhead Suppression of Annual Bluegrass

Proxy<sup>®</sup> (ethephon) is effective for suppressing *Poa annua* seedheads when applied prior to the emergence of seedheads. Timing of the first application in spring has historically been scheduled in a number of ways:

// Apply when Poa annua seedheads are first detected in the boot stage, when a noticeable bulge can be detected at the base of the plant. Poa annua is highly variable depending on biotype and location, so superintendents should look for Poa annua in the boot stage on the south-facing slopes and other warm areas.

// Apply at the first sign of forsythia bloom.

// Apply when growing degree days base 50°F (GDD50) accumulation reaches 50 with a February 1st start date; which is used in the Mid-Atlantic and Northeast.

// Apply when GDD32 accumulation = 200-500, with a January 1st start date; which seems to be more applicable for the Midwest and Northern U.S.

We now know that spring applications of Proxy without a previous fall application should be made as soon as the greens can withstand a sprayer to maximize seedhead suppression.

### // Add a Fall Primer Application for Improved Control

Years of research and on-course experience indicate that Proxy applied in the fall, followed by two spring applications, improves overall seedhead suppression and consistency of suppression, compared to two spring applications. This is because seedheads of annual bluegrass are initiated in the late fall and winter, even though they only become visible in the spring. The improvement in both consistency and amount of seedhead suppression from the additional fall application lasts throughout the seedhead production period in the spring. Timing of the fall application should be after the last mowing.

Application	Timing	Product and Rate/1000 Sq Ft
1	At or immediately after the final mowing in fall	Proxy 5.0 oz + Stressgard®-containing product
2	Traditional spring timing: // <i>Poa annua</i> in the boot stage // First sign of forsythia bloom // GDD50 = 50 with a Feb. 1 start date // GDD32 = 200-500 with a Jan. 1 start date	Proxy 5.0 oz + Stressgard-containing product
31	3 - 4 weeks after initial spring application	Proxy 5.0 oz + Primo MAXX® 0.125 oz and/or a Stressgard-containing product

<sup>1</sup>In areas with extended seedhead periods, superintendents will often apply additional applications of Proxy + Primo Maxx at reduced rates on 3-4 week intervals. Do not exceed the annual maximum application rate of Proxy at 20 oz/1000 sq ft/year east of the Mississippi River and 30 oz/1000 sq ft/year west of the Mississippi River.



#### // Tank Mixes

- // Including Proxy in the snow mold application in the late fall does not negatively affect seedhead or snow mold control the following spring
- // Research indicates that applying products such as Signature<sup>™</sup> XTRA Stressgard<sup>®</sup> or Fiata<sup>®</sup> Stressgard in the fall improve turf color and overall quality in early spring
- // Avoid tank mixes with Primo Maxx<sup>®</sup> in the late fall and early spring since some phytotoxicity is reported from applications followed by ensuing frost events
- // Research also indicates that including Stressgard-containing products, such as Fiata, in spring applications is effective for limiting yellowing that is sometimes observed when Proxy is applied alone
- // Since Proxy reduces spray tank pH, it should be added last to tank mixes. The only exception is with Signature XTRA Stressgard, which should be added after Proxy

#### // Application Timing for Areas with Fall/Winter Seedheads and No Winter Snowcover

In certain valley and coastal regions in the Pacific Northwest, there is often a flush of seedheads in the early fall. In these regions, golf course superintendents have had success applying Proxy in the late summer/early fall when daytime temperatures are consistently below 80°F. If phytotoxicity is a concern, consider combining with Stressgard-containing products like Fiata Stressgard, Signature XTRA Stressgard, Exteris<sup>®</sup> Stressgard, or Interface<sup>®</sup> Stressgard depending on the area and what diseases may be present.

In other areas of the Pacific Northwest where cool-season grasses do not go dormant, annual bluegrass seed production often begins in January and February. Golf course superintendents have had success with a fall application of Proxy when growth slows in November or December, followed by applications starting early the next year at 200 GDD32 (accumulation starting Jan 1), and then reapplications every 200-500 GDD32 until seedhead production ceases.



Seedheads of annual bluegrass disrupt uniformity and ball roll. (Bayer)



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