GreenSolutions Update

Timing of Proxy® for Seedhead Suppression of Annual Bluegrass

Proxy® (ethephon) is effective for controlling *Poa annua* seedheads when applied prior to the emergence of seedheads. Timing of the first application in spring is traditionally scheduled in a number of ways:

1. 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.
2. Apply at the first sign of forsythia bloom.
3. Apply when growing degree days base 50°F (GDD50) reach 50°F with a February 1st start date; which is used in the Mid-Atlantic and Northeast.
4. Apply when GDD32 = 200-500, which seems to be more applicable for the Midwest and Northern U.S.

A Simpler Method for Application Timing

Three years of research indicate that Proxy applied in the fall, followed by two spring applications, improves overall seedhead control and consistency of control, compared to two spring applications. The improvement in seedhead control from the additional fall application also 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/1,000 SQ FT
1	**At or immediately after the final mowing in fall**	**Proxy 5.0 oz + Stressgard-containing product**
2	**Traditional spring timing:** **• *Poa annua* in the boot stage** **• First sign of forsythia bloom** **• GDD50 = 50 with a Feb. 1 start date** **• GDD32 = 200-500**	**Proxy 5.0 oz + Stressgard-containing product**
3	**3 - 4 weeks after initial spring application**	**Proxy 5.0 oz + Primo MAXX® 0.125 oz and/or a Stressgard-containing product**

Tank Mixes

- Including Proxy in the snow mold application in the late fall does not affect seedhead or snow mold control the following spring.
- Research indicates that applying products such as Signature™ XTRA Stressgard® or Fiata® Stressgard in the fall improve turf color and quality in early spring.
- Research also indicates that including Stressgard-containing products, such as Fiata, in spring applications is as 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.

GreenSolutions Update

Timing of Proxy for Seedhead Suppression of Annual Bluegrass

Application Timing for Areas with Fall 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, or Interface® 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, and then reapplications every 500 GDD32 until seedhead production ceases.

Seedheads of annual bluegrass disrupt uniformity and ball roll (Zac Reicher, Bayer)