

Trimmit® 2SC—New Trade Name for Paclobutrazol

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Paclobutrazol has been registered for use in highly maintained turfgrass systems for several years. The professional turf product line of The Scotts Company (now The Andersons) has marketed this plant growth regulator, which has been used primarily in cool-season turf. Traditionally, three paclobutrazol products have been sold in turf: (1) a sprayable product sold as TGR Turf Enhancer® 2SC, (2) a 0.42% granular paclobutrazol product formulated on a 31-3-9 fertilizer, and (3) a 0.34% granular paclobutrazol product formulated on a 15-0-29 fertilizer.

In June of 2000, **Zeneca Professional Products began marketing a sprayable paclobutrazol formulation with the trade name of Trimmit® 2SC.** Trimmit® is the same product as the sprayable TGR Turf Enhancer® that was sold by The Scotts Company. Currently, both products are on the market and are available for use. Over time, Trimmit® will most likely replace TGR Turf Enhancer® 2SC as the sprayable formulation of paclobutrazol. Currently, the granular paclobutrazol formulations are being marketed by The Andersons.

Several turfgrass managers have inquired about why Zeneca has suddenly started selling paclobutrazol. Zeneca has always been the basic manufacturer of all paclobutrazol products sold worldwide. In addition to the turfgrass uses mentioned above, paclobutrazol is marketed as an ornamental growth regulator in the ornamentals market by the trade name of Bonzi® (sold by Uniroyal Chemical), and in the industrial vegetation market as a woody plant growth regulator by the trade name of Profile® (sold by Dow AgroSciences). In many other countries, paclobutrazol is sold by the trade name of Coltar®. But again, all paclobutrazol products are manufactured by Zeneca. Un-

til June 2000, when Trimmit® was available for use in turf, Zeneca had chosen to license all paclobutrazol products to other companies.

Paclobutrazol is one of three plant growth regulators registered for use in turfgrasses that temporarily inhibit gibberellin biosynthesis (GA inhibitors) in plants. The other two products that inhibit gibberellin biosynthesis are flurprimidol (sold as Cutless®) and trinexapac-ethyl (sold as Primo®). **Gibberellins are plant-produced hormones that are responsible for cell elongation as well as other plant functions. When gibberellin production is inhibited, plant cells do not elongate, internodes become shortened, and above-ground plant growth is reduced.** Therefore, use of these products can reduce mowing requirements of various turfgrass species. Research has shown that turfgrass growth can be reduced an average of about 50% when under growth regulation.

The most popular use of paclobutrazol is for annual bluegrass (*Poa annua*) control. **The majority of research has shown that paclobutrazol is the most effective product of the GA inhibitors for reducing annual bluegrass populations in bentgrass (*Agrostis* spp.) putting greens.** To date, annual bluegrass control is the most popular use of this product. Annual bluegrass infestations can be reduced with paclobutrazol because annual bluegrass is more sensitive to this product than is bentgrass. Therefore, paclobutrazol results in more relative growth reduction in annual bluegrass than bentgrass. This can lead to a shift in the plant population to more bentgrass and less annual bluegrass over time. This shift generally takes multiple applications at four-week intervals during periods of active growth. In the case of perennial biotypes of *Poa annua*, multiple years are required to obtain the shift in population to more bentgrass. 

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when higher tissue N was detected. By mid-July, when disease pressure was severe, there no longer was a significant correlation between dollar spot severity and leaf tissue N. Hence, **during low to moderate disease pressure, N availability appeared to be more important in reducing dollar spot severity than soil microbial activity.** Presumably, N stimulates turf growth, enabling plants to recover more rapidly from dollar spot.

Organic matter levels were greater in the upper 1.0 in. (2.5 cm) of soil in plots treated with Sustane®, Earthgro

Select®, Earthgro Dehydrated Manure®, Com-Pro®, and Scott's All Natural Turf Builder® in 1998. Following core cultivation in September 1999 and resampling in March 2000, all treatments were associated with increased organic matter levels in the upper 1.0 in. (2.5 cm) of soil, particularly in Com-Pro®-treated plots. This increase in organic matter was attributed to core cultivation, which improved aeration and downward movement of nutrients, thus promoting a greater root biomass. No treatment, how-

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