

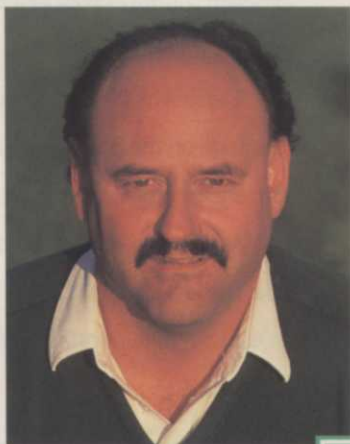
Plant growth regulation of mowing time

■ Plant growth regulators (PGRs) aren't just for turfgrass growth control any longer. The newest generation of products has become a tool to help keep turf healthier, denser and greener. They can help turf managers deliver the high aesthetic quality demanded by today's homeowners, golfers, park patrons and other sports participants.

"Primo made the fairways appear highly groomed. In fact, after the first couple of applications, the turf seemed denser. And the *Poa annua* stood straight up, which made it very easy to cut off."

Healthier turf— Another benefit of PGRs is healthier turf. Roger Sudbury of

Ken Wentland of Lied's Landscaping used PGRs last year to slow growth for up to six weeks on the lawns of commercial accounts.



With labels for all major warm- and cool-season turf, PGRs are used for growth management, trimming and edging.



Yakubisin: the *Poa annua* stood straight up

For Ken Wentland, ornamental pest specialist at Lied's Landscape in Sussex, Wis., PGRs help his crews keep turf growth under control, even during peak growing periods. Wentland used PGRs during the Midwest's unusually wet 1993 spring and summer, when Lied's mowing schedule was squeezed between rain and rapid turf growth.

"Some of our commercial accounts are mowed on alternate weeks—just enough to keep them looking respectable," says Wentland. "Last year, our wet spring caused tremendous growth, which slowed mowing considerably."

To help his crews keep up, Wentland applied Primo, one of the newest PGRs on the market, to a bluegrass/fescue/ryegrass turf mix. "The PGR helped tremendously, for about six weeks," Wentland explains, "and when we did mow there were fewer clippings. That saved us a lot of time."

How they work— Although they share a common goal of controlling turf growth, the two types of PGRs work in different manners.

Type I or mitotic toxicants are cell initiation inhibitors and suppressors such as Embark and Limit. They inhibit plant growth by suppressing cell division.

Type II are gibberellic acid (GA) inhibitors that reduce GA biosynthesis, which results in shortened stems and leaf blades. Primo, Cutless and Scott's TGR are members of this group.

The way PGRs enter turf plants also varies. Some, like Primo, are foliar absorbed

Sudbury: healthier, stronger turf with good color



directly into the leaf upon application and do not require watering in. Others may require irrigation or rain to activate absorption through the root system.

Improving appearance— The PGRs on today's market claim varying rates of growth reduction and control, with some as high as 50 percent growth and clipping reduction. But Wentland also appreciates the turf enhancements provided by PGRs.

"We noticed a darker green turf color," he says. "And clippings reduction also was important. Our workers were much happier because they could mow quicker and didn't have to bag clippings."

Clipping reduction was the reason John Yakubisin, the superintendent at Rolling Rock Club in Ligonier, Pa., used PGRs on his fairways last year. "I wanted the most playable golf surface possible without any debris or mess from clippings," he says.

Winter Haven, Fla., notes stronger, healthier turf after using them. He oversees Willowbrook Golf Course and Chain of Lakes Complex, a baseball stadium and five practice fields, spring training home for the Cleveland Indians.

"The PGR allows us to keep up with turf growth during some monsoon-type rains last spring," says Sudbury. "With all that growth, we would have had to double- and triple-mow and could have had scalping. We didn't have any of those problems. What we did have was healthier, stronger turf with good color."

A short history— When PGRs were introduced in the 1950s, they were primarily used on low-maintenance areas due to their inconsistent performance. As new products were developed, PGRs became more widely accepted in most turf locations.

Depending on individual product labels, PGRs are available for all major warm- and cool-season turf. The products can be used for turf growth management on residential and commercial sites as well as for trimming and edging. They can control turf growth throughout golf courses and on other sports fields.

"They saved us a tremendous amount of time," says Sudbury.

Since time equates to money, PGRs save money through the hours they save and other benefits. They are an interesting, effective alternative for astute turf managers.