

CHALKBOARD

TIPS FROM THE PROS

TURF GROWTH REGULATORS GIVE NEW DIMENSION TO POA ANNUA CONTROL

Developing a reliable and consistent plant growth regulator for turf has stumped chemical manufacturers for more than 30 years. What turf manager would pass up buying a chemical that reduces mowing while retaining the appearance and usefulness of the turf? The manufacturer that developed such a chemical first would reap a huge reward.

Try as they might, every time they find a promising chemical two stumbling blocks got in their way, discoloration of treated turf and the large variation in sensitivity among turfgrasses to the chemicals. Both have made their use on quality turf complicated.

Chemical manufacturers have not given up. They are taking some of the complicated characteristics of growth regulators and putting them to constructive use. Monsanto has targeted its Limit for use on types of utility turf where minor temporary discoloration is acceptable and where turfgrass types react in a uniform way. But, most of the attention is being paid to turf growth regulators (TGRs) which help control annual bluegrass (*Poa annua*). Embark from PBI Gordon has been useful in reducing the amount of seed produced by the persistent weed. Cutless from Elanco and TGR-Poa Annua Control from Scotts have shown promising results in holding back annual bluegrass growth so that desirable grasses growing at a faster pace can crowd it out.

For example, annual bluegrass is very sensitive to paclobutrazol, the active ingredient in Scotts TGR. By figuring out the rate of this chemical that stunts annual bluegrass more than quality turfgrasses such as bentgrass, Kentucky bluegrass and perennial ryegrass, the company has come up with an effective method of selectively encouraging desirable grasses to overtake this stubborn weed. At label rates the chemical slows the poa down to a crawl and turns it yellow. At the same time it alters the growth habit of desirable grasses in a way that enhances their color and density. One application gives the other grasses a growth advantage for five to ten weeks. At the end of this period the grasses resume their normal growth rates.

As Scotts points out, there are a number of important items to consider when using its turf growth regulator. Since the product is root absorbed, it works better on turfgrasses with well-established root systems and in some soils better than others. The active ingredient can become bound to organic matter in the soil or thatch. It takes



After an application of TGR, the bentgrass continues to spread while the annual bluegrass turns yellow and stops growing.

less of the material to control annual bluegrass in sandy soils than in clay/loam soils. Watering in within 48 hours of application is very important to the success of the product.

Since the product does discolor the poa, the company urges caution in applying the material to turfgrass that contains a high percentage of the weed. It also suggests using the product only on areas that are currently maintained to encourage growth. This includes proper irrigation, fertilization and pest control. The product should be used with other effective methods of poa control, such as preemergence herbicides, clipping removal and lightweight mowing.

The growth regulator should not be ap-

plied within two weeks before or six weeks after overseeding. It should also not be used during periods when turf is recovering from winter, drought, disease or insect damage or from mechanical procedures such as aeration. At the present time the label does not provide for applications to greens or athletic fields.

Obviously, this new tool is not for use by amateurs. Anytime you alter natural growth patterns you create new challenges. However, the effectiveness of these materials is impressive as is the resulting dark green color imparted to desirable turf by the new TGRs. There is a good chance these products will become a growing part in annual bluegrass control programs.

SEEDING, MULCHING AND FERTILIZING IN ONE OPERATION

Hydraulic seeders, once used just for seeding the vast slopes along highways and the large rolling lawns around construction sites, are finding their way onto golf courses, race tracks and parks.

Instead of pumping out streams of mulch and fertilizer combined with pasture-type turfgrasses for a quick, low-maintenance cover, today hydraulic seeders are being used, to a growing degree, for fine turf areas. They have been used to sow bentgrass on greens and fairways, to overseed warm-

season turf with perennial ryegrass and to reseed common bermudagrass fields. Parks are using them to plant low maintenance areas with wildflowers in addition to reseeding worn out playing fields with turf-type tall fescues, Kentucky bluegrass, perennial ryegrass and common bermudagrass. Golf course superintendents, university grounds superintendents and park superintendents call in the hydroseeder to restore turf along roads, cart paths, and walkways.

While spraying seed with a fire hose may

not seem as precise as a seed drill or spreader, hydraulic seeding is becoming one of the most reliable methods of establishing sports turf. Large areas can be seeded successfully in a single day. The mulch and fertilizer mixed in a slurry with the seed protects the germinating seed from moisture or nutrient stress.

Hydroseeding is usually performed by contractors who have invested in the large, sophisticated equipment necessary and have developed the skill and knowledge to evenly distribute thousands of gallons of slurry over acres at a time. Micke Santoro, president of Southern California Hydroseed & Hydromulch, has golf courses, race tracks, parks and stadiums as regular customers. Using a 3,000-gallon hydroseeder he can sow as little as one-half pound of bentgrass per 1,000 square feet with amazing uniformity.

"Because we are very careful about mixing the right amount of seed, mulch and fertilizer together and how we spray, we can use more expensive improved turfgrass varieties without wasting our customers' money," says Santoro. "There is no reason why they can't have the best turf just because we use a hydroseeder."

Preparation and follow-up is just the same, says Santoro. "The area has to be prepared the same as you would for any other type of seeding method. And, after we finish seeding, we make sure the area is irrigated up



A hose extension is used to hydroseed a new green.

to five times a day. In some cases, we even topdress the area with sand after we hydroseed."

Santoro does not use paper mulch. "Fiber mulch gives the best results. We use from 1,000 to 1,500 pounds of mulch per acre for overseeding and up to 2,000 pounds per acre for new seedings. For greens, we may only be mixing 20 to 30 pounds of bentgrass per acre with the mulch. You have to know

what you're doing."

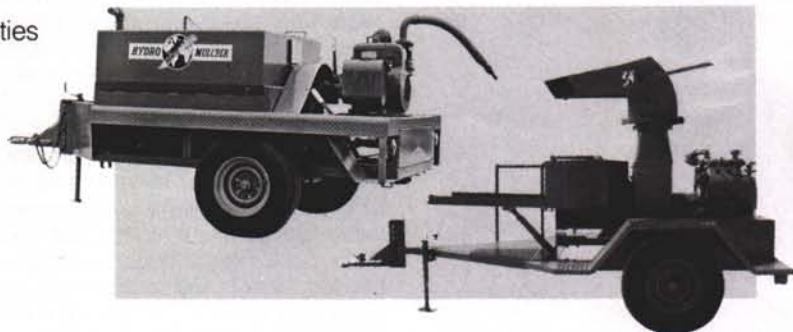
In addition to golf course work, Santoro is having luck convincing parks to overseed using his method. "Parks are often short-handed," he states. "They don't have the people to take care of overseeding in the fall. But that doesn't have to stop them. We can do all the fields in a park in a couple of days and they don't have to hire a single extra person."

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