New chemical control options for sports turf managers

EACH YEAR new products enter the turfgrass industry designed to help sports turf managers provide athletes with high quality playing surfaces. Before their commercial debut, these products are rigorously tested at universities across the United States to determine their efficacy against various pests and if they pose any negative threats to the environment.

In response to the budget reductions placed on today’s sports turf manager, some of the new products slated to debut in 2010 have been designed to reduce the number of chemical applications needed to provide high quality turfgrass playing surfaces. Additionally, the forthcoming loss of MSMA from the sports turf market has also placed an emphasis on products to control grassy weed species like crabgrass.

Onetime (active ingredients – 16% quinclorac; 8% mecoprop; 2% dicamba) is a new postemergence herbicide from BASF. This product provides postemergence control of crabgrass and various broadleaf weeds in a single application. Onetime may be a valuable tool to sports turf managers facing restrictions on the use of 2,4-D for broadleaf weed control.

A product offering similar benefits will be sold under the trade name Solitare from FMC Corp. (active ingredients- 18% sulfentrazone and 56% quinclorac) offers sports turf managers postemergence control of crabgrass and various broadleaf weeds as well. Research at the University of Tennessee indicates that applications of Solitare provide effective control of ground ivy. However, slight injury to certain cultivars of warm- and cool-season grasses has been reported after application in some climates.

Tower (active ingredient – 64% dimethenamid-P) is a preemergence herbicide that will be labeled for sports turf use sometime in 2010. This product can provide preemergence control of certain broadleaf weed species, particularly prostrate spurge) and doveweed. Although this product has been labeled for use on golf courses for several years, Tenacity from Syngenta (active ingredient – 40% mesotrione) received federal labeling for use on sports turf in...
Field Science

September 2009. This product can be used on an array of cool-season turfgrasses to provide postemergence control of crabgrass and several other broadleaf and grassy weeds, particularly, goosegrass, creeping bentgrass, and nimble will. Tenacity will offer sports turf managers a tool to control weeds during turfgrass establishment. Research conducted at the University of Tennessee has demonstrated that Tenacity can be applied at label rates to tall fescue and Kentucky bluegrasses at seeding without compromising seedling establishment. Sports turf managers seeding high traffic areas lacking turfgrass cover may benefit from applications of Tenacity.

One time, Solitare, Tower, and Tenacity are only a few of the new products that will be available for sports turf use in 2010. An array of fungicides, insecticides, and fertilizers will make their way into the market after being thoroughly tested at universities across the country. The 21st STMA Conference and Trade Show (January 12-16th, 2010) in Orlando is a great venue to learn more about the benefits these products can offer sports turf managers. If there is a need for information beforehand, contact a local university turfgrass extension specialist. Turfgrass managers interested in the performance of new herbicides in the transition zone, can visit http://tennesseeturfgrassweeds.org.

Jim Brosnan is the head of the turfgrass weed science research and extension program at the University of Tennessee. Greg Breeden is with UT’s Plant Extension program.

Reports from the field

This section was reported by Tom Mentzer, for Syngenta Lawn & Garden, Greensboro, N.C.

ANDY PARKER, GROUNDS SUPERVISOR FOR PARK HILL (MO) SCHOOL DISTRICT: “We don’t generally use a lot of herbicides. I prefer to manage weeds through other turf management practices. I seed once a month starting on March 30 and ending in the fall. We find that the dense turf canopy crowds out most weeds.

“Since our turf management program is based on good fertility, we see it as preventative for a lot of problems. The program is based on reaction, and treating weed, fungus and insect problems as they arise. This helps us save a lot of money in our budget.

“I normally don’t use a lot of fungicides unless I absolutely have to, but I do use Heritage and Daconil to treat specific problems like dollar spot or brown patch when they arise.

“One of my biggest challenges is keeping up our fertility and making sure the turf is ready for the season. Considering physical education classes use the fields during the day, we need to make sure the turf is right for the teams. It seems parents are becoming more aware of the turf their kids are playing on, so there’s more pressure on us to make sure it’s smooth, even and safe.

“Before we apply anything to the fields, I always notify the coaches and physical education teachers a couple days beforehand. I want whatever we apply to be completely dry on the turf before we allow students onto the fields.”

Park Hill School District has nearly 20 acres of sports fields, all grown on native soil:
• 2 baseball fields (Kentucky bluegrass, mowed to 2-2 ½ inches)
• 2 softball fields (One is Kentucky bluegrass, mowed to 2-2 ½ inches, the other is bermudagrass)
• 1 soccer practice field (Kentucky bluegrass, mowed to 2-2 ½ inches)
• 3 ¼ football practice fields (Quickstand cold-tolerant bermudagrass, mowed to approx. ¾-inch)

Most chemical applications are liquid (though Parker does use granular from time to time)

Tony Leonard, director of grounds for the Philadelphia Eagles: “Our chemical program mainly focuses on decreasing summer patch and gray leaf spot at our practice facility. We start treating for summer patch in April with a broad spectrum fungicide and reapply every 21-28 days until early June. Our gray leaf spot program begins in mid-July through September. We rotate a number of products through the season to prevent against fungicide resistance.

“Our (stadium) field is 100 percent cold-tolerant Patriot bermudagrass. Weeds at both facilities are rarely an issue because I believe in maintaining a high, dense canopy through proper watering, mowing and fertilization. As a result, we haven’t had to use a pre-emergent herbicide in 5 years. However, when we do get small, occasional occurrences of crabgrass or goosegrass, we spot treat those with the appropriate herbicide.

“To guard against fungus issues on the stadium in the spring, we apply either Daconil or Heritage. We also apply those products when we cover the field before a concert or other event.”

Background facts:
• The Eagles’ practice facility has 6 ½ acres of turf (mowed to 1 ¼-inch)
• The Eagles’ stadium has 2 ½ acres of turf (mowed to ¾” – 1”)
• All the fields are sand-based, have good air flow and Pythium is not an issue
• All chemical applications are liquid (no granular)