

SPRING into action

A comprehensive spring weed control management program begins with preemergent herbicides.

By Jason Stahl

Golf course superintendents thinking about spring this year might be wondering if there will even be one. After all, there wasn't one last year, for the most part. Winter seemed to jump right to summer. But we all know that was an aberration and we can most likely expect a return to normal in 2013.

With that in mind, superintendents have to consider their spring weed control strategy. Most will probably stick to their tried-and-true methods, while some might consider less conventional approaches to get the results they desire. One of the most basic actions, however, can't

be ignored: applying preemergent herbicides.

"This is the foundation of all weed control," says Laurence Mudge, technical service manager with Bayer Environmental Science. "It has been that way for 30 years. If you don't do this, you'll fight weeds year-round with post-emergent herbicides, which is much more costly and inefficient."

Steve MacDonald, president of Turfgrass Disease Solutions, says another key is to identify problem plants and know their biology in-and-out. Also, finding herbicides that have turf tolerance for your species.

"Determine which weeds are summer annuals and can effectively be controlled with a preemergent herbicide application in the spring, and determine what weeds are perennials and need to be controlled post-emergently," says MacDonald. "Control of winter annual weeds in the spring can be hit or miss and, in most cases, these will be gone by early summer. Spring time is critical for good weed control programs because soil moisture, moderate air temperatures and vigorous turf growth are optimal when compared to summer time."

Weed control programs in cool-season turf have not changed much in recent years, MacDonald says. But that is not the case in warm-season turf.



With a normal spring, superintendents have to be thinking about their spring weed control strategy.



FOR MORE INFO
Check out USGA agronomist Brain Whitlark's article "Weed Control In Non-Overseeded Bermudagrass Greens." Whitlark offers some strategies to provide cool-season weed control in non-overseeded Bermudagrass greens.

Enter bit.ly/VUoTyB into your browser to access Whitlark's article.

"There seems to be many more herbicide options that are evolving in warm-season turfgrass," he says. "The newest herbicides we see in the Mid-Atlantic and Northeast regions are niche herbicides that fit in certain scenarios, but not all."

One concept MacDonald says isn't new but is being employed more frequently in recent years is aggressive overseeding of the rough in the autumn and spring.

"Many golf courses are more focused than ever on the improvement of their rough turfgrass, and this can complicate weed control programs," he says. "Because of the need to continu-

ally overseed these areas, some superintendents have changed their weed control programs in roughs from a preemergent approach to a spot treatment, post-emergence approach using quinclorac (Drive) or fenoxaprop (Acclaim Extra) for summer annual grassy weeds. The majority of golf courses, however, are still utilizing more conventional pre-emergent approaches to annual grass control."

Kyle Miller, senior technical specialist with BASF, says one thing superintendents do in parts of the country where there is an extended crabgrass season is to put out two applications of

preemergent herbicides, one in spring and one in early summer. Others take a more non-conventional "wait-and-see" approach to weed pressure.

"What some people do is eliminate that first application, then use a product like Drive or Accelerate in combination with a second preemergent application," says Miller. "That controls the weeds that have come up that you didn't control before when you didn't put down that first application. That will also give you some residual control during summer. Plus, you save manpower by eliminating that one application."

As far as post-emergent weed

New on the Block

What new tools are out there to facilitate spring weed control? Not much, says Laurence Mudge, technical service manager with Bayer Environmental Science, at least on the preemergent side.

"A lot of the preemergent herbicides have been around awhile. There is not a lot of new technology," he says. "In fungicides, we've had a lot of new products introduced in the last 10 to 15 years. Insecticides and post-emergent herbicides, too. But for some reason, not preemergent herbicides."

One exception was Bayer's introduction of Spectacle a couple years ago for control of *Poa annua* in warm-season turf. This preemergent, says Mudge, will be applied starting mid-February in Florida and late February to April in other parts of the South.

"Preemergent herbicides tend to provide annual grass control - crabgrass, goosegrass, *Poa*, etc. Some preemergents provide some broadleaf weed control. Spectacle offers more broad spectrum control," Mudge says. "There are a lot of weeds on the label, the length of control is good and use rates are extremely low. Current preemergents get applied at a

half-pound or pound per acre. Spectacle is applied at less than an ounce per acre."

Steve MacDonald, president of Turfgrass Disease Solutions, says there are two new herbicides superintendents may see on the market in 2013: Pylex, from BASF, and Defendor, from Dow Agrosciences.

Pylex, with the active ingredient topramezone, is in the HPPD inhibiting class of herbicides, which turns sensitive weeds white.

"In our trials, this herbicide has proven to be a potentially important tool for annual and perennial grassy weed control in cool-season golf course turf," says MacDonald.

Kyle Miller, senior technical specialist with BASF, says Pylex will provide effective post-emergent control of goosegrass.

"Goosegrass can be a big problem in cool-season turf in the transition zone," says Miller. "Bermuda can also be a real problem in cool-season turf, and so Pylex, with multiple applications, can do a nice job of suppressing or controlling Bermuda, too. It's a niche product,



but those are two tough weeds we feel it will provide good or better control than what's available today."

Defendor, with the active ingredient florasulam, will be labeled for post-emergent control of various broadleaf weeds.

"Just like any new product, we'll continue to learn about these materials in years to come," MacDonald says.

Monument 75WG, released last year by Syngenta, offers post-emergent control of dandelion, crabgrass, nutsedge, clover and spurge, among other broadleaf and grassy weed, in Bermudagrass and zoysiagrass. It comes in a water-soluble, pre-measured package, and can be broadcast or used for spot treatment.



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— Laurence Mudge, Bayer Environmental Science



control, MacDonald says applications should take place as early in the year as possible to increase herbicides’ effectiveness (smaller plant and more conducive weather).

Miller advises to broadcast post-emergent broadleaf herbicides in spring to address henbit, chickweed, speedwell, etc., and



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avoid spot spraying unless you historically don’t have that much weed pressure.

“A lot of people just see weeds here and there and spot spray, but you’ll find that there are a lot of weeds that germinate all spring long – broadleaf weeds you don’t see that first time you go out to try to control them,” Miller says. “So, as a rule, it makes more sense to broadcast spray, otherwise you’re going to have to come back and retreat, which will obviously cost you time and money.”

Superintendents who were spooked by last year’s dry and mild spring should keep an eye on soil temperatures as the ultimate deciding factor on when to apply.

“Last year, our soil temperatures in March were really warm and there was a big concern that people might not be getting their preemergent herbicides down soon enough to control crabgrass. Also, people wondered if it would last as long or would they need to make multiple applications,” says Miller. “What I can guarantee for



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this year is that you will come out of winter with broadleaf weeds, just like every year, so be prepared to treat for them. Continue to monitor soil temperatures, and if we have a short winter, expect to be out earlier than normal.”

It’s impossible to predict what type of spring we’ll have in 2013. “The winter of 2012/13 has been a rollercoaster ride of cold to cool weather mixed with some warm days,” MacDonald says. He suggests superintendents plan their preemergent applications at conventional timing and scout high pressure areas for weed germination. “Flexibility and proper timing in the spring is key to successful weed control.” **GCI**

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Problem Weeds

Sedges (nutsedge and *Kyllinga* spp.) have quickly become one of the most difficult perennial weeds that most superintendents battle. Unfortunately, there are only a few herbicide options for these weeds in cool-season turfgrass, and repeated applications and time are necessary to achieve high levels of success.

“Superintendents who had issues with these weeds in 2012 and did not control them successfully will likely see them again in mid to late spring,” says Steve MacDonald, president of Turfgrass Disease Solutions.

Obviously, the weeds a superintendent should target with a post-emergent herbicide depend on where their courses are located. Florida, for instance, has alexandergrass and other weeds that aren’t found in other parts of the country.

“And doveweed is becoming a major problem in the south and southwest,” adds Laurence Mudge, technical service manager with Bayer Environmental Science.

The four annual grassy weeds that continue to be the most problematic are crabgrass, goosegrass, foxtail and Japanese stiltgrass.

“But a well-timed preemergent application in spring will successfully control these annual weeds,” MacDonald says.

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