Phoenix Environmental Care. Better Answers For Whatever You're Facing.

Brown Patch, Dollar Spot & Anthracnose

The fungus Scierotinia homoeocarpa ("Dollar Spot") commonly attacks low-out recepting bentgrass. It thrives in damn clippings or muist, cool soil.

The fungue Sclerotinia homoeocarpa (Dollar Spot) commonly attacks creeping bentgrass. It thrives in damp clippings or moist, cool soil.

environmental care case #189201

Symptoms:

Problem: Dollar Spot

1. Wany small, round dead patches 2. "Hourglass" shaped lesions

2. "Hourglass white mold 3. Cobwebby white mold 4. Damaged putting greens

nptoma: Tast-spreading Dollar Spot begins as small discolorations. Grass blades bleach, Stast-spreading infection causes ugly. Fast-spreading Dollar Spot begins as small discolorations. Grass blades bl forming dead patches on turfgrass surface. Spreading infection causes ugly, tan-colored spots 2-3" wide (silver dollar size).

Solution: PegasusTM Fungicide

Case# 00185-41

Pegasus foliar fungicide effectively controls Dollar Spot and prevents re-infection, using new formulations of the proven ingredient chlorothalonil. Pegasus also provides excellent resistance management. Available in liquid or dry flowable formulations with improved dispersion and suspension.

Phoenix Environmental Care gives you superior industry support and top performance by offering high-quality, post-patent chemistry in a wide choice of products. To learn more, call 888.240.8856 or visit www.PhoenixEnvCare.com.

Case closed.





The Science of Nature

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PESTICIDES

Troy Golden's maintenance budget, including labor, is \$450,000.

Last year, Golden spent \$67,000 on pesticides and fertilizer.

Golden has increased his pesticide budget about 3 percent each year for the past five years.



he sprays Rubigan (fenarimol), once in August and once in September, for *Poa annuna* control and Eagle for spring dead spot. During the winter, Golden applies Daconil or Cleary's 3336 on an as needed curative basis.

PURCHASING

Before Golden purchases anything, he sets his agronomic program by the first of the year. Then he lets the two or three distributors he uses know what he'll need when throughout the year. He pays as he goes.

"I've been doing this same process for a while," he says. "You can lock in pricing. It's good because it's done and out of the way. It solves delivery problems and lets the distributors know where they stand. It helps build better relationships. I get better service because the distributors know what to give me ahead of time.

"When I talk to distributors in January

about the year, I'll give them a copy of what I'm doing so they know when to deliver the products," he adds. "I know a lot of guys don't do that because they don't like showing people their plan. A lot of guys will call and say, 'I need a preemergent herbicide in two weeks,' but they don't know what it takes to get the product there. You can save money by not putting the distributor in a bind in which he has to jump through hoops." **GCI**

GOLF COURSE INDUSTRY

More Comprehensive Industry Coverage

We're excited to expand our coverage of the marketplace through the new *Golf Course Industry* magazine. Some new features include:

- Extensive Agronomic Research Each issue of *Golf Course Industry* will include at least two scientific research stories written by university personnel who are at the forefront of industry research. Each article will be accompanied by business perspective.
- **Consumer Research** Exclusive consumer research will be included in each issue to give you insight into what golfers are thinking.
- Added Business Information *Golf Course Industry* will enhance its industry business coverage including more information you can apply day-to-day on your course.

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- Merit Writing, Turf Feature Article
- First Place Printed Magazine, Cover Page Design
- Merit Electronic Publishing, Overall Company Web Design

Folio's National Excellence Awards:

Eddie Award: Bronze, Recreation & Sports B to B





PESTICIDES

BY JOHN WALSH

The sooner the better

A superintendent in North Carolina takes advantage of ordering pesticides early

The gist of the familiar saying "the early bird gets the worm" can be related to ordering and purchasing pesticides. For some, ordering products late in the year for use the following year can save money and ease pressure on one's budget.

Michael Haq, golf course superintendent at the private 18-hole Brier Creek Country Club in Raleigh, N.C., does just that. Haq, who has been at Brier Creek for two years, has a maintenance budget of just more than \$1 million, including labor. His chemical budget, not including fertilizer, is \$65,000.

"We are owned by Toll Brothers so cash

flow isn't a huge issue, and we can take advantage of early orders," he says.

Haq makes bulk purchases in November and December, the majority of which are fungicides and plant growth regulators. He doesn't purchase a lot of insecticides and buys herbicides and insecticides as needed. He treats the entire golf course twice a year, then focuses on the four acres of greens during the year.

"We're not in a real high disease-pressure area," he says.

The course features A-1 and A-4 bentgrass greens, Bermudagrass tees and fairways, zoy-

siagrass bunker faces and tall fescue rough.

PURCHASING VALUE

Purchasing many of his fungicides early before a new year begins saves Haq a considerable amount of money. The total value of his early order purchase was \$22,000 this past year. The biggest chunk outside that savings is the \$20,000 of Rubigan he purchases.

When purchasing pesticides, Haq works with just a couple distributors.

"We have a couple of national accounts, and we bid to them," he says. "This year, we got everything from one distributor, but last



Second assistant Jon Stephens, left, and third assistant Brian Brister in the chemical room at Brier Creek Country Club in Raleigh, N.C. Photo: Brier Creek Country Club



From left, senior assistant Rob Knott, golf course superintendent Michael Haq and golf professional Mark Johnson. Photo: Brier Creek Country Club Michael Haq's chemical budget, not including fertilizer, is \$65,000 a year.

The total value of Haq's early order purchase was \$22,000 this past year.

Ninety-five percent of Haq's chemical budget is for spring dead spot, greens and preemergent herbicides.

year, I split the purchase 50/50 between the two."

The products he uses – other than what he orders through the early order program – are common and in stock so he has no problem ordering those right before he needs to apply them.

"I can get them in a day or two," he says. "There are a lot of distributors looking for a bite out of the same pie."

But the key to being effective with an early order program is knowing how much one is going to use during the year, Haq says.

"It's worse if you order too much rather than too little," he says. "In most environments, being overbudget is more of a cardinal sin than having an underconditioned golf course. For us, it's easy to predict what we will use each year: 95 percent of the chemical budget is for spring dead spot, greens and preemergent herbicides."

PROGRAM SPECIFICS

Haq is on a preventive program and hasn't seen much disease lately on his greens, but

pythium volutum is his primary concern. On the Bermudagrass, he sprays the fairways, tees and approaches in the fall with Rubigan (fenarimol) for spring dead spot because there's a lot of it.

"I'm not sure why, but N.C. State is doing research on that subject," he says.

In the spring, Haq sprays Insignia (pyraclostrobin) for pythium volutum. In the middle of June, he applies a Chipco Signature (fosetyl) and Daconil Ultrex (chlorothalonil) mix, and another application during the third week of June if disease pressure remains. At the end of June, he applies Chipco 26GT (iprodione) and Daconil Ultrex. The first week of July, he applies Cleary's 3336 (thiophanate-methyl) and Banol (propamocarb), and, depending on disease pressure, might make another application in the middle of July. At the end of July, he applies another Signature/ Daconil mix. During the first week of August, he applies 26GT and Subdue Maxx (mefenoxam). In middle of August, he applies Signature and Daconil Ultrex and then monitors the weather. If it's hot, he'll apply Clearly's 3336 and Daconil Ultrex.

"By September, I won't make any preventive applications," Haq says.

In the middle of October or early November, he applies Signature again.

Haq says he doesn't apply many pesticides throughout the winter because he doesn't have snow mold problems.

In the insecticide realm, Haq will make two applications of a generic Bifenthrin Pro a year for cut worms when aerifying in March and September.

"We have trees but not many," he says, explaining one reason why insect pests aren't much of a problem. "We're almost immune to fall armyworms."

Regarding herbicides, Haq sprays Ronstar (oxadiazon) and Roundup (glyphosate) in February as a preemergent for summer weeds. All other herbicide applications depend on the time of year. Nutsedge is a problem, and Haq applies Certainty (sulfosulfuron) for that. However, he doesn't have a huge broadleaf weed problem but will use Speed Zone (carfentrazone-ethyl) when needed. **GCI**

PRODUCTS

Enforce insecticide

- Delivers protection against grubs, mole crickets, billbug larvae, annual bluegrass weevil, cutworms, chinchbugs and European crane fly
- · Best used as a preventive application before egg lay
- Offers curative action through the second instar
 Advan

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EnforceTM

Velocity herbicide

- Postemergence herbicide that controls Poa annua, Poa trivialis and certain broadleaf weeds in established bentgrass fairway turf
- Suppresses seedhead production of Poa annua and Poa trivialis
- Contains the active ingredient Bispyribacsodium
- Has a wide window of application
- Available as an 80-percent soluble powder, packaged in 2-ounce water soluble packets Valent Professional Products golfcourseindustry.com/readerservice #224



Arena insecticide

- 0.25G granule form
- Controls white grubs, chinch bugs, billbugs, Black turfgrass Ataenius and sod webworms
- Contains the active ingredient clothianidin
- Formulation is less concentrated so users can spread more granules and achieve more accurate and consistent coverage

Arysta LifeScience golfcourseindustry.com/readerservice #201



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Trinity fungicide

- Member of the demethylation inhibitor (DMI) class of chemistry
- Offers preventive and curative control of patch diseases, anthracnose, dollar spot and pink and gray snow mold
- Can be used in rotation with non-Group 3 DMI fungicides

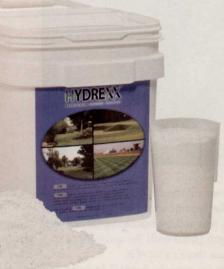
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Hydrexx soluble additive

- Dry soluble additive for melted urea and urea ammonium nitrate formulations
- When mixed with urea and urea-based fertilizers, it enhances the fertilizer's performance by preventing ammonia volatilization, leaching and denitrification
- Nitrogen remains in a usable form for as long as 16 weeks
- Agrotain International golfcourseindustry.com/readerservice #225



Salute turfgrass conditioner

- Dry water-soluble combination of potassium silicate, humic acid, fulvic acid, kelp, saponins and a proprietary blend of amino acids, beneficial bacteria and simple sugar
- Designed for use in spray systems
- Helps to increase turf-wear
- tolerance, enhance ball roll and facilitate uniform cutting of turfgrass
- Tank-mix compatible with most pesticides, fertilizers and micronutrients
- Packaged in half-pound watersoluble packets

Becker Underwood

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Carryall Turf 252 utility vehicle

- Includes the IQ Plus electric drive train
- Powered by an 11.5-hp gas engine
- Features a rustproof aluminum frame, chassis and cargo box
- Self-adjusting rack-and-pinion steering
- ArmorFlex front body offers fade-resistant color *Club Car*

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Golf cart climate control system

- · Air-conditioning and heating system for golf carts
- · Converts between heating and cooling with the flip of a switch
- Uses ice to produce cool air
- Includes sanitary beverage storage
- Botanical scents are designed to improve golfing experience *Coolwell*

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Divot filling tool

- Designed to save time and labor
- Includes refillable canister
- Pushing the spring-loaded release drops fertilizer and seed mix into the divot
- Amount of material released depends on the pressure applied *Divot Dog*

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Provaunt insecticide

- Provides effective control to multiple types of caterpillars, mole crickets, annual bluegrass weevil larvae (curative application), European crane fly larvae, potato leafhopper, grasshoppers and European pine sawfly
- Contains the active ingredient indoxacarb
- Has an ideal environmental and toxicological profile
- Classified as a reduced side active is much at he the F
- Classified as a reduced-risk active ingredient by the EPA *DuPont*
- golfcourseindustry.com/readerservice #206



PRODUCTS



Eclipse 122F greens mower

- Features a floating-head design
- Available with separate, adjustable settings for reel and mow speeds on an LCD screen
- Operators can set frequency of clip to match the situation
- Includes four rolling surfaces to reduce ground pressure Jacobsen
 - golfcourseindustry.com/readerservice #208



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2653B trim and surrounds mower

- Traction system provides flow equally to each wheel motor, reducing slippage and improving hill climbing
- Redesigned operator station provides easier access to operator controls, better access on and off the machine and more leg room
- One-piece hood offers access for daily maintenance
- On-board diagnosis is possible with the WhiteBox controller and sit-on-seat-diagnostics
- Comes with a two-post, roll-overprotection structure

John Deere golfcourseindustry.com/readerservice #209

I-Five rotary mower

- Five-gang rotary ride-on mower
- Features five 26-inch rotary cutting decks for 109 inches of
 - cutting width .
 - Two outermost decks fold up for a transport width of 75 inches

For Relief...

- Cutting decks allow three-axis rotation
- Designed for scalp-free mowing
- Powered by a 60-hp Kubota engine

National Mower golfcourseindustry.com/readerservice #210

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PRODUCTS



Dump body mini utility vehicle

- Includes heavy-duty spray-on bed liner
- Dimensions of dump bed are 89 inches long, 54 inches wide and 13 inches high
- Features a 75-amp circuit breaker that can reset, a hydraulic recovery tank, audible tilt and drop down warning buzzer, automatic shut down tilt switch and safety inspection bar
- Dump capacity is 1,000 pounds
- Bed extends 45 degrees
- Mag International

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Roots Fe Chelate fertilizer

- Water-soluble iron chelate
- Provides 18-percent concentration of fully chelated iron in a highly soluble form
- Offers quick visual response without rapid growth
- Works to improve plant color but doesn't harm or stain other surfaces
- Packaged in 1.5-pound solupaks
- Novozymes Biologicals

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CocoFlex ET-FGM growth medium

- Extended-term flexible growth medium
- Made of long-strand wood, coconut and crimped interlocking man-made fibers, as well as performance-enhancing additives
- Requires no cure time
- Provides slope protection
- Features a 1,500-percent waterholding capacity

Profile Products

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Eagle 351B rotor

- Designed for short-throw applications
- Powered with rugged gear drives and a nozzle design for controlled and uniform precipitation
- Has an 18- to 55-foot throw radius and operates at a pressure level from 60 to 90 psi
- Provides full-circle and part-circle applications, reducing inventory requirements
- Includes adjustable left- and rightside trips
 Rain Bird

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