

# MAINTENANCE



## BRIEFS

### IGM PROMOTES FOUR

CHAMPIONSGATE, Fla. — International Golf Maintenance (IGM), has promoted four superintendents to regional positions. Both Paul Haines and Bill Seigle were promoted to regional superintendents within the state of Florida. In addition to his responsibilities at The Eagles G&CC, Haines will oversee four other properties. Seigle, superintendent at Tiger Point G&CC and north Florida regional superintendent, is responsible for overseeing four clubs in the Florida panhandle. Tyler Minamyler and Jeff Miller are regional superintendents representing East Coast markets for IGM. Minamyler is now IGM's Mid-Atlantic regional superintendent, overseeing six clubs in the southern Virginia area. As IGM's new Southeast regional superintendent, Miller oversees four properties while fulfilling his duties as superintendent at the Golfers' Club at Fort McPherson (Ga.).

### HANKS JOINS VALLEYCREST

CALABASAS, Calif. — Larry A. Hanks has joined the team of ValleyCrest Golf Course Maintenance as business development manager for the Southeast/Gulf Coast region. In his new position, Hanks will be responsible for the acquisition of new maintenance contracts and spearheading industry awareness of ValleyCrest Golf throughout the area. In addition, he will support the efforts of ValleyCrest Golf superintendents and existing clients. Prior to joining the company, Hanks served as sales director for OneSource Landscape and Golf Services Inc.

### MTF APPOINTS SMITH

LANSING, Mich. — The Michigan Turfgrass Foundation (MTF) has appointed Thomas M. Smith as its new executive director. Smith spent the last year as the assistant executive director and has served nine years on the MTF's board of directors. In his almost 30 years of industry-related experience Smith has worked in the golf industry and been a research and teaching assistant at Michigan State University.

## Editorial Focus: Fertilizer

# With foliar feeding on the rise, nitrogen use declines

By KEVIN J. ROSS, CGCS

While the principle of fertilization has remained the same — supplying nutrients to the plant for optimal health — technology has changed the amount used, application techniques and sources of nutrients.

Analyzing greens fertilization today, we see two very big changes. First, the total amount of nitrogen used per 1,000 square feet has dropped dramatically over the past 25 years. James B. Beard's 1973 textbook "Turfgrass Science and Culture" (widely regarded as the Bible of turfgrass management) stated that the nitrogen requirement for bentgrass should be 0.8-1.4 #N/M per growing month. Looking back, even Beard himself acknowledges that was too high. Today, we have some greens being managed with as

low as 1-2 #N/M per year. Disregarding a grow-in situation, the nitrogen amounts have dropped from Beard's first recommendations to the current 0.25 - 0.50 #N/M range per growing month.

The second change is the incredible popularity of foliar feeding. This may be the one practice that has led to the use of less nitrogen. Spraying low amounts of nitrogen, with the use of a solubles/liquids, has become one



Spraying low amounts of soluble/liquid nitrogen is one of the most popular methods of fertilization.

of the most popular methods of fertilization over the past 10 years. This method, or "spoon-feeding"

as it's been called, is not strictly limited to greens. Many courses

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## Editorial Focus: Fertilizer

# Companies put new spin on organic fertilizer products

By A. OVERBECK and D. RICE

GLEN BURNIE, Md. and NORTH AMHERST, Mass. — Two organic fertilizer manufacturers have formed new distribution ventures and dramatically expanded product offerings in an aggressive move to increase their golf industry presence.

Tim Davisson, head of Davisson Golf, has formed a new venture, Bio Basics LLC, to roll out a line of organic liquid and granular fertilizers and amendments nationwide.

Davisson Golf has been distributing organic fertilizer and other products in the Mid-Atlantic region since 1991. EcoOrganics Inc., a firm founded in 1999 by three professors at the University of Massachusetts to develop organic fertilizers, has teamed up with Soil Technologies Corp. to increase the distribution of its products in the Eastern U.S.

Both companies offer unique fertilizer technology that could

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## ValleyCrest signs Somerset GC

LOCUST GROVE, Va. — ValleyCrest Golf Course Maintenance has signed an agreement to perform golf course grow-in and long-term golf course maintenance for Somerset Golf Club here. Under the agreement, ValleyCrest will provide turnkey grow-in and maintenance services for the 18-hole daily-fee golf club. The addition of this facility increases the company's maintenance portfolio to 43 and is its first contract in Virginia.

Situated 15 miles west of Fredericksburg, Somerset Golf Club was originally built in 1996, and is currently undergoing extensive course renovation to all of its greens, tees, bunkers and several complete holes. Architect Rick Robbins of Robbins & Associates Inc., Cary, N.C., completed the redesign and is overseeing the work. The course features bluegrass and ryegrass tees and fairways with fescue roughs and bentgrass greens. The layout is due to reopen in June.

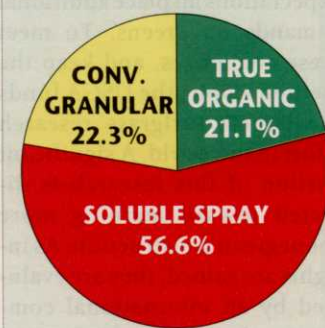
"The ValleyCrest team has

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## GOLF COURSE NEWS POLL

THE BUSINESS NEWSPAPER FOR THE GOLF COURSE INDUSTRY  
www.golfcoursenews.com

What types of fertilizer material do you use on your greens?



## SUPERideas

### Farley's 'dead ringer' keeps tree bases neat

One of the first things I did when I arrived at Teal Bend Golf Club was spray the tree bases for weeds. Nothing can bring down the looks of an otherwise tidy course than weeds and scraggly grass at the base of trees. In order to help my spray technician apply herbicide in a perfect circle of consistent size I fabricated a simple device. For lack of a better name I call it "the dead ringer."

It simply consists of a steel hook and a piece of rope with a loop on the end. The steel hook is hooked around the tree and the end of the paint gun goes in the loop. Then all you do is pull the rope tight and pull the trigger as you walk



The "dead ringer" gives the spray tech a guide to follow.

around the tree, painting a perfect circle. You just have to decide how large of a diameter you prefer around your tree bases.

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## Organic fertilizer makers expand

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change the way courses use organic products.

In addition to its customized line of Bio Basics liquid fertilizer and ZeoPro soil amendment, Bio Basics has teamed up with Purdue Agricycle Inc. to take pasteurized dry poultry waste (DPW) and turn it into golf course grade fertilizer.

"What comes out of these chickens is incredible," said Davisson. "They are feeding chickens the same things we feed turf. The analysis correlates almost directly with the ratios that we look for in the tissue analysis in our liquid program."

Bio Basics makes a straight DPW product and also combines

it with air-ground carbons and sugars to enhance nutrient uptake and growth. The Enhanced DPW can also be mixed with synthetic fertilizer to provide higher nutrient analysis.

On the liquid side, Bio Basics offers leaf tissue analysis so superintendents know exactly which nutrients the turf is getting.

Rick Holanda, superintendent at Aronimink Golf Club in

Newtown, Pa., which is holding this year's Senior PGA Championship, uses both the DPW and the liquid fertilizer products.

"The DPW is a good granular product for roughs, bunker banks and green surrounds. I use it in the spring and fall," said Holanda. "I have been using the liquid product for several years, however. The turf tissue analysis allows you to control the nutrients in

your greens. Every 14 days I take a look and see what is being over-applied or what is deficient, then I tweak the next application."

Davisson said Bio Basics is in the process of signing five distributors this year and will eventually have 15 to 20 distributors across the country.

### DEVELOPING HIGH-NITROGEN ORGANIC FERTILIZER

EcoOrganics is taking a similar approach to market by expanding distribution, but it has come up with a high-nitrogen organic fertilizer that it said could be used 100 percent on greens.

The EcoOrganics product line is based on soy trypticase broth, which is used in laboratories to grow bacteria.

"Trypticase broth is 90 percent isolated soy protein," said Dr. Bill Torello, vice president of marketing for EcoOrganics and an associate professor of plant and soil sciences at the University of Massachusetts. "They're not recyclable waste products, they are food- and animal-grade proteins, very safe and very clean."

"Our premier product is a 15-2-0. That's a very strong biostimulant. There is 15 percent organic nitrogen here. It's not a bridge product. There is no urea - it is 100 percent organic," added Torello.

The product has also been shown to increase microbial activity in the soil profile, releasing another form of natural fertilizer material.

The fertilizer is available as a wettable powder for spray applications and can be used as the sole source of nitrogen for greens fertilization programs. According to Torello, on-course testing has showed excellent results at application rates between 1/24 to 1/4 of a pound per 1,000 square feet. EcoOrganics has also developed a greens-grade granular 11-2-3 product, which has the consistency of sand. It can also be used on fairways, roughs and tees.

"Classically, the problem with organics is that they are low in nutrient content, particularly nitrogen," said Torello. "With the advent of this product, you can have the 100 percent organic management of greens." ■

## ValleyCrest

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been an important element in the redesign strategy and in improving the overall look and agronomy standards," said Arthur Jeffords, President of Lighthouse Golf Group, which manages the facility. "We are excited about the facility's potential as we proceed with plans to integrate the golf course amenities with those of the proposed 100-room Hawthorn Suites hotel/conference center on adjacent land." ■

GOLF COURSE NEWS

# The Blenders Choice

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## Foliar feeding is the rage, but more research is needed

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have used this approach on tee surfaces and, of late, fairways. The ability to spray these materials at a greater frequency, while using extremely low rates, has shown great benefits to turfgrass health. This type of approach can't be accomplished with traditional granular fertilizers.

When it comes to greens fertilizer programs, there is no true standard in today's industry. It is certainly a matter of experience and preference of the individual superintendent. The general program that seems to be emerging in popularity is one or two granular applications, usually in the spring and/or fall, and a spoon-feeding approach for the remaining months. For example, to calculate the total nitrogen of this type of program, it might be a spring and fall application at 0.5 #N/M of a granular material, and applications of soluble/liquids at a rate of 0.1 #N/M every 10 days throughout the season. In an approximate seven-month growing season, this nitrogen total is in the 2.5 #N/M range.

However, along with the amazing popularity of spoon-feeding, questions are being raised regarding the efficacy of foliar feeding. What are the maximum amounts of nutrients that the plant can absorb through the leaf tissue? Does the type of nitrogen matter? How

much is lost to volatilization?

There has been very little research done on foliar feeding of turfgrass. In the agriculture industry, foliar research has been conducted for many years. The initial work that has been done indicates that a maximum of 0.1-0.125 of #N/M may be absorbed through the foliage. Research has

shown that about 50 percent of the material is absorbed during the first hour after spraying, then 25 percent will be absorbed during the next 24 to 48 hours, and the remaining will most likely be lost. This will also vary depending on mowing and irrigation schedules. Research has also shown that water pH of the spray

mix and type of nitrogen used will greatly influence how much is absorbed by the plant. A tank mix with high water pH has the potential to convert the nitrogen to the ammonium form and have a high volatilization potential. Nitrogen compounds that are positively charged can also be absorbed electrically by the plant cells, whereas negatively charged nitrogen compounds cannot.

So what does all this mean for the industry? Even though foliar feeding has become the rage of greens fertilization programs, there are still many questions that remain to be answered from a scientific basis. Research needs to be conducted to answer the questions that are being asked. Only time will tell if foliar feeding will become the standard method of fertilization. ■

## Farley's SUPERidea

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Most of my trees are young and have trunk sizes of around six to 12 inches and are generally 10 to 20 feet tall. For those trees I use a section of rope one and a half feet long, giving me a ring of three feet across. This is proportionally correct and gives the mowers ample room to work, allowing them to stay away from the tree's base.

When it comes to the native valley oaks, I like to come all the way out to the drip line of the tree's outer canopy. In fact the course's EIR (Environmental Impact Report) requires us to keep all turf and irrigation away from these particular trees. For those situations I pull a section of rope out to the drip line and boom, there's my radius.

— John Farley, superintendent, Teal Bend Golf Club, Sacramento, Calif.

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Got a SUPERidea of your own? Email your ideas to editor Andrew Overbeck at [aoverbeck@golfcoursenews.com](mailto:aoverbeck@golfcoursenews.com). If your idea is selected for publication, we'll send you a Golf Course News golf shirt. ■

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