

**THE SEQUEL**

# Butting Heads Over Bio

**It's time to revisit the biological  
and organic fertilizer category  
to see what's happened since 1999**

By Larry Aylward, Editor in Chief

**N**early seven years ago, *Golfdom* published a cover story that discussed biological and organic fertilizers. The headline on the magazine's cover read "Butting Heads Over Bio," and the accompanying stories in the April 1999 issue debated whether biological and organic were viewed as "scientific miracles" or "snake oil."

We've decided it's time to revisit the issue. While seven years is not a long time when it comes to the Chicago Cubs winning a World Series (97 years and counting), it is a prolonged spell for change to occur in this product category. And it has. While the category, which includes products ranging from biostimulants to foliar, has grown with new players, it has also lost a few participants. It's also safe to say — and

manufacturers will attest to it — that sales of biological and organic fertilizers have increased because more superintendents are using them. Manufacturers say their products can help reduce turf stress and help superintendents slash their nitrogen use.

Bill Middleton, a senior technical advisor for Milliken Turf Products and founder of Emerald Isle True Foliars, says biological and organic products have nearly a 60 percent market penetration today. "That's pretty decent," he notes.

Bill Byrnes, president of Floratine Products, which celebrates its 15th anniversary in February, says "biostimulant use has become a widespread mainstream management practice on golf courses," says Byrnes, who also cites a dramatic evolution in product diversity and sophistication as a factor contributing to increased use.

While the debate raged on whether the products were viewed as a "scientific miracle" or "snake oil" in 1999, it may be waning. But while those partisan opinions still linger, it seems that biological and organic fertilizers are viewed by more superintendents today as products that work best when used as part of sound turf management programs.

Terry Hogan, the long-time superintendent of Big Run Golf Club in Lockport, Ill., has experienced successes and failures with

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biological and organic fertilizers. Last summer Hogan worked with Novozymes Roots Plant Care Group to use the company's products on his course's greens. Hogan, who has been at the course for 27 years, says Big Run's regular golfers say the course is the best they've ever seen it.

"They ask me, 'What are you doing differently?'" Hogan says, noting the color of the greens was great, their density was good and their consistency of growth was uniform.

Hogan, who's aware of the snake oil factor, says he's more confident in using biological and organic products than ever.

John Sedivy, director of business development for Roots, says suppliers are still battling the snake oil claim. Sedivy says Roots conducted several focus groups recently and discovered the snake oil stereotype still exists.

"The situation has gotten better over time, but it still persists," says Sedivy, who adds that superintendents haven't forgotten the poor experiences they've had with products whose performances were exaggerated by manufacturers.

Roots decided to attack the perception problem head on in its advertising. Its print ad addresses the perception and reality of biological products and even features a photograph of a snake.

The snake oil label persists because it's still true in some instances. Joe Lara, the product manager for horticulture and specialties at Becker Underwood, says his company has studied competitors' products and found them not to be as advertised.

"We've encountered competitive products that claim plant stimulatory effects only to uncover that they also contain small amounts of nitrogen fertility that create a false impression of how the products really work," Lara says. "Similarly, other product labels do not fully disclose what is in the formulations, leaving end-users to guess what is working or not working.

Too often, turf managers end up paying a lot of money for not knowing what they are really applying to the turf."

Joel Simmons, president of Earthworks, which began in 1988, says opportunities unfortunately still exist for quasi-turf scientists to create shady concoctions and enter them as products in the category. All someone needs is a garage, a few 500-gallon tanks and a natural mixture that he refers to as a miracle product. "But there's nothing miraculous about it," Simmons adds.

The bottom line is that superintendents will try biological and organic fertilizers if they trust them, Middleton says. That said, there are several reasons today why superintendents are using the products when compared to 1999.

For instance, more younger superintendents are using the products because they weren't subject to a lot of the debate that had occurred about them in the late '90s and before.

Brent Palich, superintendent of Sand Ridge Golf Club in Chardon, Ohio, uses several products in his turf maintenance program, and the 28-year-old believes more "new generation" superintendents like himself are less skeptical of the products than other veteran superintendents.

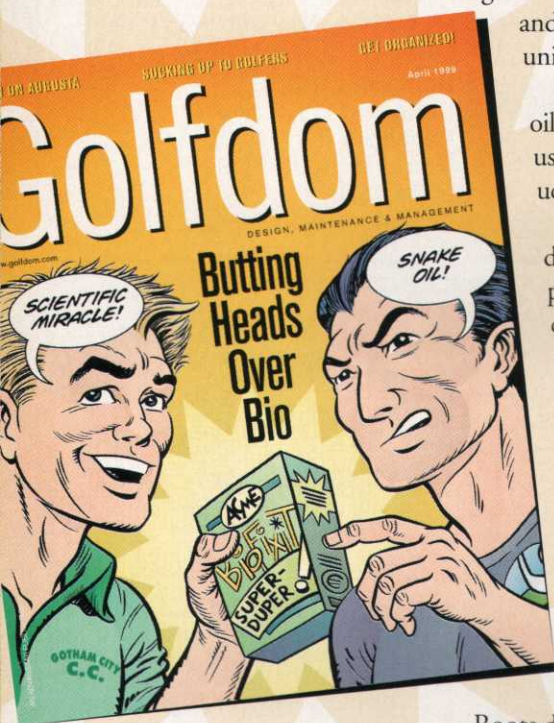
"I was brought up around these new fertilizers," Palich says. "I feel more comfortable with them than I do with synthetics because I've worked with them more. More superintendents are using these products than they were even three or four years ago. They are much more common."

Another reason for increased use is that superintendents today are smarter and know more about the products, says Mike Archer, market development manager for Milorganite.

"The overall level of agronomic education of superintendents goes up every year," he says. "If a superintendent had a bachelor's degree 20 years ago, he stuck out from the crowd. Today we have superintendents with master's degrees in agronomy. They're better able to look at products and their specifications and decide whether the products will do what they need them to do."

More superintendents are impressed with

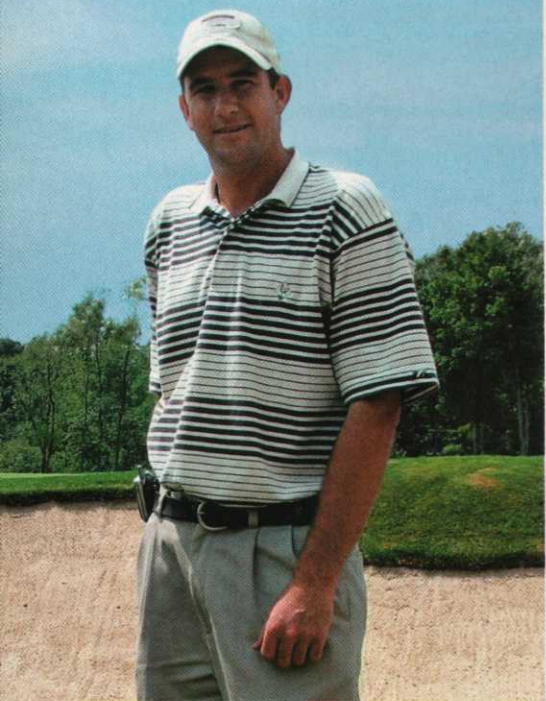
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The cover of our April 1999 issue had a touchy tone.



## Butting Heads Over Bio



**Brent Palich, superintendent of Sand Ridge Golf Club, says he's completely comfortable using biological and organic fertilizers.**

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the products because of their improved delivery systems, Middleton adds. "You can see the results of these products within two or three weeks," he says.

It can be concurred that the longer a company has been around, the more its products will be trusted and used. "The good products work," Simmons says. "I wouldn't be here 20 years later if my products didn't work."

Archer says Milorganite, which has been around since 1926, has a long-standing name in the biological and organic product segment. The challenge for Milorganite is to keep its old product exciting, especially when several

companies are marketing newer products.

Roots is marketing the fact that it's owned by Novozymes Biologicals, a Denmark-based biotech company that specializes in enzymes and microorganisms. Novozymes, which purchased Roots in 2002, is a well-respected \$1.1 billion company, although it's not widely known in the Green Industry.

"We couldn't have a better parent company anywhere in the world," Sediwy says. "It's what's behind the Novozymes name, which is an expectation to provide products and services which represent that name."

Word of mouth among users can also increase or cease a product's use. In Floratine's case, it was the former. Byrnes says virtually all of the company's growth during its first four years came from satisfied superintendents who told their peers about Floratine's products.

Byrnes says a big breakthrough for the company occurred in 1995 when he was able to assist Paul R. Latshaw, who was the superintendent of Congressional Country Club at the time, with the use of his company's products. Latshaw was preparing the course for the Senior Open and had soil problems. He tried Floratine's products as part of his turf management program and was impressed. Having Latshaw, one of the top superintendents in the business, tout your products ... well, you couldn't ask for much better marketing.

Superintendents are also more apt to try a biological and organic fertilizer if a company doesn't promise the world with a product's result. Simmons says his company would never sell a straight organic program to superintendents as a total solution to any turf problem. The idea is to sell superintendents organic products to work in harmony with conventional products, he says.

"That's a great balance," Simmons says, noting that his company doesn't aim to compete with inorganic suppliers. "It's how [superintendents] marry the two technologies to get the best of both worlds."

Simmons says most all biological products have to work with other products to be successful. "There's no silver bullet in the biological world, and there's no silver bullet in the chemical world," he says. "It's about building a good program."

Gary Grigg, vice president and agronomist for Grigg Brothers, says his company has tried to capture the best of both worlds — organic and inorganic — with its latest product, Green-Spec, which came out last year. The homogeneous product is engineered using the company's proprietary protein technology to deliver long-lasting color response and efficient nutrient delivery.

Grigg says he and others at the company scouted the performance of the biological and organic segment for several years and decided that a "bridge" product was the best way to enter the market.

Another assumption associated with biological and organic fertilizers is that they're too expensive. "People think we're only for the guys with the \$1 million budgets," says Todd Settle, North America sales manager for Roots Plant Care Group. That is not true, Settle adds, noting that Roots sells its products to nine-hole municipal courses as well.

Middleton says most biological and organic fertilizers are cost-effective and offer a good bang for the buck. Hogan watches his maintenance budget bucks carefully, but he's not afraid to spend money on biological and organic fertilizers if he knows they'll help the turf.

"Cost is an issue, but if something is working for you, then it's not an issue," he says. "Then you can justify using it." ■

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