Biologicals take maintenance to a new level of control

Continued from page 1 every other week, he had little success, he said. "But, when we put it out every other day, we started getting results," said Dan Dinelli, superintendent at North Shore Country Club in Glenview, Ill.

Dinelli, who began using Bioject in 1995, said: "We're excited because we saw good results last year, and last year was no party. We had the worst summer in history. It was unbelievable high humidity and heat that Chicago had never experienced. People were dying from the heat in the city, and yet we were expected to maintain greens at 120/1000ths of an inch. It was crazy."

"I've gotten tremendous results with this [Bioject]. This is the wave of the future. It's the only thing I use now," said Dinelli. "We're excited because we saw good results last year, and last year was no party. We had the worst summer in history. It was unbelievable high humidity and heat that Chicago had never experienced. People were dying from the heat in the city, and yet we were expected to maintain greens at 120/1000ths of an inch. It was crazy."

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"While last year he began using the Bioject system, irrigating his course with the Pseudomonas aureofaciens bacteria, has jumped full-fledged into the biological-control arena. Last late last year he started using a hybridized strain of Trichoderma harzianum, called Bio-Trek 22G, developed by Cornell University Drs. Gary Harman and Eric Nelson. A fungus applied dormant in dry granular form, Trichoderma harzianum reportedly establishes itself in the rhizosphere and gives season-long protection against soil-borne fungal pathogens with, in most cases, only two applications. And that is only half the story, Dinelli said: "Another thing we're trying this year is using a lot of organic fertilizers that are spiked with microbes," he said, "and we're top dressing fairways with compost. And all this is in hopes that we improve microbial activity, stimulate antagonists in the soil that may already be present, and, in the case of the Bioject and Trichoderma, actually implement known antagonists by applying them out in the field."

"Each angle, he said, has weaknesses and strengths. "But hopefully, in time, as scientists figure out more and more of this, there will come a day where we'll be able to fine-tune these approaches."

"Saying he has no interest in selling the biological-control products, Dinelli added: "I have a big interest in hoping that this direction continues to be explored. Yes, we have a lot more to learn with these pioneers — Bioject and Trichoderma — about their shortcomings and how to use them. But that's all in the growing pains.""

By MARK LESLIE
GLENVIEW, N.Y. — Using a multidimensional approach featuring biological-control agents, organic fertilizers and composts, North Shore Country Club superintendent Dan Dinelli hopes to reduce fungicide use by 40 percent this year.

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