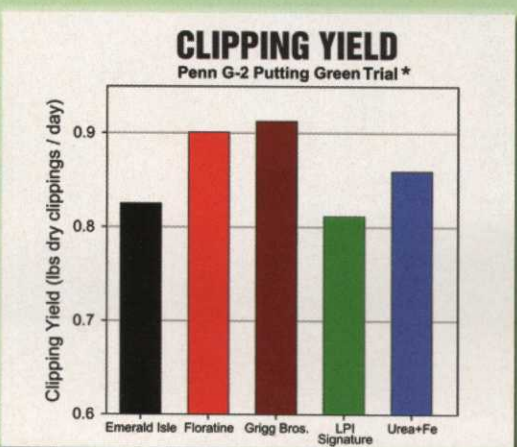
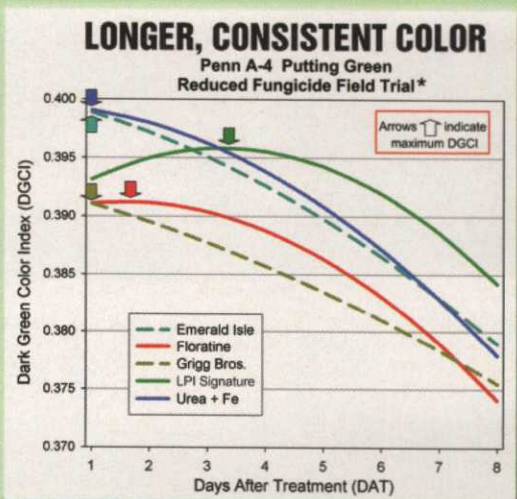
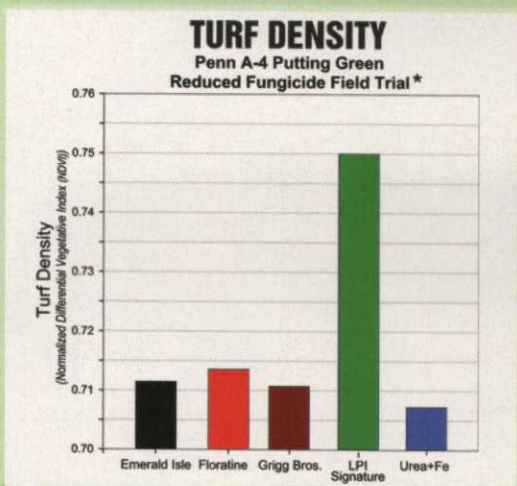


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* Max Schlossberg, Ph.D (PSU), 2007.



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Off The Fringe

Grub Busters

SILCOX DISCUSSES MODERN APPROACH IN DEALING WITH THE TURF-DAMAGING INSECT



Chuck Silcox knows a thing or two about grub control. *Golfdom* Editor in Chief Larry Aylward recently spoke to Silcox, the global turf and ornamental product development manager for DuPont Professional Products, on the topic. Silcox is an industry veteran of 25 years and has been at DuPont for five years. He has a Ph.D. from Rutgers University.

Golfdom: It's spring but not too early for a superintendent's thoughts to turn to grub control. That said, what should superintendents be thinking about in regard to grub control right now?

Silcox: I don't think it's ever too early to think about grub control. It's interesting to think where we have been in the past 20 years with grub control. Twenty years ago, grub control was primarily an August and September endeavor. And then in the early 1990s, with the introduction of imidacloprid (Merit) by Bayer Environmental Science, the benefit of a preventive application became in vogue. As time has gone by, it seems more superintendents are seeing the value of an earlier application in May. They're taking advantage of the moist soil conditions that are present in the spring. The enemy of preventive grub control of any product is dry soil and particularly dry thatch. And by going with an earlier season application, you can overcome some of those difficulties.

Golfdom: In what parts of the country do grubs pose most problems on golf courses?

Silcox: Traditionally, the heart of the grub country is been the Midwest and Northeast. That's not to say that grubs aren't elsewhere. You have *Ataenius* on in Northern California, and you have May and June beetles in Texas. The Southeast also has its share of grub problems. But the real heart of grub country are the Midwest and Northeast states.

Golfdom: On what parts of golf courses are grubs most problematic and how severe is the damage they can cause?

Continued on page 17

“Silcox” — Continued from page 16

Silcox: The damage can be very severe. When you’re talking grub control, you’re talking about treating a lot of acres because typically its fairways and roughs — the roughs primarily to prevent animal damage in the fall from skunks, raccoons and crows digging up the turf while looking for grubs. Turf can withstand a lot of grubs if it has adequate moisture. But one of the problems a superintendent also faces is if he’s got a grub population developing, and they’re getting into second and third instars in August and September and all of the sudden the weather dries out and that damage starts to show.

Golfdom: How can superintendents monitor grub populations?

Silcox: In the spring ... if you can dig down 4 or 6 inches and find grubs, you know you had a problem in the past year. So odds are that turf will become infested this year. It also depends if a superintendent has been on his course for a long time. If so, he’s going to understand where his hot spots are and where his problems are and also what species of grub of which he typically deals.

Golfdom: Some of the newer insecticides, including DuPont’s Acelepryn, are classified as reduced-risk insecticides by the Environmental Protection Agency. What constitutes a reduced-risk insecticide?

Silcox: The program was initiated back in the early 1990s by the EPA in a way to give industry incentive to develop new products that have characteristics they think are favorable. There are a number of ways a product can be classified as reduced risk. It can have a lower impact on human health, a lower toxicity on non-target organisms, lower potential groundwater contamination, low use rates, low resistance potential and it’s compatible with integrated pest management programs. ■

“Toro” — Continued from page 10

Mike Hoffman, Director of Center for Advanced Turf Technology Dana Lonn, Vice President of Operations Sandy Meurlot and others.

Being a major player in irrigation — more than 20 percent of Toro’s revenues come from it — a big topic of the day was water management. And considering that freshwater supplies are dwindling, Toro’s speakers had a lot to say about the topic.

“The fact is, water is becoming the new oil,” Hoffman said. “It’s no longer considered a commodity. It’s considered a precious resource — and it’s getting more and more expensive. We need to manage water much more carefully.”

Lonn, who has worked at Toro for almost 39 years and is considered a top industry researcher, delved into the many things that Toro is doing to help golf course superintendents irrigate more efficiently. Lonn talked about the company’s aim to develop sprinklers that mimic the distribution uniformity of rainfall. He also talked about climate-based irrigation controls to combat such things as solar evapora-

“A lot of what we’re driving at is to get more precise.”

DANA LONN

tion and wind, micro-irrigation and soil-sensor technology.

“A lot of what we’re driving at is to get more precise,” Lonn said. “And you get more precise by measuring.”

Lonn also expanded on future technology as it pertains to alternate fuels, such as fuel cells, bio-diesel and electric power. Lonn likes the latter, saying electric energy amounts to



Toro CEO and Chairman Mike Hoffman makes a point during the company’s media day in May.

lower and even zero emissions, fewer wear parts and less noise. But he said electric fuel is not yet feasible because it’s too heavy. For instance, 800 pounds of lead-acid batteries supply as much power as only 1 gallon of gas, which weighs about 8 pounds.

Overall, Lonn said Toro’s customers voice a similar request: They all want improved and more efficient products, but not at an increased price.

“They say, ‘Don’t change them much. Just give them to us better, faster and cheaper,’” Lonn said.

But Hoffman realizes that meeting such challenges abound in this ever-changing world. “

Certainly, change is accelerating,” Hoffman stated. “And a lot of the change we’ve seen over the last 15 years is happening in shorter durations, of which we have to be prepared. We are thinking way out there. So as this change accelerates, we can be in a position to help our customers. There’s a lot more learning that’s going to go on.” ■