

Controlling Insects and Nematodes - Products and Programs

By Joel Jackson, CGCS

We have to pick Hands-On topics a year in advance so we can publish and broadcast our media kits and editorial plans to our advertisers. They like to target specific products and services to meet your needs relative to the management theme of the issue. So it was at least a year ago we came up with this insect-control topic.

It had been several years since we discussed this aspect of turf management, and the EPA has been running roughshod over the organophosphate family of insecticides for a couple of years, thanks to the Food Quality Protection Act. We thought it might be time to check on how insect control was going in the new millennium. Several trends were evident from the interviews I did at the Harrell's Turf Academy in Pine Mountain, Ga. I had a captive audience of superintendents and suppliers. Here's what they had to say:

General Trends

Insect damage on turf is not a major concern in today's management programs. This is primarily due to the advances in product technology and more thorough monitoring of threshold levels.

Routine spraying of insecticides is rare and applications for worm control are more of a last resort than an automatic preventive.

The products of choice for worm control tend to be the old standbys, with Orthene and its acephate clones leading the way. The pyrethroids are used sparingly if at all. Most are waiting for more peer feedback on successes.

Thanks to Chipco Choice, mole crickets are not the turf devastator they once were. While you still have to pay attention to infestation pressure, most people are more concerned with when, where and how often to apply the product to stretch the budget dollars.

Grub damage is problematic and some cover their bases by alternating Merit with Chipco Choice. Known areas are treated with Merit, but most did not feel they had any significant grub problems.

Nematodes remain a constant threat to weaken turf especially during stressful conditions. Many saw good results from Curfew applications during the recent drought. As NemaCur fades away, we await Dr. Crow's results of testing on alternative products.

Specific comments on products, programs and pests

Susan Leisure, Dow AgroSciences: "One of our new products for worm control that works both on turf and ornamentals is Conserve, an environmentally friendly product. The active ingredient is spinosid and is naturally occurring. The product works by contact and ingestion and has a 14-day residual. Some superintendents are using it in rotation with their regular products. Mach 2 is a pyrethroid product that works to control grubs and surface feeders."

Joe Conoly, Bayer Environmental Crop Sciences: "Sevin sales are up for worm control, and of course many folks use the Merit program and time their applications to control grubs as well as the hatch of mole cricket nymphs." I asked Joe about the use of Chipco Choice in relation to its cost and course budgets. Conoly said, "Acreages are up for the year. We are finding medium and lower budget courses can't afford not to use Choice to get a handle on their mole-cricker problems and stay competitive. Top Choice gives courses the opportunity to custom apply to only specific areas of concern so they can manage their budget dollars accordingly."

Dick Naccarato, Naples Beach Club: "Costs of materials are a concern for us. I use Top Choice to treat the perennial trouble spots. The crickets always seem to come back to the same spots each year due to soil type, moisture, whatever. I prefer the bagged material so I don't have to take a chance on turf damage by the slit injection equipment. I have also tried Talstar sparged on fertilizer. The products are getting better and more effective and so the insect pressure and damage are less. We have learned to manage the pest and the pesticide much better to avoid a lot of repeat applications."

Jim Schilling, Bonita Bay East: "Frankly, I just don't have a really big insect problem. One reason may be the rock layer just a few inches down. It's not a bug-friendly environment. We did slit inject Choice over the entire course and where we either missed or didn't treat, we got hammered. I followed up on those areas with a bait called Snare and applied some Top Choice. I had mixed results with 20 acres of Curfew treatment. Again the rock so close to the surface may have been a problem. Our worm problems are small. We monitor the damage and selectively treat as needed. Usually we grow out of the problem before we need to spray. When we do spray we tend to use Orthene."

Ken Arsenault, Golf Club of Jacksonville: "I've seen more worm problems this year than ever. Maybe it was the wet summer; they sure came out after every rain and usually on the same spots on the same greens. We tend to monitor damage first to see if it is widespread and causing a real problem. When they were as active as they were this year, we generally had to spray all greens if the damage was exceeding our threshold tolerances. We rely on acephate to control any worm outbreaks. I'd like to see more product evaluations on the new products. Right now I rely on what I know works. I learn from my peers and my mentors. The grapevine and word of mouth tell me what's working."

As far as mole crickets go, we are into our third year since our last Chipco Choice application, and we think we have been lucky to get that much good control out of the product. Next year we treat again. We have used Merit for some problem areas not covered by the Choice."

Bill Alford, Golden Eagle C.C.: "I don't have a lot of insect problems. If worms pose a problem I'll chase them with Orthene, Sevin and Talstar. The mole crickets we have don't like the heavy clay soils, which we do have a lot of. Where they are active on fairways and tee tops, we have applied Chipco Choice. We treated two years in a row and the third year we just monitored for hot spots and treated as needed with Top Choice. In the roughs where the slit injection isn't practical (tree roots, slopes etc) we have used the new slow release, coated Orthene product called Precise."

Alan Puckett, The Club at Eaglebrooke: "My biggest insect problem when I got here was that mole crickets were out of control. We used Chipco Choice to get them under control and the course cleaned up well. We treated the fairways the last two years and next year we will skip them and do the roughs. We'll use Top Choice on the slopes. I want to learn more about the new coated Orthene product, Precise, and see how it might fit into our program."

"Worms aren't a big problem. If we see the signs that they are active, we monitor them closely and, if looks like we need to spray, we hold off until the end of the week so we don't have any fire drills over the weekend when the course is busiest. We use a combination of Orthene and Dursban usually. I have tried some DeltaGard, but I really haven't messed around with the new products that much. One thing we do when we spray is to make sure we start and stop the spraying into the collar since the worms will inhabit the tall grass around the green."

"Nematodes are my next concern. I have used NemaCur on three of our fairways for chronically weak areas that don't outgrow the damage. Next year I think I'm going to have to treat the greens. The pressure is building and they aren't reacting as well to cultural practices. I am going to use some Neotec, which Steve Ciardullo has been successful with over at Mountain Lake. We've got to find something that works on 'todes with NemaCur phasing out."