

New strategies for grub control on golf courses

Dave Smitley

Status of grub infestations in Michigan. Japanese beetle has now spread north along Lake Michigan to the Traverse City area and inland as far north as a line through Bay City, Midland, Big Rapids and Ludington. European chafer has now been picked-up in Traverse City and several other cities in the northern lower peninsula, but has not built-up to levels high enough there to cause turf damage. Oriental beetle has been found near Monroe, Michigan and just west of Grand Rapids. Sampling is now underway to determine how widespread it is in Michigan. An active population of green June beetle was discovered in southwest Michigan, near Sturgis. I don't expect it to become much of a problem in Michigan. *Ataenius* and *Aphodius* are about the same as they were 10 years ago: a sporadic problem throughout the state.

New Grub Control Products. Two new products are now available for grubs: Allectus and Arena.

1. **Allectus: imidacloprid + bifenthrin (like Merit + Talstar).** Bayer and FMC have joined forces to offer a product that combines grub control with surface insect control. Imidacloprid has been a turf standard for grub control for many years, and bifenthrin has good activity on cutworms, ants, *ataenius* adults, and annual bluegrass weevil (not found in Michigan, yet). The only downside is that at the high rate you are only applying 0.25 lbs ai/Acre of imidacloprid, somewhat less than the 0.4 lbs ai/Acre on the Merit label.
2. **Arena: clothianidin.** Arena is a new turf insecticide in the same chemical class as Merit. In the first two years of testing it has worked at least as well as Merit for grub control. Like Merit, it works great for grubs when applied in June or July for late summer and fall grubs. We are in the process of testing May and September applications to see if they work as well as the July application.

Taking Advantage of MTF Research and Biological Control. Five years ago, the MTF provided initial funding for a project to introduce pathogens and parasites of Japanese beetle into Michigan. This project was later funded by Project GREEN. This year we are starting the assessment process to see how well the pathogens and parasites are working. We will be seeking MTF support to continue this project next year. In the last two weeks we have found the fly parasite, *Istocheta*, at three locations. In September we will begin sampling grubs to determine pathogen activity. A field day will be scheduled in October at one of the introduction sites. Superintendents will be invited to a golf course with good natural enemy activity to collect infected grubs and take them back to their own location. Watch the NewsNotes or emails for more information in September.

Treating fairways for Japanese beetle: think about skipping lightly infested fairways, or skipping a year. As Japanese beetle begins to settle down in some places, you may not have to treat all your fairways every year. They tend to come back to same fairways year after year. Also, skipping a year may work well for some courses.