

# VICTORY AT LAST?

## A Powerful Organic Weapon Against Iris Borers

by Cathy Egerer

Few things are more frustrating to an iris lover than finding that iris borers (*Macronoctua onusta*) have taken up residence in the garden. The traditional response has consisted of manual control or treatment with insecticides. In recent years, a new warrior has entered the scene: a tiny nematode with a big name, *Steinernema carpocapsae*. Studies have shown they can be 100% effective in eliminating iris borers.

Nematodes live in the soil and, like a microscopic SWAT team, they seek and destroy the iris borer larvae before they can reach the rhizome. It's best to apply them when the iris borer larva is working its way down the leaf, which is June to early July depending on your area. The nematodes enter the larva when it reaches the soil, and quickly destroy it. Then they multiply, using the dead larva as a host, and in three weeks several million new nematodes will emerge.

An interesting case study occurred at the Presby Memorial Iris Gardens in Monclair, New Jersey. Linda Sercus, then Executive Director, described the situation:

"For years, Presby had relied on applications of Bayer's Merit (a synthetic nicotine compound) for borer control. Finding organic methods of control for both pests and weeds was a goal on everyone's mind. Nematodes had been applied at Presby with dismal results. Looking back, they were probably applied incorrectly, during weather conditions that weren't optimum. But we didn't know that then.

"We did know that every single bed at Presby needed new soil. Old soil just kept being reused, and when compounded with up to three applications of Merit, there just was *no* microbic activity. The irises were puny, with sparse blooms, and rot was prevalent. I had read of 'burning the irises' as a means to control borers, and we invested in two industrial propane burners and burned off all 16,000 square feet of plantings. 'Nervous wreck' doesn't begin to describe my anxiety attack. But, it did work - somewhat. Weather, however, nixed that as a reliable solution.

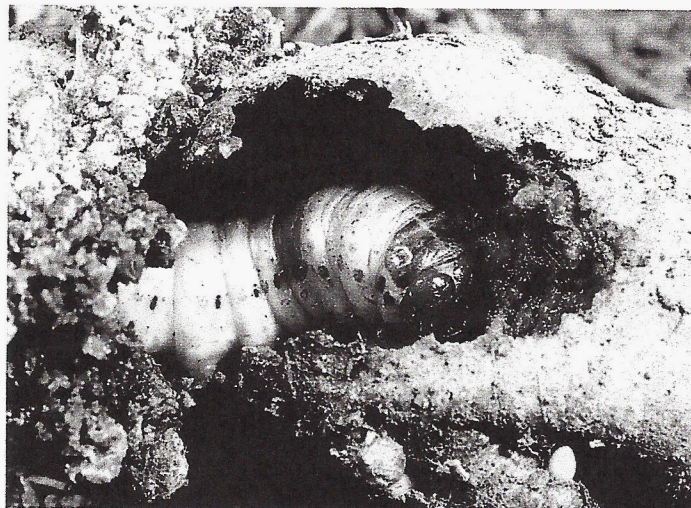
"A major borer infestation during the 2010 bloom season included borers attacking not only the bearded iris but the non-bearded, where the borers attacked the emerging buds versus the foliage. We had absolutely

no way to manually control the situation due to the sheer numbers of irises involved. So we ordered millions of nematodes, and applied them before bloom season was over. IT WORKED! By incorporating nematodes into our maintenance routine for the next three years, we virtually eliminated iris borers from the garden. The incidence of rot plummeted, and the irises grew and increased without the trauma the borer brings. Applying them in early to mid June on a rainy day was perfect (it kept them moist). We were deliriously happy with the results!" [For a video of Presby's application process, visit [www.youtube.com](http://www.youtube.com) and search for Nematode Application Day.]

Naomi Pye of BioLogic, a commercial source for nematodes, explains, "Nematodes are damaged by UV rays, so we recommend applying them in the evening. Because they live in the soil and can dry out, they need to have a film of water over them when they hit the ground, so it's important to pre-water the area where you will apply them. Many people apply them when it's raining. Once the packaged nematodes are mixed with water, they can be applied with a hose-end sprayer or diluted further and sprinkled on with a watering can."

Nematodes are available in several formulations. Solid blocks of material containing millions of nematodes can be refrigerated for up to six months, then mixed with moist soil and placed directly around affected plants. For a wider application, spraying is usually easier, and several companies sell inexpensive hose-end sprayers designed specifically for nematode application.

If you'd like to share your experience with nematodes and iris borers, email me at [pr@historiciris.org](mailto:pr@historiciris.org). We'd love to know how they worked for other HIPS members.



Borer larva munching away

D. Shetlar photo

Here are a few commercial sources (others are available via online search):

- BioLogic, <[www.biologicco.com](http://www.biologicco.com)>, 717-349-2789, sold as Eco Mask
- Arbico Organics, <[www.arbico-organics.com](http://www.arbico-organics.com)>, 800-827-2847, sold as NemAttack
- Green Methods, <[www.greenmethods.com](http://www.greenmethods.com)>, 800-477-3715