

Pest Bulletin



Cranberry Girdler

Of the several insect pests that can infest cranberries in the Fraser Valley, Cranberry Girdler can be one of the hardest to manage. This is partly because there are no chemical insecticides. Also, alternate hosts for the Girdler abound in the Fraser Valley, including turfgrass, pasture, hay, and fir trees, of which there are several species.

Life Cycle and Biology

The Cranberry Girdler is a moth and is a Lepidopteran insect pest. The adult moths appear in June, flying at night near the surface of the bog. Active for about two months, the females then deposit up to several hundred eggs into the leaf litter. Larvae hatch from the eggs, then pupate and overwinter in a cocoon that develops in September or October. Adult moths, about a half inch long, have long mouthparts which give them the appearance of having an extended "snout". Larvae are an off-white color with an orange head, and are about a half an inch long or slightly longer. The damage caused by chewing on the vines can result in large, irregular patches of dead plants.



Control Options

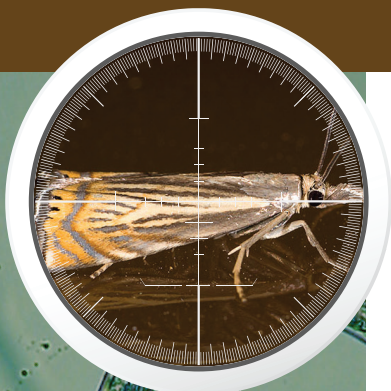
It is best to use an integrated program to help control Girdler. If necessary hire the services of a consultant to monitor Girdler population dynamics. One cultural practice that can help is application of sand. It can be top-dressed before eggs are laid in June, which is believed to cover fungi and moss that the young larvae feed on. Larvae can also be drowned by flooding for up to two days in late August, however keep in mind that if water is left on the bog too long it can cause an increase in fruit rot.

Many cranberry growers now apply entomopathogenic nematodes to control Girdler. The most common is *Steinernema carpocapsae* but *Heterorhabditis bacteriophora* is also available. A rate of 3 billion nematodes per acre is recommended to achieve control. Nematodes can be applied by spraying or chemigation. It is best to apply during cool conditions and to follow application with irrigation, to avoid the nematodes drying out and to rinse them off the foliage and into the leaf litter.

TerraLink now distributes beneficial entomopathogenic nematodes. On our website www.tlhort.com, type "nematode" into the search bar to view or download other tech sheets on nematodes. Alternately, call and inquire with our sales desk toll free at 1-800-661-4559.

Steinernema carpocapsae

for the control of **Cranberry Girdler**



Basic Biology of Nematodes

Predatory nematodes are one of the more unusual tools available to producers to help control pests of food and ornamental crops. With the steady advance of scientific research, these beneficial nematodes are becoming both more common and less expensive. Of the more than 80,000 species of nematodes known to exist, only a few are insect-parasitic (entomopathogenic). We can and do use them to our benefit, and there are several commercially developed and produced species available for several situations.

How to Use Nematodes Against Cranberry Girdler

The Girdler is of particular concern to cranberry producers and there are no chemical controls. Besides flooding to drown the larvae, or top-dressing with sand to smother them, the only other definite control method is application of entomopathogenic nematodes. If left untreated, Girdler can cause significant damage to stems and roots.

Apply *S. carpocapsae* at 3 billion nematodes per acre when monitoring indicates the appropriate population level of adults, which estimates when the larvae will appear and begin feeding. This is often about June or July. *S. carpocapsae* can be applied through irrigation, or sprayed on. The nematodes must be washed off the foliage into the trash layer at the top of the soil profile. It is best to apply the nematodes in early morning or evening to avoid them becoming dried out. Irrigation should be applied for a week or so afterwards to keep the field moist.

- Entomopathogenic nematodes are best when used as preventative practice.
- Know your pests and always monitor populations.
- Results may not be noticeable immediately. Nematodes and other bio-controls are not pesticides and do not act instantaneously.
- Nematodes can be used in conjunction with other bio-controls.

How to Order

S. carpocapsae is available in units of 3 billion.

Please order by the end of the day every Wednesday for delivery the following Tuesday. For large amounts, please inquire with the TerraLink Sales Desk at 1-800-661-4559.

For tech sheets on other nematodes offered by TerraLink, or more information in general, type "nematode" into the search bar on the front page of our website, www.tlhort.com.