

CONTROLLING CRANBERRY GIRDLER WITH BIOSAFE-N FOR CRANBERRIES

Biosys
1057 East Meadow Circle
Palo Alto, CA 94303

Cranberry girdler is one of several serious insect pests that infest cranberry beds. It is the larval stage that is destructive to the cranberry vine. The larvae feed on the woody parts such as the runners and larger roots and only occasionally feed on the finer roots.

Injury occurs in the larval stage, beginning in early June and continuing throughout the summer months and into fall, usually into mid-October. The newly emerged larvae do not cause the extensive damage that the larger maturing larvae cause. For this reason, evidence of the presence of cranberry girdler sometimes goes unnoticed until vines begin to express feeding damage through the early fall expression of red or brown foliage in September and October. Large quantities of leaves begin to drop from the cranberry vine, leaving areas of dead vines. In severe cases, the vines become severed in portions of the field and one is able to roll the vines back, like a carpet, exposing the soil beneath.

In the cranberry field, larval feeding carries on concealed in the trash layer that consists of fallen leaves, and other organic matter. This concealed feeding area also provides the larvae with a haven for protection from natural parasitic enemies.

As the larvae mature into larger forms, they become more ravenous and consume a great deal of cranberry vine bark, often feeding right through the vine and completely severing the vine.

The Use of BioSafe-N for Cranberries to Control Cranberry Girdler

BioSafe-N for Cranberries can be applied from mid-July through mid-September. The application is timed with the larval stage of the cranberry girdler. Biosys now recommends a new reduced rate for the control of cranberry girdler. That rate is now 2 billion beneficial nematodes per acre.

BioSafe-N for Cranberries can be applied with most spray equipment. Overhead sprinkler systems, backpack sprayers as well as other application equipment may be used to apply the product. Always apply the product to moist soil. The natural environment for beneficial nematodes is moist soil. Pre-irrigate the bed for 30 minutes. This will prepare the bed for the application and also flush and cool irrigation lines. After applying BioSafe-N for Cranberries, follow the label and continue irrigating another ¼ inch of water. Be careful not to flood the bed. The key is to get the beneficial nematodes down to the soil through the trash layer.

Once the product is applied, begin monitoring your beds after a week and look for signs of girdler infection. You will notice a change in activity as the larvae become less active and begin to turn light brown in color. If you have access to laboratory equipment, collect several larvae from the treated bed and carefully

dissect them under a microscope in several drops of water in a petri dish. You should see many new beneficial nematodes that reproduced inside the girdler larvae.

BioSafe-N for Cranberries will last up to 4 to 6 weeks in the soil after following label directions. When applied properly, BioSafe-N for Cranberries can result in the control of girdler larvae up to 95%.
