

# BIO-UPDATE: Nematodes for the Control of Black Vine Weevil



*Black Vine weevil larvae*



*Black Vine Weevil larvae in the growing media*

## Black Vine Weevil Biological Control:

Black Vine Weevil (*Otiorhynchus sulcatus*) is a major pest of nursery stock, pot plant and soft fruit production.

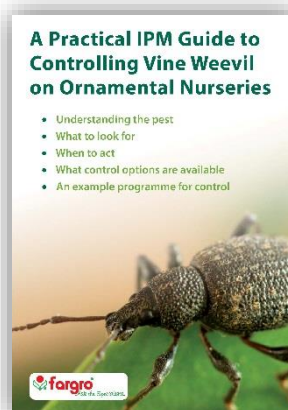
Leaf notches around the edge of leaves indicates damage by adult weevils, this is when egg laying begins.



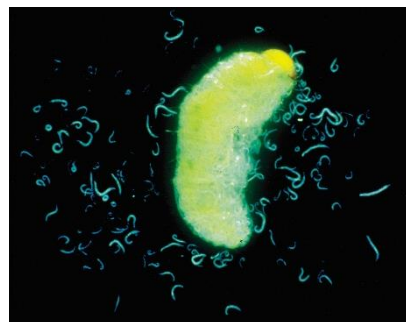
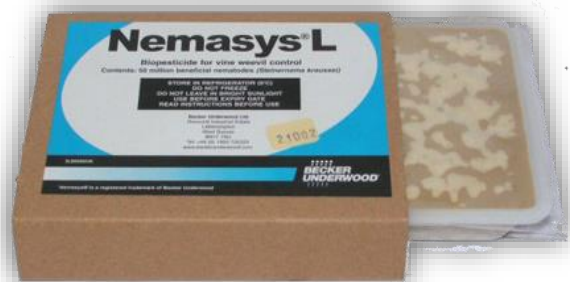
Adults are all female, approximately 10 mm long, and can lay up to 1000 eggs between June and October but over a longer period under protection. The larvae feed mainly on roots but they will also eat corms and soft fleshy stems. It takes several months to develop from egg to adult resulting in one cycle per year on outdoor crops but multiple generations may occur on heated crops.

You might also be interested in our **IPM Guide for Controlling Vine Weevil**.

Detailed practical information on implementing a complete IPM programme for Vine Weevil control, including compost incorporated products and adult controls, can be found in the booklet 'A Practical IPM Guide to Controlling Vine Weevil on Ornamental Nurseries' which is available for download from NAD's website.



# Nemasys-L



*Black Vine Weevil larvae attacked by nematodes*

**Type:** Microscopic nematodes  
(*Steinernema kraussei*)

### How it works:

The nematode worms seek vine weevil larvae in moist soil and compost, larger weevil grubs are more easily located. Nematodes enter the weevil larvae and release a small pellet of bacteria that kills the host after a few days. The parasitic worms begin to reproduce, releasing several thousand more juvenile infective nematodes able to find and kill further weevil grubs.

### Species controlled:

Black vine weevil (*Otiorhynchus sulcatus*) and other soil living larvae.

### When to use:

Autumn and Spring are the main seasons for nematode application, although additional treatments may be needed for heated or protected crops. It is important that the soil or compost is kept moist (not water logged).

Nemasys-L will work as low as 5°C allowing applications to be made whenever the pest is active. Apply as a drench using conventional sprayer, dilutor, watering can or through most irrigation lines. In all cases remove any fine filters and ensure water temperature is between 5 and 15°C.

### Rates of use:

**Container plants:** The 50 million pack treats up to 100 m<sup>2</sup>, 250 million up to 500 m<sup>2</sup>.

**Open ground treatments:** The 50 million pack treats up to 50 m<sup>2</sup>, 250 million up to 250 m<sup>2</sup>.

We also have Information sheets available re application of Nemasys-L through Dosatron dilutors – please ask for your copy.

### How to apply Nematodes

Application of nematodes can be made using standard spray equipment, lances, Dosatrons, via irrigation lines, or even by watering can in those situations where relatively small areas are to be treated. Nematodes are generally quite resistant to pressure and will not be harmed by the pressures regularly found in hydraulic spray equipment. However it is essential to follow the manufacturers guidelines and these few general rules:

- Spray equipment must be cleaned thoroughly before use with nematodes. Chemical residues may be detrimental to them.
- Fine filters should be removed as these can create blockages when applying nematode products.
- If applying via irrigation lines ensure these are free of deposits that may cause blockages.
- Water temperature should be between 5 and 15°C.
- The water tank must be constantly agitated throughout the process as nematodes settle out very quickly at the rate of approximately 1cm/minute.
- It is standard to apply drench treatments at between 5% and 10% of pot volume. For example, a 1 litre pot would require a drench of 50ml to 100ml of diluted product.

**Act now and order your stock for September / October application!**

Contact NAD sales team on 01 8437808 or by e-mail: [sales@nadirl.com](mailto:sales@nadirl.com)