

# *Heterorhabditis bacteriophora*

## for the control of European Chafer Beetle



### 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 European Chafer Beetle

First found locally in 2001, this is a serious turf pest in the east. The larvae, or grubs, can cause heavy damage to turf stands by feeding on the fibrous roots. They can also cause problems in ornamental nursery plants as well as fruit and vegetables.

Apply *H. bacteriophora* at up to 100 million nematodes in 3 US gallons of water per thousand square feet (3 billion per acre in over 100 gallons water). They are best applied in mid-July and into fall at soil temperatures over 12° C. Keep the treatment area moist for a couple of weeks following application.

- 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.

If desired, alternate treatments of *H. bacteriophora* with chemical controls.

### How to Order

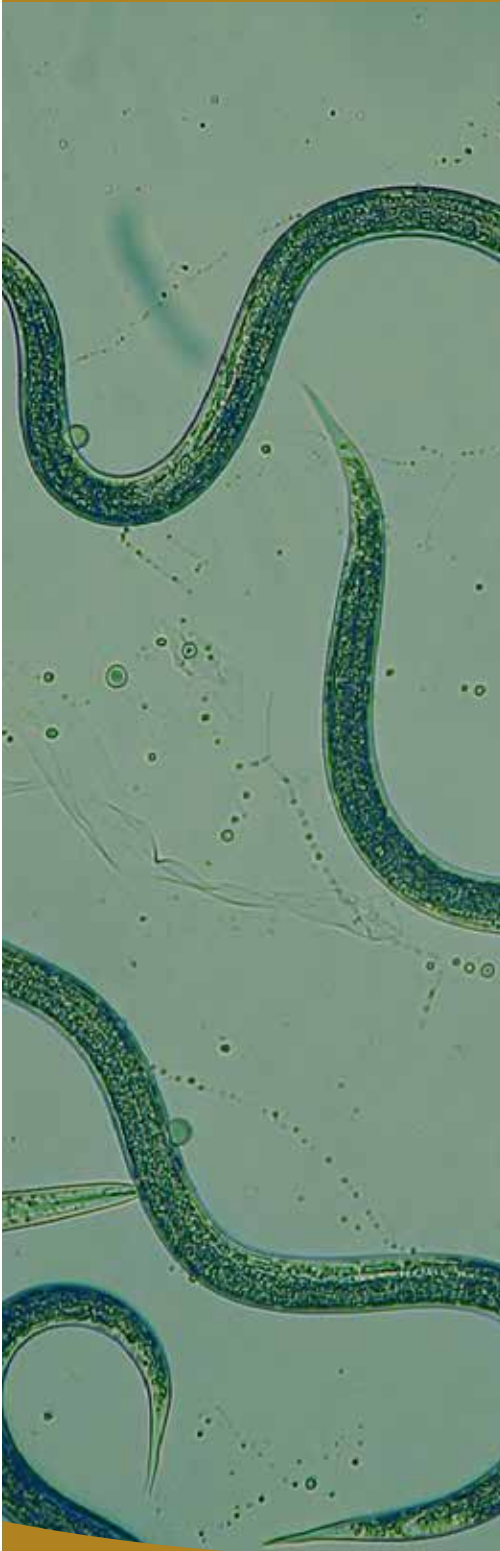
*H. bacteriophora* is available in units of 50 and 250 million.

Please order by noon 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](http://www.tlhort.com).

# Beneficial Nematodes

## for Turf & Landscaping



### TerraLink: Now a distributor of Beneficial Nematodes!

TerraLink has become a primary distributor for beneficial nematodes to the turf and landscaping industries in BC. Insect-parasitic nematodes have been used for many years as bio-control alternatives to chemical applications. We can supply the following beneficial species:

Beneficial Nematode	Target Pests
<i>Heterorhabditis bacteriophora</i>	European Chafer Beetle
<i>Steinernema feltiae</i>	Leatherjacket, Western Flower Thrips, Fungus Gnat
<i>Steinernema carpocapsae</i>	Black Vine Weevil

### General Guidelines on How to Use Beneficial Nematodes:

- As with any biological control, beneficial nematodes are best used as a preventative practice. Large pest infestations may take some time to control with repeated applications.
- Use a spray application system with filters no smaller than 50 mesh, nozzle apertures larger than 0.5 mm, and lower than 300 psi pump pressure.
- Make sure to use a spray adjuvant in your nematode solution.
- Upon mixing your nematodes into solution, use it within 2 hours for best results.
- Agitate the solution, preferably with an air circulation system.
- Apply in early morning or the evening, to avoid drying and exposure to UV light.
- Beneficial nematodes have a storage shelf life of about two months, provided they are kept at 2-5°C and moist, but not frozen.

For more information please contact your TerraLink Sales Representative or the TerraLink Sales Desk at 1-800-661-4559 or by email at [info@tlhort.com](mailto:info@tlhort.com).