

# nematop<sup>®</sup> Biological Soil Insecticide

For control of **grass grub** (*Costelytra spp.*) and **vine weevil** (*Otiorhynchus spp.*) larvae and pupae

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ACTIVE INGREDIENT: <i>Heterorhabditis bacteriophora</i> .....	15%
INERT INGREDIENTS.....	65%
WATER.....	20%

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The nematodes are formulated in a wettable powder, enclosed in a Non-Water-Soluble pack.

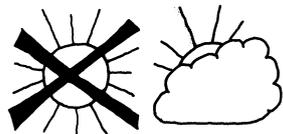
**STORE AT 4° - 10° C  
DO NOT FREEZE**

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## DIRECTIONS FOR USE

### APPLICATION TIMING

Apply nematop from **March to the end of May** against larvae which have developed from eggs laid in late spring and from **August to mid-October** for treatment of larvae which have developed during winter.



### CONDITIONS

- Apply nematop when soil temperatures are above 12° C for at least several hours a day.
- Apply early morning or late evening to minimize the effect of heat and sunlight.
- The soil surface should be moist at the time of application.
- Apply nematop with sufficient water (at least 1,000 litres/ha) to moisten the soil surface.
- Irrigate within 30 minutes after treatment with at least 1 litre/ m<sup>2</sup> to wash nematop off the leaves and below the soil surface.
- For optimum results, maintain the soil moist for 3-4 weeks after application.

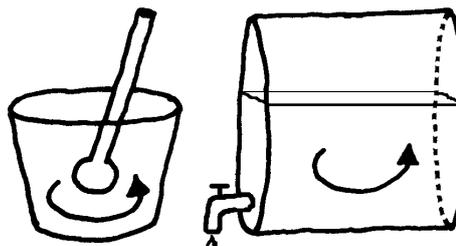
### APPLICATION RATES

Soil: 0.5 million nematodes per 1 m<sup>2</sup>.  
Pots, containers, grow-bags: 10,000 nematodes per litre potting compost.  
Strawberry: 35,000 nematodes per plant.  
Blueberries: 75,000 nematodes per plant.  
Increase the number of nematodes if composted green waste or perlite is a significant part of the substrate.

- Use nematop as soon as possible upon delivery.
- Use the entire pack at one time.
- The entire spray solution should be applied once nematop is mixed with water. Do not store for longer than 4 hours.
- Remove all fine filters in the tubing and at the nozzles. Use nozzles with at least 0.8 mm diameter. Do not exceed a pump pressure of 5 bar.

### APPLICATION

- ◆ **Ground Spraying Equipment**
- Rinse equipment with water before using nematop.
- Add water to the spray or tank mix.
- With the agitator running, add the required amount of nematop through the sieve.
- Begin application of the spray solution and maintain agitation to avoid settling of the nematodes until all the mixture has been applied.



**Mix the solution thoroughly for 3 min and continue mixing during application to avoid sedimentation**

## Irrigation Equipment

- **nematop**<sup>®</sup> can be applied through micro-tube irrigation, drip irrigation, hand-held or motorised calibrated irrigation equipment.
- Irrigate prior to nematode application to moisten soil surface.
- Dissolve nematop in water and add it to a clean feeder tank. Agitate solution continuously during injection to prevent nematodes from settling. Alternatively add carboxy methyl cellulose at 0.4% w/v (available from Bioforce).
- After injection, rinse feeder tank with clean water and inject into system.

### ◆ Drench Application to Containers

Add 500 million nematodes to 1,000 litres of water and evenly apply to surface of potting media. Adjust volume accordingly for smaller or bigger pots as outlined in the drench mixing chart.

### Drench Mixing Chart

Pot Ø (cm)	Pot Volume (litres)	Drench per Pot (ml)	Pots per 500 million nematodes
10	0.5	10	100,000
12	0.8	16	62,500
14	1.5	30	33,333
	3	60	16,667
	5	100	10,000

## Dipping

- Add one pack to 800 litres of water and mix thoroughly the solution.
- Keep nematode solution agitated by bubbling in of compressed air.
- Alternatively add cellulose gum (available from Bioforce) at 0.4% w/v.
- 800 litres will treat approx. 4,000 plants with fist-size root balls.

## STRAWBERRY

### Contact

Bioforce Limited  
P.O Box 73,  
Drury 2247

Ph: 09 294 8973

Fax: 09 294 8978

[office@bioforce.net.nz](mailto:office@bioforce.net.nz)

[www.bioforce.co.nz](http://www.bioforce.co.nz)

Produced by e-nema<sup>®</sup>

Gesellschaft für Biotechnologie und biologischen Pflanzenschutz mbH

Klausdorfer Str. 28-36 T +49 4307-82950 info@e-nema.de

D-24223 Schwentinental F +49 4307-829514 [www.e-nema.de](http://www.e-nema.de)

### ◆ Dipping of Frigo Plants

- Add one pack of 500 million to 80 litres of water and mix solution thoroughly.
- Add cellulose gum (available from Bioforce) at 0.4% w/v to prevent nematodes from settling.
- One frigo plant takes up approx. 2 ml of solution. 80 litres will treat approx. 40,000 plants.

### ◆ Drench Application

- Drench 200 ml around the base of each plant or inject into the root zone.
- One pack of 500 million nematodes diluted in 4,000 litres of water will treat 20,000 plants.

## COMPATIBILITY

**nematop**<sup>®</sup> is compatible with most chemical fertilizers and pesticides. Only a few insecticides have a negative impact on nematop. In these cases apply nematop 3 days earlier or 2 weeks later. A compatibility list can be downloaded at [www.e-nema.de](http://www.e-nema.de).

## STORAGE

The product may be stored for a limited period of time at 4 to 10°C (see expiring date on the package).

## SAFETY

The active ingredient and the formulation of nematop are safe to users, consumers and the environment. There are no restrictions or safety instructions for the use of nematop.

