

# NemaTrident®H



**For biological control of vine weevil larvae and pupae (*Otiorhynchus sulcatus*) in soil or container-grown crops**

NemaTrident®H contains a naturally occurring beneficial entomopathogenic nematode, *Heterorhabditis bacteriophora* (15%), inert ingredients (65%) and water (10%).

Bag holds, 50, 250 and 500 million of *H. bacteriophora* infective juveniles. The nematodes are formulated in a wettable powder, enclosed in a Non-Water-Soluble pack.

**NemaTrident®H is safe, sustainable and can provide 90-100% efficacy for effective control of vine weevil larvae and pupae at temperatures as low as 12°C if applied with Bionema approved soil conditioners - making it the most effective and versatile product currently available.**

**Our unique Tri-Component system ensures maximum dispersal of infective juvenile nematodes within the soil which then go in search of larvae to penetrate and kill.**

## Directions For Use

### Application timing

NemaTrident®H should be applied from the end of March to the end of May for the control of overwintering larvae and pupae and from August to mid-October to target newly hatched L1 and L2 larvae which have developed from eggs laid in late spring.

### For best results

- Use NemaTrident®H with Bionema approved soil conditioner at recommended rate for maximum efficacy.
- Apply nematodes when vine weevil larvae are present in soil or substrates.
- Nematodes are susceptible to ultra-violet light and desiccation. Apply during early morning or late evening during low light levels. Do not apply in bright sunlight.
- The soil or growing media surface should be moist at the time of application and if possible irrigation before application will be beneficial.
- Apply nematode at a time when soil or growing media temperature is expected to be above 12°C for at least 3 - 6 hours per day
- The entire pack contents must be used once opened.
- Remove all filters from nozzles on spraying equipment to avoid blockages.

### Application rates

Crop / Substrates	Recommended rate
Soil	0.5 million nematodes per square meter
Pots, containers, growbags	10,000 nematodes per litres potting growing media
Strawberry	25,000 nematodes per plant
Raspberry	30,000 nematodes per plant (20 litre growing media)

### Application directions

- Apply NemaTrident®H as soon as possible after delivery.
- Apply the entire pack with recommended concentration of soil conditioner.
- As soon as NemaTrident®H is mixed with water and soil conditioner the entire spray solution should be used in a single application. Do not store for longer than 4 hours in tank.
- Do not exceed a pump pressure of 5 bar.
- Flush system with enough water to wash nematodes out of irrigation pipes.

## Application

### Ground spraying

- Clean the equipment with clean water before using NemaTrident®H.
- Remove all fine filters in the tubing and at the nozzles.
- Only use nozzles with at least 0.8 mm diameter.
- Mix the nematode into 10 litres of water.
- Rinse the pack since nematodes often cling to the packaging.
- Stir the stock solution until all lumps are dissolved.
- Add ¾ of required amount of water to the tank along with the required amount of soil conditioner.
- With the agitator running, add the required amount of NemaTrident®H through the sieve.
- Add the remaining water and begin application of the nematode maintaining agitation to avoid settlement of the nematodes until all the mixture has been applied.
- As soon as NemaTrident®H is mixed with water and soil conditioner the entire spray solution should be used in a single application. Do not store for longer than 4 hours in tank.

## Irrigation equipment

- NemaTrident®H can be applied through micro-irrigation (individual spaghetti tube), drip irrigation, or hand-held or motorised, calibrated irrigation equipment.
- Irrigate prior to nematode application to moisten soil or growing media surface.
- Dissolve NemaTrident®H in water and add it to a clean feeder tank. Agitate solution continuously during application to prevent nematodes from settling.
- After application, rinse feeder tank with clean water and inject into system.

## Dipping

- Add one pack of 500 million in 800 litres of water and mix the solution thoroughly.
- Keep the NemaTrident®H solution agitated by introducing compressed air.
- 800 litres will treat approx. 4,000 plants with fist-size root balls.

## Drench application to containers

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

Pot Ø(cm)	Pot volume (litres)	Drench/pot(ml)	Qty Pots /pack
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

## Strawberry

### Dipping of Strawberry plants

- Add one pack of 500 million to 80 litres of water containing approved soil conditioner and mix solution thoroughly.
- One Strawberry plant requires approximately 2 ml of nematode solution.
- 80 litres nematode solution will treat approximately 40,000 plants.

### Drench application

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

### Compatibility

NemaTrident®H is compatible with most chemical fertilizers and pesticides. Only a few insecticides have a negative impact on NemaTrident®H. In these cases, apply NemaTrident®H 3 days earlier or 2 weeks later. For detailed information on compatibility please visit our website: [www.bionema.com](http://www.bionema.com).

### Storage

The product should be stored at 5 to 10°C to retain maximum viability (see expiring date on the package).

### Precaution

- Keep away from children.
- Wash hands and face after handling with clean water.
- Do not freeze.

### Safety

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

### Limitation of liability

Efficacy of nematodes can be influenced by many factors such as storage, method of application, water volume, soil or substrate moisture and pest density. Bionema Limited cannot be held responsible for any risks. Users should follow the product instruction and contact us for help. Liability is disclaimed for insufficient quality or possible damage arising from circumstances outside of our jurisdiction.

### Contact

For further assistance and expert guidance please contact us below.