

Novel Method of Controlling Insect Pests Using Entomopathogenic Nematodes

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Who we are



Research & Development

Efficacy testing

Quality Assessment



Knowledge Transfer



Course 1: Application of biological insecticides entomopathogenic nematodes



Course 2: Application of biopesticides (fungi, bacteria)



Course 3: Application of biocontrol agents (predators, parasitoids & mites)

Training courses

Current nematode products

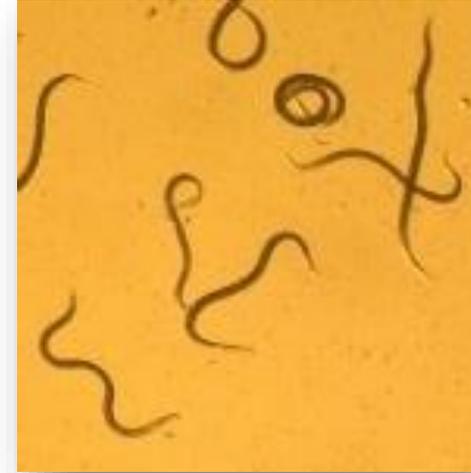
- *Steinernema kraussei* – cold tolerance- >5 - 30°C
- *Heterorhabditis bacteriophora* >12°C
- *H. bacteriophora* + *S.carpocapsae* + *S. feltiae*
- *Heterorhabditis downesi* >8 - 28°C)



- Inconsistency
 - Quality
 - Temperatures
 - Moisture conditions
 - Pest identification
 - **Compatibility- insecticide, fungicides, fertilizers**
 - Poor dispersal
 - Application equipment
 - Lack of training in application

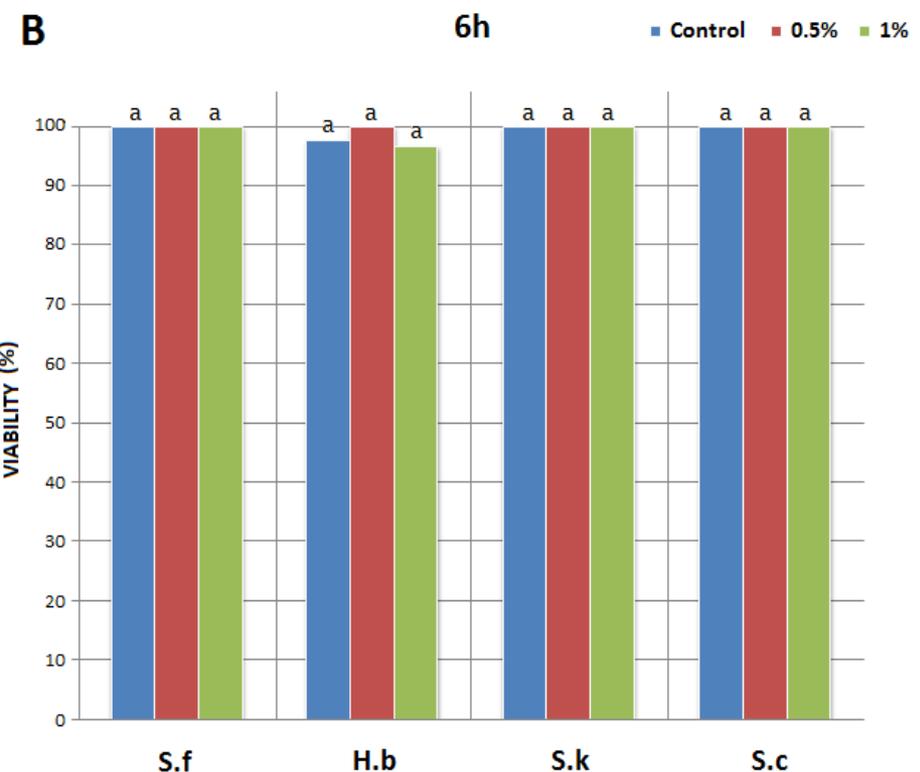
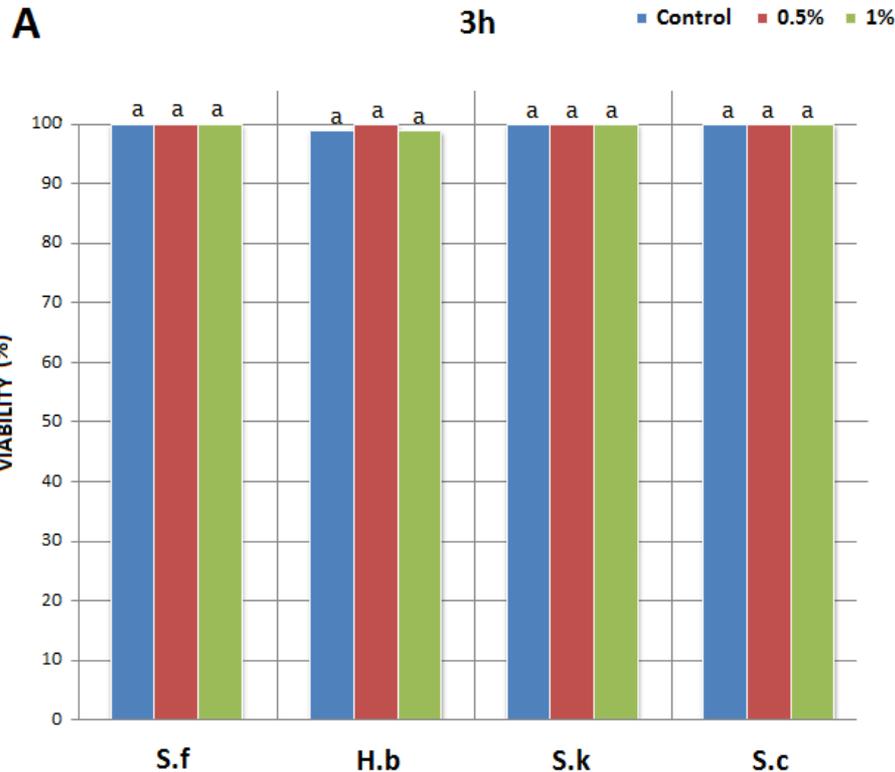


Compatibility



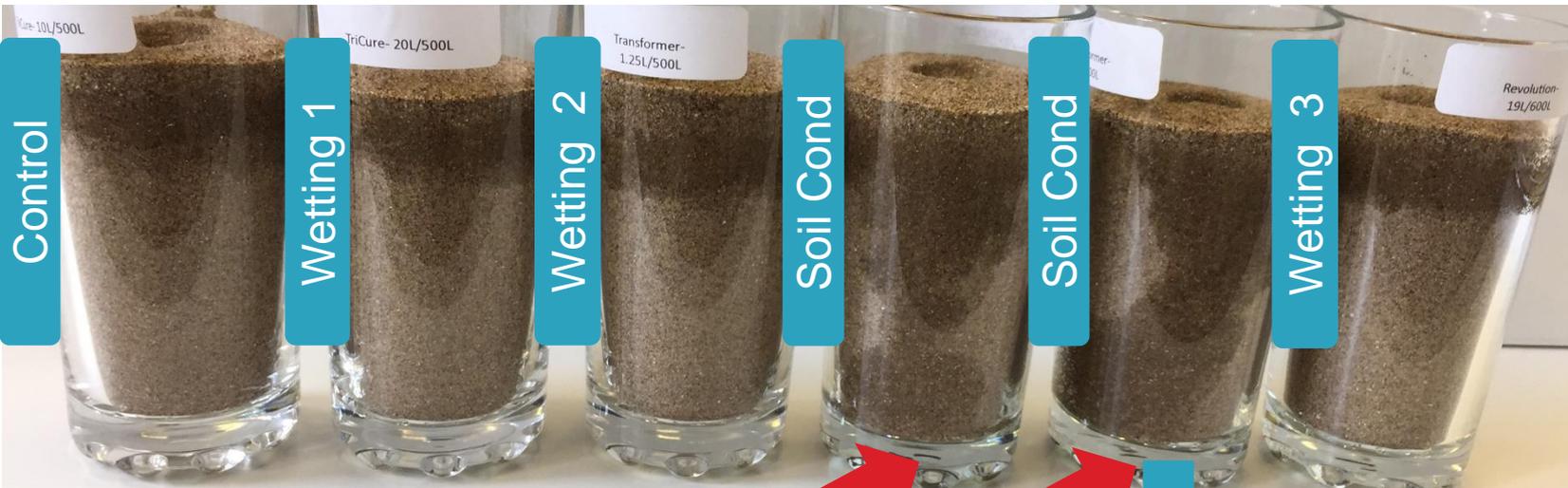
Nematode compatibility study

- Commercial entomopathogenic nematode products compared
- Soil conditioner (SC) used at 0.5 and 1%
- Nematodes exposed with or without SC for 3 and 6 hr



Entomopathogenic nematode species

Water movement test



Wetting 1 Wetting 2 Soil Conditioner Control



New nematode products

- **NemaTrident[®]**- unique Tri-Component system

9 new products for >40 targets

1. Nematode



3. Training & Advice

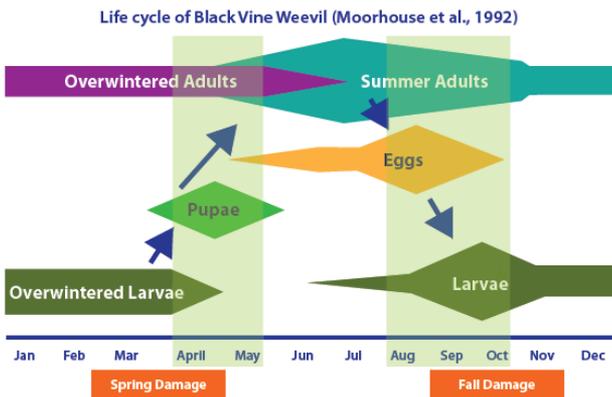
2. Approved soil conditioner



Case study 1- Vine weevil control in soil-grown strawberry (Field trial 2016)



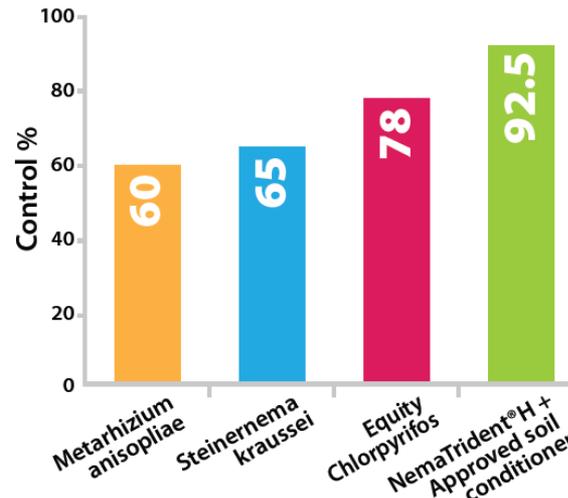
Life cycle of Black Vine Weevil



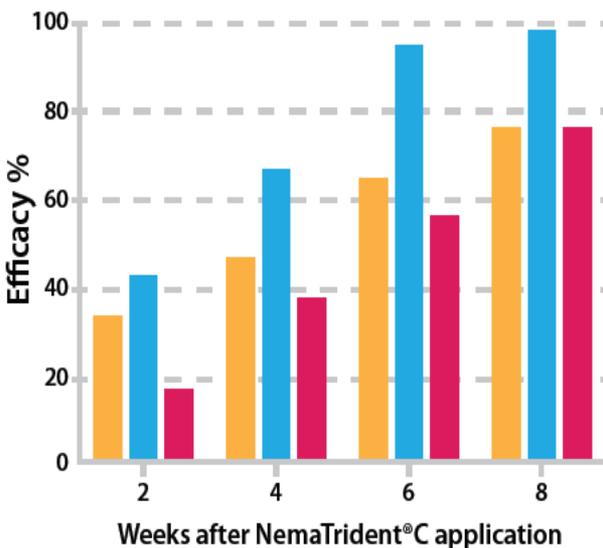
Life cycle of black vine weevil

(optimum times for application of nematode to control larvae indicated in highlighted areas).

Comparative efficacy results of different pesticides to black vine weevil control in soil grown strawberry



Case study 2- Chafer control in golf course (Field trial 2016)



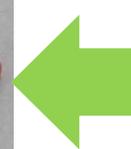
How NemaTrident[®] works with soil conditioner

- **Tri-Component system** ensures maximum dispersal into the soil or growing media by the nematodes, which then hunt out larvae and kill them quickly
- 20-30% higher control than other products
- Shown in field trials to be effective against many insect pests



Without SC

With SC



We are looking for distributors



NemaTrident®

Professional Growers

NemaTrident®

Home & Garden



NemaTrident^C
For the biological control of chafer grubs

Content: beneficial nematode, *Steinernema abdicatum*

NemaTrident^{CT}
For the biological control of black vine weevil

Content: beneficial nematode, *Steinernema abdicatum*

NemaTrident^{CT Plus}
For the biological control of black vine weevil

Content: beneficial nematode, *Steinernema abdicatum* + *Stenotaphrum secundatum*



NemaTrident^{CT Plus}
For the biological control of chafer grubs

Content: beneficial nematode, *Steinernema abdicatum* + *Stenotaphrum secundatum*

NemaTrident^F
For the biological control of winter a flower thrips and leafminer

Content: beneficial nematode, *Steinernema abdicatum*

NemaTrident^H
For the biological control of black vine weevil

Content: beneficial nematode, *Steinernema abdicatum*

NemaTrident^L
For the biological control of leather jacket, mole crickets and cutworms

Content: beneficial nematode, *Steinernema carpocapsae*

NemaTrident^S
For the biological control of Sclerotid flies

Content: beneficial nematode, *Steinernema abdicatum*

NemaTrident^T
For the biological control of codling moth, capsular flies, shore fly & fruit moth

Content: beneficial nematode, *Steinernema carpocapsae*

NemaTrident^L
For the biological control of leather jacket, mole crickets and cutworms

Content: beneficial nematode, *Steinernema carpocapsae* + **TRANSFORMER**

Unique two pack formula for better performance

2 Pack Formula

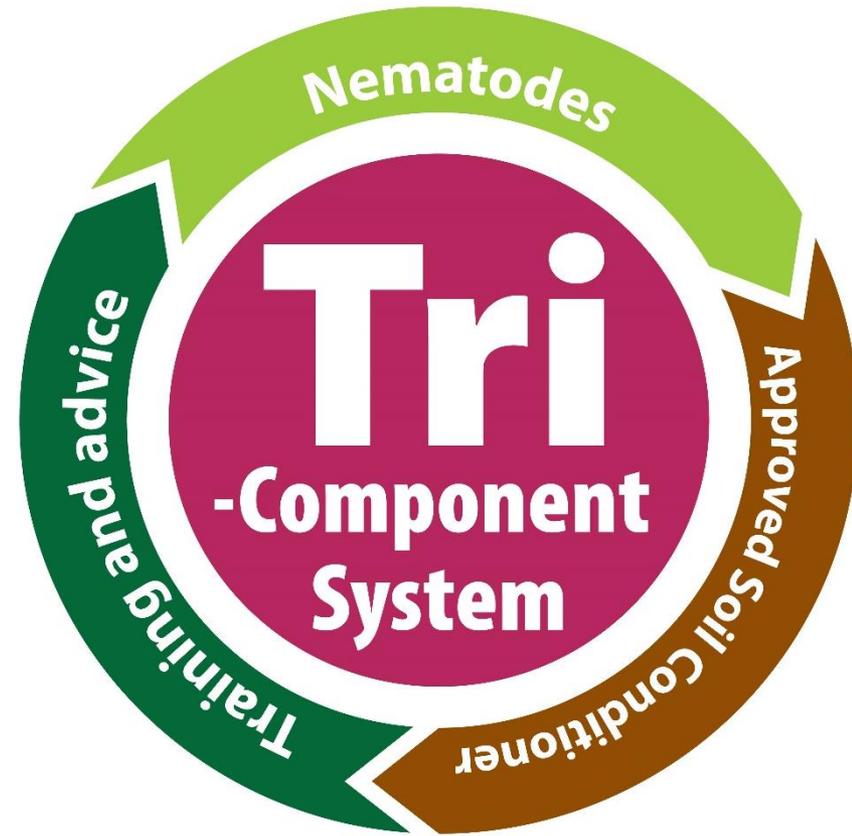
Home and garden protection:
• Lawns

USE AS SOON AS POSSIBLE
FOLLOW INSTRUCTIONS INSIDE THIS PACK

Bionema
Founded on research – focused on nature

Store NemaTrident^L at 5-10°C
Do not freeze
Contains living beneficial nematodes

Thank you



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