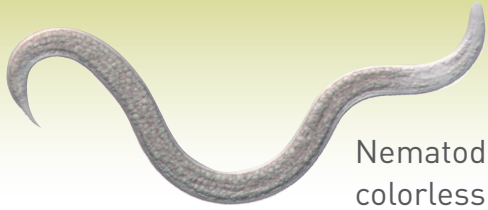


BENEFICIAL ENTOMOPATHOGENIC NEMATODES FOR THE CONTROL OF LARVAE, WEEVILS AND THRIPS

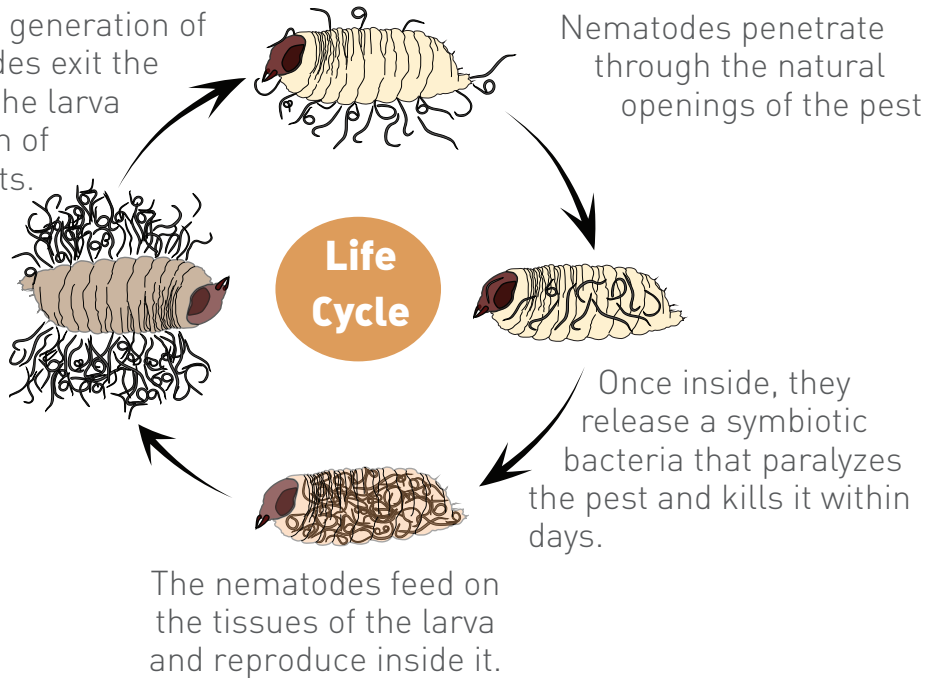
What are Beneficial Entomopathogenic Nematodes?



Nematodes are thread-like microscopic, colorless and unsegmented round worms.

How do Beneficial entomopathogenic Nematodes work?

The new generation of nematodes exit the body of the larva in search of new hosts.



▲ ADVANTAGES

- Nematodes actively seek their hosts
- Nematodes attack multiple life cycle stages of the host pest
- Easy and non-labour intensive applications
- Nematodes have no deleterious effects on humans or other vertebrate animals, non-target organisms or plants
- They have no negative effects on the environment
- Nematodes do not generate pest resistance
- They are compatible with many biopesticides
- Can be combined with fertilizers
- Can be combined with pheromones
- Can be used in plums, table grapes, peppers, nuts, avocado...
- No residue
- Can be applied at any time, no need to wait for the susceptible stage

💧 APPLICATION METHODS

- Drench or dip
- Conventional spraying equipment
- Drip-irrigation systems
- Bare-rooted or containerised plants can be dipped into a suspension of nematodes

An additional Biological control Agent for your arsenal!



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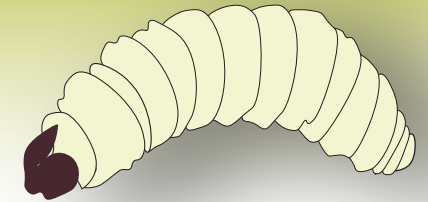
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BLACK VINE WEEVIL *Otiorhynchus sulcatus*

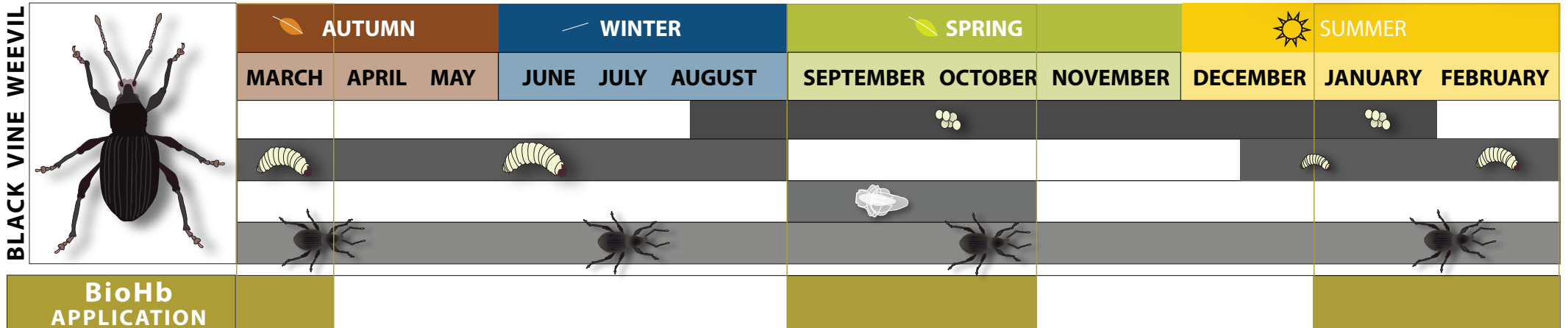
The Black vine weevil is matte black with fused wing covers and is unable to fly, it feeds at night on leaves while the larvae live below the soil surface and feed on roots, rhizomes and plant stems causing serious to unreversible damage.

Application Tips

- 2,500 litre water per ha, less water only during or after rain.
- Add surfactant for good coverage.
- Apply after harvest in autumn or spring.
- Apply in late afternoon.
- Minimum 4 h of 100% humidity necessary.



SOUTHERN HEMISPHERE



E EGG **L** LARVA **P** PUPA **A** ADULT

Black Vine Weevil <i>Otiorhynchus ssp.</i>	Against Overwintering Larvae	Against Newly Hatched Larvae
Entomopathogenic Nematode	BioHb (Heterorhabditis bacteriophora)	
Application	January – February - March	September - October
Soil temperature	> 12°C	
Dosage	0.5 – 1 million per m ²	



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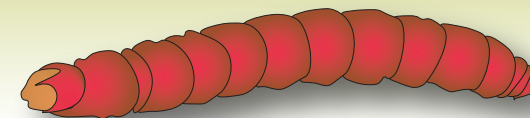
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CODLING MOTH *Cydia pomonella*

The Codling Moth adult has patterned wings with a variation of colors (grey, brown, black and dark orange) lays its eggs on the surface of the fruit, after emerging from the egg, the larvae burrow into the rind. A brown discoloration can be observed at the point of penetration as well as an increase in the incidence of mold and disease. The point of entry becomes an open door to other pests and pathogens.

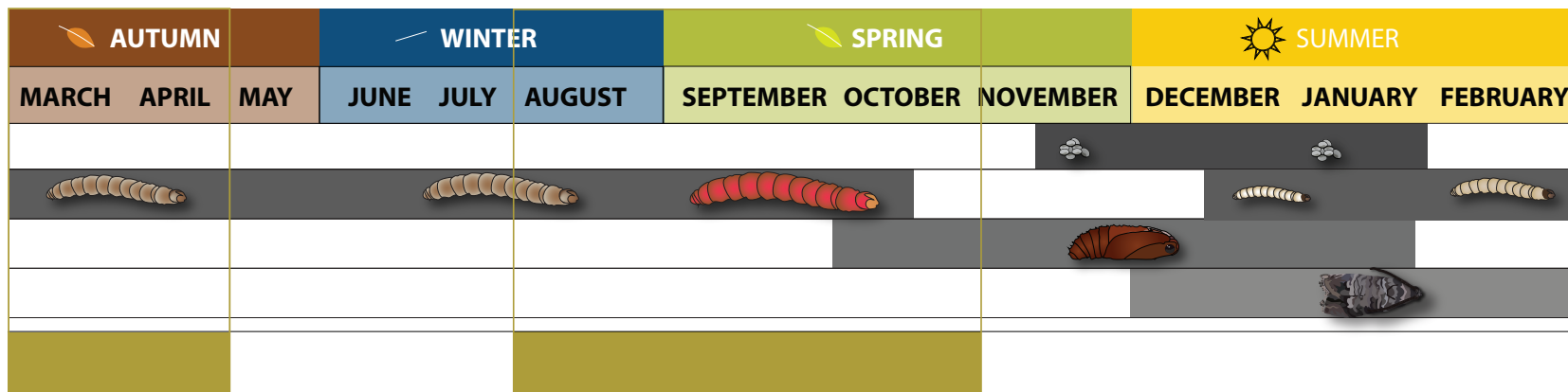
Application Tips

- 2,500 litre water per ha, less water only during or after rain.
- Add surfactant for good coverage.
- Apply after harvest in autumn or spring.
- Apply in late afternoon.
- Apply at 1 meter trunk height.



SOUTHERN HEMISPHERE

CODLING MOTH



E EGG **L** LARVA **P** PUPA **A** ADULT

Codling Moth <i>Cydia pomonella</i>	Against Overwintering Larvae	
Entomopathogenic Nematode	BioSf (<i>Steinernema feltiae</i>)	
Application	March - April	August - September - October
Air temperature	Apply at temperature > 12°C Minimum 4 h of 100% humidity necessary	
Dosage	1.5 billion per hectare (0.75 billion per Hectare on soil + 0.75 billion for 1 meter trunk height)	

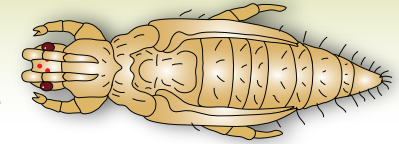


WESTERN FLOWER THRIPS (WFT) *Frankliniella occidentalis*

The Western Flower Thrips is a year-round pest yet are less destructive during wet weather. Thrips cause damage to plants and fruit by sucking the plants cells leaving silvery speckling or white patches.

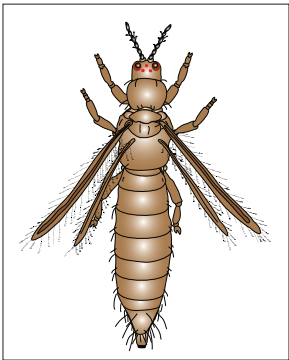
Application Tips

- Apply in the evening to make use of the higher humidity.
- Growing points of plants should stay moist for at least 3 hours after application
- Don't apply with a wetting agent.
- Apply in late afternoon.
- At low infestation apply every two weeks with 250.000 nematodes per m².

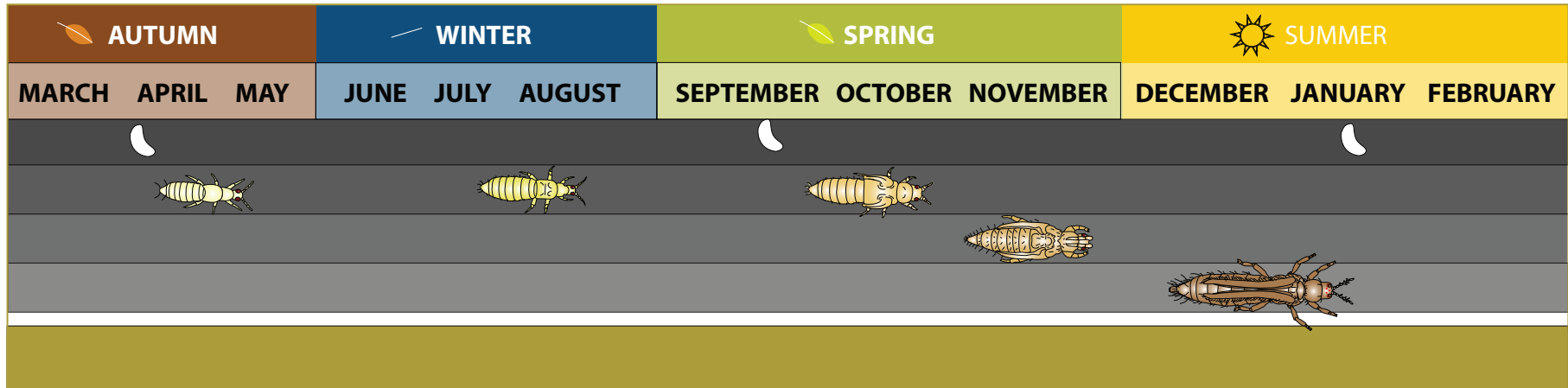


SOUTHERN HEMISPHERE

WESTERN FLOWER THRIPS



**BioSf
APPLICATION**



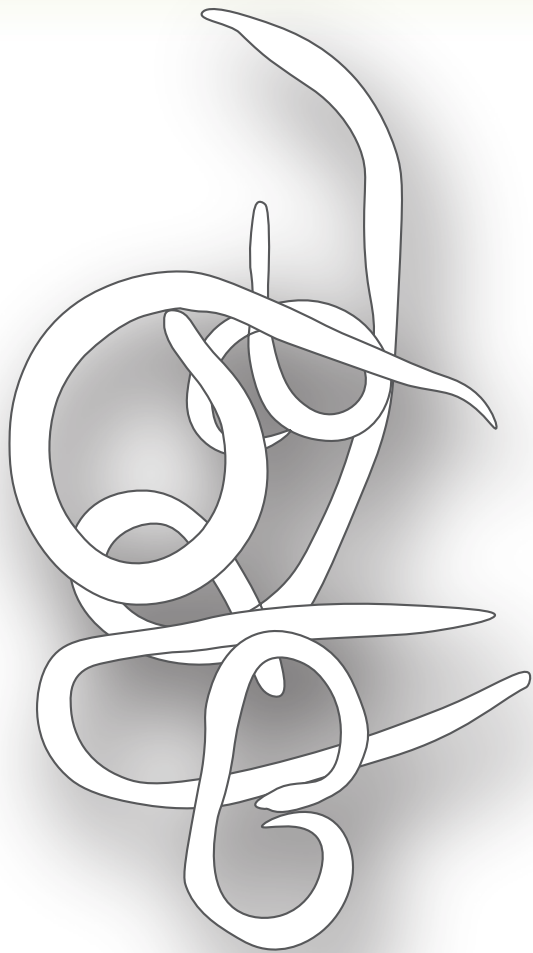
E EGG **I** INSTAR **P** PUPA **A** ADULT

Western Flower Thrips <i>Frankliniella occidentalis</i>	Against all stages present at the time of application
Entomopathogenic Nematode	BioSf (<i>Steinernema feltiae</i>)
Application	Routine weekly application
Air temperature	< 28°C
Dosage	0.125 million per m ² + additive every 7-10 days



BIOSf *Steinernema feltiae*

Family: *Steinernematidae*
Genus: *Steinernema*
Species: *S.feltiae*



TARGETS

MAIN TARGET

Fungus gnat (sciarids)
Codling moth and
thrips pupae.

CROPS

Turf, vegetables, flower
gardens, orchards,
trees, vineyards and
greenhouses.

ENTOMOPATHOGENIC NEMATODE



NOT IN DIRECT SUNLIGHT

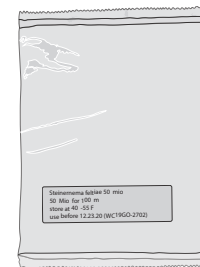


DO NOT FREEZE

TIP

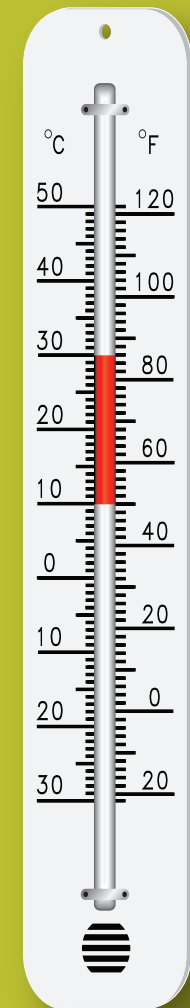
Use the correct nematode
species for the target pest.
Nematodes can be kept
refrigerated for several
weeks.

PACKAGING



250 M infective juveniles
500 M infective juveniles

TEMPERATURE TOLERANCE



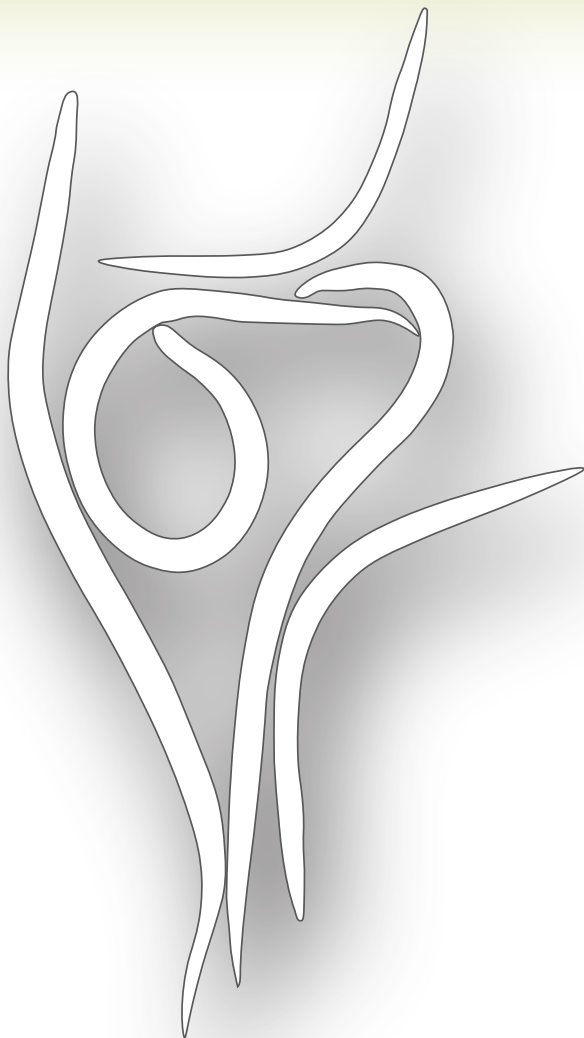
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BIOHb *Heterorhabditis bacteriophora*

Family: *Heterorhabditidae*
Genus: *Heterorhabditis*
Species: *H. bacteriophora*



TARGETS

MAIN TARGET

False codling moth,
macadamia nut borer,
thrips pupa, chafer
grubs and
black vine weevil.

ADDITIONAL TARGET

Strawberry root weevil,
white grubs and other
grub species.

CROPS

Turf, vegetables, flower
gardens, orchards,
trees, vineyards and
greenhouses.

ENTOMOPATHOGENIC NEMATODE



NOT IN DIRECT SUNLIGHT

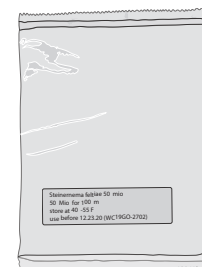


DO NOT FREEZE

TIP

Use the correct nematode
species for the target pest.
Nematodes can be kept
refrigerated for several
weeks.

PACKAGING



250 M infective juveniles
500 M infective juveniles

TEMPERATURE TOLERANCE



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