

# BioSc

*Steinernema carpocapsae*

BioSc (*Steinernema carpocapsae*) is an entomopathogenic nematode (insect-pathogenic nematode)



Codling moth damage on apple

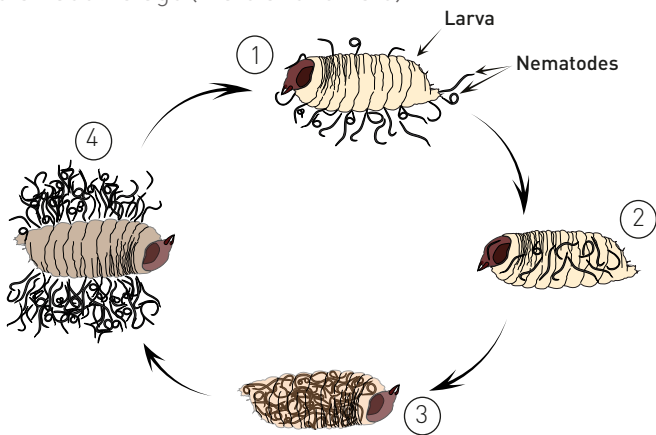
Cutworm damage on carrot

## DESCRIPTION

Infective juveniles are between 0.44-0.65 mm in length and transparent in color. This species is an “ambush” forager, standing on its tail in an upright position near the soil surface and attaching to passing hosts, even capable of jumping.

## LIFE CYCLE

The life cycle consists of a few stages: egg, 3-4 juvenile stages and an adult stage (male and female).



1. The infective juvenile stage of nematodes penetrate through the natural openings of the pest.
2. Once inside, they release a symbiotic bacteria along with a variety of proteins that paralyzes the pest and kills it within days.
3. The nematodes feed on the bacteria and host tissues and reproduce inside it.
4. The new generation of nematodes exit the body of the larva in search of new hosts.

## TARGET PESTS

Billbugs, cutworms, armyworms, sod webworms, chinch bugs, crane flies, codling moth, banana moth, cranberry girdler, clearwing borers, black vine weevil, peachtree borer and shore flies.

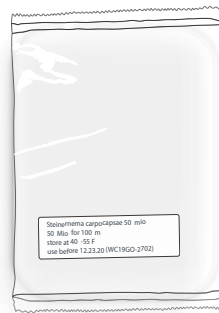


Cutworm damage

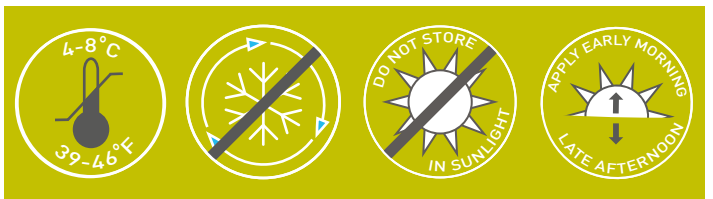
## CROPS

Turfgrass, ornamentals as well as fruit and vegetable crops.

## PRODUCT



- BioSc in bag  
50/250/500 million infective juveniles  
of *Steinernema carpocapsae*

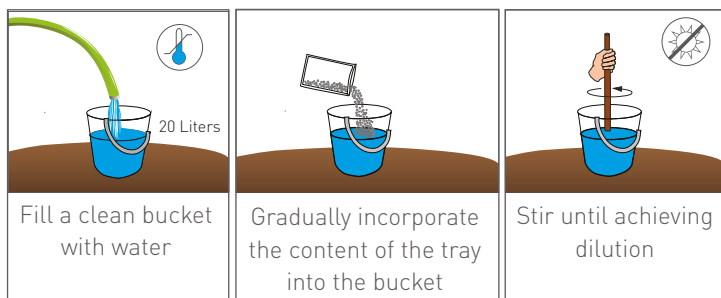


# BioSc



## APPLICATION & HANDLING

- For optimum results BioSc should be applied early morning or late evening to minimize the effect of heat and sunlight.
- The soil surface should be moist at the time of application and it's recommended to maintain the soil moist for at least 6-8 hours after application.
- BioSc can be applied as a drench, through micro-irrigation or with a coarse spray application.
- For optimal results apply *S. carpocapsae* in temperatures of 18-28°C/ 64-82°F with a relative high humidity (above 60%).



1. Fill a clean bucket with up to 20 liters of water (depending on the packet size).
2. Gradually incorporate the content of the tray into the bucket.
3. Stir until achieving dilution
4. Once the contents of the tray have been diluted in the bucket of water, add the contents of the bucket to the application equipment.

## STORAGE

- BioSc is shipped in insulated, chilled boxes. Packaging must be kept intact until use.
- Keep in a cool location until release.
- If they cannot be applied immediately, they may be stored in a dark place at a temperature of 4-8°C/39-46°F.



Micro-irrigation application

## DOSAGE

- Apply as soon as damage is visible
- The amount and frequency of applications is determined by crop, the degree of infestation, weather conditions and damage inflicted on the crop. Additional quantities might be needed according to the infestation level and scouting information.
- Consult with your BioBee representative.

## MONITORING

Scouting and monitoring is crucial.

Results can be observed 3-5 days after application.

Under some circumstances, successive generations of *Steinernema carpocapsae* nematodes can provide extended biological pest control throughout the growing season.

## GENERAL COMMENTS

Before combining BioSc with any chemical pesticide in the crop, please consult your BioBee technical advisory representative.

## DISCLAIMER

The success of biological pest control is affected by the crops initial pest population (upon application of the product), weather conditions and chemical residue present in the crop, among other possible aggravating factors.