

nemaplus[®]



Biotech for Nature

Biological Control of Sciarids in Greenhouses with *Steinernema feltiae* nematodes

Area of application

Damage is caused by the larvae, which feed on roots and stalk tissue of seedlings, cuttings and younger plants. Fungal diseases gain entry through the wounds caused by sciarid larvae. Plants known to be susceptible to sciarid attack include Poinsettia, Azalea, Cyclamen, Kalanchoe, Exacum, Gerbera and Begonia. Potted herbs are another important area of use. With increasing use of compost in potting soil, sciarids become a major problem.

Mode of action

nemaplus[®] controls the larval stages of sciarids (*Bradysia* spp.). Applied as a drench to the soil or spray, the nematode *Steinernema feltiae* finds the insect and invades through natural openings into the body cavity, where it releases its symbiotic bacteria. The bacteria multiply and kill the insect within 1-2 days. The nematodes feed on the bacteria and propagate. About 1,000 nematodes of the next generation emerge two weeks after application from one sciarid larva. **nemaplus**[®] is safe for beneficial insects, plants and humans.

Application

The recommended application rate for **nemaplus**[®] is 0.5 million nematodes per m² of soil surface. If the potting soil contains organic materials or Perlite, the dosage needs to be increased. **nemaplus**[®] is mixed with water and applied through conventional spraying equipment or irrigation systems. Potting soil should be moist but not wet. Too much watering can wash nematodes out of the substrate. **nemaplus**[®] works best at soil temperatures between 10 and 28°C.

Efficacy

Results of trials carried out by research stations all over Europe document the high efficacy and advantages of using **nemaplus**[®] to control sciarid flies. Nematode applications outperform other control measures as nematodes are mobile and actively search for larvae in the soil. Development of resistance is not expected. **nemaplus**[®] is compatible with most chemical plant protection compounds and fertilizers. It also controls soil stages of Western Flower Thrips (*Frankliniella occidentalis*) and, applied on the foliage, leafminer and *Tuta absoluta*. **nemaplus**[®] can be combined with predatory mites and beneficial insects.



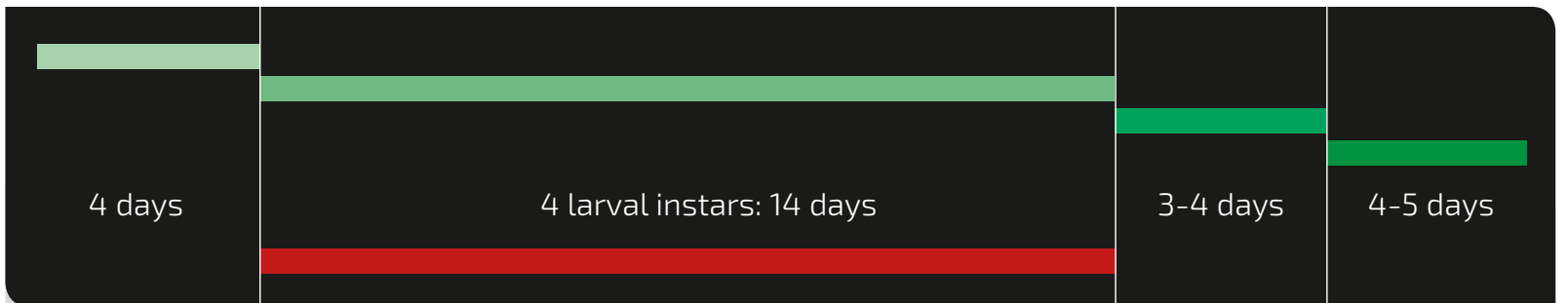
Sciariid larvae feed on roots and stalk tissue of seedlings, cuttings and young plants, which provide entry ports for fungal diseases.



Sciariid flies prefer to lay eggs in substrates with a high content of composted organic material.



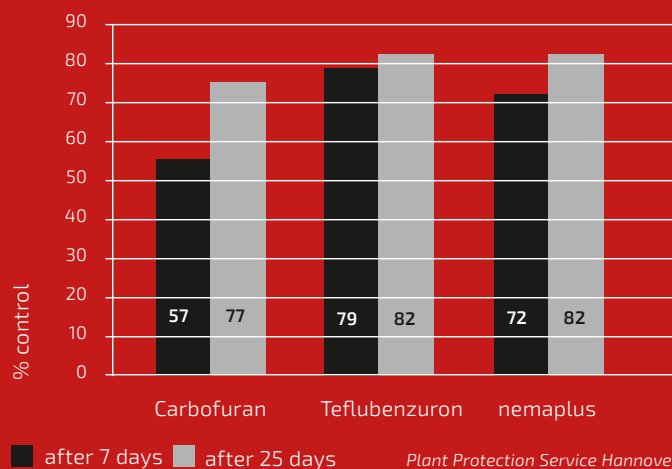
Steinernema feltiae controls sciariid larvae. Application should take place a week after the peak of adult emergence.



Life Cycle of Sciariid Flies 28 days at 21° C

■ Egg
 ■ Larva
 ■ Pupa
 ■ Adult
 ■ Application

Reduction of Sciariid Flies in potted plants



Plant Protection Service Hannover, 2000

Further information needed?

Please contact us!

We will be happy to answer your questions!

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