

Champignonmückenbekämpfung
 Control of Mushroom Sciarids
 Lutte contre la mouche du champignon
 Lotta contro le Sciaride della fungaia
 Control de la mosca del cultivo del champiñón



nemacel®

Biological Control of Mushroom Sciarids



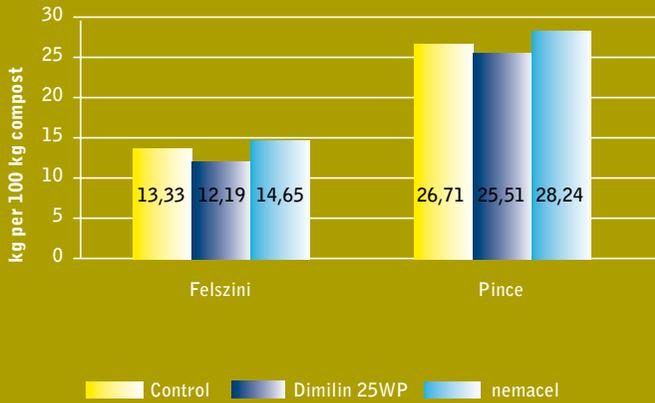
Need further information?
**Please contact us! We would be pleased
 to answer your questions!**



nemacel® is produced by:
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Yield at different treatments



Recommendations for use:

- nemacel® is applied to the casing layer as an aqueous suspension at 2 million nematodes per m² (190.000/sq.ft.)
- Splitting of the total dosage into two applications, the first at casing and the second a week later, is the most effective.
- nemacel® contains living organisms and works best if used as soon as possible after delivery. Product can be stored at 2 -12° C (36-54°F) up to the expiration date printed on the package.

THE PROBLEM

Sciariid Flies (*Lycoriella sp.*, *Bradysia sp.*)

Sciariid flies are the most damaging insect pest in commercial mushroom production. Larvae cause yield loss of up to 40 % and, more importantly, impact quality rating. Occurrence of adults in pre-packed mushrooms can cause rejection by retailers.



Sciariid fly

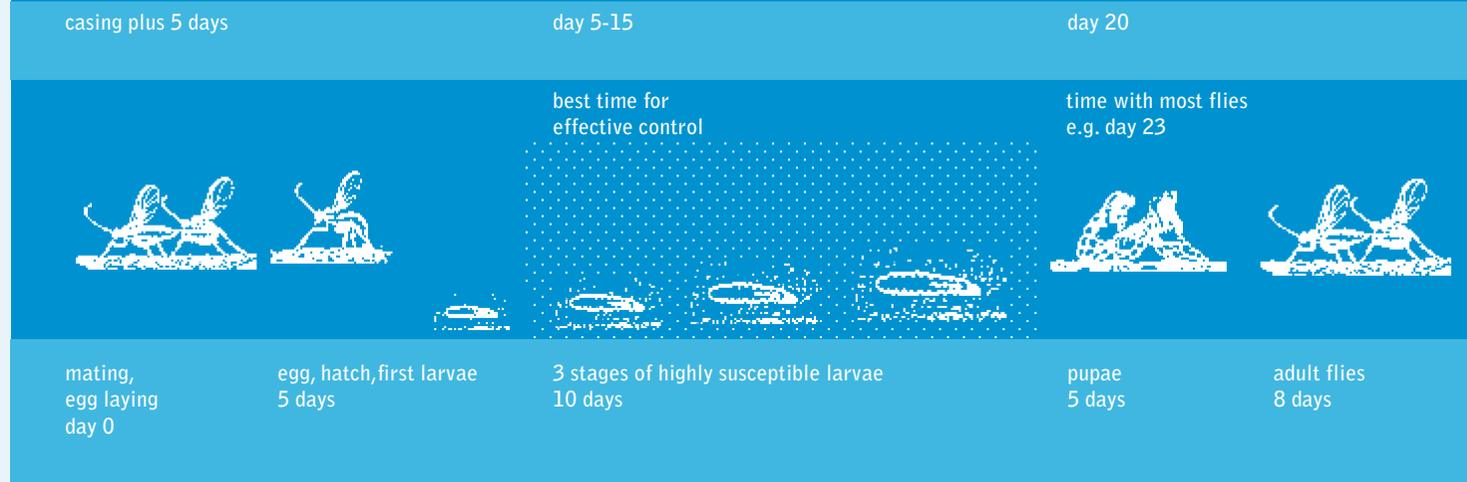
Adult sciariids are small, black flies, of 3 to 5 mm (0,1 to 0,2 inches), with two slender antennae and long legs. They spread fungal spores and mites, and can be a nuisance for picking staff.



Sciariid larva, transparent with distinct shiny black head

Main damage is caused by the larvae feeding on growing mycelium and developing pinheads and buttons. They tunnel in the stalks and caps of larger mushrooms.

APPLICATION TIMING



THE SOLUTION

nemacel® contains insect-pathogenic nematodes of the species *Steinernema feltiae*.



Sciariid larva infected with *Steinernema feltiae*

LIFE CYCLE OF SCIARID FLIES

Adult flies live for 7 days in which gravid females lay approx. 200 eggs in unspawned compost and casing soil. At mushroom growing temperatures, the life cycle takes about 4 weeks.

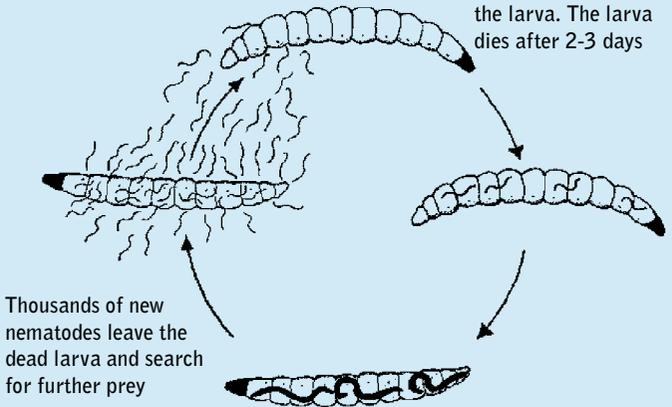
The short life cycle together with the high propagation rate can lead to extreme increases in fly numbers, particularly towards the end of the cropping period. Flies develop resistance to chemicals within a short period of time. nemacel® provides the perfect solution, since resistance development to entomopathogenic nematodes is not possible.

Unlike insect growth regulators, nemacel® does not reduce mushroom yield. nemacel® has a minor effect on phorids.

MODE OF ACTION

The nematodes actively search for sciariid larvae

The nematodes enter the larva. The larva dies after 2-3 days



Thousands of new nematodes leave the dead larva and search for further prey

Nematodes reproduce inside the dead larva