

Nematode

Nematodes are the most numerous multicellular animals on Earth. A handful of soil will contain thousands of nematodes, many of which parasitize insects (Figure 1). Nematodes enter insects through soft membranes, breathing ducts, mouths and anus. Once inside they release a pathogenic bacteria from their stomach that kills and digests the insect host. The nematodes reproduce inside the insect then burst forth once the resources have been exhausted (Figure 2).

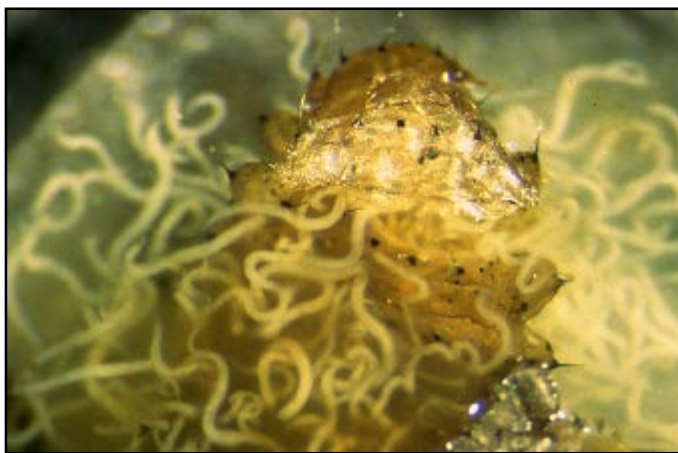


Figure 2. **Nematodes bursting from parasitized caterpillar.**

Products

Steinernema carpocapsae

(Scanmask, Millennium, NemAttack)

Heterorhabditis bacteriophora

(NemaSeek, NemaSys G, LarvaNem)

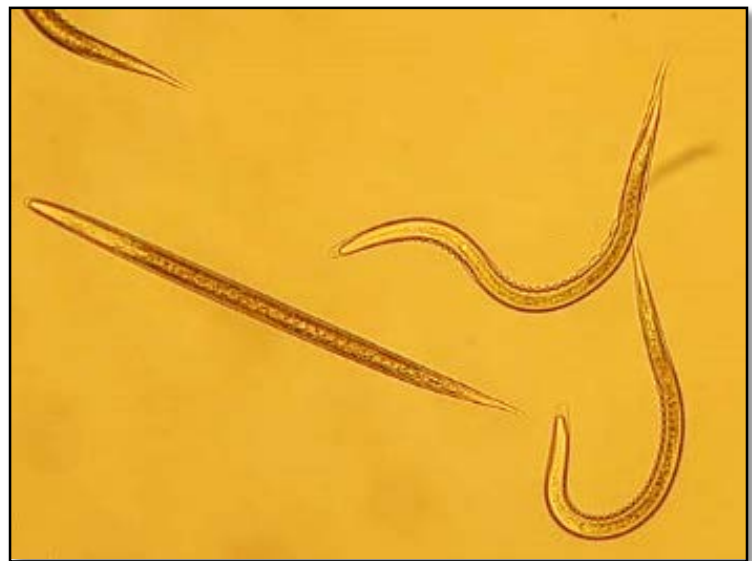


Figure 1. **Infective juvenile nematodes in water.**

Activity

Nematodes can be found in soil or water, but can also be purchased by numerous producers. Nematodes are tested for particular insects on foliage or in the soil. Their effectiveness is highly dependent on moisture, but have seen success in very hard to treat areas such as within wood or plants.

Research

Nematodes actively hunt their prey, which provides an advantage when dealing with insects concealed within soil or plant material. WTARC is testing nematode efficacy on soil dwelling and conceal feeding crop pests, such as sawflies, cabbage weevil and alfalfa weevil among others.