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## Nematology Laboratory

Under the direction of

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Research emphasizing on Nematology, Plant Parasitic Nematodes and Entomopathogenic Nematodes.

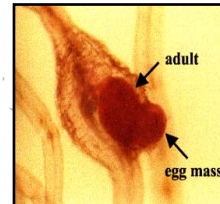
- Selection of antagonistic microorganism capable for controlling of plant parasitic nematodes.
- Searching the new entomopathogenic nematode species and its efficacy for controlling insect pest.
- Ecology and efficacy of Entomopathogenic nematode and its bacterial symbiont metabolite to control plant parasitic nematodes and plant pathogens.



### Research Programs

#### Plant Parasitic Nematodes

Plant Parasitic



Plant-parasitic nematodes are small wormlike (300-1,000 micrometers, by 15-35 micrometers), invisible to the naked eyes. Several hundred species are known to feed on plants with their spears or stylets causing a variety of plant disease. The annual losses caused by nematodes worldwide over \$80 billion annually. Therefore, How effective to control them is our interesting. Biological control is one of the tactics that our laboratory focus for selecting the high potential antagonistic microorganism to control plant parasitic nematodes and will be developed to new biological control agent. Furthermore, surveying the nematodes damaged in economic important crops such as chili, potato, guava and their population dynamics are also determine.



#### Entomopathogenic Nematodes

Entomopathogenic Nematodes

Entomopathogenic nematodes, insect parasitic nematodes mutualistically associated with two bacterial genera, *Xenorhabdus* for *Steinernema* and *Photorhabdus* for *Heterorhabditis*. Antagonistic effect of this nematode-bacterium complex to plant parasitic nematodes was evaluated. In the present we attempt to search the high potential entomopathogenic nematode new species and its bacterial symbiont metabolite for controlling the insect pest, some plant pathogens and plant parasitic nematodes. A new alternative to determine the possibility to use nematode new species as a biological control agent.

