

STUDIES ON THE EFFECT OF PESTICIDES ON NEMATODES ATTACKING ONION

BY

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A RESEARCH REPORT

**SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF
THE ADVANCED COURSE**

IN

AGRICULTURAL BIOLOGY

FOR

THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE

**FACULTY OF AGRICULTURE
EASTERN UNIVERSITY
SRILANKA**

1999

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ABSTRACT

The study was carried out at the faculty of Agriculture of the Eastern University to evaluate the efficiency of Pesticides on Nematodes attacking onion (*Allium cepa*). Carbofuran (Nematicides), Captan (Fungicide), Neem seed kernal and Lakada (*Gardenia forsbegi*) leaf bud (as botanicals) and soil sterilization were used as treatments.

For this experiment soil and onion samples were brought from Kaluthawalai. Nematode species found in the sample were *Aphelencooides besseyi*, *Xiphinema elongatum*, and *Helicotylenchus eavenssi*. With these nematodes fungus species such as *Alternaria*, *Fusarium*, *Aspergillus* and *Rhizoctonia* were also found.

For this study, All the onion plants were grown in plastic pots and all the treatments except Captan were applied as a basal. Captan was applied at weekly interval.

Soil sterilization was most effective in reducing the nematodes among the treatments used in this study. The other treatments such as neem, carbofuran were also found to be very effective in reducing nematodes in soil.

Based on these findings, soil sterilization can be recommended for glass house experiment, because it was not economical for large-scale cultivation. Carbofuran and Neem could be used as alternative to other synthetic nematodes to control these nematodes in Kaluthawalai area.

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