

STUDIES ON THE EFFECT OF PESTICIDES AND COWDUNG ON NEMATODES ATTACKING ONION

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ABSTRACT

The study was carried out in the Eastern University, to evaluate the effect of pesticide and cowdung on nematode attacking onions.

Basamid (nematicide), Carbofuran (nematicide), Prince (insecticide) and Neem seed kernel powder were used as treatments. Half of these treatments were incorporated with organic matter.

Onion bulbs were planted in 45 treated plastic pots and 5 were planted in non-treated plastic pots. All the treatments were applied as a basal. All the bulbs were treated with Thiram (fungicide) before planting.

Among these treatments, Neem with organic matter was most effective in reducing the parasitic nematodes in soil. The other treatments such as Basamid with organic matter and Carbofuran with organic matter were also found to be effective in reducing the nematode in soil. But cost involves and pollution is the main problem with Basamid and Carbofuran has the deleterious effect to the human health. So farmers do not prefer to use these chemicals to reduce the nematodes in soil.

The growth and development of onion was significantly higher in soil treated by Neem with organic matter than other treatments. Application of nematicides along with organic matter was found to be more effective in controlling the nematode population rather than applying the nematicides alone to the soil.

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