

STUDIES ON THE VARIETAL RESPONSE OF ONION AGAINST NEMATODES

BY

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ABSTRACT

A study was carried out to evaluate the response of selected onion varieties to nematodes at the Eastern University, Sri Lanka, during the period of September to November 1999.

Yield loss by nematodes on onion is the recently developed problem in Batticaloa district. Infected soil sample was brought from Kaluthawalai and it was analyzed and 3 predominant species of nematodes were identified, namely, *Aphelencooides spp*, *Xiphinema spp*, and *Helicotylenchus spp*.

The response of Jaffna and Nilaveli varieties of onion were tested against onion nematodes. For these studies soil sterilization and bulb dip in Carbofuran were used as pretreatment.

Based on these studies, combination of soil treatment and bulb treatment has effectively ($p < 0.05$) reduced the nematode number and increased the bulb yield in Jaffna and Nilaveli varieties.

Although both varieties were susceptible to nematode attack, the nematode attack was low in Jaffna variety with these treatments. Soil treatment in Jaffna variety was effective in reducing the nematode number and increasing the bulb yield. Bulb treatment was not very effective in reducing nematodes in both varieties.

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