Pak. J. Nematol., 27 (2): 159-166, 2009

MANAGEMENT OF ROOT-KNOT NEMATODE INFECTING BRINJAL BY BIOPESTICIDES, CHEMICALS, ORGANIC AMENDMENTS AND BIO-CONTROL AGENT

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Abstract

The potential of bio-pesticides, chemical pesticides, organic amendments and bio-control agent was studied in controlling the root-knot nematode *Meloidogyne incognita* on brinjal "cv" Dilnasheen in two greenhouse experiments. In first experiment bio-pesticides (Abamectin and Azadirachtin) and a chemical pesticide Lorsban were tested alone and in combination with a bio-control agent *Pasteuria penetrans* for the management of root-knot disease. The best control (61 %) in root galling was recorded in pots treated with Azadirachtin + *P. penetrans* followed by Abamectin + P. penetrans (52 %), Abamectin and *P. penetrans* (48 %), Lorsban + *P. penetrans* (42 %), Azadirachtin (36 %) and Lorsban (21%) compared with unamended control. All the treatments showed significant reduction in egg-masses compared with untreated control; however, maximum decrease (66 %) in egg-masses was recorded in Azadirachtin + *P. penetrans* treatment while lowest reduction (45 %) was observed where Lorsban was applied. In another experiment bio-pesticides (Abamectin and Emamectin) and organic amendments (saw dust and kanair leaves) and a chemical (Furadan) were evaluated in controlling the root-knot disease. Abamectin proved to be the best in reducing root galling (62 %) and egg-masses (79 %) followed by Furadan while other treatments showed intermediary effects compared to untreated inoculated control