

## MANAGEMENT OF *MELOIDOGYNE INCOGNITA* ROOT-KNOT NEMATODE BY INTEGERATION OF *BACILLUS THURINGIENSIS* WITH EITHER ORGANIC AMENDMENTS OR CARBOFURAN

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### Abstract

In pot experiment, *Bacillus thuringiensis* (Turex), three organic amendments viz., sawdust (SD), poultry manure (PM) and sesame cake (SC) as well as carbofuran as a standard nematicide were evaluated either alone or in combination for the management of *Meloidogyne incognita* infecting tomato plants. Their effects on plant growth criteria were also investigated. All of the individual treatments reduced tomato root-galls and  $J_2$  in the soil as well as improved growth of the infected plants. However, increases in the growth criteria was more pronounced in inoculated plants treated with Turex or SC. The addition of such organic amendments or carbofuran to Turex gave best nematode control and plant growth than that of their single application. The best combination with regard to reduction of root-galling (83.33 %) and  $J_2$  (90.15 %) was obtained with Turex + SD followed by Turex + PM and Turex + SC. Also, the results of interactions of binary mixtures indicated that only Turex + SC mixture gave a potential effect for nematode control which has potential for use in the integrated nematode management while the other mixtures exhibited additive effects.