

## MANAGEMENT OF ROOT-KNOT NEMATODE, MELOIDOGYNE INCOGNITA IN TOMATO

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### Abstract

The effect of six organic additives and nematicides viz., chopped neem leaves, chopped ficus leaves, fresh cow dung, NPK fertilizers, phorate (Thimet 10G) and carbofuran (Furadan 3G) on *Meloidogyne incognita* and tomato (*Lycopersicon esculentum* Mill. cv. 'K-25') growth parameters were evaluated in a greenhouse trial. All treatments stimulated plant height, fresh and dry weights, and fruit weight compared to untreated inoculated plants. Plants treated with carbofuran were the best followed by phorate, neem leaves (*Azadirachta indica* A. Juss.), NPK fertilizers, ficus leaves (*Ficus racemosa* L.) and fresh cow dung in that order. Application of organic additives and nematicides also suppressed pathogenic effect and resulted in significant reduction in gall index and population density of *Meloidogyne incognita* in roots and soil. The highest reduction in root-knot index was noted in plants treated with carbofuran, whereas the lowest reduction was observed in plants treated with fresh cow dung..