

Management of root-knot nematode, *Meloidogyne incognita* in tomato using neem products

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ABSTRACT : An experiment was conducted at cultivator's field of Tholai, Tehsil-Jamwa Ramgarh (Jaipur) with naturally infested soil (3.5 l/g soil) of root-knot nematode. *Meloidogyne incognita*. The experiment consisted of ten treatments viz. Neem cake (10q/ha), Vermi compost (10q/ha), Poultry manure (10q/ha), *Trichoderma viride* (6-8g/kg seed), Neem cake + vermi compost, Neem cake + Poultry manure, Neem cake + *Trichoderma viride* + Poultry manure + vermi compost, Vermi compost + *T. viride* alongwith treated check (Carbofuran 3G @ 2.0 kg ai /ha) and untreated check. Tomato seedlings were raised in infested field after forty five days of sowing. The untreated control plot was also maintained for comparison. The plants were examined after 120 days & recorded root-knot galls. Root-knot galls were counted after proper staining of roots and categorized for root-knot index. All treatments were significantly higher as compared to untreated check. It was found that the treated check (carbofuran 3G) was very effective in the management of root-knot nematode followed by Neem cake + *Trichoderma viride* + Poultry manure + Vermi compost, Neem cake + Vermi compost, Neem cake + Poultry manure, Neem cake as compared to untreated check - 9.24 (highest nematode population). It was found that the fruit yield was higher in carbofuran (200.0q/ha) which was at par of Neem cake + *Trichoderma viride* + Poultry manure + vermi compost (190.33q/ha) as compared to untreated check (111.66).

Key Words: Management, Tomato, *Meloidogyne incognita*, organic amendments.