

Effect of Different Animal Manures on *Meloidogyne incognita* (Kofoid and White) on Tomato

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Abstract

Root-knot nematode, *Meloidogyne incognita* are generally regarded as silent enemies in soil and cause losses up to 80% in heavily infested vegetable fields. Stunting, yellowing and a general unthrifty appearance are the symptoms developed above ground slowly over time and remain unnoticed until plants are well developed. Infested tomato wilt or die in hot, dry weather causing losses in yield ranging from 28-68%. A screen house study was conducted to test the effect of different animal manures on the eco-friendly management of *M. incognita* on tomato. Recommended dosage of manures, biological control agent and chemical nematicide were compared with control. The results revealed that goat manure was the best alternative for the management of *M. incognita* and more or less equally effective to carbofuran. It is not only suppressing the gall formation but also improve crop growth and biomass production. While bio agent, *Tricoderma viride* and poultry manure ranked third and fourth, respectively in managing *M. incognita*. This management study revealed that organic amendments improve the plant growth and check the nematode infestation in vegetable fields.