

**EVALUATION OF NEMATOCIDAL POTENCY OF BOTANICAL BIOPESTICIDES IN
COMBINATION WITH TRIAZOPHOS AGAINST ROOT KNOT NEMATODE,
MELOIDOGYNE INCOGNITA INFESTATION ON CHICKPEA, *CICER ARIETINUM* L**

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ABSTRACT

Aqueous leaves extract of *Citrus aurantifolia* and chemical pesticide, Triazophos with different combinations have been tested against root knot nematode, *Meloidogyne incognita*. Experiments were conducted *in-vitro* and in micro-fields on host plant chickpea, *Cicer arietinum* L. Field application of mixtures was tested by seed soaking method, foliar spray method and direct soil treatment method. *In-vitro* experiments showed more than 95% juvenile (J_2) mortality of nematode parasite in 5: 5 combination of leaves extract and triazophos treatment. This combination was also found very effective by different treatment methods in micro-field experiments. A significant increase in shoot length and weight and root length and weight of host plant was observed. The greatest reduction in nematode population with nil root knot index (RKI) was noticed in 50:50 combination treatment of citrus leaves extract and triazophos when compared with infected control. This treatment also influences the number of bacterial nodules, percent germination of seeds and seedling vigour index (SVI) over normal control.

KEYWORDS: *Citrus Aurantifolia*, Integrated Pest Management, *Meloidogyne incognita*, Nematicidal Efficacy, Root Knot Nematode, Triazophos