



**REGULAR ARTICLE**

**Evaluation of the effects of composted broiler litter enriched with *Trichoderma viride* in management of *Meloidogyne incognita* (Kofoid and White) in spinach (*Spinacia oleracea*)**

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**ABSTRACT**

In this study, repeat screen-house experiments were carried out to evaluate the effects of composted broiler litter enriched with *Trichoderma viride* in management of *Meloidogyne incognita* (Kofoid and White) in spinach (*Spinacia oleracea*). A significant increase of plant growth in *S. oleracea* and a decrease in the population of *M. incognita* were observed in the amended soil (soil:composted broiler litter 22:1 v/v). Infested plants that were grown in native soil showed a significant reduction in growth, whereas in soils treated with nematicide, carbofuran 3% G the growth was moderate. The abundance of soil microfauna and naturally occurring nematophagous fungus, *T. viride* significantly increased in amended soil when compared to the soil treated with chemical nematicides. This study concludes that composted broiler litter (soil:composted broiler litter 22:1 v/v) enriched with *T. viride* increased the plant growth and abundance of soil microfauna and reduced the population of *M. incognita*. Therefore, treatment with *T. viride* might be more effective than the use of recommended level of chemical nematicides.