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EFFECT OF DIFFERENT CONCENTRATIONS OF BIO-CONTROL AGENTS ON ROOT-KNOT DISEASE OF CHICK PEA AND ITS RHIZOSPHERE MICROFLORA

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Abstract

Biocontrol agents viz., *Paecilomyces lilacinus, Trichoderma harzianum, Asprgillus niger* and *Glomus fasiculatum* (VAM fungus) at four different concentrations were used for the management of *Meloidogyne incognita*root-knot nematode. All bio-control agents were found effective for the control of root-knot nematode, but a better performance was noted in VAM fungus (50 chlaymydospores) followed by *P. lilacinus* (5000 spores), *T. harzianum*(5000 spores) and *A. niger* (5000 spores). Higher growth parameters and maximum amount of yield and root nodules were recorded in VAM fungus. Maximum reduction of root-knot infection was recorded in *P.lilacinus.* Higher number of total rhizosphere bacteria (*Rhizobium* and *Azotobacter*) were recorded in soil amended with VAM fungus. Reduction of fungal colonies and plant parasitic nematodes were recorded from rhizosphere of plant grown in *T. harzianum* and VAM fungus, respectively