

RESEARCH PAPER

Compatibility study of isolates of *Trichoderma* spp. with plant extracts

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The potential *Trichoderma* is an exceptionally good model of bio-control agent as it is ubiquitous, easy to isolate and culture multiply rapidly on many substrates. There are several mechanisms involved in *Trichoderma* antagonism namely antibiosis whereby the antagonistic fungus shows production of volatile metabolites including ethylene and acetone as well as diffusible antibiotics and environmentally safe and economically viable strategy for control of various plant diseases has led to an increased plant based products in agriculture. The results of neem leaves, garlic and onion bulb extracts significantly reduced the growth of isolates of *Trichoderma* species. It was also noted that an increase in the concentration (5 % to 15 %) resulted in subsequent decrease in growth of the isolates. The inhibition per cent at lower concentration *i.e.*, 5 per cent of neem, garlic and onion extracts was ranging from 20.89 to 27.99, 9.51 to 17.11 and 7.95 to 12.5, respectively. Whereas, at higher concentration *i.e.*, 15 per cent, it was 44.53 to 55.09, 34.59 to 39.86 and 31.56 to 39.55, respectively. The average per cent inhibition in mycelial growth of isolates species wise indicated that all the seven species were more or less similar regarding sensitivity towards tested plant extracts.

Key words : *Trichoderma* spp., Plant extracts, Compatibility

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