Research Article

Multiplication Status of *Trichoderma asperellum* Amalgamation in Vermicompost and NADEP Compost

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Abstract

Vermicompost and NADEP compost are two important organic compost used for cultivation of different horticultural crops. Usually, *Trichoderma* sp. has been mixed in organic compost with the aim that it will multiply over it but the limited scientific information available on this aspect. The quantitative multiplication of *Trichoderma* sp. on organic compost and status of its inherent pathogenic fungi is still an ambiguous and controversial issue. In view of above, an experiment was carried out with the above two composts to find out multiplication dynamics of resident *Trichoderma asperellum* and the inherent fungi in vermicompost & NADEP compost. Talc based formulation of *T. asperellum* mixed in vermicompost & NADEP compost separately in six test dose and incubated at ambient temperature for 60 days. The pathogenic fungi initially present in compost was antagonized by the addition of the resident biocontrol agent, *T. asperellum* in all the test dose. The original population of *T. asperellum* neither multiplied nor increased after mixing it with these composts after 60 days of incubation. It is clear that the pathogenic fungal population present in vermicompost and NADEP compost managed by the amalgamation of *T. asperellum* in these two composts while *T. asperellum* spore remain almost constant with the initial population of its inoculum.

Key words: Fungi, multiplication, NADEP compost, pathogen, *Trichoderma asperellum*, vegetable, vermicompost

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