

Short Article

BIOCONTROL OF DISEASE AND INDUCTION OF CERTAIN DEFENCE COMPOUNDS IN TOMATO INFECTED WITH *Meloidogyne Javanica* BY SEVERAL *Trichoderma* ISOLATES

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Abstract

In this study, 20 isolates of *Trichoderma* were examined for their effectiveness as biological control agents of root knot nematode. The isolates were cultured in liquid culture medium containing colloidal chitin. According to results, isolates 125, 126 and 10 Bi of *Trichoderma harzianum* showed maximum chitinase activity compared to others. In greenhouse experiments, biological control potential of 6 isolates with maximum or minimum enzyme activity against the nematode was compared. Results showed that isolates with maximum rate of enzyme activity in laboratory experiments had better performance in greenhouse studies. *T. harzianum* 125 induced an increase in the activity of phenylalanine ammonia lyase and peroxidase in the roots of tomato plants.

Keywords: *Trichoderma*, Kitinase, Phenylalanine ammonia lyase, Peroxidase.

See Persian text for figures and tables (Pages ۱۷۷-۱۸۱).

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