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INTERACTION BETWEEN TWO ARBUSCULAR MYCORRHIZAL FUNGI (*Glomus mosseae* AND *Glomus intraradices*) AND ROOT- KNOT NEMATODE (*Meloidogyne javanica*) IN TOMATO *

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Abstract

Interaction between arbuscular mycorrhizal fungi *Glomus mosseae* and *Glomus intraradices* and root knot nematode *Meloidogyne javanica* was studied in tomato under greenhouse condition. The experiment was conducted as factorial and completely randomized design with 6 treatment and 9 replications. Plant growth indices (shoot height, root length, shoot and root wet and dry weight) as well as nematode developmental parameters (gall numbers and egg mass on each plant, egg numbers in each egg mass, J2 numbers in soil and reproduction factor *Rf=Pf/Pi)* used for fungal effects on nematode and, fungal developmental parameters (spore numbers and root colonization percent) were used for nematode effects on mycorrhizal fungi. Results showed mycorrhizal fungi improve growth of different plant parts and decreasing nematode damages. No significant differences were observed between two mycorrhizal fungi. Despite decreasing in fungal indices (spore numbers in soil and root colonization rate) affected by nematode, there are not significant differences among indices with or without nematode inoculation.

Keywords: Root knot nematode, Tomato, Interaction, Symbiosis.

See Persian text for figures and tables (Pages ۳۹۳-۴۰۱).

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