

Research Article

Physiological Changes Induced by Arbuscular Mycorrhizal Fungi (AMF) and Plant Growth Promoting Fungi (PGPF) in Tomato (*Lycopersicum esculantum*)

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Abstract

Experiment was conducted to assess the effect of AMF and PGPF for physiological changes induced during the interaction of AMF and PGPF in tomato. The nutrient uptake was enhanced during the combined application of AMF along with *T. harzianum*. However the uptake efficiency was most reverse with respect to the combined delivery of AMF + *A. solani*. Assay on the mycorrhizal nutrient efficiency (MNE) in tomato indicated that combined application of AMF with *T. harzianum* enhanced the uptake of P, K, Mg, S, Fe, Cu, Mo and B than non-mycorrhizal control. Besides it also increased the uptake of Zn and N. Comparative evaluation between AMF and other indicated that the interactive nutrient efficiency (INE) in relation to the uptake of P, Mg, Fe and B was the maximum in AMF + *T. harzianum* treated plants rather than the mycorrhizal control.

Key words: AMF, *Lycopersicum esculantum*, micro and macronutrients, PGPF

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