# Salinity Effects on VAM Infection and Alkaline Phsphatase Activity in Wheat. (S03-kandil161948-Poster)

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## Abstract:

Role of arbuscular mycorrhizal fungi (AM) in the protection of wheat (Triticum vestium) against salt stress induced by addition of increasing levels of soluble salts into Egyptian calcareous soils was studied in the greenhouse. Plant growth, nutrition, alkaline phosphatase, and infective parameters were evaluated. P and N uptake and dry weight (DW) of wheat plants grown under three salinity levels (1.6, 5.6, and 12.0 dS/m) were significantly increased by AM inoculation relative to noninoculated plants (NI). The highest Mycorrhizal dependency (MD) was 36.5% at 5.6 dS/m for 50 days' old plants. NI plants that grow in 12.0 dS/m soil died at 50 day's age, while inoculated plants (IP) completed its growth season. Activity of alkaline phosphatase was significantly increased in rhizosphere of both NI and IP with higher values in IP, while rate of root infection was decreased with increase of soil salinity . In general, mycorrhizal inoculation stimulated wheat growth and phosphatase activity in saline soils.

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