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Interactions between Water-Stress and VA Mycorrhizal Inoculation on Plant Growth and Leaf-Water Potential in Tomato

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Abstract : The influence of arbuscular mycorrhizal (AM) fungus(Glomus mossea) on plant growth and leaf-water potential of tomato (lycopersicum esculentum L.cv.super star) were studied in potted culture water stress stress period of 3 months in greenhouse conditions with the soil matric potential maintained at Fc1, Fc2, Fc3, and Fc4 respectively (0.8,0.7,0.6,0.5 Fc). Seven-day-old seedlings of tomato were transferred to pots containing Glomus mossea or non-AMF. AM colonization significantly stimulated shoot dry matter and leaf-water potential but water stress significantly decreased leaf area, shoot dry matter colonization and leaf-water potential.

Keywords : leaf-water potential, plant growth, tomato, VA mycorrhiza, water-stress
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