

## Effect of arbuscular mycorrhizal fungi on physiological and biochemical activities in *Plectranthus barbatus* Andrews and *Mentha piperita* L.

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HAZIRA MAQBOOL ATTAR, MISBA HFARHEEN, R. SHRUTHI AND SAVITHA M MURTHY\*  
*Department of Botany, Mount Carmel College, Bengaluru 560 052, Karnataka*

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The study was conducted to observe the various aspects related to drought tolerance in arbuscular mycorrhizal (AM) inoculated *Plectranthus barbatus* (= *Coleus forskholii* iforskholii) and *Mentha piperita* plants. Non AM and AM plants were grown under normal and water stressed conditions. Water stress was induced with the help of PEG and *Glomus mosseae* spores were used for AM source. The plants were taken to determine the effects of AM fungi under stress condition on relative water content (RWC), water potential ( $\psi$ ) and free proline. In this comparative study AM fungi had influence on RWC, water potential and proline accumulation under normal and stress conditions with and without AM fungi. Mycorrhizal plants had higher leaf water potential, RWC than non mycorrhizal plants. However, the proline accumulation was lower in mycorrhizal plants compared to non mycorrhizal plants. Both the plants have shown well adjustment towards water stress.

**Key words:** AM fungi, RWC, proline, osmolyte, osmotic stress

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