

Drought Resistance of Nursery Grown Betel Nut (*Areca catechu* L.) under the Influences of Vesicular-Arbuscular Mycorrhiza MycoVAM

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Abstract : The aim of the study conducted inside screen house is to determine the effect of Vesicular Arbuscular Mycorrhiza MycoVAM *Glomus mosseae* or *Glomus fasciculatum* on the drought resistance of Betel nut (*Areca catechu*). The study revealed that there is a highly significant growth increment and drought resistance of planted seedling inoculated with VAM compared to uninoculated seedling. The study revealed not significant under well water condition after 60 days. Growths are higher in inoculated seedlings compared to uninoculated seedlings. Seventy days (75) days after planting there was a highly significant difference in inoculated plants. It is not significant in height increment after 90 days, although the height percentage increase in inoculated seedlings was higher. The water stressed *Areca catechu* seedlings inoculated with VAM significantly increases total shoot height with increment of 72.34 while days before wilting 65.89 and 88.68 in the leaf water content. This demonstrates the result provided by VAM in the development of seedlings.

Keywords : vesicular-arbuscular mycorrhiza MycoVAM, resistance, symbiosis, water stressed

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