

MYCORRHIZAL INOCULATION EFFECT ON GROWTH RESPONSES AND DRY MASS PRODUCTION OF *MIMOSA HIMALAYANA* GAMBLE SEEDLINGS

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Abstract: *Mimosa himalayana* is a nitrogen fixing shrub of Central Himalayan region. In the present study, effect of mycorrhizal inoculation was observed on the seedlings of *M. himalayana*. For this, seedlings of *M. himalayana* were raised in polyethylene bags containing sterilized mixture of soil and commercial sand. The seedlings of *M. himalayana* became colonized when inoculated with vesicular-arbuscular mycorrhizal fungi. When compared with uninoculated seedlings, inoculated seedlings showed increased root and shoot length with 48% to 58% mycorrhizal dependency for total seedling biomass. Present study suggested that the vesicular arbuscular mycorrhizal fungi act as an important biological factor that contributes to the efficiency of nutrient uptake and use.

Keywords: Colonization, Inoculation, *Mimosa himalayana*, Mycorrhiza, Production

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