EFFECT OF BENEFICIAL BIOINOCULANTS ON THE GROWTH OF MONKEY POD TREE (SAMANEASAMAN) IN NURSERY CONDITION

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Abstract :Nursery experiments were conducted to assess suitable bioinoculants and their combinations to improve the seedling quality of *Samaneasaman*. Seeds were germinated in polythene bag with a potting mixture of unsterilized soil, sand and Farm yard manure in the ratio of 1:2:1 and inoculated individually and in combinations with *Azospirillum*, AM fungi and *Pseudomonas*. Shoot and root length, basal diameter and biomass were recorded at six months after inoculation. Results showed that the bioinoculants increase the growth and biomass of *S.saman*seedlings.Bioinoculants caused the significant increase in the growth, biomass, chlorophyll, protein and soluble sugar content of *S.saman* when compared to control plants. The maximum total biomass was observed in *Azospirillum* + AM fungi + *Pseudomonas* inoculated seedlings, followed by seedlings inoculated with *Azospirillum* + AM fungi and then by *Azospirillum* alone.

Key words:Biomass, Bio-inoculants, Biochemical content and Samaneasaman

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