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Alleviating effect of micro-symbionts on nutrient status and survival of teak seedlings under salt stress

SWATI SHEDAGE*, N.S. PATIL1 AND D.B. JADEJA2

Department of Forestry, College of Forestry, Navsari Agricultural University, NAVSARI (GUJARAT) INDIA (Email: shedage.swati@rediffmail.com)

Abstract : Seedlings of *Tectona grandis* L. were planted under different salinity levels *viz.* normal soil (<4 ECe soil), saline soil (4-8 Ece) and highly saline soil (8-12 Ece) and seedlings were inoculated with *Azotobacter* + Vesicular-arbuscular mycorrhizal (VAM) fungi, *Azospirillum* + vesicular-arbuscular mycorrhizal (VAM) fungi and combination of all three. Experiment was repeated for two years and data were recorded at the end of each experiment on nutrient content in different plant parts (leaves, stem and root), chlorophyll content, root colonization and survival per cent. Triple inoculation (*Azotobacter* + *Azospirillum* + VAM) significantly and positively influenced the nutrient status and survival per cent of teak seedlings as compared to uninoculated seedlings under salt stress condition. It was followed by dual inoculation of *Azospirillum* and VAM.

Key Words: Micro-symbiont, Salinity levels, Nutrient content, Chlorophyll content, Root colonization, Survival per cent

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^{*} Author for correspondence

¹Department of Forest Product Utilization, Navsari Agricultural University, NAVSARI (GUJARAT) INDIA

²College of Forestry, Navsari Agricultural University, NAVSARI (GUJARAT) INDIA