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Research Article

Study the effect of INM on seedling growth and quality parameters of *Bambusa vulgaris* (S) seedlings at different stages

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ABSTRACT : An investigation was undertaken with *Bambusa vulgaris* (S.) as the test tree species to standardize ideal Integrated Nutrient Management (INM) techniques for improving the growth of tissue cultured seedlings, so as to obtain the best quality seedling within a shortest nursery period. A nursery experiment was conducted by raising tissue culture *B. vulgaris* seedlings in polybags of size 25 cm x 15 cm filled with non-calcareous, red sandy loam soil (Typic Ustropept), sand and FYM with two levels of urea (500 and 1000 mg seedling^{-1}), two levels of single super phosphate (1000 and 1500 mg seedling^{-1}), two levels of muriate of potash (250 and 500 mg seedling^{-1}) and micronutrient mixture (5 g) along with *Azospirillum* (5 g) seedling^{-1}, phosphobacteria (5 g) seedling^{-1} and VAM (10 g) seedling^{-1}. The results revealed that the shoot and root length, collar diameter and number of shoots were increased by INM treatments. Application of urea, single super phosphate and muriate of potash (500: 1000: 250 mg) along with VAM (10 g), *Azospirillum* (5 g), phosphobacteria (5 g) and micronutrient mixture (5 g) seedling^{-1} (T_9) proved to be the ideal dose to improve above said parameters. The same treatment continued to be the best in enhancing the dry matter production, chlorophyll a and total chlorophyll.

KEY WORDS : Integrated Nutrient Management, VAM, Rhizome, Culm, Nursery

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