

Effect of Different Growing Media on the Performance of Teak (*Tectona grandis* Linn.) Stump in Nursery

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Abstract: A study was undertaken to analyse the effect of different growing media using soil, sand, FYM, sawdust and vermicompost in different proportion to optimize the sprouting and growth of behaviour of teak (*Tectona grandis* Linn.) stump in nursery condition. Stumps of 13-18 mm collar diameter, 2.5 cm shoot and 12.5 cm root were selected and raised in the polybags of 6" x 12" in size containing fifteen combinations of growing media under nursery condition for 150 days. Experiment revealed that vermicompost: sand: soil (1:1:1), sawdust: soil: vermicompost (1:1:1) and soil: sand: FYM (1:1:1) showed 100% sprouting indicating better sprouting possibility than solo media like FYM (96%), sawdust (95.67%) and sand (95%). Both the collar diameter and height was highest (14.47 mm and 107.91 cm) in vermicompost: sand: soil (1:1:1), which was strongly at par with vermicompost: sand (1:1) (14.04 mm and 105.42 cm), whereas the lowest collar diameter (7.53 mm) and height (53.55 cm) was recorded in sawdust and sawdust: soil (1:1), respectively. At the end of 150 days of growth, sturdiness quotient in each and every growing media except sawdust: soil: FYM (1:1:1) was cross the limit (6.0) signalling that further the growth of seedlings in the container lead to risk on survival and growth in the field.

Keywords: Tectona grandis, Stump, Growing media, Sprouting, Collar diameter