



## Effect of Container and Growing Media on *Terminalia bellirica* Roxb. Seedling Performance under Nursery Conditions

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**Abstract:** Investigation on the effect of containers (root trainer 250 cc, root trainer 300 cc, polybags 16 x 24 cm-1500cc and polybag 23 x 28 cm-4200cc) and potting media (soil, soil: sand: FYM-1:1:1 and soil: sand:vermicompost-1:1:1) on the growth of *Terminalia bellirica* was carried out at Sher-e-Kashmir University of Agricultural Sciences and Technology-Jammu, Chatha, Jammu (India) during 2015-2016. Among the different container sizes and media, the polybag of 23 x 28 cm size and soil: sand: vermicompost (1:1:1) growing media resulted in significantly higher seedling height, collar diameter, number of leaves, length of primary root, fresh shoot and root weight, total seedling fresh weight, dry shoot and root weight, total seedling dry weight, root: shoot ratio and seedling quality. The effect of containers on number of secondary roots and sturdiness quotient was significant whereas it was non-significant in case of media. The sturdiness quotient decreased with increase in container size. The effect of interaction of containers x potting media was significant on growth parameters viz. seedling height, number of leaves, fresh shoot weight, total seedling fresh weight, root: shoot ratio and sturdiness quotient, however, it was non-significant in case of germination percentage, collar diameter, number of primary roots, fresh shoot weight, dry shoot weight, dry root weight, total seedling dry weight and seedling quality index. The interaction polybags (23 x 28 cm) x medium (soil: sand: VC-1:1:1) resulted insignificantly higher values for the most of the studied growth parameters than the remaining interactions. The large sized containers (polybag of 23 x 28 cm) in combination with soil: sand: VC (1:1:1) media resulted in better growth of *T. bellirica* seedlings. Thus the seedling of this species should be grown in polybag (23 x 28 cm) using soil: sand: VC (1:1:1) as growing media to obtain better quality planting stock.

**Keywords:** *Terminalia bellirica*, Container size, Potting media, Farm yard manure, Vermicompost, Root trainers, Polybags, Nursery

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