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Effect of Pre-sowing Seed Treatment on Germination and Seedling Growth of *Terminalia bellirica* (Gaertn.) Roxb.

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Abstract: The study describes the effects of depulping the fruits and soaking the seeds of *Terminalia bellirica* on seed germination and initial seedling growth in nursery condition including soaking in water, cow dung slurry for different durations and termite treatment. Due to the hard seed coat with thick pericarp having high content of phenolic compounds, *T. bellirica* seeds germinate irregularly taking longer time for nursery establishment. Germination parameters were significantly influenced by the pre-sowing treatments and the water soaking of the seeds for 24 hrs produced the highest germination. The pre-sowing treatments also influenced the initial seedling growth and the seedlings obtained after alternate drying and wetting of the seeds for five days recorded higher growth and biomass than untreated seeds.

Key Words**:** Bio-volume index, Biomass, Depulping, Germination, Pre-treatment, Seedling, *Terminalia bellirica,* Vigour index