



Estimation of Tree Biomass in Dry Deciduous Forests of Seshachalam Hill Ranges, Southern Eastern Ghats by Non-Destructive Method

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Abstract: The present study deals with the estimation of tree biomass by non destructive method in dry deciduous forest (DDF) of Seshachalam hill ranges in 18 (1-ha) study sites. The biomass of each species was estimated by calculating its volume by means of its specific equation and species specific gravity. The range of above ground biomass was (AGB) 70.36 t ha^{-1} to 156.64 t ha^{-1} and below ground biomass (BGB) was in the range of 34.45 t ha^{-1} to 74.39 t ha^{-1} . AGB showed a significant positive relationship with Basal area; while non-significant positive relation with tree density and tree diversity was recorded. But the top ten rank species AGB values has showed significant positive relationship with tree density. Below ground biomass (BGB) was derived from above ground biomass (AGB) and the total tree biomass was estimated.

Keywords: Above ground biomass, Belowground biomass, Dry deciduous forest, Tree volume equation, Wood specific gravity
