[A simple field based method for rapid wood density estimation for selected tree species in Western Kenya](https://www.sciencedirect.com/science/article/pii/S2468227619307100)

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Description

Wood density is an important variable for accurate quantification of woody biomass and carbon stocks. Conventional destructive methods for wood density estimation are resource intensive, prohibiting their use, limiting the application of approaches that would minimize uncertainties in tree biomass estimates. We tested an alternative method involving tree coring with a carpenter's auger to estimate wood density of seven tropical tree species in Western Kenya. We used conventional water immersion method to validate results from the auger core method. The mean densities (and 95% confidence intervals) ranged from 0.36 g cm−3 (0.25–0.47) to 0.67 g cm−3 (0.61–0.73) for the auger core method, and 0.46 g cm−3 (0.42–0.50) to 0.67 g cm−3 (0.61–0.73) for the water immersion method. The auger core and water immersion methods were not significantly different for four out of seven tree species namely; *Acacia* …