

## QUANTIFICATION AND MODELLING OF BIOMASS AND CARBON AT NATURAL REGENERATION IN THE OMBROPHYLOUS MIXED FOREST AREA

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- **ABSTRACT:** *Quantification and modelling of biomass and carbon at natural regeneration in the Ombrophyllous Mixed Forest area. We conducted an inventory of plants components of natural regeneration in Ombrophyllous Mixed Forest area where the objective was to assess the relationship among dry biomass and carbon with forest variables. The plants were classified in the following categories: tree seedlings < 30 cm of height, tree seedlings ≥ 30 cm of height and herbaceous. The strongest correlations of biomass and carbon stock were with collar diameter and crown diameter variables. The average carbon content for tree seedlings categories was statistically higher than herbaceous. The highest quantity of biomass and carbon stocked was found in herbaceous plants. The allometric models fitted to biomass and carbon showed satisfactory statistics of precision and adjustment, but always proved unbiased estimates. The natural regeneration has great capacity to stock biomass and carbon sequestration.*
- **KEYWORDS:** *Atlantic forest; forest inventory; allometric models.*

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