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Growth models of Rhizophora mangle L. seedlings in tropical southwestern Atlantic

Modelos de crescimento de plântulas de Rhizophora mangle L. no sudoeste do Atlântico

Tropical

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ABSTRACT

The present study selected and compared regression models that best describe the growth curves of *Rhizophora mangle* seedlings based on the height (cm) and time (days) variables. The Linear, Exponential, Power Law, Monomolecular, Logistic, and Gompertz models were adjusted with non-linear formulations and minimization of the sum of the squares of the residues. The Akaike Information Criterion was used to select the best model for each seedling. After this selection, the determination coefficient, which evaluates how well a model describes height variation as a time function, was inspected. Differing from the classic population ecology studies, the Monomolecular, Three-parameter Logistic, and Gompertz models presented the best performance in describing growth, suggesting they are the most adequate options for long-term

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