

Uso da Análise Multivariada para agrupamento de dados no ajuste da relação diâmetro–altura em plantios florestais misto na Amazônia Mato–Grossense

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Abstract: *This study was conducted using data from a reforestation located in the municipality of Cotriguaçu - MT, owned by ONF - Brazil, containing data from 10 native families of the Brazilian Amazon. Initially, the regression model was fitted for the entire population, then by family, and posteriorly by groups of families that were grouped using Multivariate Data Analysis. The statistical criteria used to analyze the results were: Root Mean Squared Error (rmse), Relative Root Mean Squared Error (rmse%), Pearson Correlation Coefficient (r); and the scatter plot of estimated versus observed heights. The graphical analysis of height dispersion allowed us to verify that the use of the variable family and family groups generated specific parameters for each fit when compared to the globally fitted model. It was also verified, through statistical results, that family is a variable that affects height, not as much as DBH, but can be used to minimize the error of estimates.*

Keywords: *Amazonia Mato-Grossense; Artificial intelligence; Hypsometric relationship; Mixed Plantings; Amazonia Mato-Grossense.*

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