

## BETA-DIVERSITY PATTERNS BETWEEN PLOTS OF ATLANTIC FOREST AND CERRADO IN A FOREST REMNANT

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The Atlantic Tropical Forests and the Cerrado are considered South American biodiversity hotspots. However, these domains have experienced intense habitat loss and intense disturbance regimes that led to species and functioning losses. Most of the remaining patches of Atlantic Tropical Forest as well as of Cerrado are still submitted to intense disturbance. Conservation strategies should evaluate comprehensive floristic studies since species richness is positively related to ecosystem functions. The aim of the present work was to analyze changes in the composition of trees between plots in a forest remnant amongst the Atlantic Tropical Forest and the Cerrado Domains, Minas Gerais State, Brazil (20°13'10" S, 48°55'12" W) and understand which factor (turnover or nestedness) is driving the species diversity. This forest remnant is composed of Atlantic Tropical Forest and Cerrado species and there are no marked visual differences between the phytophysiognomies. 5094 contiguous 10-m x 10-m plots were settled in the remnant, in a total area of 50.94 ha. In each plot, all trees and treelets with a diameter at breast height ≥ 3.18 cm were censused. After species identification, we used three pairwise metrics to verify the beta-diversity between sites: β<sub>SOR</sub>, that considers the total compositional differences between plots, comprising turnover and nestedness;  $\beta_{\text{sim}}$ , that observes changes in the species composition because of the turnover and  $\beta_{sne}$ , that considers only the compositional changes due to nestedness. Then, a dissimilarity matrix was performed using the Sørensen dissimilarity and a dendrogram was generated using UPGMA. The general average of dissimilarity, turnover and nestedness were  $\beta_{SOR} = 0.880$ ,  $\beta_{sim} = 0.839$  and  $\beta_{sne} = 0.038$ , suggesting that turnover is the main process generating the species diversity in the study area. The cluster and the floristic composition suggests two main groups of plots, indicating two different floristic influences: Atlantic Tropical Forest and Cerrado woodland.

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