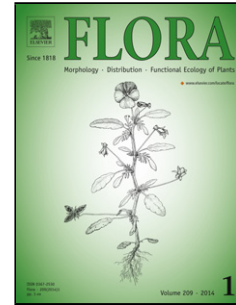


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## Connection between tree functional traits and environmental parameters in an archipelago of montane forests surrounded by rupestrian grasslands

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### Highlights

- Environmental parameters determine the composition of forest islands.
- Habitat heterogeneity promotes the establishment of species.
- We identified a connection between traits of trees and parameters of the habitat.
- Connection between habitats and species is a predictive factor for conservation.

### Abstract

Forest islands are unique habitats standing out across mountains dominated by rupestrian grassland in southeastern Brazil. In this work we evaluated the relationship between the plant species functional traits (number of ecoregions in which a species occurs, potential height, mean height, mean basal area, mean leaf area) and ecological variables (leaf damage from chewing herbivores, the number of individuals) with environmental parameters (physical and chemical properties of the soil, canopy cover) of the tree communities in an archipelago of montane forest islands immersed in rupestrian grasslands. We found a strong connection between the traits of tree species and

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