

FRUIT-FEEDING BUTTERFLIES IN THE ATLANTIC FOREST: COMMUNITIES STRUCTURE AND TEMPORAL ANALYSIS

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Abstract

The correct description of an ecological community requires studies focus on the spatial and temporal components. Thus, the study purpose is to describe the community structure of fruit-feeding butterflies, considering the vertical strata (canopy and understory) besides the temporal variation in the community. The results showed that butterflies present a clear vertical stratification and two seasonal peaks in abundance and richness of species throughout the year.

Key words: Butterflies, Temporal Variation, Vertical Stratification.

Introduction

Human interference in the environment is intensifying in the last decades. Accordingly, in current scenario studies about remaining communities are crucial to conservation programs. Understanding about communities involves considerations about temporal variation, due to seasonality, and spatial components, as vertical and horizontal dimensions. Butterflies are very useful in these studies because they are easily sampled with well-established protocols.

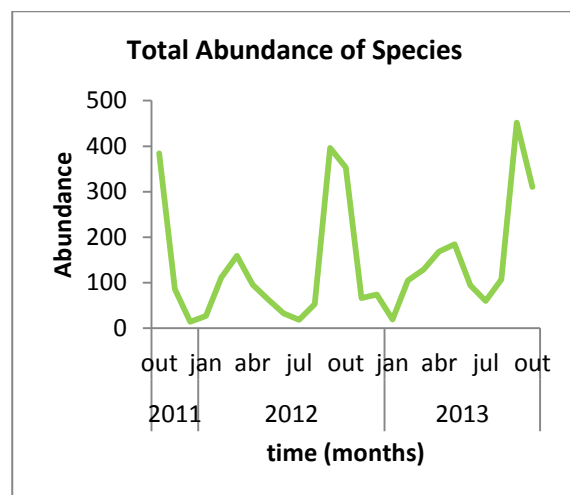
The present study aims to analyse community structure of fruit-feeding butterflies in the Atlantic Forest, exploring the spatial component, as well investigate temporal variation, using two years of sampled.

Results and Discussion

The study was carried out at Serra do Japi, Jundiaí municipality, São Paulo. Five sets of ten baited traps were distributed in five transects, alternating between canopy and understory. The bait consisted in mixture of fermented banana and sugar cane juice.

General patterns of richness, abundance and specie composition were evaluated and for temporal variation analysis, richness per time (months) and abundance per time (months) were plotted in order to identify seasonality.

The results showed a distinct vertical stratification, probably due to differences in resources availability¹, luminosity and predators in canopy and understory³; and two seasonal peaks in abundance and richness throughout the year, caused by variation in temperature and humidity.



Conclusions

The results showed that fruit-feeding butterflies present two peaks of abundance, and that species are vertically stratified. These two results should be considered in studies focusing on optimized sampling of fruit-feeding butterflies in tropical forests.

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