

# Biodiversity and foraging behavior of bees at flowers of *Vriesea friburgensis* in a restinga, SC

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## Introduction

Among bromeliads, ornithophily is the most widespread floral syndrome. However, bees and other insects can also be observed on their flowers. Therefore, we aimed to systematically record the spectrum of flower visitors and to document temporal pattern, behavior and resource use.



Restinga, Praia da Joaquina, SC

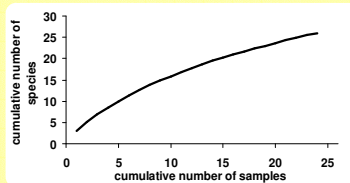
## Materials & Methods

- examined bromeliad species: *Vriesea friburgensis*
- observation site: Restinga, Praia da Joaquina, Florianópolis, SC, southern Brazil
- record the flower visitors and their behaviour

## Results

### 1. Diversity of flower visitors

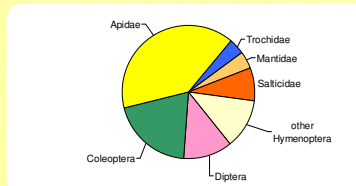
- About 25 species of insects and one hummingbird (*Thalurania glaucopis*) were observed.
- Species accumulation curve indicates that there are still species to discover



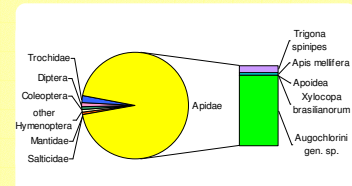
Species accumulation curve

### 2. Importance of *Vriesea friburgensis* for bees

- 40% of all taxa were bees
- 94% of all observed flower visitors were bees
- the most frequent flower visitors were Augochlorine sweat bees



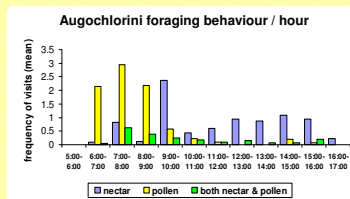
Diversity of flower visitors



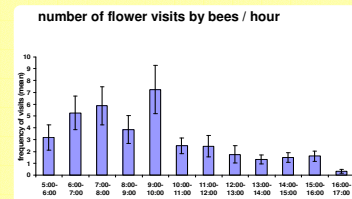
Flower visitors (number of all observed individuals)

### 3. Foraging behaviour

- Most bees visit the flowers until 10 a.m.
- Hummingbird *Thalurania glaucopis*: foraging for nectar
- Apis mellifera*: foraging for pollen
- Halictidae & *Trigona spinipes*: foraging for pollen & nectar



Augochlorini foraging behaviour / hour



number of flower visits by bees / hour

## Conclusions

Although the flowers show an ornithophilous syndrome that indicates hummingbirds as the main pollinator, the flowers are a very important food resource for a huge range of insects, especially bees.

## Acknowledgements

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