

## Temporal dynamics of flowering in an *Anthurium* community and its flower visitor assemblage in the Parque Arví, Santa Elena (Antioquia, Colombia)

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Congeneric species present great similarity in their structures and requirements, therefore, the competition between them is expected to be greater than between species belonging to different genera. When congeneric sympatric plant species compete for pollinators, different ecological strategies, such as staggered flowering or deposition of pollen on different parts of the pollinator's body can increase the probability of pollination. The purpose of this study was to describe the temporal dynamics of flowering in seven species of the genus *Anthurium* and the assemblage of insects visiting their inflorescences in the Parque Arví (Santa Elena, Medellín). Flowering and inflorescence visitors were recorded for all species biweekly for one year. Although flowering for all species was in general continuous, the flowering peaks of each *Anthurium* species occurred at different moments of the year. The insect assemblages showed high dissimilarity in composition between *Anthurium* species and between biweeklies. A fine temporal analysis of interactions between *Anthurium* and its inflorescence visitors showed that the high turnover of flower visitors was related to the rewiring of insects to the most abundant flowering *Anthurium* species, making this system highly dynamic temporarily. The continuous flowering of *Anthurium* results in a constant offer of flower resources to flower visitors, functioning to maintain the insect populations locally throughout the year. On the other hand, the segregation of the flowering peaks might function as a strategy to reduce competition for pollinators among *Anthurium* species and simultaneously, promote reproductive isolation, diminishing the probability of transference of heterospecific pollen.

**Keywords:** *Anthurium*, flower-visitor, phenology, pollinator competition.