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### ASSOCIATION BETWEEN ENDOPHAGOUS INSECTS AND FLORIVORIA PATTERNS THROUGH ECOLOGICAL NETWORKS

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Tema/Meio de apresentação: Interações Ecológicas/Pôster

Insects and higher plants are more abundant living beings on the planet and this diversity is estimated through the specificity of insect-plant interactions and their richness. The nature of these interactions can occur at several trophic levels and among the herbivores stand out the endophagous insects that use internal resources of the plants for food and shelter. The objective was to design networks of interactions involving endophagous insects, floral damage and inflorescence phenotypes. The interaction networks were constructed using the number of endophagous insects in inflorescences of *Baccharis platypoda* (Asteraceae), damage of the florivoria (cocoons in the receptacle, macerated, whitish, floral tissue consumption, peduncle and bracts) and flowering phenophases (flower buds, Pre-anthesis, mature flowers and dispersion). Ecological network (Q) metrics were evaluated through the QuanBiMo algorithm and ecological specialization of population (index  $d$ ) and community ( $H_2$ ). The analyzes were performed in program R3.3.2. A total of 1,176 insects were collected from Coleoptera, Diptera, Hemiptera and Lepidoptera. The highest abundance of endophagous insects occurred in the mature (61.78%) and dispersion (22.74%) inflorescence. The most frequent damages were: cocoon receptacle (126) and consumption of floral tissues (101). Only flower buds showed a high  $d$  index, being attacked only by Hemiptera sp2 and Diptera sp1. The other phenophases and damages presented low indices ( $d < 0,18$ ). The value of  $H_2$  presented low values for phenophases ( $H_2 = 0,08$ ) and damage to the inflorescences ( $H_2 = 0,13$ ), indicating that there is a generalist behavior among the endophagous insects regarding the stage of development of the inflorescence and types of damage of floral tissues. The modularity indicated weak associations between the points of the network of interactions, and as it is closely related to the  $H_2$ , can be used as a conclusive parameter on the generalist character existing between the endophagous insects found in inflorescences of *B. platypoda* and its life cycle.