



XIII Congresso de ECOLOGIA

III International Symposium of Ecology and Evolution

Múltiplas ecologias: evolução e diversidade

08 a 12 de outubro de 2017 • UFV - VIÇOSA | MG

PLANTS WITH CHEMICAL DEFENSES IN CERRADO: DO ANTS PRESENCE INFLUENCE HERBIVORY CONTROL?

Maria Olívia Dourado Sanna^{1*}, Tathiana Guerra Sobrinho², Dalana Campos Muscardi³, Laila Fieto Ribeiro⁴, José Henrique Schoereder⁵

1. Programa de Pós-Graduação em Entomologia, Universidade Federal de Viçosa, Viçosa, 36570-900, Brazil; 2. Departamento de Ciências Agrárias e Biológicas, Universidade Federal do Espírito Santo, São Mateus, 29932-900; 3. Departamento de Educação e Ciências Humanas, Universidade Federal do Espírito Santo, São Mateus, 29932-900; 4. Programa de Pós-Graduação em Entomologia, Universidade Federal de Viçosa, Viçosa, 36570-900, Brazil; 5. Departamento de Biologia Geral, Universidade Federal de Viçosa, Viçosa, 36570-900, Brazil. *Correspondence to lilisanna92@gmail.com.br

Tema/Meio de apresentação: Interações ecológicas/Pôster

One of the most studied mutualistic relationship is ant-plant interaction. Plants provide resources such as food and nesting sites to ants, which in turn, provide protection to the plants i.e., by precluding the survival of competing plant species or by defending the plant against herbivorous insects. The aim of this study was to analyze if the increase of food and nesting resources in plants promote the decrease of herbivory, mediated by the increase of ant abundance and species richness. Carbohydrate food sources and artificial nests were added to 80 *Piptocarpha rotundifolia* trees, a typical Cerrado species that does not have extrafloral nectary. Four treatments were defined: trees with carbohydrates and artificial nests, trees with carbohydrates and without nests, trees without carbohydrate and nests, and trees without carbohydrate and without nests. The resources remained in plants for four months, when the colonies that occupied the artificial nests were also collected. Measurements of herbivory were performed through photographs of the leaves, and ant sampling were made with pitfall traps, in two different times: before and after resources addition. We observed that ant abundance and ant species richness increased in the trees with both resources, but herbivory did not decrease with the increased of resources supply. This result indicate that ants were attracted by both resources, but they had no effect on herbivory. One explanation for this result is that *P. rotundifolia* has secondary compounds that may acted as herbivory regulation. In addition, the ant species collected in the trees are mostly opportunistic, and probably did not attack herbivores.