ISSN 1517-6770

Revista Brasileira de
ZOOCIÊNCIAS
8(2): 211, dezembro 2006

Interações entre formigas e *Ouratea spectabilis* (Ochnaceae) na vegetação do Cerrado: variação temporal e efeito do fogo

Jonas Byk[1] & Kleber Del Claro[2]

[1] *Programa de Pós-Graduação em Ciências Biológicas: Comportamento e Biologia Animal, Universidade Federal de Juiz de Fora, MG. Bolsista CAPES. jonas.byk@pop.com.br*
[2] *Orientador, Departamento de Zoologia, Universidade Federal de Uberlândia, Uberlândia, MG, 38400-902. delclaro@ufu.br*

Abstract. Interactions between ants and *Ouratea spectabilis* (Ochnaceae) in the vegetation of Cerrado: temporary variation and effect of the fire. During the last years the focus in the interactions between ants and plants has been receiving great attention, mainly in tropical areas. This interaction type has been supplying information for a better understanding of the optional mutualism and of the coevolution process with several angiosperms species, mainly the ones that possess extrafloral nectaries (NEFs) that offer the nectar as food to the ants. In the present study the aspect of the conditionality was investigated in the results of the ecological relationships among ants - plants in the Cerrado, in other words, how the presence or absence of ants affects the action of the herbivores of a tree through time and to verify how the fire occurrence can affect the relationships between ants and plants in the Cerrado. The present study was developed in the reservation of Clube de Caça e Pesca Itororó de Uberlândia (CCPIU), Uberlândia - Minas Gerais (18°59'S, 48°18'W) of September of 2004 to January of 2005. The areas were separeted as burned and not burned. The species with NEFs were *Ouratea spectabilis*, Engl. (Ochnaceae), this is one of the most abundant species in all the Tropical Savanna. The study was divided in four stages:1) Demarcation of the plants and assembly of the experimental manipulation (exclusion of the ants with addition of a resin - Tanglefoot®); 2) Measurement of the leaf herbivory; 3) Reproductive impact and identification of herbivore insects, 4) Identification of associated ants. 36 morph species of day ants and night ants that were found *Camponotus rufipes,* that visited NEFs in both periods of the day. The visiting ants, *O. spectabilis* used NEFs, as well as honeydew of hemiptera (Membracidae) that can infest the panícules of the infrutescences. We observed 10 herbivore's families, with prominence to coleopterons, lepidopterous and tisanopterous. The results of the experiments evaluating the effect of the fire and the presence or absence of the action of the interaction ant-plant along the time on the herbivory, they showed that the ants visitor's of NEFs of *O. spectabilis* presence reduced the herbivoria significantly to foliate. The visitation of ants was also relevant for the aptitude of the plant, individuals with ants formed more fruits for produced buds in the burned area as well as, the not burned area. The amount of seeds of the fruits produced among both areas with the ant presence were also larger. The benefits of the association with ants for *O. spectabilis* stay along the time. The interaction seems to be equally advantageous and important for ants and plants in the two atmospheres (with or without the fire), depending on the presence or not of ants.

Keywords: ants, insect-plant interaction, insects herbivores, fire.