



SELECTIVITY OF BOTANICAL EXTRACTS OF THE CERRADO ON *TENEBRIO MOLITOR* (COLEOPTERA: TENEBRIONIDAE) AND *ANTICARSIA GEMMATALIS* (LEPIDOPTERA: NOCTUIDAE)

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Tenebrio molitor L. (Coleoptera: Tenebrionidae) and *Anticarsia gemmatalis* Hübner (Lepidoptera: Noctuidae) are agricultural pests and alternative hosts of parasitoids. The use of botanical insecticides is an alternative for the pest control. This work aimed to evaluate the effect of plant extracts from cerrado in the reproductive capacity of *T. molitor* and *A. gemmatalis*. The extracts were evaluated at concentrations of 0.1 or 0.01% (w.w-1) in the laboratory of the Federal University of Viçosa in Viçosa, Minas Gerais State, Brazil. The ethanol extracts used were obtained from *Bidens sulphurea* (flowers) and *Vernonia aurea* (leaves) (Asteraceae), *Salvertia convallariaedora* (leaves) (Vochysiaceae), *Acisanthera* sp. (leaves) (Melastomataceae), *Memora nodosa* (leaves and flowers) (Bignoniaceae), and the flavonoid astilbin, isolated from *Dimorphandra mollis* (flowers) (Leguminosae). The control had only water or ethanol. The experimental design was entirely randomized, with 36 treatments and 10 replications, each one with one pupa of *T. molitor* or one piece of paper with 10 eggs of *A. gemmatalis*. The mortality of two-d-old pupae of *T. molitor* and one-d-old eggs of *A. gemmatalis* was higher than one-d-old pupae and two-d-old eggs, respectively. Treatments at concentration of 0.1% showed higher toxicity on these insects than treatments with 0.01%. The viability and duration of the stages of *T. molitor* and *A. gemmatalis* were also affected by the extracts. The most activities extracts were *B. sulphurae* and *S. convallariaedora*. Males of *T. molitor* and *A. gemmatalis* were heavier than females. Deformations were common in insects treated with the extracts. The extracts affected the second generation of *T. molitor* and *A. gemmatalis*, although these insects showed better development than in the first one. Extracts from *B. sulphurae* and *S. convallariaedora* can be recommended for programs of Integrated Pest Management (IPM).