



XI ENCONTRO BRASILEIRO DE ECOLOGIA QUÍMICA
XI BRAZILIAN MEETING ON CHEMICAL ECOLOGY

October 23-26, 2019

Maceió, Brazil

**INTEGRATED USE OF BOTANICAL EXTRACTS AND NATURAL ENEMIES IN
THE MANAGEMENT OF INSECTS-PEST**

*João Pedro de Andrade Bomfim**; *Lucas Alves de Oliveira*; *Filipe Pereira Giardini Bonfim*; *Regiane Cristina Oliveira de Freitas Bueno*

*Faculdade de Ciências Agrônômicas, Universidade Estadual Paulista "Júlio de Mesquita Filho", Campus de Botucatu, São Paulo, Brasil. [*pedroab261@hotmail.com](mailto:pedroab261@hotmail.com)*

KEYWORDS: INTEGRATED PEST MANAGEMENT, BIOLOGICAL CONTROL, BOTANICAL EXTRACTS, AGRICULTURAL ENTOMOLOGY

ABSTRACT: The species *Bemisia tabaci* (Hemiptera: Aleyrodidae) and *Spodoptera frugiperda* (Lepidoptera: Noctuidae) are important pests in agriculture around the world. They are problems for large crops, such as maize (*Zea mays*: Poaceae) and soybean (*Glycine max*: Fabaceae) and for horticultural crops, generally produced in smaller areas, such as tomato (*Solanum lycopersicum*: Solanaceae) and sweetpepper (*Capsicum annuum*: Solanaceae). As a way to reduce the effects of the attack of these insects, different tactics must be implemented in the context of Integrated Pest Management. Among these tactics are chemical control, using synthetic insecticides or natural products and biological control, with the use of natural enemies such as parasitoids and predators. In this context, the research group (AGRIMIP) has developed several studies aiming to evaluate the effect of botanical extracts and essential oils of plants of different taxonomic families on whiteflies and caterpillars, as well as to evaluate the selectivity of these compounds to *Telenomus remus*, *T. podisi* (Hymenoptera: Platygasteridae) and *Trichogramma pretiosum* (Hymenoptera: Trichogrammatidae).