

Predation of *Zaprinus indianus* (Diptera: Drosophilidae) by the social wasp *Synoeca cyanea* (Hymenoptera: Vespidae)

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Fruit fly species are mainly responsible for the damage dealt to fruit in Brazil by insects. The fly Zaprionus indianus (Grupta) is considered of the principal economic pests in national fruit production. In fact, one of the promising techniques for pest management is biological control. Several studies have described the predatory behavior of social wasps on different groups of insect pest in agroecosystems. Thus, the objective this study was record of predation of Z. indianus larvae by the social wasp Synoeca cyanea. During three consecutive days, were conducted observations ad libitum (sensu Altmann, 1974) on the behavior of wasps S. cyanea foraging in ripe fruits of Spanish prune from 8 am to 6 pm. Observed that S. cyanea workers always exhibited antennation of the fruit and this behavior was more prolonged when the fruit being inspected had holes in its skin (exocarp) created by other insects. The wasps persistently malaxed the fruit when detected the presence of Z. indianus larvae, after trapped, the larvae were captured individually of the fruit and removed of site, the wasp transforming it into the form of an acorn, the set off the fruit making transport of the prey for the nest. During the observations we did not register any other species of wasps foraging in Spanish prune. This intense foraging activity of S. cyanea associated with the predation behavior and its broad distribution in throughout Brazil gualifies it an as interesting natural enemy of larvae of Z. indianus, and also as a prospective candidate for use in integrated pest management program against dipteran pests of fruit crops.

Key-words: Fruit fly, natural enemy, biological control.