Supplementary Material for MANOEL A. UCHÔA, CLAUDENIR S. CAIRES, JOSÉ N. NICÁCIO AND MARCELO DUARTE−**Frugıvory of *Neosılba* Specıes (Dıptera: Lonchaeıdae) and *Thepytus echelta* (Lepıdoptera: Lycaenıdae) on *Psıttacanthus* (Santalales: Loranthaceae) in Ecotonal Cerrado-South Pantanal, Brazil.** Florida Entomologist 95(3) (September, 2012) at http://purl.fcla.edu/fcla/entomologist/browse

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## ABSTRACT

This paper presents a survey of the insects that feed on fruits of *Psittacanthus* Martius (Santalales: Loranthaceae), a hemiparasitic mistletoe genus that infects trees in Brazil and other neotropical countries. The aim of the study was to identify candidate insects for biological control of *Psittacanthus* mistletoes. Unripe and mature fruits were collected in several localities of Cerrado, bordering South Pantanal, Southwestern Brazil, from 29 Apr 1998 to 30 Jul 2000. A total of 24,710 fruits (54 samples) of *Psittacanthus acinarius* infecting 15 species from 10 plant families were evaluated. *Psittacanthus acinarius* (Mart.) was the most abundant and frequent species of mistletoe parasitizing trees in the ecotonal Cerrado-Pantanal. From 24,710 fruits of *Psittacanthus acinarius* were obtained 1,812 insect larvae including 1,806 *Neosilba* McAlpine (Diptera: Lonchaeidae) species and 6 *Thepytus echelta* (Hewitson) (Lepidoptera: Lycaenidae). From these emerged 1,550 *Neosilba* spp. adults and 6 *T. echelta*. *Neosilba pantanense* Strikis was described from this research. Larvae of *T. echelta* occurred in fruits of *P. acinarius* parasitizing *Cecropia pachystachya* Trécul (Urticaceae) and *Anadenanthera colubrina* (Vellozo) Brenan (Fabaceae). Larvae of *Neosilba* caused no adverse effects on the germination of infected fruits of *Psittacanthus*, because they do not eat the embryo or viscin tissues. This differs from the larvae of *T. echelta* that interrupted the germination of seeds by feeding on those tissues. *Thepytus echelta* may be a promising insect for the biological control of *P. acinarius* in the ecotonal Cerrado-Pantanal, although its abundance and frequency were low throughout the sampling period.

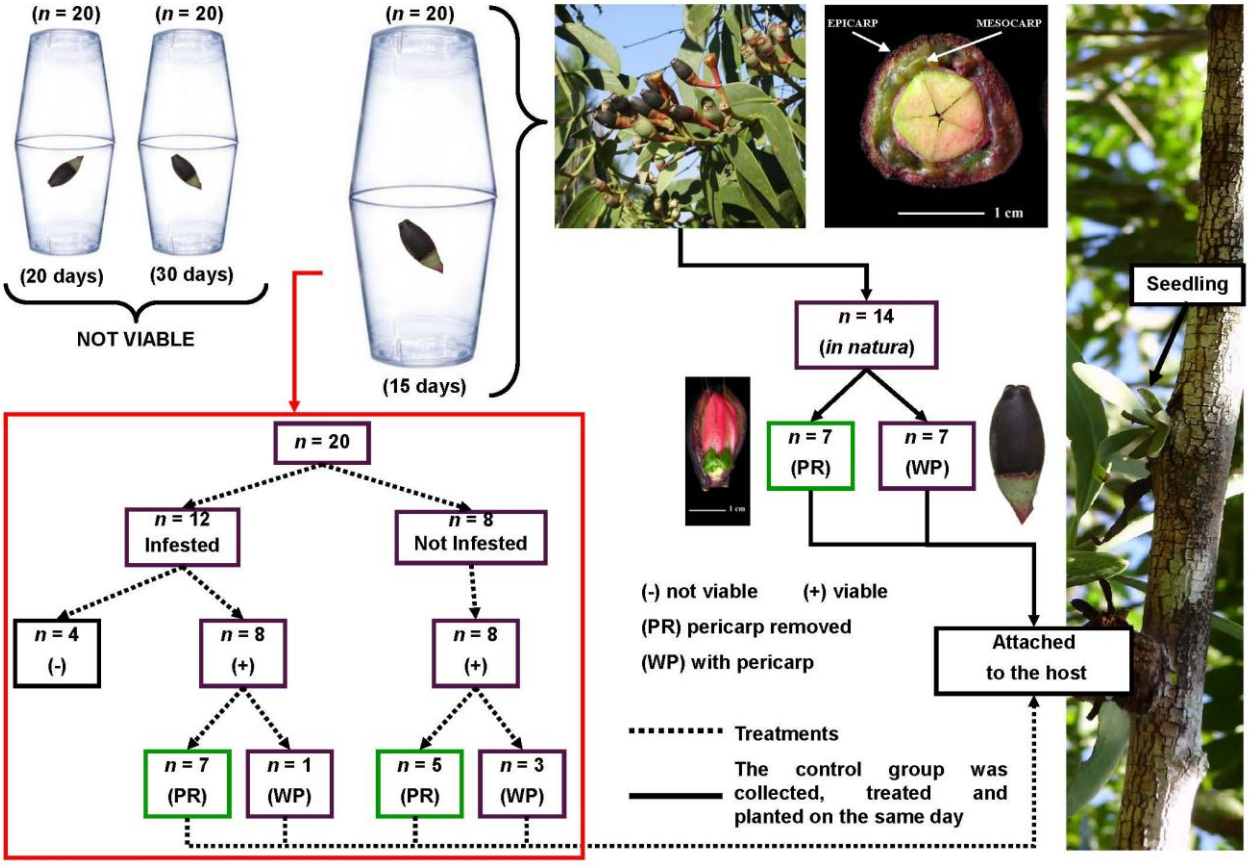


Fig. 1. Experimental design for seed germination of *Psittacanthus acinarius* (Mart.) Mart. (Loranthaceae), showing the containers for the fruits, and collection of infesting larvae.

Fig. 2. Male (above) and female (below) of *Thepytus echelta* (dorsal [right] and ventral [left] views, respectively) (Photos by Marcelo Duarte-USP, SP).

Fig. 3. Larva of *Thepytus echelta* (Lycaenidae) on the peduncle of *Psittacanthus acinarius* (Loranthaceae) fruit.

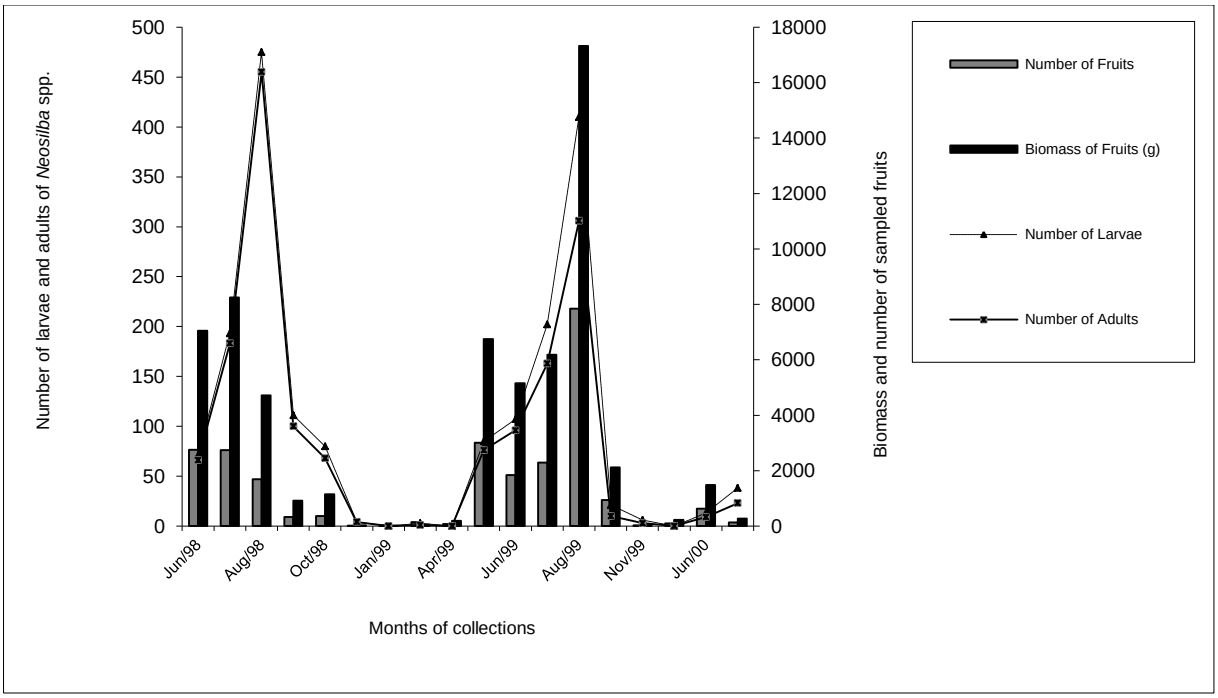


Fig. 4. Population fluctuation of larvae and adults of 6 *Neosilba* species (Diptera: Lonchaeidae) on fruits of *Psittacanthus acinarius* (Mart.) Mart. (Loranthaceae), sampled from Jun 1998 to Jul 2000 in ecotonal Cerrado-South Pantanal, Mato Grosso do Sul (Anástacio, Aquidauana, and Miranda).