



**Description of immatures and natural history of the weevil
Loncophorus pustulatus (Champion, 1903) (Coleoptera: Curculionidae:
Curculioninae) associated with flowers of *Ceiba speciosa* (A. St.-Hil.)
Ravenna (Bombacoidea: Malvaceae) in southeast Brazil**

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Abstract

Larva and pupa of *Loncophorus pustulatus* (Champion, 1903) (Curculionidae: Curculioninae: Anthonomini) are described, illustrated and compared with descriptions of immatures of two other species of *Loncophorus*. Weevil larvae were found inside aborted flowers on the ground under *Ceiba speciosa* (A. St.-Hil.) Ravenna (Malvaceae), in the city of São Paulo, State of São Paulo, and reared to adults in laboratory. Data obtained in the field and under laboratory conditions are presented. Parasitoidism of weevil larvae by wasps of the genus *Catolaccus* (Hymenoptera: Pteromalidae) is reported.

Key words: Anthonomini, *Catolaccus*, life cycle, Neotropical Region, "paineira", biodiversity, host plant association

Introduction

During a routine survey, carried out by Bená and Albertoni, of beetles associated with flowers of trees used as ornamental plants in central and southeast Brazil, weevil larvae were found inside aborted flowers on the ground under *Ceiba speciosa* (A. St.-Hil.) Ravenna (Malvaceae), formerly *Chorisia speciosa*, the "paineira" (portuguese), "palo borracho" (spanish) or silk floss tree. The larvae were reared to adults in the laboratory and identified as *Loncophorus pustulatus* (Champion, 1903), a Neotropical member of the curculionine tribe Anthonomini.

The Anthonomini (*sensu* Alonso-Zarazaga & Lyal, 1999) includes 43 genera and more than 500 species. It has an almost worldwide distribution, only absent in the Australian region. Bionomical knowledge is usually restricted to a few species that have economic importance (Burke 1976), as for example the cotton boll weevil (*Anthonomus grandis* Boheman, 1843) and the acerola blossom weevils (*A. macromalus* Gyllenhal, 1836 and *A. acerolae* Clark, 1988).

The Neotropical genus *Loncophorus* Chevrolat, 1832 currently contains 14 species distributed from Mexico south to Argentina. Clark (1988) revised the genus and recognized 13 species; thereafter, Clark (1995) added a new species from Mexico. *Loncophorus* species are predominantly associated with hosts in the family Malvaceae, subfamily Bombacoidea (formerly family Bombacaceae). Only one species, *L. angusticollis* Clark, 1995, is associated with Tiliaceae, a plant family related to Malvaceae. According to Clark (1988), larvae of some species, like *L. obliquus* Chevrolat, 1832, *L. varius* (Fabricius, 1775) and *L. chevrolati* Gyllenhal, 1836 are known to develop in fruits, whereas others like *L. fusiformis* (Champion, 1903), *L. pustulatus* (Champion, 1903) and *L. martinsi* Clark, 1988 develop in flower buds. Fernández *et al.* (2008) added *L. santarosae* Clark, 1986 to the list of species that develop in aborted flowers. The larvae of only two species have been described: *L. santarosae* by Clark & Burke (1986), as *Anthonomus santarosae*, based on specimens from Costa Rica, and *L. fusiformis* by Ahmad & Burke (1972), from material collected in San Salvador. Burke (1968) described the pupa of *L. fusiformis*. Little is known about the biology of *L. pustulatus*, a widespread species in Central and South America, occurring from Mexico