



## Revision of *Argoravinia* Townsend (Diptera: Sarcophagidae) of Brazil with the description of two new species

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### Abstract

The genus *Argoravinia* Townsend comprises six species restricted to the New World, with the exception of two species introduced into the Marshall Islands. The nominal genus *Raviniopsis* Townsend was considered a junior synonym of *Argoravinia* in the last catalogue of Sarcophagidae and the results of the present study support this arrangement. However, *Argoravinia* (s.s.) and *Raviniopsis* are considered as subgenera of *Argoravinia*, since they comprise two distinct species groups that are each inferred to be monophyletic based on characters of the male and female terminalia. Four species of *Argoravinia* previously recorded from Brazil are redescribed: *A. alvarengai* Lopes, *A. aurea* (Townsend), *A. brasiliana* (Lopes), and *A. rufiventris* (Wiedemann). Two new species of the subgenus *Argoravinia* are described from the Brazilian Amazon: *A. catiae* sp. nov. and *A. paraensis* sp. nov. Additional information on the biology of *A. aurea* is provided. A key to all six described species of *Argoravinia* is presented.

**Key words:** Calyptratae, Oestroidea, flesh flies, Neotropical Region, taxonomy

### Introduction

The genus *Argoravinia* Townsend, 1917 was erected for *Sarcophaga argentea* Townsend, 1912, collected from Piura, Peru. Lopes (1976) added a second species to this genus, *A. alvarengai* Lopes, based on material from Roraima, Brazil. Lopes (1969) treated *A. argentea* as a junior synonym of *A. rufiventris* (Wiedemann, 1830), described from “Brazil”.

Townsend (1918) established the genus *Raviniopsis* for his new species *R. aurea*, based on a series of females from Peru and Panama. Lopes (1969) added two species to the genus, *Sarcophagina candida* Curran, 1928 from Puerto Rico and Jamaica, and *Pachygraphomyia spinosa* Hall, 1933 from Panama. Lopes (1988) reviewed *Raviniopsis* and described two additional species, *R. brasiliana* from males and females collected from southeastern Brazil and *R. timbarensis* based on a single male from Ecuador. Lopes (1988) did not find significant morphological differences between *R. aurea* and *R. spinosa*, but retained both as valid species.

*Argoravinia* and *Raviniopsis* were thought to be closely related and were treated within the same subtribe by Lopes (1983, 1975a). Pape (1996), in his world catalogue, considered *Raviniopsis* as a synonym of *Argoravinia*, and also synonymized *R. spinosa* with *R. aurea*. Thus, *Argoravinia sensu* Pape (1996) comprised six described species: *A. alvarengai* (northern South America), *A. aurea* (Mexico to Brazil and introduced into Marshall Islands), *A. brasiliana* (southern Brazil), *A. candida* (Cuba, Jamaica, and Puerto Rico), *A. rufiventris* (United States to Argentina and introduced into Marshall Islands), and *A. timbarensis* (Ecuador).

Species of *Argoravinia* are Neotropical and southern Nearctic in distribution, with the exception of *A. aurea* and *A. rufiventris* that have been introduced into the Marshall Islands (Micronesia, Oceanian Region) (Pape 1990; Evenhuis 2011). Four species have been recorded from Brazil: *A. alvarengai*, *A. aurea*, *A. brasiliana*, and *A. rufiventris*.

*Argoravinia* species are small to medium-sized flies (4.0–9.5 mm) characterized mainly by the median stylus being long and slender (Lopes 1976, 1988; Pape 1996).