

SCIENTIFIC NOTE

First Record of *Anastrepha flavipennis* Greene (Diptera: Tephritidae) and of its Host in the Brazilian Amazon

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Abstract

Anastrepha flavipennis Greene was obtained from *Pouteria glomerata* (Sapotaceae) fruits, known as “abiurana-da-várzea” in the Brazilian Amazon. This is the first record of *A. flavipennis* for the state of Amazonas and of *P. glomerata* as a host for this fruit fly in the Amazon Basin.

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Anastrepha flavipennis Greene is recorded in Brazil and Panamá (Stone 1942a), Venezuela and Colombia (Norrbom *et al* 1998), and Argentina (Foote 1967). In Brazil, this species occurs in the states of Pará, Roraima, Maranhão, Piauí and Minas Gerais (Zucchi 2008).

The objective of this work was to report the occurrence of fruit fly and a new host fruit in the Brazilian Amazon. The importance of sampling native fruit is emphasized considering the little knowledge of hosts of fruit flies in the Brazilian Amazon. Fruits of *Pouteria glomerata*, “abiurana-da-várzea”, were sampled during February and March 2008 in Bom Jesus do Paraná do Iauara community in the municipality of Manacapuru, Amazonas state (03°36'37”S 61°18'19”W). Fruits were taken to an insect-rearing room (photoperiod 12h, 25.0 ± 0.1°C and 89.0 ± 4.7% RH), counted, weighed and individually placed in 250 ml transparent cages with a 2 cm layer of damp vermiculite at the bottom for larvae pupation. Emerged flies were collected, killed, sexed and preserved in 70% ethanol for further identification.

Pouteria glomerata is a native tree of the Amazon

Basin and it is commonly found in flood plain ecosystems. The fruits are green and covered with rusty hairs. Unlike other fruits of the genus, they are not consumed by native people (Braga *et al* 2007). Most *Pouteria* species are indigenous to the tropical and subtropical regions of South America, including Brazil, and few species are economically important such *Pouteria caimito* (Cavalcante 1996).

A total of 527 puparia of *A. flavipennis* were obtained from 30 fruits (73.2 g) of *P. glomerata*. The infestation was 24 puparia/kg of fruit or 17.6 puparia/fruit, but only 92 fruit flies (91 females and 1 male) were obtained from all puparia collected.

Pouteria glomerata and *Pouteria stylosa* (Sapotaceae) are the only two natural host fruits known for *A. flavipennis* (Norrbom & Kim 1988). There is also a record of *A. flavipennis* obtained artificially from *Manilkara sapota* (Sapotaceae) and *Mangifera indica* (Anacardiaceae) in Panamá (Stone 1942b, Norrbom 2004). This is the first record of *A. flavipennis* in the Brazilian Amazon and *P. glomerata* is recorded for the first time as a host for an

Anastrepha species in Brazil. Fruit fly voucher specimens are deposited in the entomological collection of the "Universidade Federal do Amazonas", Manaus, and in the United States National Collection, Washington, D.C.

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