NOTAS E COMUNICAÇÕES

BIONOMICS DATA FOR *Anopheles (Anopheles) forattinii* WILKERSON & SALLUM, 1999.

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Abstract - Immature and adult stages of *Anopheles (Anopheles) forattinii* were collected in the Parque Nacional do Jaú, Novo Airão, Amazonas, Brazil. Larvae and pupae were taken from fresh water among floating plant debris inside flooded "igapó" forest. This species may make use of plant debris for passive dispersal throughout its distribution range.

Key-words: Culicidae, *Anopheles forattinii*, bionomics

Bionomics Data *for Anopheles (Anopheles) forattinii* Wilkerson & Sallum, 1999

Resumo - Estágios imaturos e adultos de *Anopheles (Anopheles) forattinii* foram coletados no Parque Nacional do Jaú, Novo Airão, Amazonas, Brasil. Larvas e pupas foram encontradas em água doce entre material vegetal flutuante na floresta de igapó inundada. Esta espécie pode estar utilizando material vegetal como meio de dispersão passiva na sua área de distribuição.

Palavras-Chave: Culicidae, *Anopheles forattinii*, bionomia

In a recent morphological study, *Anopheles (Anopheles) mediopunctatus* (Lutz, 1903), of the Series Arribalzagia, was demonstrated to represent three distinct species: *An. mediopunctatus, Anopheles (Anopheles) costai* Fonseca & Ramos, 1940, and *Anopheles (Anopheles) forattinii* Wilkerson & Sallum, 1999. Although these three species share similar anatomical structures of the male genitalia (elongate 9th tergal lobes and two widely separated parabasal setae), morphological characters of the male genitalia, larva and pupa can be used to easily distinguish the three species from each other (Wilkerson & Sallum, 1999). *An. forattinii* is known from Amazonian Brazil, Peru, Colombia and French Guiana. According to Pecor *et al.* (2000), *An. forattinii* was the only species, of the three species formerly identified as *An. mediopunctatus*, collected in Iquitos, State of Loreto, in the Peruvian Amazon. In these collections from Iquitos, individuals of *An. forattinii* were captured as adults using human bait, and as larvae from heavily shaded forest pools.

Medical importance of *An. forattinii* is not known. Klein *et al.* (1991a, 1991b) demonstrated *An. mediopunctatus* to be as susceptible, or nearly as susceptible, to *Plasmodium falciparum* as *Anopheles (Nyssorhynchus) darlingi* Root,1926. These observations probably refer to *An. forattinii* since *An. costai* was relatively rare in collections from their study area (Wilkerson & Sallum, 1999) and *An. mediopunctatus* is only known from the coastal areas of the

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states of Rio de Janeiro and São Paulo, southeastern Brazil (Sallum *et al.*, 1999). Because of misidentification problems between *An. forattinii*, *An. costai* and *An. mediopunctatus*, the epidemiological importance of the former species may be underestimated.

Male, female, larvae and pupae of *An. forattinii* were collected in the Parque Nacional do Jaú (PNJ) which is located in the Municipality of Novo Airão, State of Amazonas, Brazil, between 1°40' and 3°00'South latitude and 61°25' and 63°50'West longitude. The PNJ is the largest Brazilian national park, having a 540-kilometer perimeter and occupying over 2.2 million hectares. The natural boundaries of the PNJ reach the Negro, Jaú, and Carabinani Rivers in the vicinities of Novo Airão, towards the south, and the Unini and Pauini Rivers close to Barcelos, in the north.

Male and female adults of *An. forattinii* were collected in Shannon traps with light and humans as bait, and in UV light traps, both placed within dense primary forest along the Carabinani River (2°1'36"S and 61°32'22"W). Adults were also collected in UV light traps, CDC light traps and Malaise traps placed inside primary forest and along the margin of the Miratuca River (1°47'2"S and 61°49'1"W). Immature stages of *An. forattinii* were collected in the Miratuca and Carabinani Rivers. Larvae and pupae were found inside flooded, dense "igapó" forest among plant debris.

The breeding places were in deep water (not measured), the water was fresh, slow-moving, partially shaded, and rich in floating plant debris (Fig. 1). Larvae and pupae were found in association with immature

Figure 1. The breeding places of *Anopheles forattinii* located in deep, slow-moving, partially shaded, fresh water rich in floating plant debris.

stages of *Culex* (*Aedinus*) *guyanensis* Clastrier,1970,*Culex* (*Melanoconion*) *vaxus* Dyar,1920, *Culex* (*Mel.*) near *vaxus* and other unidentified specimens of *Culex* (*Mel.*) from the Melanoconion Section.

Immature stages of *An. forattinii* may make use of plant debris in the water as a substrate and as a passive transport mechanism to disperse from hatching sites to other microhabitats. Therefore, this species may not solely depend on flying adults as a way of active dispersal throughout its distribution range.

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