

Sand flies (Diptera: Psychodidae) in Pernambuco State, northeastern Brazil: The presence of species incriminated as vectors of cutaneous leishmaniasis in the Amazon region

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Abstract

A total of 83,499 phlebotomine sand flies belonging to 23 species were captured in CDC light traps and from humans in three areas of the northeastern coastal region of Pernambuco State, Brazil. Two species had not been recorded previously from this region but have been incriminated as vectors of dermal leishmaniasis in the Amazon region. *Lutzomyia clautrei*, associated with the parasite *Leishmania (Viannia) naiffi*, and *Lutzomyia flaviscutellata*, associated with *Leishmania (Leishmania) amazonensis*, were captured in a small area of residual forest in the area of Recife. A third species, *Lutzomyia complexa*, which is considered a vector of *Leishmania (V.) braziliensis*, was also taken in the same forest, as well as in similar habitats of the municipalities of Amaraji and Paudalho. The commonest species in each locality were, respectively, *Lutzomyia umbratilis*, *Lutzomyia whitmani*, and *Lutzomyia complexa*. All are important vectors of the agents of leishmaniasis in the Amazon region.

Key words: Phlebotominae, sand fly, *Lutzomyia umbratilis*, *Lutzomyia complexa*, *Lutzomyia clautrei*, *Lutzomyia flaviscutellata*, *Lutzomyia whitmani*, cutaneous leishmaniasis, Amazon, Brazil

Introduction

Many phlebotomine sand fly species have been incriminated in the transmission of zoonotic cutaneous leishmaniasis on the American continent (Marcondes 2001, p. 26; Shaw 2002), and there is both epidemiological and experimental evidence of vector-