The presence of *Lutzomyia longipalpis* in a focus of American visceral leishmaniasis where the only proven vector is *Lutzomyia cruzi*. Corumbá, Mato Grosso do Sul State

Presença de *Lutzomyia longipalpis* em foco de leishmaniose visceral americana onde o vetor provável é somente o *Lutzomyia cruzi*. Corumbá, Mato Grosso do Sul

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**Abstract** The present communication reports the presence of *Lutzomyia longipalpis* in Corumbá, Mato Grosso do Sul, where the principal vector is *Lutzomyia cruzi*.

**Key-words:** Sand flies. American visceral leishmaniasis.

**Resumo** A presente comunicação relata a presença do *Lutzomyia longipalpis* em Corumbá, Mato Grosso do Sul, onde o vetor principal é o *Lutzomyia cruzi*.

**Palavras-chaves:** Mosquito-palha. Leishmaniose visceral americana.

Since 1983, many scientists have shown interest in the epidemiology of American visceral leishmaniasis (AVL) in Corumbá, since studies have not detected the presence of *Lutzomyia longipalpis*, the principal known vector of this disease in the Americas 1.

From 1995 to 1998 the entomology team of the Regional Coordination for Mato Grosso do Sul has been systematically capturing sand flies, vectors of *Leishmania chagasi*. These collections resulted in the incrimination of *Lutzomyia cruzi* as the vector of AVL in the absence of *Lu longipalpis* in Corumbá 4.

Because of this peculiarity, and in order to obtain more information on the vector involved, intensified studies were carried out in the field 5, and in the laboratory, by various groups of scientists 2-3.

The DIVEP team (Division of Epidemiological and Environmental Surveillance) of the Mato Grosso do Sul (Health) Co-ordination, presented a project to study the habits of *Lu cruzi* to the Coreplan (Regional Planning Council) in 2001, which included two monthly 24-hour captures in residences, caves and surrounding areas, using CDC miniature light traps.

The phlebotomine sand flies were captured in two-hour intervals noting the corresponding time period, mounted and identified per capture period (every 2 hours).

Following this separation, in processing the collected material from 17/07/2001 from a pig sty and a chickenhouse in the Cristo Redentor District of Corumbá, three male specimens of *Lu longipalpis* were identified from the 22:00 - 24:00 hour collection.

For some time we have discussed the possibility of finding this species in Corumbá since it is present in the surrounding municipalities of Miranda, Aquidauana and Anastacio, where *Lu longipalpis* is the principal vector of AVL. Although there is a natural barrier between these municipalities and Corumbá (the Paraguay River), it is important to note that progress, particularly in transportation, (railways and highways) include the completion of a bridge over this river, offering more rapid access to the city of Corumbá.

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The importance of detecting *Lu longipalpis* lies in the fact that this species is better adapted to the epidemiology of the diseases and widely distributed throughout the Country and present in areas where AVL is a constant concern of public health control programs such as those of Teresina (Piauí State), Belo Horizonte (Minas Gerais State), Araçatuba (São Paulo State), São Luis (Maranhão State) and, Tres Lagoas in Mato Grosso do Sul State).

The presence of *Lu longipalpis* in this focus of AVL presents a new variable in the epidemiology of this disease in Corumbá.

REFERENCES


