

**LEISHMANIA INFECTIONS IN *LUTZOMYIA LONGIPALPIS*
(DIPTERA: PSYCHODIDAE) ON THE ISLAND OF SÃO LUIS,
MARANHÃO STATE, BRAZIL**

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Dissection of Lutzomyia longipalpis, captured in the São Luis focus of visceral Leishmaniasis revealed a 1.8% promastigote infection rate.

The recent outbreak of visceral Leishmaniasis in São Luis (Da Silva et al., 1983) has initiated surveillance of the human population, dogs and potential reservoir animals by SUCAM (Brazil et al., 1983). Following the detection of *Leishmania donovani chagasi* in *Lu. longipalpis* on the Island of Marajó, Pará State (Ryan et al., 1984; Lainson et al., 1984) attempts were made to isolate this parasite from sandflies present in the São Luis focus. CDC light traps were placed in chicken, pig and donkey sheds in the Mata São José de Ribamar district, São Luis Island, between 19:00-09:00 hrs on the 13th and 14th December, 1983. Six suprapylarian (Lainson & Shaw, 1979) promastigote infections were detected in 327 *Lu. longipalpis* dissected, these infected guts were inoculated intraperitoneally into 1 or 2 hamsters.

The detection of this high proportion (1.8%) of naturally infected *Lu. longipalpis* in a focus of human infection along with earlier reports from the states of Ceará (Deane & Deane, 1954 and Deane, 1956), Bahia (Lopes, 1956) and Pará (Ryan et al., 1984, in Marajó and Lainson et al., 1984, in Santarém), removes any reasonable doubts that this sandfly is indeed the major vector of visceral Leishmaniasis. The high infection rate, detected in this study, results, at least in part, from 80% of the dogs from this area (unpublished observations) being infected, and explains the numerous human cases. During the captures, on this occasion and in June, 1983, by aspiration from the walls of the sheds, we were bitten by a number of *Lu. longipalpis* demonstrating their relatively anthropophilic habits.

Characterization of the Maranhão isolates, by isoenzymes and monoclonal antibodies awaits development of the infections in the inoculated hamsters.

RESUMO

Foram dissecados *Lutzomyia longipalpis*, capturados no foco de leishmaniose visceral na ilha de São Luis, Maranhão, sendo encontradas 1,8% com infecção natural por promastigotas.

ACKNOWLEDGEMENTS

The authors are grateful to Drs. R. Lainson and J.J. Shaw for their continued support in this project and the regional office (São Luis) of SUCAM for field assistance.

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This work was supported financially by the Wellcome Trust (London), the Fundação SESP (Rio de Janeiro), the CNPq (Brasília) and the Federal University of Maranhão.

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Received for publication April 11th and accepted June 11th, 1984.

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