

## Leish001- Epidemiological and entomological aspects of American tegumentary leishmaniasis (ATL) in the municipality of Monte Negro, state of Rondônia, Brazil

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**Introduction:** The municipality of Monte Negro (10° 15' 92" S and 63° 17' 14" W), located 250 km southwest from the city of Porto Velho, is an historical area of transmission of ATL that accounted for a prevalence of 59 cases/100.000 inhabitants in 2010. This work was carried out on the purpose of identifying the species of phlebotomine sandflies in this area that may have been transmitting the disease, and concisely describe the epidemiological aspects of ATL. **Material and Methods:** epidemiologic data was obtained from the Ministry of Health of Brazil and from the Secretary of Health of Monte Negro. The phlebotomine sandflies were captured using CDC light traps between July 2006 to July 2008 in nine different localities of the municipality. Environmental, economic and demographic indicators were obtained from government institutions, namely IPEA, IBAMA and IBGE. **Results:** There has been a significant decrease in the incidence a ATL of about 50% over the last ten years in the municipality and 25% in Rondônia. 1,935 specimens of 52 sand fly species were captured, two of the genus *Brumptomyia* genus and 50 of the genus *Lutzomyia*. The species of the genus *Lutzomyia* found belong to the subgenera *Evandromyia*, *Lutzomyia*, *Micropygomyia*, *Nyssomyia*, *Pressatia*, *Psathyromyia*, *Psychodopygus*, *Sciopemyia*, *Trichophoromyia*, *Viannamyia*; and the following groups: Aragaoui, Migonei, Oswaldoi, Saulensis, Verrucarum and an ungrouped species *Lutzomyia acanthopharynx*. Brazilian socioeconomical and environmental indicators demonstrated an increase by 18% in the government family allowances provided in this region, reduction of migration to Amazônia (minus 35.000 inhabitants), increase of employs in the south and southwest of Brazil and 50% decrease in deforestation. **Main Conclusions:** Four sandflies species were found in the state of Rondonia for the first time: *B. brumpti*, *Lu. tarapacaensis*, *Lu. melloi*, and *Lu. lenti*. Other species captured as *Lu. whitmani* and *Lu. davis* have proved to be significant vectors of *Leishmania* in the enzootic and in the anthroponotic cycle. The detection of these vectors suggests an increase of the transmission risk in the peridomestic environment. Socioeconomical improvement of Brazilian economy in the last 15 years collaborated in the decrease of people exposed to vectors of ATL, as they fixed these people in areas of low risk of transmission (urban areas, south and southwest of Brazil). **Supported by** FINEP/FAPEX **E-mail:** spider@icbusp.org