

## DIVERSITY OF PROTOZOAN PARASITES THAT INFECT ANURANS AND REPTILES IN THE BRAZILIAN AMAZON REGION

1LABORATÓRIO ECOLOGIA DE DOENÇAS TRANSMISSÍVEIS NA AMAZÔNIA, INSTITUTO LEÔNIDAS E MARIA DEANE – FIOCRUZ AMAZÔNIA, MANAUS, BRASIL; 2PROGRAMA DE PÓSGRADUAÇÃO EM BIOLOGIA DA INTERAÇÃO PATÓGENO-HOSPEDEIRO, INSTITUTO LEÔNIDAS E MARIA DEANE – FIOCRUZ AMAZÔNIA, MANAUS, BRASIL; 3LABORATÓRIO DE DOENÇAS PARASITÁRIAS- COLEÇÃO DE PROTOZOÁRIOS, INSTITUTO OSWALDO CRUZ, FIOCRUZ RJ, RIO DE JANEIRO, BRASIL; 4FIOCRUZ RONDÔNIA, PORTO VELHO, BRASIL

The Amazon is home to one-third of the world's biodiversity, housing 163 species of anurans and 315 of reptiles. These animals have significant zoonotic potential, as they are reservoirs for a wide variety of parasites, such as protozoa of the Trypanosomatidae family, obligate parasites of vertebrates, invertebrates and plants, and transmitted between hosts by insects. Of the 25 genera of the Trypanosomatidae family *Trypanosoma* and *Leishmania* have been the most studied because of their medical and veterinary importance. The other genera are few studied. Therefore, the project seeks to identify the trypanosomatid species that infect different reptile and anuran hosts, in order to fill gaps in knowledge of biodiversity. The collections were carried out in rural areas of the municipalities of Presidente Figueiredo (PF) and Urucurituba (UR), AM. In each municipality, two areas were selected, in each one a Pitfall Trap with Drift Fence (AIQ) was built. A blood sample was obtained from each captured animal by cardiac or caudal puncture for the preparation of a smear and subsequent observation of the parasites under optical microscope. At all 141 animals were captured, 67 belonging to the Amphibia Class and 74 to the Reptilia Class. In PF, 93 individuals were collected and in UR, 48. Trypanosomatids were observed in the anuran *Pristimantis fenestratus*, compatible with the species *Trypanosoma fallisi*; in *Allobates femoralis* and *Rhinella marina*, were observed trypanosomatids compatible with *Trypanosoma rotatorium* and *T. tsunetzomiytai*. In addition, 50% of the reptiles and 11.4% of the amphibians presented protozoa of the phylum Apicomplexa (Hepatozoon, Hemogregarinas and Plasmodium). The identification of the parasite species is being confirmed by sequencing. The results of this work will contribute to reducing gaps in knowledge of the biodiversity of hemoparasites of wild animals, as well as to analyze their zoonotic potential and the risk to animal and human health.

**Key words:** Anuran, reptil, hemoparasites, Trypanosomatidae, Apicomplexa

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