

RESUMO - ENTOMOLOGIA E ACAROLOGIA

HEPATOZOOM SCREENING IN MITES FROM BRAZILIAN SQUAMATES

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Reptiles of the order Squamata represent one of the most diverse vertebrate groups in Brazil and host a wide range of ectoparasites, including mites and ticks, which may act as vectors of pathogens. Among protozoan parasites, species of the genus *Hepatozoon* (Apicomplexa: Adeleorina) are widely distributed and commonly infect reptiles, with transmission frequently associated

with the ingestion of arthropod vectors and with predation. Despite their relevance, the occurrence and circulation of Hepatozoon in ectoparasites and their hosts in Brazil remain poorly investigated. This study aimed to detect Hepatozoon DNA in ectoparasites of Squamata from different regions of Brazil, using material obtained from field collections and tissue banks associated with the Acarological Collection of the Butantan Institute (IBSP). DNA was individually extracted and initially screened using endogenous controls (18S rRNA and cox-1 genes) to ensure that it has DNA that can be amplified by PCR. All samples with successful amplification were subsequently tested by conventional PCR targeting regions of the 18S rRNA gene to Hepatozoon. A total of 98 ectoparasite specimens belonging to the families Trombiculidae, Ixodorhynchidae, and Pterygosomatidae tested positive for endogenous controls and were therefore considered suitable for pathogen screening. However, all samples were negative for Hepatozoon, with no amplification detected in any of the assays performed. Although no evidence of Hepatozoon infection was found in the analyzed material, these results contribute to the understanding of host–parasite interactions and pathogen distribution in Brazilian Squamata. The absence of detection may reflect low parasitemia levels. Further studies including larger sample sizes, broader geographic coverage, and complementary diagnostic approaches are necessary to clarify the role of ectoparasites in the epidemiology of Hepatozoon spp. in reptiles.

Palavras-chave: squamata; hepatozoon; mites; molecular screening; host–parasite interactions.