

HELMINTH DIVERSITY OF WILD AND SYNANTHROPIC SMALL MAMMALS IN THE
MUNICIPALITY OF MONTES CLAROS, NORTHERN MINAS GERAIS REGION

LARA RIBEIRO DE ALMEIDA¹, BEATRIZ ELISE DE ANDRADE SILVA², ROSANNA LORRANE
FRANCISCO DOS REIS MATOS³, THAINARA DA SILVA GONÇALVES³, LÍVIA ALENCAR
GOMES³, HUDSON ANDRADE SANTOS⁴, THALLYTA MARIA VIEIRA³, ARNALDO
MALDONADO JÚNIOR¹.

¹INSTITUTO OSWALDO CRUZ – FUNDAÇÃO OSWALDO CRUZ, RIO DE JANEIRO,
BRAZIL; ²UNIVERSIDADE DO ESTADO DO RIO DE JANEIRO – UERJ, RIO DE JANEIRO,
BRAZIL; ³UNIVERSIDADE ESTADUAL DE MONTES CLAROS – UNIMONTES, MINAS
GERAIS, BRAZIL; ⁴UNIVERSIDADE FEDERAL DE MINAS GERAIS - UFMG, MINAS
GERAIS, BRAZIL.

Small mammals can serve as definitive or intermediate hosts for numerous species of parasitic helminths, some of which may have zoonotic potential. This study aims to identify helminth species morphologically and molecularly from small mammals captured in the municipality of Montes Claros, Minas Gerais. Sampling was conducted in Sapucaia Municipal Park, Milton Prates Municipal Park, and the neighborhoods of Carmelo, Vila Greice, and Alto São João. For captures, Sherman and Tomahawk traps were used, remaining open for five consecutive nights at each site and checked every morning. The captured animals were weighed, sedated, and euthanized with an intravenous overdose of general anesthetic. The carcasses of the collected small mammals were deposited and cataloged in the Coleção Integrada de Mamíferos Silvestres Reservatórios do Instituto Oswaldo Cruz (FIOCRUZ-RIO) after species identification. A total of 34 animals were captured: 11 in Sapucaia (three *Didelphis albiventris*, six *Thrichomys apereoides*, and two *Kerodon* sp.), two in Milton Prates, five in the Carmelo neighborhood, 12 in Vila Greice, and four in Alto São João, all belonging to the *Rattus* genus. Out of the 34 necropsied animals, 44% (15/34) tested positive for helminths from the phyla *Nematoda* and *Acanthocephala*, as well as the class *Cestoda*, including the species *Calodium hepaticum*; the genera *Physaloptera* sp., *Trichuris* sp., *Cruzia* sp., *Heligmostyngylus* sp.; the families Oxyuridae and Trichostrongylidae and strobilocercus parasitizing the liver of rodents. The identification of small mammal species and helminths is still in progress. While numerous helminthological surveys have already been conducted on wild and synanthropic small mammals, further exploration of the parasitic fauna in different environments is essential, especially for detecting potential reservoirs of helminths with zoonotic potential and preventing the potential transmission of these parasites to humans.

Supported By: Fundação Carlos Chagas Filho de Amparo à Pesquisa do Estado do Rio de Janeiro (FAPERJ), Nº DO PROCESSO E-26/200.326/2024

Keywords: Zoonoses, Rodents, Helminths