

BIODIVERSITY OF HELMINTHS IN THE *Thylamys macrurus* (OLFERS, 1818)
(DIDELPHIDAE: THYLMYINI) FROM BRAZILIAN PANTANAL, MATO GROSSO DO SUL,
BRAZIL

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The biome Pantanal, located in central South America, a seasonally fire-prone region, drew international attention after the unprecedented 2020 wildfires. The Pantanal serves as a vital biodiversity sanctuary, harboring numerous endemic species of Brazilian flora and fauna. Among didelphid marsupials, *Thylamys macrurus* (Olfers, 1818) is endemic to parts of Mato Grosso do Sul, where it plays an important role in the local ecosystem. However, increasing environmental threats, such as habitat loss and climate-driven wildfires, endanger the region's unique biodiversity, underscoring the need for conservation efforts. In this way, the aim of this study was to characterize the helminth community of *T. macrurus* in the Pantanal, specifically in the municipality of Corumbá, state of Mato Grosso do Sul, Brazil. Four small marsupials *T. macrurus* were collected from the Pantanal (SISBIO 13373-5; 73761) using Sherman live traps placed on the soil and in the trees. The helminths were recovered from the gastrointestinal tracts, washed in saline (NaCl) and fixed in 70% ethanol for light microscopy. All captured hosts were parasitized and 228 helminth specimens were recovered from them. The helminths were first identified based on morphological and morphometrical characterization. We identified four different genera of nematode and one Cestode. We recovered two *Spirura* sp. in stomach, one *Pterygodermatites jagerskioldi*, 110 *Didelphoxyuris thylamisis*, 110 *Gracilioxyuris agilisis*, and two cestodes. The helminth species found in *T. macrurus* have also been reported in other species of the tribe Thylamyini, corroborating previous studies on helminth communities within the genus belonging to the tribe. This study provides the first analysis of the helminth community in *T. macrurus*, offering valuable insights and highlighting the importance of research on helminth biodiversity in small marsupials, especially those living in habitats increasingly affected by environmental degradation.

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