

## Helminth community composition of wild rodents in the Atlantic forest from high altitude

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The Atlantic Forest is situated along the eastern coast of Brazil and is one of the five most important biodiversity hotspots in the world, due to its biological richness and threatened species extinction level. It is one of the Brazilian biomes that has suffered most disturbances due to the severe impact of human occupation. Wild animals live and interact in their natural ecosystem, where they interact with the environment around them and with other organisms. Their abundance is influenced by abiotic and biotic factors such as habitat, locality, climate and fluctuation of individuals number during the years and seasons. The small mammals are important for public health, once wild rodents are reservoirs of hantavirus, trypanosomiasis and schistosomiasis among other parasites, moreover, they are relevant for ecosystem. The aim of this study was to identify the composition community of the rodents *Akodon montensis*, *Akodon serrensis*, *Delomys dorsalis* and *Oxymycterus dasytrichus* in the Atlantic Forest from high altitude area of Petrópolis, Rio de Janeiro, Brazil. The study was carried out in the Petrópolis part of the Parque Nacional da Serra dos Órgãos. Rodents were captured using Sherman live trap. During five consecutive nights. Traps were baited with mixture of peanut, butter, banana, oat meal and bacon. The euthanized rodents, in the field laboratory, have their thoracic and abdominal cavities observed for the presence of helminths. Fifteen rodents were collected: three *Akodon montensis*, four *Akodon serrensis*; three *Oxymycterus dasytrichus* and five *Delomys dorsalis*. Until now six nematodes infecting the rodents *Akodon montensis* and *Akodon serrensis* have been identified: *Protospirura numidica*, found in the stomach, *Stilestrongylus eta* and *Pterigodermatites* sp. parasitizing the small intestine, *Nematomystes* sp. *Syphacia* sp. and *Trichuris* sp. parasitizing the large Intestine. Totaling 53 specimens of nematodes, moreover, the presence of cestode was observed in the small intestine. In the rodents *D. dorsalis* was found only one species of oxyurid, *Syphacia hugoti*. The nematodes *Caroloxuris* sp and *Nematomystes* sp. was found parasitizing the large intestine of *O. dasytrichus*. The genera *Syphacia*, *Trichuris*, *Pterigodermatites*, *Stilestrongylus* and *Nematomystes* were found parasitizing *A. montensis*, totalizing a richness of five species. While, in the rodent *A. serrensis* only one species of nematode was observed, *Protospirura numidica*. The richness of helminth species in the present study was also observed in previous studies in wild rodents ranging from one to nine. Interestingly, the composition of helminths in rodents of the genus *Akodon* from PARNASO- Petrópolis differs from the composition of helminths from *Akodon* collected in PARNASO - Teresópolis.