

RESUMO - ENTOMOLOGIA E ACAROLOGIA

CHECKLIST OF TICKS (ACARI: IXODIDA) ASSOCIATED WITH WILDLIFE IN ECUADOR WITH EMPHASIS ON HOST-PARASITE RELATIONSHIPS

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Ticks are hematophagous ectoparasites of vertebrates and are recognized as important vectors of pathogens that primarily affect animals and, to a lesser extent, human health. Ecuador is recognized as a megadiverse country by Conservation International and the United Nations Environment Program's World Conservation Monitoring Center (UNEP-WCMC). Despite this, knowledge of arthropod diversity, such as ticks and their associated wildlife hosts, remains limited. This study aimed to develop a checklist of tick species collected on wild vertebrates preserved in the ectoparasite collection of the Instituto Nacional de Biodiversidad of Ecuador (INABIO), with a focus on host-parasite associations and their ecological relevance. Specimens were identified using morphological characters from taxonomic keys for the Neotropical region, and molecular

techniques were used to support their identifications. All records were organized into a database, including host and locality information. To date, more than 60 tick–host associations have been recorded, primarily involving the genera *Ixodes* and *Amblyomma*. The genus *Ixodes* showed the highest diversity, with species such as *Ixodes montoyanus*, *Ixodes mashpiensis*, *Ixodes luciae*, *Ixodes* cf. *andinus*, and *Ixodes auritulus*, parasitizing a wide range of hosts, especially small mammals from the genera *Nephelomys*, *Thomasomys*, and *Transandinomys*, as well as marsupials and birds. Meanwhile, *Amblyomma* species, including *Amblyomma multipunctum*, *Amblyomma sculpturatum*, *Amblyomma ovale*, *Amblyomma naponense*, and *Amblyomma nodosum*, were found associated with medium- and large-sized mammals such as *Tapirus terrestris*, *Tapirus pinchaque*, and *Procyon cancrivorus*, and the immature forms were found with birds and small mammals. These findings reveal a rich, still-unexplored network of tick-host relationships in Ecuador, including new reports of tick species and hosts. Beyond documenting diversity, this study underscores the relevance of biological collections as a source of ecological information, and even epidemiological, that can be revisited and expanded with modern tools. Furthermore, these findings open perspectives for future research on pathogen detection and the role of wildlife in the maintenance and dispersion of tick-borne agents within a One Health framework.

Palavras-chave: biological collections; one health; ectoparasites; hosts; biodiversity.