Article

Ticks (Acari: Ixodidae) parasitizing endemic and exotic wild mammals in the Esteros del Iberá wetlands, Argentina

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Abstract

Five species of ticks belonging to the genera Amblyomma, Haemaphysalis and Rhipicephalus were recorded from endemic and exotic wild mammals in the Esteros del Iberá wetlands, Argentina. Adults and immature stages of Amblyomma dubitatum were found on Hydrochoerus hydrochaeris, Sus scrofa, Axis axis and Myrmecophaga tridactyla. Larvae and nymphs of A. dubitatum were collected on Bubalus bubalis, Lepus europaeus, Monodelphis dimidiata and on the rodents Cavia aperea, Scapteromys aquaticus, Oligoryzomys flavescens and Akodon azarae. One male of Amblyomma nodosum was associated with M. tridactyla; specimens of Haemaphysalis juxtakochi were found on A. axis, S. scrofa and Mazama gouazoubira; and Rhipicephalus (Boophilus) microplus was detected on Blastocerus dichotomus. Adults of Amblyomma triste were collected on B. dichotomus, S. scrofa and H. hydrochaeris, while immatures of this tick were recorded on M. dimidiata, A. azarae, S. aquaticus, O. flavescens and H. hydrochaeris. In addition to elucidating tick-host associations, the findings of this survey are biomedically important. Although the tick fauna of Esteros del Iberá is limited, some species, such as A. triste and R. (B.) microplus, are recognized vectors of pathogenic agents infecting humans and animals. Also, a large number of the Esteros del Iberá collection records were for ticks from exotic (S. scrofa, A. axis, B. bubalis, L. europaeus) or reintroduced (M. tridactyla) mammals, suggesting that the introduction of these mammals may result in the amplification of tick populations in the study area, with potential deleterious effects on the endemic fauna.

Key words: ticks, Ixodidae, wild mammals, Esteros del Iberá, Argentina

Introduction

Taxonomic knowledge of the parasitic arthropods associated with a particular host community is fundamental to studies of the influence of these parasites on host ecology and to attempts to evaluate their potential as vectors of infectious diseases. From a biomedical standpoint, ticks are among the most important parasitic arthropods (Hoogstraal 1985; Jongejan & Uilenberg 2004)—they are hematophagous ectoparasites of terrestrial tetrapods whose role as vectors of animal and human pathogens is widely recognized (Sonenshine and Mather 1994; Jongejan and Uilenberg 2004). About 198 species of ticks belonging to the families Argasidae (soft ticks) and Ixodidae (hard ticks) occur in the Neotropical Zoogeographic Region (Guglielmone *et al.* 2003; Nava *et al.* 2009, 2010b), and many of these are potential vectors of pathogens to mammals (Guglielmone *et al.* 2003).

The Esteros del Iberá is a large wetland complex spanning over 13,000 km² in the Argentinean province of Corrientes (Canziani *et al.* 2003). This macrosystem is one of the most important