

Ticks (Acari: Ixodida) parasitizing free-living wild animals in the Caatinga biome in the State of Pernambuco, northeastern Brazil

MAURICIO C. HORTA¹, GABRIELA F. do NASCIMENTO¹, THIAGO F. MARTINS², MARCELO B. LABRUNA², LUIZ C. P. MACHADO³ & PATRÍCIA A. NICOLA³

¹ Colegiado de Medicina Veterinária, Universidade Federal do Vale do São Francisco, 56300-000, Petrolina, PE, Brasil. E-mail: maurivet@yahoo.com

² Departamento de Medicina Veterinária Preventiva, Faculdade de Medicina Veterinária e Zootecnia, Universidade de São Paulo, 05508-270, São Paulo, SP, Brasil

³ Colegiado de Ciências Biológicas, Universidade Federal do Vale do São Francisco, 56300-000, Petrolina, PE Brasil

Abstract

Information on ticks from the Caatinga, a semi-arid biome unique to northeastern Brazil, is scarce. The present study reports field data on ticks infesting free-living wild animals in native Caatinga vegetation within the municipalities of Cabrobó, Custódia, Floresta, Ibimirim and Salgueiro, State of Pernambuco, Brazil. During field work from March 2009 to February 2010, a total of 91 ticks were collected from the following animals: *Amblyomma rotundatum* parasitizing *Boa constrictor* (tropical American boa); *Amblyomma auricularium* parasitizing *Euphractus sexcinctus* (yellow armadillo), *Galea spixii* (Spix yellow-toothed cavy), *Thrichomys apereoides* (common punaré), *Monodelphis domestica* (gray short-tailed opossum) and *Conepatus semistriatus* (striped hog-nosed skunk); *Amblyomma parvum* parasitizing *G. spixii* and *T. apereoides*; and *Ornithodoros (Alectorobius)* sp. parasitizing *Wiedomys pyrrhorhinos* (red-nosed mouse). We report the first tick infestation in northeastern Brazil on *G. spixii* and *C. semistriatus*. *Thrichomys apereoides* and *G. spixii* are new host records for *A. auricularium* and *A. parvum*, while *W. pyrrhorhinos* is a new host record for *Ornithodoros (Alectorobius)* sp. *Conepatus semistriatus* is recorded for the first time parasitized by *A. auricularium* in Pernambuco State. The present study increases our knowledge of the distribution of ticks and their parasitism of wildlife in northeastern Brazil.

Key words: Ticks, wild animals, Caatinga, Pernambuco, Brazil

Introduction

Ticks (Acari: Ixodida) are obligately hematophagous ectoparasites that feed on a wide variety of vertebrates, including humans and domestic and wild animals. Knowledge of tick parasitism of wildlife is very useful when analyzing tick ecology and distribution, host relationships, and tick-borne diseases.

The tick fauna of Brazil comprises 61 species (Barros-Battesti 2006, Dantas-Torres *et al.* 2010). Many studies of ticks under natural conditions in different Brazilian biomes have been conducted (Aragão 1936, Labruna *et al.* 2005, Szabó *et al.* 2007, 2009). However, these studies are mostly restricted to the adult stage, whereas hosts of the immature stages of many tick species are still poorly known. The semi-arid Caatinga biome contains great faunal and floral diversity and is entirely contained within the national territory of Brazil. However, the tick fauna of this biome has been largely neglected, and little information exists concerning parasitism of wild animals.

The present study reports field data on ticks infesting free-living wild animals, including reptiles, rodents, Xenarthra and carnivores, from five municipalities in the Caatinga of northeastern Brazil. New locality and host records for a number of tick species are provided.