



The *Amblyomma* (Acari: Ixodida: Ixodidae) of Mexico: Identification Keys, Distribution and Hosts

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Abstract

Taxonomic keys, distributional data and hosts are provided for the 26 *Amblyomma* species known from Mexico. Members of this genus have been collected in 30 of Mexico's 32 states and are associated with 43 nominal vertebrate taxa, of which 40 have been identified to species and four (*Python* sp., *Myrmecophaga tridactyla*, *Tamandua tetradactyla*, *Tupinambis teguixin*) are non-native. Mammals are the principal class of vertebrates parasitized by Mexican *Amblyomma* species, followed by reptiles, birds and amphibians. Our knowledge of Mexican *Amblyomma* is still far from complete because many potential hosts have not yet been examined and vast areas of the country remain unexplored.

Key words: *Amblyomma*, Ixodidae, keys, distribution, hosts, Mexico

Introduction

Ticks of the genus *Amblyomma* (Koch) are parasites of all classes of terrestrial vertebrates: amphibians, reptiles, birds and mammals. Many members of this genus are of medical and veterinary importance, serving as vectors of microorganisms that cause diseases, such as Rocky Mountain spotted fever (Cooley & Kohls 1944; Estrada-Peña *et al.* 2004), other rickettsioses of the spotted fever group (Estrada-Peña *et al.* 2004), heartwater (Sonenshine 1991) and enzootic tularemia (Cooley & Kohls 1944), in domestic and wild animals, as well as humans.

The genus *Amblyomma* may be characterized as follows: body generally medium- to large-sized; scutum usually ornate, often with bright, multicolored iridescent patterns or dark spots and stripes on a pale ground; eyes and festoons present; palps usually long, palpal segment 2 very long; anal groove situated posterior to anus; spiracles subtriangular or comma-shaped; basis capituli variable in dorsal outline (Robinson 1926; Sonenshine 1991). *Amblyomm*ine ticks occur worldwide, chiefly in humid tropical and subtropical regions (Sonenshine 1991). The genus is the third largest in the Ixodidae and currently comprises 130 species (Guglielmone *et al.* 2010), 59 of which are found in the Neotropical Zoogeographic Region (Barros-Battesti *et al.* 2006; Nava *et al.* 2009). In Mexico, Hoffmann (1962) initially recognized 17 species: *Amblyomma americanum* (Linnaeus), *Amblyomma auricularium* (Conil), *Amblyomma cajennense* (Fabricius), *Amblyomma castañedai* Vargas and Hoffmann, *Amblyomma coelebs* Neumann, *Amblyomma dissimile* Koch, *Amblyomma imitator* Kohls, *Amblyomma inornatum* (Banks), *Amblyomma longirostre* (Koch), *Amblyomma maculatum* Koch, *Amblyomma oblongoguttatum* Koch, *Amblyomma ovale* Koch, *Amblyomma parvum* Aragão, *Amblyomma pecarium* Dunn, *Amblyomma rotundatum* Koch, *Amblyomma sabanerae* Stoll, and *Amblyomma scutatum* Neumann. However, *A. castañedai* is currently considered a junior synonym of *A. scutatum* (Camicas *et al.* 1998). Later, Hoffmann and López-Campos (2000) again recorded these species but included new locality records for some of them, and Whitaker & Morales-Malacara (2005) compiled a list of ectoparasites associated with Mexican mammals, including 12 *Amblyomma* species. Recently,