



The *Ixodes* (Acari: Ixodidae) of Mexico: parasite-host and host-parasite checklists

CARMEN GUZMÁN-CORNEJO¹, RICHARD G. ROBBINS² & TILA M. PÉREZ¹

¹ Colección Nacional de Ácaros, Instituto de Biología, Universidad Nacional Autónoma de México, 3er Circuito Exterior s/n, Ciudad Universitaria, Copilco, Coyoacán, México D.F., C.P. 04510. E-mail: cguzman@ibiologia.unam.mx

² DPMIAC/AFPMB, Walter Reed Army Medical Center, Washington, DC 20307-5001.

Abstract

Parasite-host and host-parasite checklists are provided for all species of *Ixodes* known from Mexico; host and locality data are from specimens housed in the Colección Nacional de Ácaros, Instituto de Biología, Universidad Nacional Autónoma de México, and from literature. Six *Ixodes* species (*I. brunneus*, *I. conepti*, *I. dentatus*, *I. eadsi*, *I. guatemalensis*, *I. texanus*) are newly recorded from Mexico; in addition, 17 new locality records are presented for eight species (*I. affinis*, *I. boliviensis*, *I. luciae*, *I. rubidus*, *I. scapularis*, *I. spinipalpis*, *I. tancitarius*, *I. woodi*), and eight new host records are given for five species (*I. affinis*, *I. boliviensis*, *I. rubidus*, *I. spinipalpis*, *I. tancitarius*).

Key words: Ixodidae, *Ixodes*, Mexico, checklists, hosts, distribution.

Introduction

Ixodes Latreille is the largest genus of ticks in the world, currently comprising 243 species (Guglielmone *et al.* 2006), more than one quarter of the global tick fauna. In all life history stages, members of this genus possess an anal groove that curves anterior to the anus, forming an arch. Several *Ixodes* species are of major medical and veterinary importance, having been implicated in the transmission of zoonotic disease agents (Sonenshine *et al.* 2002; Goodman *et al.* 2005).

Despite the predominance of this genus in the Northern Hemisphere, relatively few species of *Ixodes* have been reported from Mexico. Hoffmann and López-Campos (2000) recorded 18 *Ixodes* species associated with Mexican birds and mammals, while Whitaker and Morales-Malacara (2005), working only with mammals, reported 14 species.

As part of a project to catalog the tick species deposited in the Colección Nacional de Ácaros (CNAC), Instituto de Biología, Universidad Nacional Autónoma de México (IBUNAM), we analyzed all specimens belonging to the genus *Ixodes*. Initially, the CNAC chiefly consisted of Dr. Anita Hoffmann's personal collection, which was donated to IBUNAM in 1992, and in 1997 was officially designated the National Collection, housing a great variety of mites and ticks from Mexico.

The objective of this paper is to compile parasite-host and host-parasite checklists for all known Mexican species of *Ixodes* and to report new host, distribution and taxonomic data derived from specimens deposited in the CNAC.