Pterygosoma (Pterygosoma) pseudotrapelus sp. nov. (Acariformes: Pterygosomatidae)—ectoparasite of Pseudotrapelus sinaitus (Squamata: Agamidae) from Jordan

ANDRE V. BOCHKOV1,2, DANIEL A. MELNIKOV1 & ROMAN. A. NAZAROV3

1 Zoological Institute, Russian Academy of Sciences, Universitetskaya embankment 1, 199034 St. Petersburg, Russia. E-mail: prostigmata@zin.ru
2 Museum of Zoology, University of Michigan, 1109 Geddes Ave., Ann Arbor, Michigan 48109 USA.
3 Museum of Zoology, Moscow State University, B. Nikitskaya 6, 125009 Moscow, Russia.

Abstract

A new ectoparasitic mite species, Pterygosoma (Pterygosoma) pseudotrapelus sp. nov. (Acariformes: Pterygosomatidae) is described from Pseudotrapelus sinaitus (Squamata: Agamidae) collected from Jordan. According to leg setation, this species belongs to group 4 established by Jack (1964). It differs from the other three species of the group by the following female characters: from P. sinaita Jack by the presence of 15–18 pairs of long peripheral setae (vs. 3–4 pairs of short setae in P. sinaita), and 1 pair of strong and stout genital setae (vs. 3 short spur-like setae); from P. foliosetis Jack by the long peripheral setae with slightly expanded tips (vs. strongly expanded setae in P. foliosetis), barbed filiform anterior-lateral setae (vs. smooth expanded setae), and pseudoanal setae being much longer than wide (vs. as long as wide setae); from P. rhipidostichata Bertrand et al. by the presence of 23–28 pairs of antero-lateral setae (vs. over 50 pairs in P. rhipidostichata), peripheral setae slightly expanded apically (vs. pointed setae), presence of a pair of the stout genital setae (vs. lacking genital setae), and the presence of 4 pairs of pseudoanal setae of uniform shape (vs. 5 pairs of setae of different shape).

Key words: mites, lizards, parasites, systematics

Introduction

The genus Pterygosoma Peters (Acariformes: Pterygosomatidae) includes 52 species and subspecies. All of them are permanent highly specified ectoparasites of lizards. Forty nine species and subspecies of the nominal subgenus Pterygosoma s.str. are associated with agamas of the family Agamidae whereas three species of the subgenus Gerrhosaurobia Lawrence parasitize lizards of the family Gerrhosauridae (Jack 1962; Bertrand et al. 1999; Bertrand & Modry 2004). In this paper we describe a new species of the subgenus Pterygosoma from Pseudotrapelus sinaitus (Agamidae) originating from Jordan.

Material and methods

Mites were cleared in lactophenol and mounted in Hoyer’s medium. Specimens were studied using a Leica microscope and phase contrast. Drawings were made with a camera lucida, and measurements were taken using a calibrated ocular micrometer. In the species description, names of the leg and idiosomal setae follow Grandjean (1939, 1944), names of the palpal setae follow Grandjean (1946). Grandjean’s nomenclatures were adapted to the family Pterygosomatidae by Bochkov & O’Connor (2006). All measurements are in