

Article

Contribution to the knowledge of Costa Rican oribatid mite fauna, with supplementary descriptions of *Pergalumna silvatica* and *P. sura* (Acari: Oribatida: Galumnidae)

SERGEY G. ERMILOV^{1*}, OLMAN ALAVADARO-RODRÍGUEZ^{2,3} & AXEL. P. RETANA-SALAZAR^{2,4}

¹Tyumen State University, Tyumen 625003, Russia. E-mail: ermilovacari@yandex.ru

²Centro de Investigación en Estructuras Microscópicas (CIEMIC), Ciudad de la Investigación, Universidad de Costa Rica, San José 2060, Costa Rica. E-mail: apretana@gmail.com

³Escuela de Biología, Facultad de Ciencias, Universidad de Costa Rica, San José 2060, Costa Rica. E-mail: old7806@gmail.com

⁴Escuela de Nutrición, Facultad de Medicina, Ciudad de la Investigación, Universidad de Costa Rica, San José 2060, Costa Rica

*Corresponding author

Abstract

An annotated checklist of oribatid mites collected from Costa Rica in 2012 is provided. We have registered 10 species in 8 genera and 6 families. *Archegoletes magnus*, *Kokoppia euramosa*, *Neoamerioppia cocuyana*, *Xenillus venezuelanus*, *Lamellobates molecula*, *Trachyoribates glaber*, *Pergalumna silvatica* are recorded for the first time from Costa Rica. Two species of the family Galumnidae, *Pergalumna silvatica* and *P. sura*, are redescribed, on the basis of Costa Rican specimens.

Key words: Oribatida, *Pergalumna*, supplementary description, fauna, record, checklist, Costa Rica.

Introduction

The oribatid mite fauna of Costa Rica is poorly studied (for example: Mahunka 1982; Niedbała 1986, 2007; P. Balogh 1994, 1997; Behan-Pelletier 1998; J. Balogh and P. Balogh 2002; Behan-Pelletier and Eamer 2003; Schatz 2006, 2007; Szwilewska-Szczykutowicz and Olszanowski 2006; Niedbała and Skubała 2008).

The primary goal of this paper is to present an annotated checklist of oribatid taxa collected by O. Alvarado-Rodríguez and A.P. Retana-Salazar in 2012 (Project «Oribatida Biodiversity from Costa Rica»). Two of the identified species were *Pergalumna silvatica* Hammer, 1961 (see Hammer 1961) and *P. sura* P. Balogh, 1997 (see P. Balogh 1997), of the family Galumnidae, which are distributed in the Neotropical region (Subias 2004, online version 2013). The original descriptions of both species are incomplete (lacking information about the length of morphological structures, leg setation and solenidia, gnathosoma). The secondary goal of this paper is to redescribe and illustrate *P. silvatica* and *P. sura* based on the Costa Rican material.