Some new armascirine cunaxids (Acari: Prostigmata: Cunaxidae) from the Eastern United States

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Abstract

Four species of the family Cunaxidae (Acari: Acariformes), i.e. Armascirus ozarkensis sp. nov., A. pennsylvanicus sp. nov., A. primigenius sp. nov., and Dactyloscirus pseudophilippinensis sp. nov. are described and illustrated from the Ozark Highlands, Mississippi, and Appalachian Plateau. In addition, three described species, Armascirus gimplei, A. harrisoni, and Dactyloscirus dolichosetosus are reported from these areas. All new and previously described species have been registered with Zoobank. A list of species, including citations of their original description and Zoobank LSID numbers, and keys to world species of both genera have been included.

Key words: Armascirini, Arkansas, key, Cunaxidae, Pennsylvania, taxonomy

Introduction

Cunaxidae Thor, 1902 are small (300–1000 µm), predatory mites found in a variety of habitats including leaf litter and soil, open rocks, agriculture fields, and stored products (Den Heyer 1977; Den Heyer & Ryke 1966; Quilici et al. 1997; Sepasgosarian 1984; Smiley 1992; Walter 1999; Zaher et al. 1975). They play an important role in the biological control of small insects, scales, mites, and nematodes (Chaudhri et al. 1979; Ewing & Webster 1912; Walter & Kaplan 1991) and are easily recognized by their spined palpi (except Bonzinae) and diamond-shaped body (Krantz & Walter 2009).

Armascirus and Dactyloscirus belong to the subfamily Cunaxinae Thor, 1902, which is characterized by possessing five-jointed palpi with at least the distal two segments reaching beyond the subcapitulum (Den Heyer & Castro 2008). Seven genera are currently included in Cunaxinae: Cunaxa Von Heyden, 1826, Dactyloscirus Ber-