



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-