

Article

A new *Adamystis* Cunliffe, 1957 species from Iran (Acari: Trombidiformes: Adamystidae)

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Abstract

A new species of Adamystidae is described, *Adamystis iranoturanianensis* **sp. nov.** These mites were collected from soil, humus and litter in the southern parts of the Kamfiruz Region in Fars, Iran. This family comprises 16 species including the new species described herein. The new species differs from the other members of this family by: the fused, punctate and reticulate endopodal shield; possessing two pairs of plates in the genital region; and the unique coxal formula 1-3-2-2. This is the first record of this family from Iran.

Key words: Acari, Adamystidae, *Adamystis*, new species, Iran

Introduction

Until 2006, the family Adamystidae consisted of two subfamilies, Adamystinae Cunliffe and Saxidrominae Coineau, but based on the combination of the constricted idiosoma, massive chelicerae and the presence of a unique anterior dorsal processes in males (important structures used during mating displays), the Saxidrominae was elevated to family level consisting of three genera, *Saxidromus* Coineau (four spp.), *Bovidromus* Coineau *et al.* (one sp.) and *Rhinodromus* Coineau *et al.* (one sp.) (Coineau *et al.*, 2006). The Adamystidae has only the genus *Adamystis* Cunliffe.

Fuangularworn & Lekprayoon (2010) gave a key to all species of the Adamystidae and Saxidromidae (as Saxidrominae) and described one new species, *Adamystis thailandensis*. The family Adamystidae currently comprises of 16 species, including the new species, *Adamystis iranoturanianensis* **sp. nov.**, described herein, and another described by Khanjani *et al.* (2012). Along with the record of Khanjani *et al.* (2012), this new species represents the first record of the Adamystidae from Iran.

Material and Methods

The samples were collected from soil and humus under oak (Fagaceae) and pistachio (Anacardiaceae) trees during a survey conducted from 29 May 2010 to 21 August 2010. The soil and humus were placed in black plastic bags and taken to the laboratory. The samples were then put in Berlese funnels for about a week and the collected mites were examined under a stereo microscope then preserved in 70 % ethanol. Lactophenol and Hoyer's medium were used for clearing and