

***Adamystis* Cunliffe, 1957 (Acari: Prostigmata: Adamystidae) in Iran: two new species and a key to the Iranian species**

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Abstract

Two new species of the prostigmatic mite genus *Adamystis* Cunliffe, 1957—*A. theroni* **sp. nov.** and *A. ueckermanni* **sp. nov.**—from Fars province, Iran are described and illustrated based on female specimens collected from soil, humus and leaf litter under oak trees (*Quercus brantii* Lindl, 1840). *Adamystis theroni* **sp. nov.** differs from its congeners in having a smooth dorsal shield encompassing setal rows *c*, *d* and *e*, chelicera with two setae, lateral lip with three adoral setae, and coxal setation of 2-4-4-4. *Adamystis ueckermanni* **sp. nov.** is unique in having the trichobothrial pair *sci* placed far apart from each other, and the large dorsal shield with a mixed reticulation pattern encompassing setal rows *c*, *d*, *e*, *f* and *h*. A diagnostic key to the four species of *Adamystis* known from Iran is also given.

Key words: Acari, Trombidiformes, Anystina, Adamystidae, Iran

Introduction

Adamystis Cunliffe, 1957 is the only genus in the prostigmatic mite of family Adamystidae (Coineau *et al.* 2006, Beyzavi *et al.* 2012). It is distinguished from the related family, Saxidromidae, by the unconstricted idiosoma, unbulged chelicera bearing 1–2 setae, hook-like movable chela, and divided leg femora (Coineau *et al.* 2006). Adamystid mites are considered predators (Walter *et al.* 2009) typically living in dry soil and leaf-litter habitats, but some can be found on phylloplanes (Walter & O’Dowd 1995). Prior to this study, the genus *Adamystis* included 17 species (Fuangarworn & Lekprayoon 2010, Beyzavi *et al.* 2012, Khanjani *et al.* 2012) of which two species, *A. iranoturaniensis* and *A. alvandicus*, were described from Iran. Two more new species are described herein, namely *A. theroni* **sp. nov.** and *A. ueckermanni* **sp. nov.**, based on female specimens collected from soil and humus under oak trees (Fagaceae), in Iran (Southern Kamfiruz, Fars province). A diagnostic key to the Iranian species is provided.

Material and methods

Samples of soil, humus and leaf litter were collected, put into black plastic bags and taken to the laboratory. Mite specimens were extracted using Berlese funnels for a week into 70% ethanol. They were then sorted under a stereo microscope, cleared with lactophenol or Nesbitt’s solution, and mounted on glass slides using Hoyer’s medium. Observations and drawings were made under a