



Two new species of the genus *Anoplocheylus* Berlese, 1910 (Acari: Trombidiformes: Pseudocheylidae) from Iran

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Abstract

Two new species of the genus *Anoplocheylus* Berlese, 1910 (Acari: Trombidiformes: Pseudocheylidae), *A. sinai* Bagheri **sp. nov.** and *A. kazemii* Bagheri **sp. nov.**, are described and figured. An updated key to all known species of *Anoplocheylus* is also provided.

Key words: Acari, *Anoplocheylus*, Predatory mites, Trombidiformes, Iran

Introduction

Members of the family Pseudocheylidae are thought to be predators and are found under tree bark, in litter and nests, and on moss (Walter *et al.* 2009) and sometimes in soil (Van Dis & Ueckermann 1991). They differ from other families of Anystoidea by having leg tarsi terminating in elongated and annulated pretarsi, no genital papillae, widely separated coxal fields I–II and III–IV, and anapomorphic additions of adanal and anal setae during ontogeny (Walter *et al.* 2009). The family currently comprises three genera, *Anoplocheylus*, *Neocheylus* and *Pseudocheylus*.

The genus *Anoplocheylus* was revised by Ueckermann and Khanjani (2004), who described two new species, one from Iran and the second from South Africa. They showed that the number of setae on the palpfemur, presence or absence of a genital aperture and genital setae, and the number of setae on the prodorsal shield are important characters distinguishing different life stages. Navaei-Bonab *et al.* (2011) described another new species from Iran and provided a key to all known species. This paper deals with description of two new species of *Anoplocheylus* and updates this key to species.

Material and methods

The litter and soil samples were taken from apple and black cherry orchards of Miandoab and Azarshahr, Iran. Mites were extracted from soil using a Berlese funnel, preserved in 70% ethanol, cleared in Nesbitt's fluid and mounted on microscope slides using Hoyer's medium. Body length was measured from the gnathosoma to the posterior end of the idiosoma and width was measured at the broadest part of the idiosoma. The terminology and abbreviations follow Van Dis and Ueckermann (1991). All measurements are given in micrometers (µm).