



Two new Bdellidae (Trombidiformes: Bdelloidea) from Iran and the status of *Neobiscirus* Gomelauri, 1963

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Abstract

Two new Bdellidae, *Biscirus iranensis* Paktinat-Saej & Bagheri **sp. nov.** and *Bdella farabii* Paktinat-Saej & Bagheri **sp. nov.**, are described from northern Iran. The monotypic genus *Neobiscirus* considered a junior synonym of *Biscirus*, and its only species therefore considered *Biscirus kobachidzei* (Gomelauri, 1963) **comb. nov.**

Key words: Prostigmata, Spinibdellinae, Bdellinae, predatory mites, systematics

Introduction

Bdellidae comprises five subfamilies: Bdellinae, Cytinae, Odontoscirinae, Polytrichinae, and Spinibdellinae which are distinguished by the numbers of setae on the hypostome, presence of a trichobothrium on tibia II, and shape of the chelicerae (Omukunda *et al.* 2012). Spinibdellinae comprises five genera (Omukunda *et al.* 2012), of which *Biscirus* Thor contains about 25 species. Bdellinae comprises two genera, of which *Bdella* Latreille contains about 60 species worldwide (Atyeo 1960; Wallace & Mahon 1972; Den Heyer & Hernandez 2013). Nine species of *Biscirus* and *Bdella* have been recorded from Iran: *Bi. silvaticus* (Kramer, 1881); *Bi. arenarius* Wallace & Mahon, 1972; *Bi. simplex* (Soliman & Zaher, 1975); *Be. longicornis* (Linnaeus, 1758); *Be. muscorum* Ewing, 1909; *Be. captiosa* Atyeo, 1960; *Be. humida* Wallace & Mahon, 1972; *Be. lattakia* Soliman & Zaher, 1975; and *Be. karajiensis* Ueckermann *et al.*, 2007 (Kamali *et al.* 2001; Jalaieian & Nourbakhsh 2005; Ueckermann *et al.* 2007). In this paper, *Biscirus iranensis* **sp. nov.** and *Bdella farabii* **sp. nov.** are described from northern Iran.

Material and methods

Samples of soil and rotten leaves were taken from Mazandaran and East Azerbaijan Provinces. Mites were extracted using a Berlese-Tullgren funnel and specimens were collected in AGA solution (Smiley 1992). Collected specimens were cleared in Nesbitt's fluid and mounted in Hoyer's medium (Walter & Krantz 2009), examined under an Olympus BX41 phase-contrast microscope and figures were drawn with the aid of a drawing tube. Body length was measured from the apex of the subcapitulum to the posterior margin of the idiosoma; body width was measured at the level of setae *c*₂; and setae were measured from their insertions to their tips. Legs were measured from the ventral insertion of the coxae to the base of the pretarsi. The setal nomenclature of Kethley (1990) is followed for the idiosoma except for the propodosomal setae, which follows the notation given by Fisher *et al.* (2011) and legs follows that of Den Heyer (1981). All measurements are given in micrometers (µm) and variations