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First record of *Samsinakia trilobitus* (Prostigmata, Cheyletidae) from Iran

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The family Cheyletidae comprises over 440 described species in 75 genera (Zhang *et al.* 2011; Bochkov and Abramov 2016). Most cheyletids are free-living predators, though some are permanent ectoparasites of mammals and birds (Bochkov 2005; Bochkov and Abramov 2016). The genus *Samsinakia* was erected by Volgin (1965) to accommodate *Cheyletophies theodoridis* Samšičák, 1959. This genus currently includes eight described species from India, Madagascar, Mexico, the Philippines, Rwanda, Thailand and Zaire, namely: *Samsinakia theodoridis* (Samsinak), *S. volgini* (Fain), *S. pagongae* Corpuz-Raros & Sotto, *S. gonocephalum* Fain, *S. trilobitus* Bochkov & Mironov, *S. carabae* Ramaraju & Mohanasundaram, *S. tilae* Bochkov & Klimov, *S. charanasriae* Fuangarworn & Lekprayoon (Fain 1980; Ramaraju and Mohanasundaram 1999, Fain and Bochkov 2001; Bochkov and Klimov 2005; Fuangarworn and Lekprayoon 2010).

An important part of Hyrcanian forests in Iran is Nour Forest Park located in the middle of Mazandaran Province, northern Iran and south of the Caspian Sea, with about 4000 hectares vast. Until now several new mite taxa have been described from soil-litter or associated with Coleoptera collected in Hyrcanian forests in northern Iran, including some new species (e.g. by Kazemi *et al.* 2008; Rahiminejad *et al.* 2011; Bagheri *et al.* 2014), one new genus, *Persicolaelaps* Kazemi & Beaulieu (Kazemi and Beaulieu 2016), in addition to a new laelapid species, *Julolaelaps tritosternalis* Moraza & Kazemi, associated with *Ommatoiulus caspius* (Diplopoda) that was collected in Nour Forest (Moraza & Kazemi 2012). Therefore, fauna of these forests is very rich and we anticipate more interesting taxa in this area that have not been collected/described yet.

Until now, 43 species belonging to 22 genera of cheyletid mites have been reported from Iran (e.g. by Kamali *et al.* 2001; Ahadiyat *et al.* 2004; Bochkov *et al.* 2005; Doğan *et al.* 2011; Ardeshir 2017; Paktinat-Saeij *et al.* 2017; Salarzahi *et al.* 2018). Prior to this study, only one undetermined species of the genus *Samsinakia* was reported from Fars Province, southern Iran (Beyzavi and Ostovan 2012). We recently collected *Samsinakia trilobitus* Bochkov & Mironov, 1998 from under the elytra of an unknown (the host had been lost) scarab beetle of the genus *Copris* Geoffroy in Nour forest, and we herein report on this new record for the fauna of Iran. *Samsinakia trilobitus* was originally described from specimens removed from a tenebrionid beetle in South India (Bochkov and Mironov 1998). For this study, mite specimens were cleared in Nesbitt's fluid and then mounted on

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microscope slides in Hoyer's medium. All measurements are given in micrometers (μm). The terminology of the idiosomal and leg chaetotaxy follows that of Grandjean (1939), adapted for Prostigmata by Kethley (1990). Mite specimens were deposited in the Acarological Collection, Institute of Science and High Technology and Environmental Sciences, Graduate University of Advanced Technology, Kerman, Iran, and the Acarological Collection, Department of Plant Protection, Faculty of Agriculture, University of Maragheh, Maragheh, Iran.

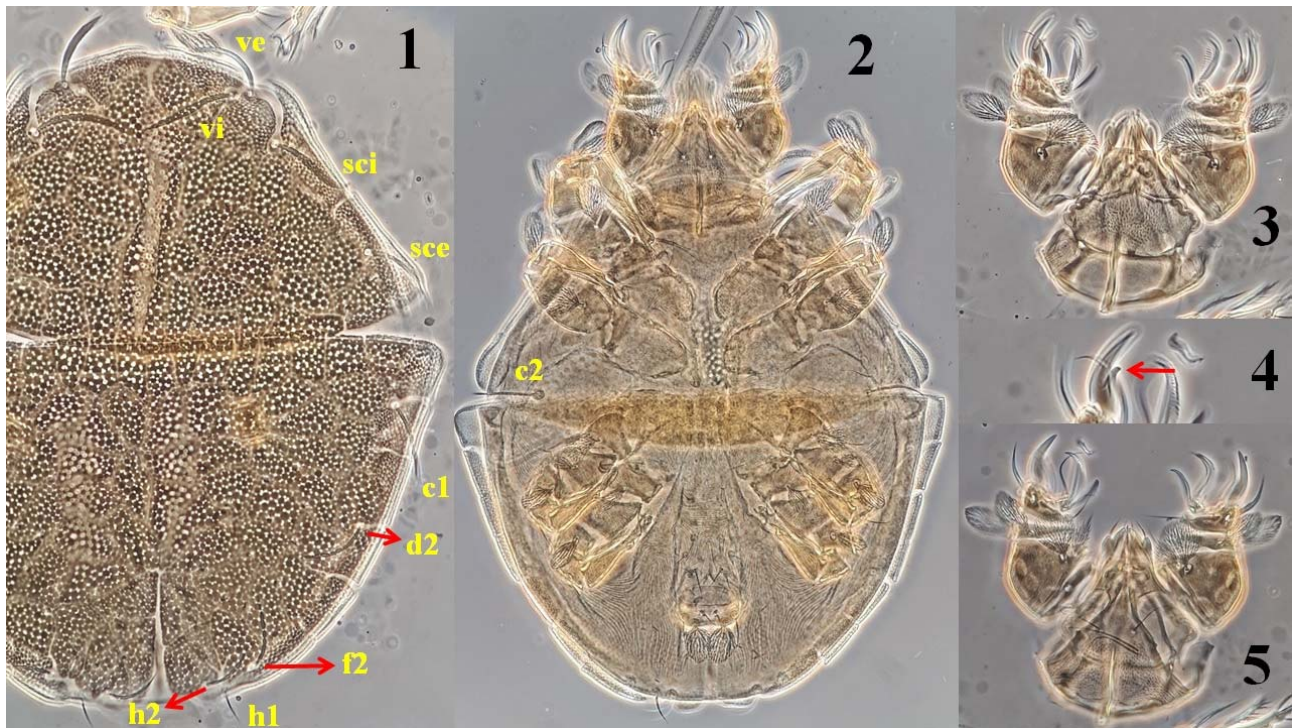
Genus *Samsinakia* Volgin, 1965

Samsinakia trilobitus Bochkov & Mironov, 1998 (Figs. 1–5)

Samsinakia trilobitus – Bochkov and Mironov (1998): 266; Fain and Bochkov (2001): 74; Fuangarworn and Lekprayoon (2010): 67.

Diagnosis (female)

Propodonal shield with four pairs of setae (*vi*, *ve*, *sci*, *sce*), setae lanceolate, arcuate and finely barbed (Fig. 1); hysteronotal shield with four pairs of setae (*c1*, *d2*, *f2*, *h2*), similar to propodonal setae, but narrower; seta *h1* setiform, seta *e2* absent (Fig. 1). Palpal claw with a single tooth, hook-like (Fig. 4). Coxae I–IV with 2-1-2-2 setae; anterior setae of coxa III fan-like; genua I–IV with 2-2-2-2 setae; tibiae I–IV with 4-4-4-4 setae; tibia III with one fan-like seta and three barbed setae; tibia IV with one lanceolate seta, one barbed seta and two simple setae.



Figures 1–5. *Samsinakia trilobitus* Bochkov & Mironov, 1998 – 1. Dorsal idiosoma; 2. Ventral view of body; 3. Gnathosoma, dorsal aspect; 4. Palptibial claw with basal tooth (arrow); 5. Gnathosoma, ventral view.

Measurements of specimens from Iran (n = 5)

Idiosoma length 317–323, width 257–274; length of some idiosomal setae: *sce* 44–50, *sci* 48–50, *ve* 44–50, *vi* 46–56, *c1* 42–47, *c2* 44–45, *d2* 40–43, *f2* 32–37, *h2* 28–32, *h1* 19–24.

Note

Measurements of the specimens from Iran are longer than those from India studied by Bochkov and Mironov (1998).

Specimens examined

31 ♀, June 2006, from under the elytra of a *Copris* sp. (Scarabaeidae) collected in Nour Forest, Nour City, Mazandaran Province, northern Iran.

Distribution

India, from an unknown tenebrionid beetle, and Iran, from *Copris* sp. (this study).

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