

Correspondence

First record of the family Macrodonychidae Hirschmann, 1975 (Acari: Uropodina) from Iran

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Members of the family Macrodonychidae Hirschmann, 1975 are large, reddish-brown mites with short legs. Most of species from this family occur in the tropical and subtropical regions, but one species was found in the northern temperate climate (*Macrodonychus bregetovaae* Hirschmann, 1975) as well (Kontschán 2011). The species *Macrodonychus (Bregetovamacrodonychus) bregetovaae* Hirschmann, 1975 was described from the Caucasus (Hirschmann 1975), after that Kontschán (2004) found this species in Hungary, and one year later Bal & Özkan (2005) collected it in the eastern part of Turkey. However several new Uropodina records were presented in the last decade from Iran [Jalaeian & Breitegger (2002), Jalaeian *et al.* (2004), Kamali *et al.* (2001), Kazemi *et al.* (2001, 2003, 2005) and Kazemi & Kontschán (2007)], but this large and unusual Uropodina species was not recorded yet from this country.

The specimens of the investigated species were collected from field studies in the Guilan province, Northern Iran. The collected specimens were cleared in Nesbitt's fluid and were mounted in Hoyer's medium on microscopic slides. The identified specimens are deposited in the Department of Plant Protection, Faculty of Agricultural Sciences, University of Guilan.

Macrodonychus (Bregetovamacrodonychus) bregetovaae Hirschmann, 1975

Macrodonychus bregetovaae: Hirschmann 1975a: 36, Hirschmann 1975b: 37–38, Hirschmann 1975c: 39 and 40, Wiśniewski & Hirschmann 1993: 33, Wiśniewski 1993a: 269, Wiśniewski 1993b: 384, Kontschán 2004: 275–276, Bal & Özkan 2005: 126–127, Kontschán 2011: 1626.

Material examined

Fourteen females and two male specimens were collected from different parts of Guilan province, namely: Sangar (37°10'N, 49°41'E), soil of rice field, 14 June 2009; Sowme'e-Sara (37°18'N, 49°18'E), village Behambar, soil of poplar (*Populus alba* L.) garden, 5 July 2009; Asalem (37°42'N, 48°56'E), soil of walnut (*Juglans regia* L.)

garden, 5 July 2009; Amlash (37°4'N, 50°10'E), soil of elm (*Ulmus carpinifolia* Gleditsch) garden, 27 July 2009; Roudsar (37°08'N, 50°17'E), soil under Caspian honey locust tree (*Gleditschia caspica* Desf), soil of rice field and soil of walnut garden, 27 July 2009; Shanderman (37°28'N, 49°01'E), soil of poplar garden, 10 August 2009; Shaft (37°09'N, 49°24'E), soil of rice field, 9 August 2009; Shahrestan (37°25'N, 49°48'E), soil of walnut garden, 31 October 2010; Kuchesfahān (37°15'N, 49°46'E), soil of elm garden, 14 May 2011, Rasht, village Falak Deh (37°13'N 49°33'E) soil of elm garden, 14 May 2011.

Short description

Females. Idiosoma. Length of idiosoma 1150–1300 µm, width 840–920 µm. Shape oblong, posterior margin rounded. Dorsal and marginal shields not fused anteriorly. Isolated pygidial shield present (Fig. 1). Surface of dorsal and ventral sides of body covered by reticulate sculptural pattern and bearing very short, smooth and needle-like setae (Figs. 3–4). Genital shield oval, without sculptural pattern and anterior process (Fig. 3). Genital shield situated between coxae II and III (Fig. 2). Stigmata situated between coxae II and III. Peritremes hook-shaped with short poststigmatid part (Fig. 5). Legs short, all legs with claws on tip of tarsi and all segments bearing smooth setae. Tritosternum with narrow basis (Fig. 6). Gnathosoma (Fig. 7). Corniculi anteriorly rounded, internal malae longer than corniculi and marginally serrate, all of hypostomal setae marginally serrate. Palp trochanter with one smooth and one serrate seta, other setae on palp smooth (Fig. 8). Chelicerae with internal sclerotized node, fixed digit as long as movable digit (Fig. 9). Male. Similar in shape, surface and length to females, but genital shield rounded and situated between coxae III.

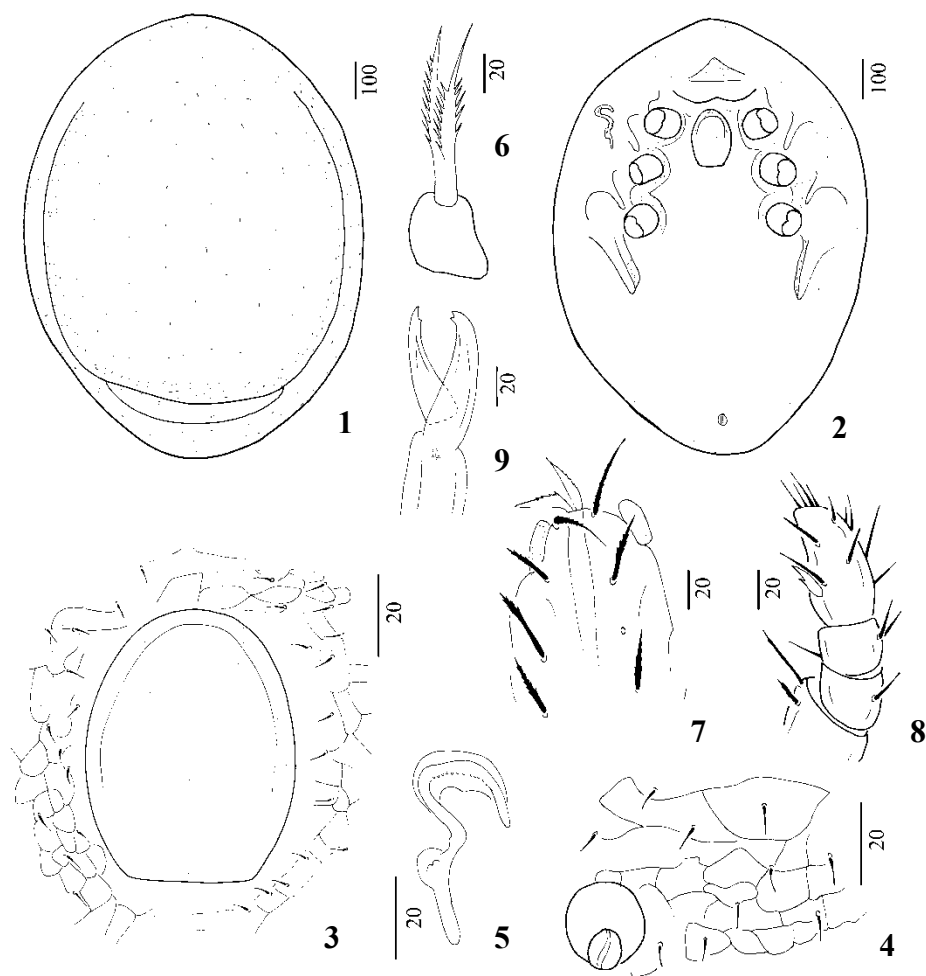
Distribution. Russia, Hungary, Turkey, Iran.

Notes to the biology. Bal & Özkan (2005) mentioned viviparity in the *M. (B.) bregetovaae*. They found about 30 larvae in the female's body, but the bodies of our four females contain only 13–24 larvae.

Notes to the distribution. This species were collected in Russia, Hungary, Turkey and Iran, but no occurrence in the area between East Turkey and Hungary has been proved so far, however several Uropodina records from the Balkan peninsula have already been presented (e.g. Kontschán 2003, 2004, 2007a, b, 2010). We have a hypothesis for the Hungarian occurrences. In the Upper Miocene, a continental land bridge existed between western part of Anatolia and eastern part of the Balkan Peninsula and this land bridge aided the colonization of the soil mites between Asia Minor and Balkan Peninsula. Despite the intensive collection and research work, we cannot detect this species from the Balkan Peninsula and the western part of Turkey, but this species can be occurred in the countries of the regions as well. It is possible that *M. (B.) bregetovaae* has a wider geographical distribution in Middle East and Middle Asia countries.

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Figures 1–9. *Macrodinychus (Bregetovamacrodinychus) bregetovaae* Hirschmann, 1975 (female). 1. Dorsal view of idiosoma; 2. Ventral view of idiosoma; 3. Intercoxal area of female; 4. Sculptural pattern and setation near anal opening; 5. Peritreme; 6. Tritosternum; 7. Ventral view of gnathosoma; 8. Palp; 9. Chelicera.

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