

Short communication

**First report of a genus and species of the family Dinychidae (Acari: Mesostigmata: Uropodoidea) from Iran**

E. Arjomandi<sup>1</sup> and Sh. Kazemi<sup>2&\*</sup>

1. Department of Entomology, Faculty of Agriculture, Tarbiat Modares University, Tehran, Iran, 2. Department of Biodiversity, Institute of Science and High Technology and Environmental Sciences, Graduate University of Advanced Technology, Kerman, Iran.

\*Corresponding author, E-mail: shahroozkazemi@yahoo.com

چکیده

در بررسی فون کنه‌های میان‌استیگمای خاکریزی در استان گلستان که در تابستان ۱۳۸۹ انجام شد، یک گونه از کنه‌های جنس *Dinychus* Kramer, 1882 به نام *Dinychus woelkei* Hirschmann & Zirngiebl-Nicol, 1969 از جنگل قرن‌آباد از داخل کنده پوسیده درختی جمع‌آوری و شناسایی شد. این نخستین گزارش این جنس و گونه از ایران است.

Mites of the genus *Dinychus* Kramer, 1882 live in different habitats such as moss, leaf-litter, decaying plant debris and animal manure (Lindquist *et al.*, 2009). Athias-Binche *et al.* (1989) redefined the genus, described a new species from North America and placed 17 species of the genus in the family Prodinychidae, but Karg (1989) and Lindquist *et al.* (2009) recognized them as members of the families Urodinychidae and Dinychidae, respectively.

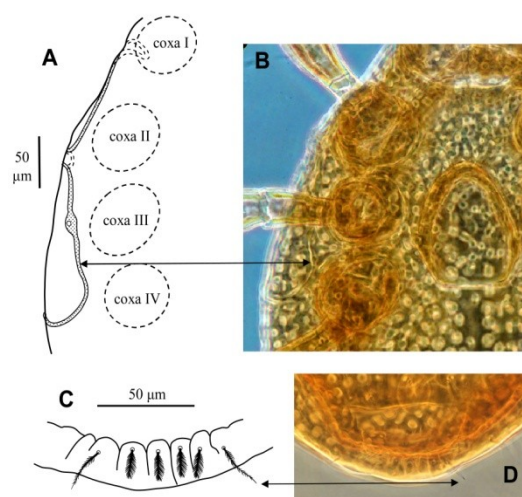
Mites of the cohort Uropodina are poorly studied in Iran. So far only 24 species belonging to 10 genera of Uropodoidea have been reported from Iran including *Oplitis iranicus* Kazemi & Kontschán, 2007 and *Neodiscopoma persica* Kazemi & Kontschán, 2007 (Kazemi & Kontschán, 2007, 2014).

During a survey on the edaphic mites of the order Mesostigmata in Golestan province in summer 2010, a specimen of the species *Dinychus woelkei* Hirschmann & Zirngiebl-Nicol, 1969 was collected inside a decaying trunk in Qarn-Abad forest using a Berlese-Tullgren funnel. We cleared the specimen in Nesbitt's fluid and mounted it in Hoyer's medium and later identified the species as *D. woelkei*. This is the first report of the genus *Dinychus* and the species *D. woelkei* from Iran.

The diagnostic characters of the species are as follows:

Idiosoma 660  $\mu\text{m}$  long, 420  $\mu\text{m}$  wide, sub-oval, and slightly elongate; dorsal and ventral surface of idiosoma strongly sclerotized and densely ornamented

with sub-oval pits in different size; dorsal setae short, smooth or densely plumose, three pairs of posterior opisthotal setae including J5, Z5 and a lateral pair plumose and situated on post marginal platelets (fig. 1, C-D); epigynal shield 115  $\mu\text{m}$  long, 90  $\mu\text{m}$  wide, anterior margin of shield convex, reaching to mid-level of coxa II, posterior margin truncate at mid-level of coxa IV (fig. 1, B); stigmata on mid-level of coxa III (fig. 1, A); peritremes long (140  $\mu\text{m}$ ), extending posteriorly to mid-level of coxa IV, curved towards lateral margins of idiosoma, extending anteriorly to mid-level of coxa I (fig. 1, A).



**Fig. 1.** *Dinychus woelkei*: A. stigmata and peritreme (arrow), B. epigynal shield, C-D. plumose setae (arrow) on post marginal platelets.

**References**

- Athias-Binche, F., Bloszyk, J. & Olszanowski, Z.** (1989) *Dinychus ruseki* n. sp. (Acari: Uropodina) from Canada with remarks on the habitats and distribution of the members of the genus *Dinychus*. *Canadian Journal of Zoology* 67, 1482-1488.
- Karg, W.** (1989) *Acari (Acarina), Milben. Unterordnung Parasitiformes (Anactinochaeta). Uropodina Kramer, Schildkrötenmilben.* 203 pp. Gustav Fischer Verlag.
- Kazemi, Sh. & Kontschán, J.** (2007) A review of the Uropodina mite fauna (Acari: Mesostigmata) of Iran and description of two new species. *Zoology in the Middle East* 42, 79-82.
- Kazemi, Sh. & Kontschán, J.** (2014) Three new records of the superfamily Uropodoidea (Acari: Mesostigmata: Uropodina) from Iran, and a key to the known Iranian species of Uropodoidea. *Persian Journal of Acarology* 3 (1), 9-16.
- Lindquist, E. E., Krantz, G. W. & Walter, D. E.** (2009) Order Mesostigmata. pp. 124-232 in Krantz, G. W. & Walter, D. E. (Eds) *A manual of acarology*. 807 pp. Texas Tech University Press.

*Received:* 15 November 2014

*Accepted:* 25 february 2015