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New records of two cheyletid mite species (Acari: Cheyletidae) from Iran

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Abstract: Two species of the family Cheyletidae (Acari: Prostigmata), *Cheletonella vespertilionis* Womersley and *Cheyletus kuznetzovi* Bochkov and Khaustov, are given as new records for the Iranian fauna. This is also the first report of the genus *Cheletonella* Womersley from Iran.

Key words: Acari, Cheyletidae, *Cheletonella*, *Cheyletus*, new records, Iran

İran'dan iki keyletid akar türünün (Acari: Cheyletidae) yeni kaydı

Özet: Cheyletidae familyasına ait iki tür (Acari: Prostigmata), *Cheletonella vespertilionis* Womersley ve *Cheyletus kuznetzovi* Bochkov ve Khaustov, İran faunası için yeni kayıt olarak verilmiştir. Bu; aynı zamanda, *Cheletonella* Womersley cinsinin İran'dan ilk kayıdır.

Anahtar sözcükler: Acari, Cheyletidae, *Cheletonella*, *Cheyletus*, yeni kayıt, İran

Mites of the family Cheyletidae have a worldwide distribution, including about 500 described species in 77 genera (Bochkov, 2005; Fuangarworn and Lekprayoon, 2010). They can be found in a great variety of habitats (Fain and Bochkov, 2001a). Cheyletid mites are mainly free-living predators that feed on various micro-arthropods, particularly on herbivorous, fungivorous, and saprophagous acaroid mites (Zdarkova, 1979). The predatory forms are usually from plants, soil-litter, stored products, nests

of vertebrates, and colonies and galleries of insects (Hughes, 1976; Fuangarworn and Lekprayoon, 2010). Some members of this family are ectoparasites of wild and domestic animals; sometimes they cause allergies and dermatitis in humans having close contact with infested pets (Fain and Bochkov, 2001a). Additionally, there are many cases of phoresy by this family of mites on some insects (Volgin, 1969).

This paper presents new distribution data and adds 2 species to the mite fauna of Iran, namely

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Cheletonella vespertilionis Womersley and *Cheyletus kuznetzovi* Bochkov and Khaustov.

Genus *Cheletonella* Womersley

The genus *Cheletonella* is a small group with 3 valid species (Fain and Bochkov 2001a; Bochkov, 2005): *Cheletonella vespertilionis* Womersley, *C. hoffmannae* Smiley, and *C. pilosa* Tseng. *Cheletonella juglandis* Xia, Zhu and Ye is regarded as a species inquirenda (Fain and Bochkov, 2001a).

Cheletonella vespertilionis Womersley

Cheletonella vespertilionis Womersley, 1941: 61.

Cheletonella caucasica Volgin, 1955: 168.

Materials examined: Three females from some kind of orchard soil, Kashmar (Khorasan Razavi Province), Iran, September 2009, by M. Jalaieian.

Distribution: Australia, USA, Brazil, Malaysia, Algeria, Armenia, Belgium, Tajikistan, Ukraine (Volgin, 1969; Summers and Price, 1970; Fain and Nadchatram, 1980; Fain and Bochkov, 2001a; da Silva Ezequiel et al., 2001), and Iran (new record).

Remarks: *Cheletonella vespertilionis* was found in birds' nests, on gray hamsters, on bats, in bat guano, in forest soil, and in house dust. The Iranian specimens were collected from some kind of orchard soil.

Genus: *Cheyletus* Latreille

The genus *Cheyletus* is one of the largest cheyletid groups, with 31 valid species known worldwide (Fain and Bochkov, 2001b; Bochkov and O'Connor, 2003; Bochkov, 2005), and 15 species are listed as uncertain species by Fain and Bochkov (2001b) and Bochkov (2005). To date, 6 species of *Cheyletus*, namely *C. cacahuamilpensis* Baker, *C. carnifex* Zachvatkin, *C. eruditus* (Schrank), *C. malaccensis* Oudemans, *C. malayensis* Cunliffe, and *C. trouessarti* Oudemans, have been reported from Iran (Bochkov et al., 2005).

Cheyletus kuznetzovi Bochkov and Khaustov

Cheyletus kuznetzovi Bochkov and Khaustov, 1999: 116.

Materials examined: Two females from some kind of orchard soil, Kashmar (Khorasan Razavi Province), Iran, December 2008 and September 2009, by M. Jalaieian.

Distribution: Turkmenistan (Bochkov and Khaustov, 1999; Fain and Bochkov, 2001b) and Iran (new record).

Remarks: This species was found in an ant-hill in Turkmenistan by Bochkov and Khaustov (1999). The Iranian specimens were collected from some kind of orchard soil. This is the first record since the original description.

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