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First report of the subfamily Myonyssinae (Acari: Mesostigmata: Laelapidae) from Iran

Shahrooz Kazemi^{1*} and Mojtaba Mohammad-Dustar-Sharaf²

1. Department of Biodiversity, Institute of Science and High Technology and Environmental Sciences, Graduate University of Advanced Technology, Kerman, Iran; E-mail: shahroozkazemi@yahoo.com

2. Department of Plant Protection, Tabriz Branch, Islamic Azad University, Tabriz, Iran; E-mail: mojtaba.doostar@gmail.com

* Corresponding author

The family Laelapidae includes *ca.* 90 known genera and over 1300 known species in nine subfamilies, and mites of this family are soil-dwelling predators, arthropod symbionts and obligate and facultative ectoparasites of mammals (Evans and Till 1966; Casanueva 1993; Lindquist *et al.* 2009; Beaulieu *et al.* 2011). Bregetova (1956) erected the subfamily Myonyssinae which includes laelapid mites usually associated with small mammals. So far more than 100 species of laelapid mites have been reported from Iran, but only a few of them were collected in association with small mammals and none of them belongs to Myonyssinae (Kazemi and Rajaei 2013).

During an investigation on Mesostigmata in Arasbaran Forests, East Azerbaijan Province, Iran, mite specimens were extracted from soil and litter using Berlese-Tullgren funnels, cleared in Nesbitt's fluid and mounted on microscope slides in Hoyer's medium. In this research, a female specimen of *Myonyssus gigas* (Oudemans, 1912) was collected in soil and litter near a hole, possibly belonging to an unknown small mammal, the typical hosts of myonyssine mites. This record is the first report of the subfamily from Iran. Diagnosis for the genus and species followed Evans and Till (1966) and Mašán and Fenda (2010).

***Myonyssus Tiraboschi*, 1904**

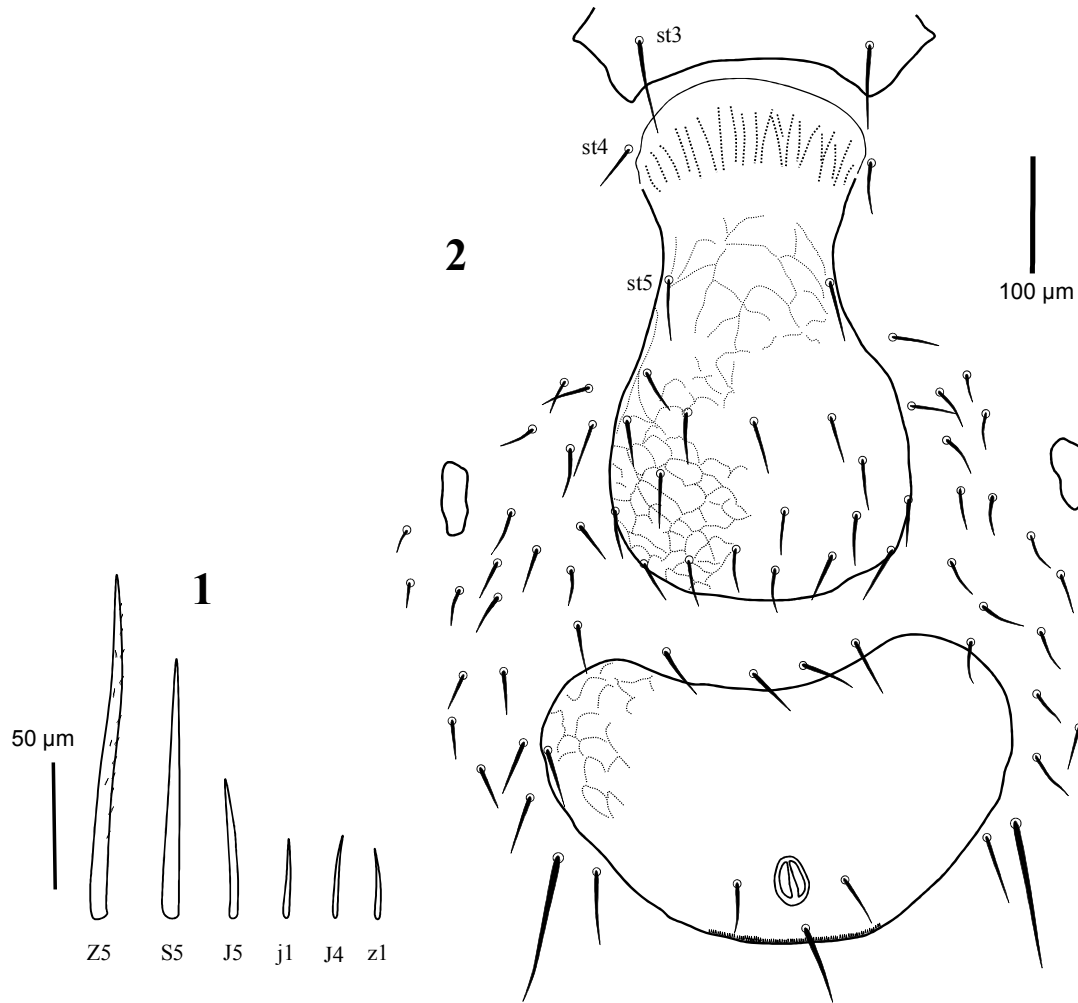
Type species: *M. decumani* Tiraboschi, 1904

***Myonyssus gigas* (Oudemans, 1912) (Figs. 1–2)**

Liponyssus gigas Oudemans, 1912.

Measurement of the studied material. Dorsal shield covering all idiosoma, 1141 long, 706 wide; dorsal shield with setae smooth, except Z5, S5 (103) and Z5 (132) longest, others 23–68 long (Fig. 1). Sternal shield 188 long, 241 wide; sternal setae lengths: st1 81, st2 62, st3 70. Metasternal setae 47 long. Epigynal shield 448 long along midline from anterior hyaline margin to posterior edge of shield, 150 wide at st5 level, 259 wide at broadest point; with 17 smooth setae, st5 51 long, others 38–48 (Fig. 2). Anal shield 215 long, 397 wide; one ventral seta asymmetrically inserted in lateral region of shield;

para-anal setae 45 long, postanal 68 long; cribrum narrow (Fig. 2). Ventral setae on soft integument smooth and moderately short, 15–47 long, except a pair of long posterior setae (117). Second segment of chelicera 178 long, movable digit 48 long; other gnathosomal details not clearly visible. Length of legs I-IV: 891, 824, 823 and 963 respectively, excluding pretarsus.



Figures 1–2. *Myonyssus gigas* (female) – 1. Details of some dorsal idiosomal setae; 2. Idiosoma, ventral view (including posterior region of sternal shield, epigynal shield, anal shield).

Studied material

One female specimen, collected in Arasbaran Forests, Aynalu Region, East Azerbaijan Province (38° 53' 06" N; 46° 47' 64" E), altitude 1700 m above sea level, from soil and litter near an unknown small mammal nest, 9 September 2013, coll. Mojtaba Mohammad-Dustar-Sharaf, deposited in Acarological Collection, Institute of

Science and High Technology and Environmental Sciences, Graduate University of Advanced Technology, Kerman, Iran.

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