



<http://dx.doi.org/10.11646/zootaxa.3686.2.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:A98DECA9-8AB2-4764-A590-DA9D5C854343>

## Review of the genus *Myrmozercon* Berlese (Acari: Laelapidae), with description of two new species from Iran

OMID JOHARCHI<sup>1</sup> & MARYAM MORADI<sup>2</sup>

<sup>1</sup>Department of Plant Protection, Yazd Branch, Islamic Azad University, Yazd, Iran.  
E-mail [joharchi@iauyazd.ac.ir](mailto:joharchi@iauyazd.ac.ir), [j.omid2000@gmail.com](mailto:j.omid2000@gmail.com)

<sup>2</sup>Department of Entomology and Plant Pathology, Abureihan College of Agriculture, University of Tehran, Iran.

### Abstract

This paper reports on three species of mites of the genus *Myrmozercon* Berlese, 1902 associated with ants in Iran – *Myrmozercon crinitus* Joharchi **sp. nov.** from *Pheidole pallidula* (Nylander), *Myrmozercon michaeli* Joharchi **sp. nov.** from *Messor* sp. and *Myrmozercon tauricus* Trach & Khaustov from *Crematogaster schmidti* (Mayr) in the bark of grape vines. *Myrmozercon* is re-defined, the distribution, and the host-specificity and host range of its constituent species are discussed. A key to species of *Myrmozercon* occurring in the Palaearctic Region is presented.

**Key words:** Laelapidae, *Myrmozercon*, ants, taxonomy, Iran, myrmecophiles

### Introduction

Many species of mites in the family Laelapidae have been reported from ants or their nests. The myrmecophilous genus *Myrmozercon* Berlese, 1902 includes 24 described species from Europe, Australia, Africa, Middle East, Transcaucasia, North America and Central Asia (Hunter & Hunter, 1963; Rosario & Hunter, 1988; Karawajew, 1909; Vitzthum, 1930; Walter, 2003; Shaw & Seeman, 2009; Trach & Khaustov, 2011; Joharchi *et al.*, 2011; Ghafarian *et al.*, 2013).

Only twelve species of *Myrmozercon* have been described from the Palaearctic Region. All species are associated with ants, except for one quarantine interception on plant material (Hunter & Hunter, 1963). *Myrmozercon robustisetae* Rosario & Hunter, 1988 was described from a termite nest, but this species is now known to belong to the termitophilous genus *Urozercon* Berlese, 1901 (in Berlese & Leonardi, 1901) (OConnor & Klimov, 2004). Shaw & Seeman (2009) synonymised *Parabisternalis* Ueckermann & Loots, 1995 with *Myrmozercon*, and included the subgenus *Myrmonyssus* (*Laelaspulus*) Berlese, 1904 as a synonym of *Myrmozercon*. The only species known from western Asia and eastern Europe are *M. ovatum* Karawajew, 1909 (suspected synonym of *M. brevipes* in Ghafarian *et al.*, 2013), from Turkmenistan, *M. tauricus* Trach & Khaustov, 2011, from Ukraine, *M. karajensis* Joharchi *et al.*, 2011 and *Myrmozercon cyrusi* Ghafarian & Joharchi, 2013, from Iran. We now add some new information to the study of the genus *Myrmozercon* in Iran.

### Material and methods

Laelapidae associated with ants were collected mainly in some regions of northern Iran over a period of two years. Mites were removed from ants' nests by individual hand picking and by extraction from ant nesting material using Tullgren funnels. Mites were cleared in Nesbitt's solution and mounted in Hoyer's medium. The nomenclature used for the dorsal idiosomal chaetotaxy is that of Lindquist & Evans (1965), the leg chaetotaxy is that of Evans (1963a), the palp chaetotaxy that of Evans (1963b), and names of other anatomical structures mostly follow Evans & Till (1979). We use the term "lyrifissures" to refer to slit-shaped sensilli, and "pore" for circular or oval-shaped