



## A new species and new record of *Reticulolaelaps* Costa (Acari: Laelapidae) from Iran

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### Abstract

We describe a new species of mite from Iran—*Reticulolaelaps hallidayi* Joharchi, Nemati & Babaeian **sp. nov.** (Acari: Laelapidae). The new species was collected in a nest of *Tapinoma* sp. (Hymenoptera: Formicidae) in Taleghan city, Alborz Province and in soil in Khuzestan province in southwestern Iran. *Reticulolaelaps faini* is reported for the first time from Iran. The genus *Reticulolaelaps* is redescribed, and *Reticulolaelaps lativentris* Karg is transferred to *Pseudoparasitus* Oudemans.

**Key words:** *Reticulolaelaps*, Laelapidae, myrmecophile, Formicidae, soil

### Introduction

The family Laelapidae includes a multitude of morphologically and behaviourally diverse dermanysoid mites that are free living or associated with arthropods, mammals and birds (Faraji & Halliday, 2009; Lindquist *et al.*, 2009; Joharchi *et al.*, 2011; Joharchi *et al.*, 2012a, b). At present the family includes nine subfamilies, 144 genera and approximately 800 species (Lindquist *et al.*, 2009). Many species of Laelapidae have been reported from ants or their nests. Joharchi *et al.* (2011; 2012a, b) have previously reported on five species of Laelapidae associated with ants and reviewed the Iranian species of the genus *Laelaspis*. Ghafarian *et al.* (2013) described a new species in the genus *Myrmozercon* Berlese, 1902 mainly associated with ants.

The genus *Reticulolaelaps* Costa, 1968 was described for a species collected from forest litter in Israel. The genus includes only two described species, which are free living in soil and litter (Costa, 1968; Karg, 1978). The genus *Reticulolaelaps* has previously been reported from Iran associated with bark of elm trees in Isfahan (Ghafarian *et al.*, 2011). The discovery of the new species of *Reticulolaelaps* allows us to develop a clearer concept of the genus and how it is distinguished from other genera in this family.

### Materials and methods

Soil, litter and ant's nest samples were collected in Khuzestan and Alborz Provinces (Iran). Mites were extracted using Tullgren funnels, 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 is 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 cuticular openings of unspecified function. Holotype and paratypes of the new species are deposited in the Acarological Laboratory, Department of Plant Protection, Agricultural College, Shahrekord University (APAS),