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A new species of *Hypoaspis* Canestrini from Iran (Acari: Laelapidae), with a key to the species occurring in the Western Palaearctic Region

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Abstract

Hypoaspis elegans **sp. nov.** was collected on adult female *Oryctes elegans* Prell. (Coleoptera: Scarabaeidae) in Bam, Kerman province, Iran. The new species is described and illustrated from adult females. *Hypoaspis surii* Khanjani *et. al.*, 2013 is a junior synonym of *Hypoaspis maryamae* Joharchi & Halliday, 2011. A key to the Western Palaearctic species of *Hypoaspis* is presented.

Key words: Mesostigmata, *Hypoaspis elegans* **sp. nov.**, *Hypoaspis surii*, *Hypoaspis maryamae*, Kerman, Iran

Introduction

The Laelapidae is one of the largest families of free-living Mesostigmata, but it has not yet achieved a stable classification. *Hypoaspis* Canestrini and related genera have had an especially complicated and confusing history. The nominotypical subgenus, i.e., *Hypoaspis sens. strict.*, is most easily recognised by the greatly elongate setae *Z4* on the dorsal shield (3–5 times as long as *J4*) and the greatly elongate setae on some of the leg segments (Evans & Till, 1966; Karg, 1979). It now comprises about 35 species worldwide.

Before the start of this study, 15 species of *Hypoaspis sens. strict.* had been reported from the Western Palaearctic Region: *Hypoaspis alborzensis* Razavi Susan & Joharchi, 2014; *H. campestris* (Berlese, 1887) *sensu* Bregetova, 1977; *H. integer* Berlese, 1911; *H. krameri* (G. & R. Canestrini, 1881); *H. larvicolus* Joharchi & Halliday, 2011; *H. maryamae* Joharchi & Halliday, 2011; *H. melolonthae* Joharchi & Halliday, 2011; *H. neokrameri* Costa, 1971; *H. pentodoni* Costa, 1971; *H. phyllognathi* Costa, 1971; *H. polyphyllae* Khanjani & Ueckermann, 2005, *H. stammeri* (Götz in Hirschmann *et al*., 1969), *H. surii* Khanjani *et. al.*, 2013, *H. terrestris* (Leonardi, 1899) and *H. zaheri* Fouly & Al-Rehiayani, 2011.

We here describe a further new species, as well as a key for identification of the Western Palaearctic species of *Hypoaspis sens. strict*. We follow Joharchi & Halliday (2011) in treating *Hypoaspis* as a genus equivalent to *Hypoaspis* (*Hypoaspis*) (= *Hypoaspis sens. strict.*) of other authors (e.g., Evans & Till, 1966; Karg, 1979, 1982, 1993).

Materials and methods

Phoretic laelapids on beetles were collected from Bam, Kerman province, Iran, in 1999. Mites were removed from the beetles using an entomological pin, cleared in Nesbitt's fluid and mounted in Hoyer's medium on microscope slides. The nomenclature used for the dorsal idiosomal chaetotaxy is that of Lindquist & Evans (1965), the leg

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