### Article

# Raphignathus larestanensis, a new species of the genus Raphignathus Dugès (Acari: Raphignathidae) from southern Iran

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## Abstract

A new species of the genus *Raphignathus* Dugès (Acari: Raphignathidae), *R. larestanensis* **sp. nov.** is described and illustrated from fibers of date palm in Larestan, Fars province, southern Iran.

Key words: Acari, Raphignathidae, Raphignathus, new species, Iran

# Introduction

Raphignathidae (Acari: Trombidiformes: Raphignathoidea) are predaceous mites characterized by their cheliceral bases forming a stylophore, cervical peritremes not embedded in the dorsal surface of the stylophore and their confluent coxae (Fan & Zhang 2005; Walter & Krantz 2009). The genus *Raphignathus* Dugès is the oldest genus in this family and has a worldwide distribution with more than 60 species. They can be found underneath tree bark, in lichens, moss, leaf litter, pigeon nests, soil, house dust, on a wide range of plants and in house dusts and were even collected from the intestine of a wedded seal (Zaher & Gomaa 1979; Meyer & Ueckermann 1989; Fan & Yin 2000; Khanjani & Ueckermann 2003).The genus *Raphignathus* has seven known species in Iran, namely: *R. collegiatus* Atyeo, Baker and Crossley, 1961; *R. gracilis* (Rack, 1962); *R. giselae* Meyer and Ueckermann, 1989; *R. zaoi* Hu, Jing and Liang, 1995; *R. aciculatus* Fan, 2000; *R. hecmatanaensis* Khanjani and Ueckermann, 2003; *R. protaspus* Khanjani and Ueckermann, 2003 (Khanjani & Ueckermann, 2003; R. protaspus Khanjani and Ueckermann, 2003; Ghorbani *et al.* 2010). In this paper a new species, *R. larestanensis* **sp. nov.**, from southern Iran, is described and illustrated.

### **Material and Methods**

Mites were extracted from fibers of date palm (*Phoenix dactylifera* L.) using a Berlese funnel. Specimens were cleared in Nesbitt's fluid and mounted in Hoyer's medium (Walter & Krantz 2009). Measurements were taken as follows: length of idiosoma from suture between gnathosoma and idiosoma to posterior margin of idiosoma; width of idiosoma at broadest part of idiosoma; and setae from their insertion to their tips. Distances between setae were measured between their insertions. The terminology and abbreviations of dorsal and ventral setae follows Kethley (1990) and all measurements are given in micrometers (µm).