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Article



Cryptofavognathus, a new genus of the family Cryptognathidae Oudemans (Acari: Raphignathoidea), with the description of a new species from Turkey

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Abstract

A new genus, *Cryptofavognathus* is proposed for two species, *Cryptofavognathus afyonensis* (Koç & Akyol, 2004) **comb. nov.** and *C. anatolicus* **sp. nov.** The adult female and male of *C. anatolicus* **sp. nov.** collected from moss and a bird's nest are herein described and figured.

Key words: Acari, Cryptognathidae, Cryptofavognathus, new genus, new species, Turkey

Introduction

The family Cryptognathidae was established by Oudemans (1902) based on *Cryptognathus* which was erected by Kramer (1879). Summers & Chaudhri (1965) redefined this family and recognized two morphologically distinct species groups, *Imbricatus* and *Favus*. The *Favus* group has a wedge-shaped and dimpled prosternal apron, and two pairs of genital setae, and the *Imbricatus* group a crescent-shaped and transparent prosternal apron, and three pairs of genital setae. Luxton (1973) established two new subgenera *Cryptognathus* (*Favognathus*) for *Favus* and *Cryptognathus* (*Cryptognathus*) for *Imbricatus*. Later, Luxton (1987) raised *Favognathus* and *Cryptognathus* to generic level. Doğan (2008) stated that *Cryptognathus* comprises 18 species and *Favognathus* 34 (including *F. agapictus* in Flechtmann's (1971) unpublished Ph.D. thesis) in his paper comprising the distributions and habitats of all known cryptognathids.

Koç & Akyol (2004) described *F. afyonensis*, based on two females collected from Turkey, having two pairs of genital setae, but prosternal apron without dimples. It resembles *Favognathus* in having two pairs of genital setae and *Cryptognathus* in having a transparent prosternal apron and therefore intermediate between the genera *Cryptognathus* and *Favognathus*.

This paper deals with the proposal of a new genus, *Cryptofavognathus* gen. nov. based on *Cryptofavognathus afyonensis* comb. nov. and the description of a new species, *C. anatolicus*.

Material and methods

Methods used for specimens collection, extraction, material preservation, preparation and drawing of the specimens were as discussed by Doğan (2006). Dorsal setal and leg setal designations follow Kethley (1990) and Grandjean (1944), respectively. Chaetotaxy of leg segments is given with solenidia in parenthesis. All measurements are given in micrometers (μ m) and refer to length of the structure unless otherwise stated. Length of legs is measured from tip of claw to base of trochanter. Length of palp is measured from tip of tarsus to base of trochanter.