

Article

***Eustigmaeus ueckermanni*, a new species of the genus *Eustigmaeus* Berlese (Acari: Stigmaeidae) from central Iran**

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Abstract

A new species of *Eustigmaeus*, *E. ueckermanni* **sp. nov.** is described based on females collected from soil and humus under oak trees (*Quercus brantii* Lindl., 1840) in the south of Kamfiruz region, Fars province, Iran. A key to known species in Iran is provided.

Key words: Acari, Stigmaeidae, new species, Iran, *Eustigmaeus*

Introduction

Stigmaeidae is the largest family in the superfamily Raphignathoidea and includes potentially important predaceous mite species found throughout the world on plants and in the soil (Khanjani and Ueckerman, 2002). It consists of a large group of genera which are usually identified by the distinctive configuration of the dorsal shields (Ueckermann and Meyer, 1987). *Eustigmaeus* Berlese, 1910 is the largest genus in this family and contains more than 100 species worldwide (Fan & Zhang, 2005; Cheng & Fan, 2008; Doğan *et al.* 2011 and Geblalivand *et al.*, 2012). Adults of this genus can be easily distinguished from their nymphal stages by having 2 pairs of subcapitular setae (*n*, *m*) and the number of setae on trochanters (1-1-2-1). Up to now thirteen species have been reported from Iran (Khanjani & Ueckermann, 2002; Kamali *et al.* 2001; Kheradmand *et al.* 2007; Haddad *et al.*, 2011; Khanjani *et al.*, 2011; Bagheri *et al.* 2011a, b, c and Geblalivand *et al.* 2012). In this study one more species is described and illustrated based on adult female specimens and the number of Iranian *Eustigmaeus* is increased to fourteen.

Material and methods

Mites were extracted from soil using a Berlese Tullgren funnel. Specimens were cleared in Nesbitt's fluid, mounted in Hoyer's medium (Walter & Krantz, 2009) and examined at 1000× magnification under an Olympus BX41 phase contrast microscope. All drawings were made by using a drawing tube. The length of gnathosoma was measured from the base of chelicerae to the tip of palptibial claw, the length of the idiosoma from the suture between the gnathosoma and idiosoma to the posterior margin of the idiosoma, the width of the idiosoma at the broadest part of the idiosoma and setae were measured from their insertion to their tips; distances between setae were measured between their insertions. The terminology and abbreviations are based on Grandjean (1944) and Kethley (1990). All measurements are given in micrometers (µm).