

## **Article**



# Three new species of the genus *Tycherobius* Bolland (Acari: Camerobiidae) from Iran

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#### **Abstract**

Three new species of the genus *Tycherobius* Bolland, 1986, *Tycherobius iranensis* **sp. nov.**, *Tycherobius ueckermanni* **sp. nov.** and *Tycherobius farsiensis* **sp. nov.**, collected from soil and rotten leaves under oak trees (*Quercus brantii* Lindl. (Fagaceae)) in Iran, are described and illustrated. This genus is recorded for the first time in Iran. A key to all known species is given.

**Key words:** Acari, Camerobiidae, *Tycherobius*, predatory mite, Iran

### Introduction

Camerobiid mites, known as "stilt-legged mites", are predators of small phytophagous mites and first nymphal instars of scale insects (Meyer 1962; Bolland 1986; Khanjani & Ueckermann 2002, 2006; Gerson et al. 2003; Akyol & Koç 2006; Fan & Walter 2006; Khanjani et al. 2010). The genus Tycherobius is one of seven genera belonging to the Camerobiidae, and was erected by Bolland (1986). This genus has been the subject of a review twice (Bolland 1986; Fan & Walter 2006). So far, 17 species are described from Turkey, U.S.A., Australia, New Zealand, Pakistan, Brazil, Italy, Hawaii, Israel, Ukraine and Poland (Canestrini 1889; McGregor 1950; Summers & Schlinger 1955; Chaudhri et al. 1974; Bolland 1986; Bolland & Swift 2000; Bolland & Koç 2001; Flechtmann 2001; Ayyildiz & Dogan 2003; Fan & Zhang 2005; Akyol & Koç 2006; Fan & Walter 2006). In this paper Tycherobius iranensis sp. nov., Tycherobius ueckermanni sp. nov. and Tycherobius farsiensis sp. nov. collected from soil and rotten leaves under oak trees, Quercus brantii Lindl, (Fagaceae), in Fars Province, Iran, and are described and illustrated hereunder. This is the first record of this genus in Iran.

#### Material and methods

The specimens were directly mounted on microscope slides in Hoyer's medium (Walter & Krantz, 2009), examined and drawn using an Olympus  $BX_{51}$  microscope with differential interference contrast (DIC) and a camera lucida apparatus. Setal notations follow Kethley (1990) and Khanjani *et al.* (2010). All measurements are given in micrometers ( $\mu$ m) and the measurements of the paratypes are followed by the range and mean in brackets and square brackets. Also, a key to all known species and comparative taxonomic characters are provided.

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