



## Article

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### Two new flat mite species of the genus *Aegyptobia* Sayed, 1950 (Acari: Trombidiformes: Tenuipalpidae) from Iran

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#### Abstract

Two new flat mite species (Acari: Trombidiformes: Tenuipalpidae) are described: *Aegyptobia jiroftiensis* sp. nov. from *Convolvulus polygonum* (Convolvulaceae) and *Aegyptobia hormozgani* sp. nov. from *Artemisia siberia* (Asteraceae).

**Key words:** Acari, Tenuipalpidae, new species, leg chaetotaxy, Iran

#### Introduction

*Aegyptobia* Sayed is the third largest genus of Tenuipalpidae comprising 94 species (Mesa *et al.* 2009; Seeman & Beard 2011). To date, ten species of this genus have been reported from Iran (Kamali *et al.*, 2001; Khanjani *et al.*, 2008, 2012; Farzan *et al.*, 2012). Recently, Khanjani *et al.* (2012) described *Aegyptobia bromi* Khanjani, Khanjani & Seeman, 2012 and *Aegyptobia nazarii* Khanjani, Khanjani & Seeman, 2012, redescribed three others, and provided new synonymies in this genus. They synonymized *Aegyptobia kharazii* Mesa & Moraes, 2009 (which was originally *Aegyptobia meyeræ* Khosrowshahi & Arbabi, 1997) with *Aegyptobia beglarovi* Livschitz & Mitrofanov, 1967; and *Aegyptobia ueckermanni* Khosrowshahi & Arbabi, 1997 with *Aegyptobia tragardhi* Sayed, 1950. Furthermore, they moved *Aegyptobia daneshvari* Parsi & Khosrowshahi, 1990 to the genus *Phytoptipalpus* Trägårdh and synonymized it with *Phytoptipalpus salicicola* (Al-Gboory, 1987). In addition to those species, *Aegyptobia glyptus* Pritchard & Baker, 1958, *Aegyptobia iranensis* Khanjani, Gotoh & Barimani-Varandi, 2008, and *Aegyptobia persicae* Khosrowshahi & Arbabi, 1997 were reported from Iran (Kamali *et al.*, 2001; Khanjani *et al.*, 2008). Farzan *et al.* (2012) also added *Aegyptobia pavlovskii* (Reck, 1951) as a new record to the *Aegyptobia* species of the country. We describe here two new more *Aegyptobia* from Iran, bringing the total to 12 species.

The taxonomy of the Tenuipalpidae historically relies heavily upon dorsal chaetotaxy, but also other characters such as the form of the rostral shield, number of palpal segments, number of legs, form of dorsal setae, and ventral idiosomal chaetotaxy. The dorsal chaetotaxy of *Aegyptobia* resembles that of *Pentamerismus* McGregor and *Phytoptipalpus*. *Aegyptobia* and *Pentamerismus* are similar in the number of opisthosomal setae (12–13 pairs) and differ in the rare or common absence of setae *f*<sub>2</sub>, respectively, and marginal position of setae *e*<sub>2</sub> and *f*<sub>2</sub> in *Pentamerismus* only. *Aegyptobia* and *Phytoptipalpus* are different in having three and two pairs of anal setae, respectively. Several species of *Phytoptipalpus* have only three pairs of legs as an adult, and several species are recorded with 12, instead of 13 pairs of dorsal opisthosomal setae.

Recently, leg chaetotaxy has been become a standard addition to descriptions of Tenuipalpidae. The system of Grandjean (1939, 1942, 1944, 1948), applied by Lindquist (1985) to the Tetranychidae, was first applied in a tenuipalpid description by Zhang & Fan (2004) for their re-description of *Dolichotetranychus ancistrus* Baker & Pritchard, 1956. Seeman & Beard (2011) surveyed about a third of all species of *Aegyptobia*, and demonstrated that