Description of a new species of the genus Stigmaeus Koch (Acari: Prostigmata: Stigmaeidae) from East Azerbaijan Province, Iran

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Abstract

A new species of Stigmaeus Koch (Acari: Stigmaeidae), Stigmaeus marandiensis sp. nov. is described and illustrated from soil in apple orchards at Marand, East Azerbaijan Province, Iran. A key to all known species from Iran of the genus Stigmaeus is also provided.

Key words: Acari, Stigmaeus, new species, Stigmaeidae, Iran

Introduction

Stigmaeidae are small, red, yellow or orange mites that occur in many habitats and form an important component of the acarofauna of soil, litter and plants. It is a large cosmopolitan group that consists of predators feeding on a variety of arthropods, ectoparasites of dipterans and pollen feeders (Summers 1966; Ueckermann & Meyer 1987; Walter et al. 2009). The genus Stigmaeus Koch is one of the most important genera of this family and is known from just eight species in Iran, namely: S. unicus Kuznetzov, 1977; S. alvandis Khanjani & Ueckermann, 2002; S. elongatus Berlese, 1886; S. candidus Fan & Li, 1993; S. malekii Haddad et al., 2006; S. pilatus Kuznetzov, 1978; S. shabestariensis Haddad, Lotfollahi & Akbari, 2010 and S. shendabadiensis Haddad, Akbari & Lotfollahi 2010 (Khanjani & Ueckermann 2002; Faraji & Ueckermann 2006; Haddad Irani- Nejad et al. 2006, 2010 a & b; Rostami 2010). In this paper we describe another species of this genus, S. marandiensis sp. nov.

Materials and Methods

Mites were extracted from soil using a Berlese funnel. Specimens were cleared in Nesbitt’s fluid and mounted in Hoyer’s medium. The length of the idiosoma was measured from the base of chelicerae to the posterior margin of the suranal shield, the width at the broadest part and setae were measured from their insertion to 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).