

New species and records of eriophyid mites from Iran (Acari: Eriophyidae)

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Abstract

Four eriophyid mites, including two new species, from Iran are described and illustrated. They are *Aceria heteropappi* sp. nov. on *Heteropappus altaicus* (Willd.) Novopokr. (Asteraceae), *Tetra heliotropii* sp. nov. on *Heliotropium chorassanicum* Bung (Boraginaceae); and new records in Iran of *Aceria malherbae* Nuzzaci, 1985 on *Convolvulus repens* L. (Convolvulaceae), and *Aceria salsolae* de Lillo & Sobhian, 1996 on *Salsola dendroides* Pall. and *Salsola kali* L. (Chenopodiaceae).

Key words: Iran, new species, new records, taxonomy, Eriophyoidea

Introduction

During May–September 2011 eriophyoids associated with uncultivated plants surrounding agroecosystems were surveyed by the second and forth authors in Razavi Khorasan Province, northeast Iran. A variety of plants in different localities mainly in Mashhad and neighboring areas were randomly investigated and sampled for potential eriophyoid symptoms and presence of mites. This forms part of an on-going survey of Eriophyoidea in Iran by Drs Sadeghi and Sinaie which already contributed 9 new species and 6 new records to the known eriophyoid biodiversity of this country, reported in 3 papers (Xue *et al.* 2009, 2011, 2012).

About 96 eriophyoid mite species are known from Iran (Babaei *et al.* 2010; Kamali & Amrine, 2005; Kamali & Jalaieian, 2011; Xue *et al.* 2009, 2011, 2012), and the present study increases the total to about 100 species. Almost half of these species belong to the genus *Aceria*. Kamali and Amrine (2005) reviewed the Iranian species of *Aceria* and listed 20 species. Also, an identification key was provided. Xue *et al.* (2009) listed 41 *Aceria* species in their checklist of Iranian eriophyoid species. Only two *Tetra* species have been reported from Iran, *Tetra ferdowsiensis* Xue, Sadeghi & Hong, 2009 and *Tetra lycopersici* Xue & Hong, 2005 (Xue *et al.* 2009, 2011).

Material and Methods

Plant samples were brought to the laboratory and mite specimens were found and hand collected from the plant material using a dissecting microscope. Collected mites were preserved in 70% ethyl alcohol for subsequent slide mounting or freshly collected specimens were placed in a lactophenol solution for 5–7 days at room temperature and then mounted in Hoyer's medium. Slide mounted specimens were identified by the first and third authors. The morphological terminology used