



The genus *Mycterothrips* (Thysanoptera: Thripidae) in Iran, with three new species

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Abstract

Three new species of *Mycterothrips* are described from Khorasan-e Shomali province in Northeast of Iran, *M. mahvelatensis* sp.n., *M. nastarani* sp.n. and *M. sanubari* sp.n.. An identification key is provided for both sexes of the nine species of *Mycterothrips* known from Iran. Host associations among these Iranian species, as well as the variation in number of pronotal posteromarginal setae, are discussed briefly.

Key words: identification key, Iran, *Mycterothrips*, new species

Introduction

Among nine families that have been recognized in the insect order Thysanoptera, Phlaeothripidae is the richest family according to the number of species as well as diversity in habitat (Mound 2005; ThripsWiki 2013). However, in Iran, the family Thripidae with 106 recorded species and one species group with 34 genera exceeds phlaeothripids (Minaei 2013), probably due to a greater interest in this country in studying these insects in association with agriculture (Minaei *et al.* 2007; Bhatti *et al.* 2009). Most genera of Thripidae known from Iran are associated with living plants, but *Scolothrips* species are predators on tetranychid mites. *Mycterothrips* species feed mainly on leaves of shrubs and trees, and this genus has been extensively revised with a key to 27 species (Masumoto & Okajima 2006). These authors further suggested that the *Mycterothrips* genus-group defined by Mound and Palmer (1981) is probably not monophyletic.

Members of *Mycterothrips* are reported from various parts of the world except the Neotropical region, and they are abundant in the Palaearctic to Oriental regions (Masumoto & Okajima, 2006): two species from Ethiopian region; two species from Australia (Mound *et al.*, 2013); three species from North America (Hoddle *et al.* 2013) and one undescribed species from Indonesia (Sartiami & Mound 2013). In Iran, Bhatti *et al.* (2009) listed four species of *Mycterothrips*, and subsequently Mirab-balou *et al.* (2011) described two further species from western Iran.

The thrips fauna of Iran is poorly known, particularly in several areas of eastern Iran which still have been not well explored. The purpose of this paper is to describe three new *Mycterothrips* species from Iran and to indicate variation in the number of pronotal posteromarginal setae in these new species. The plants are listed with which the nine species of this genus from Iran have been associated (Table 1). Full nomenclatural details of all taxa discussed in this paper are web available (ThripsWiki 2013)

Mycterothrips host associations in Iran

The concept of “host association” in thrips is not easy to define, and many of the published records of host plants of thrips are not reliable (Mound 2013). In Iran, there are some examples of this problem that have been provided elsewhere (Minaei *et al.* 2007), but it is evident that some thrips species are related to specific plant families. Such