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The *Phlaeothrips*-lineage of fungus feeding thrips (Thysanoptera: Phlaeothripidae) in Iran with a new species of *Hindsiothrips*

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Abstract

Hindsiothrips sisakhti sp. n. is described from leaf litter in Iran, this being the first record of the genus from this country. A key is provided to the seven Phlaeothripinae genera recorded from Iran that are considered members of the Phlaeothrips-lineage, in which most species are fungus feeding: Aleurodothrips, Hindsiothrips, Hoplandrothrips, Hoplothrips, Phlaeothrips and Stictothrips. Structural variation in the group is discussed briefly, and Idiothrips ficus Bhatti is considered a new synonym of Idiothrips bellus Faure.

Key words: Hindsiothrips sisakhti, Idiothrips, new species, new synonymy, Phlaeothrips lineage

Introduction

Although Bhatti (1988; 1994) recognized 12 families in the Thysanoptera suborder Tubulifera, most thysanopterists accept one family with two subfamilies in this suborder despite doubt remaining concerning their monophyly (Mound & Morris 2007; Buckman *et al.* 2013). In the smaller of these subfamilies, Idolothripinae, the classification is more or less stable with two tribes and nine subtribes (Mound & Palmer 1983), but classification within the other subfamily, Phlaeothripinae, is not satisfactory. Mound and Marullo (1996) recognized three "lineages" based on feeding strategies and weak structural character states: the *Haplothrips*, *Liothrips* and *Phlaeothrips* lineages. The first of these is now well defined as the tribe Haplothripini (Mound & Minaei 2007; Minaei & Mound 2008). Moreover, the *Liothrips* lineage of leaf-feeding species seems largely discrete, whereas the *Phlaeothrips* lineage displays considerable structural diversity, and is probably polyphyletic (Buckman *et al.* 2013). The *Phlaeothrips* lineage occurs worldwide and comprises mainly species that feed on fungal hyphae on dead branches or in leaf litter. Many live in colonies, exhibit complex allometry in males, and subsocial behavior including male fighting (Crespi 1986).

From Iran, nineteen genera of Phlaeothripidae are already recorded (Bhatti *et al.* 2009; Minaei 2012) (Table 1). In recent years there are several works on various Iranian groups of Thysanoptera especially on those of agricultural interest (Minaei *et al.* 2007; Bhatti *et al.* 2009). However, the fungus feeding thrips in the Idolothripinae (Minaei 2011) and particularly Phlaeothripinae are very little known and require much work. The objective of this paper is to provide an introduction and means of identifying the seven genera of the *Phlaeothrips* lineage recorded from Iran, and to establish one new species level synonym as a result of recent collecting. Moreover, *Hindsiothrips* is recorded from Iran for the first time, and a new species described in this genus. Full nomenclatural information about Thysanoptera is available on the web (Mound 2012).

Acknowledgements, depositories and abbreviations

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