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A CHECKLIST OF IRANIAN THRIPS (INSECTA: THYSANOPTERA)

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The list of 217 species in 74 genera of thrips (Insecta: Thysanoptera) known from Iran is given. They belong to the suborder Terebrantia with four families, Aeolothripidae (23 species in 4 genera), Melanthripidae (7 species in 7 genera), Stenurothripidae (1 species in 1 genus) and Thripidae (135 species in 47 genera), and the suborder Tubulifera with 51 species and 20 genera in the single family Phlaeothripidae.

KEY WORDS: Thrips, checklist, Terebrantia, Tubulifera, Iran.

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Приведен список 215 видов из 74 родов трипсов (Insecta: Thysanoptera) фауны Ирана. Подотряд Terebrantia представлен 4 семействами: Aeolothripidae (23 вида из 4 родов), Melanthripidae (7 видов из 7 родов), Stenurothripidae (1 вид из 1 рода) и Thripidae (135 видов из 47 родов), а подотряд Tubulifera – единственным семейством Phlaeothripidae (49 видов из 20 родов).

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INTRODUCTION

About 6000 species of Thysanoptera are known from the world. These are classified into two suborders Terebrantia and Tubulifera, comprising nine families, of which 8 families belong to Terebrantia and one family belongs to Tubulifera. The Terebrantia comprise 2000 species, whereas the Tubulifera include 3500 species from all over the world (see Mirab-balou *et al.*, 2011a: 720–721).

Iran situated in the Palaearctic faunal region (Fig. 1), and straddles the division between the western and eastern Palaearctic subregions. Iran has a land area of 1,648,184 km². It is bordered by Iraq, Turkey, Armenia, Azerbaijan, Turkmenistan, Afghanistan and Pakistan, and also has over 2000 km of southern coastline, two-thirds facing the Persian Gulf and the remainder lying east of the Strait of Hormoz in the Gulf of Oman.



Fig. 1. Map of Iran with boundaries of provinces

The first checklist of Thysanoptera in Iran was provided by Bhatti *et al.* (2009) with 177 species (132 species in Terebrantia, and 45 species in Tubulifera). Since then, several papers have appeared on the taxonomy and faunistics of these insects in Iran by Mirab-balou and associates during 2010–2013 (Mirab-balou & Chen, 2010 a, b; Mirab-balou & Chen, 2011 a, b; Mirab-balou *et al.*, 2011 a, b; Mirab-balou & Chen, 2012 a, b, c, d; Mirab-balou *et al.*, 2012 a, c, d; Mirab-balou & Chen, 2013 a, b; Mirab-balou *et al.*, 2013), and Minaei and associates during 2009–

2013 (Minaei, 2011; 2012 a, b, c; 2013 a, b; Minaei & Aleosfoor, 2013; Minaei & Mound, 2010; Minaei *et al.*, 2012, 2013). These studies have resulted in a substantial increase in the number of species known from Iran, totaling 217 species belonging to five families, adding 40 species to the last published checklist from Iran by Bhatti *et al.* (2009).

Thysanoptera have a diversity of biology, i.e. predators, phytophagous, and fungus-feeding. All members of Aeolothripidae, species of *Scolothrips* (in Thripidae) and several species of Phlaeothripidae, such as *Haplothrips kurdjumovi* and *H. subtilissimus*, are predators; several recorded species in Phlaeothripidae are fungus-feeding; but most others feed either on leaves or on flowers of plants, many being important pests, such as species belonging to the genera *Haplothrips*, *Stenchaetothrips*, *Taeniothrips*, *Dendrothrips*, *Megalurothrips*, *Anaphothrips*, *Thrips*, *Frankliniella*, *Scirtothrips*, *Microcephalothrips*, and *Ceratothripoides*. Among them, species of the five latter genera are pests of agricultural crops and flowers, either by direct damage caused to plant tissue during feeding or by transmission of pathogenic agents, especially viruses (Mirab-balou & Chen, 2011a; Mirab-balou *et al.*, 2012 a, b).

MATERIALS AND METHODS

The list below is based on the collection data of the author and his study on this group of insects from 2008 to 2013 and includes earlier records from other publications. All the Iranian taxa are listed here with records of distribution in the world and in Iranian provinces.

LIST OF IRANIAN THYSANOPTERA

SUBORDER TEREBRANTIA HALIDAY, 1836

This suborder included eight families in the world (Bhatti, 1979, 1990), of which the following four families are known from Iran: Aeolothripidae, Melanthripidae, Stenurothripidae, and Thripidae. Among them, Thripidae is the largest family including most of the important species.

Family Aeolothripidae Uzel, 1895

Aeolothripids recognized by their fore wings, which are broad with the apex rounded and usually with shaded and colorless transverse bands. Further, the antennae are 9-segmented; segments III–V are elongate and parallel-sided, and the sensoria on antennal segments III and IV are flat, linear or oval shaped; and the ovipositor is upturned (Nakahara, 1991). Adults and larvae of many species in this family appear to be facultative predators of other small arthropods, and they feed on both floral tissues as well as on thrips and mites that live in flowers (Tyagi *et al.*, 2008). Almost 200 species of Aeolothripidae are recognized worldwide in 28 genera (ThripsWiki, 2013), of which 23 species belonging to four genera has been recorded in Iran.

Among Iranian Aeolothripidae, species of the genus *Aeolothrips* are widely distributed and between them, only *A. albicinctus* is ground-living species and the first abdominal tergite in this species is narrow and bears numerous transverse striae; other species are associated with flowers (Mirab-balou & Chen, 2012a).

Genus *Aeolothrips* Haliday, 1836

***Aeolothrips afghanus* Jenser, 1984**

DISTRIBUTION. Iran (Kerman); Afghanistan.

***Aeolothrips albicinctus* Haliday, 1836**

DISTRIBUTION. Iran (Hamedan, Alborz); China, Mongolia, Europe, North America.

***Aeolothrips balati* Pelikán, 1958**

DISTRIBUTION. Iran (Fars); Turkey, Bulgaria, Spain.

***Aeolothrips citricinctus* Bagnall, 1933**

DISTRIBUTION. Iran (Fars); Europe, North Africa.

***Aeolothrips collaris* Priesner, 1919**

DISTRIBUTION. Iran (Fars, Khuzestan, Kerman, Isfahan, Khorasan-e-Shomali, Golestan, Guilan, Hamedan, Alborz); China, India, France, Albania, Egypt, Cyprus, Canary Islands, Mongolia, Bangladesh.

***Aeolothrips cursor* Priesner, 1939**

DISTRIBUTION. Iran (Hamedan); Cyprus, Italy, France, Spain, Crimen, Turkey, Greece, Albania.

***Aeolothrips deserticola* Priesner, 1929**

DISTRIBUTION. Iran (Khuzestan, Hamedan); Egypt, Israel, Morocco, Canary Islands.

***Aeolothrips eremicola* Priesner, 1938**

DISTRIBUTION. Iran (Sistan and Baluchestan); Egypt, China.

***Aeolothrips fasciatus* (Linnaeus, 1758)**

DISTRIBUTION. Iran (Isfahan, Fars, Kerman, Yazd, Hamedan, Alborz, Kermanshah, Zanjan, Azarbaijan-e-Sharghi, Azarbaijan-e-Gharbi, Lorestan, Markazi, Ardabil, Ghom, Chehar Mahal Bakhtiari); China, Japan, North Korea, Mongolia, Europe.

***Aeolothrips gloriosus* Bagnall, 1914**

DISTRIBUTION. Iran (Hamedan, Zanjan); Italy.

***Aeolothrips heinzi* zur Strassen, 1990**

DISTRIBUTION. Iran (Kerman); Turkey.

***Aeolothrips intermedius* Bagnall, 1934**

DISTRIBUTION. Iran (Isfahan, Khuzestan, Yazd, Kerman, Fars, Golestan, Tehran, Alborz, Guilan, Zanjan, Azarbaijan-e-Sharghi, Qazvin, Kermanshah, Azarbaijan-e-Gharbi, Kordestan, Hamedan); China, Europe.

***Aeolothrips modestus* zur Strassen, 1966**

DISTRIBUTION. Iran (Fars); Canary Islands.

***Aeolothrips mongolicus* Pelikán, 1985**

DISTRIBUTION. Iran (Khuzestan, Golestan, Khorasan-e-Shomali, Fars); China, Mongolia.

***Aeolothrips montivagus* Priesner, 1948**

DISTRIBUTION. Iran (Hamedan); Cyprus, Turkey.

***Aeolothrips tenuicornis* Bagnall, 1926**

DISTRIBUTION. Iran (Tehran, Ghom, Fars, Khuzestan, Golestan); Morocco, England.

***Aeolothrips versicolor* Uzel, 1895**

DISTRIBUTION. Iran (Fars, Hamedan); England, Russia, Czech Republic, Hungary, Yugoslavia, Finland, Norway, North America.

***Aeolothrips zurstrasseni* Minaei, 2013**

DISTRIBUTION. Iran (Fars).

Genus *Indothrips* Bhatti, 1967

***Indothrips bhushani* Bhatti, 1967**

DISTRIBUTION. Iran (Khuzestan); India.

Genus *Orothrips* Moulton, 1907

***Orothrips priesneri* (Titschack, 1958)**

DISTRIBUTION. Iran (Fars); Turkey, Southern Italy, Czech Republic, South of France, Spain (Aragon, Andalusia).

Genus *Rhipidothrips* Uzel, 1895

***Rhipidothrips brunneus* Williams, 1913**

DISTRIBUTION. Iran (Golestan, Khuzestan, Hamedan, Azarbaijan-e-Sharghi); widespread across Western Europe to Egypt, Western Australia and USA (California).

***Rhipidothrips flavus* Tunç, 1991**

DISTRIBUTION. Iran (Golestan, Hamedan); Turkey.

***Rhipidothrips graciosus* Uzel, 1895**

DISTRIBUTION. Iran (Azarbaijan-e-Sharghi, Fars, Kerman, Golestan, Hamedan); southern areas of the Western Palaearctic and USA (California).

Family Melanthripidae Bagnall, 1913

This family includes 67 species in four genera, of which *Melanthrips* with 37 species is the largest (ThripsWiki, 2013). In Iran, only 7 species in two genera has been recorded (Mirab-balou & Chen, 2012b; Minaei et al., 2012). The members of this family are distinguished by having a pair of lobes with an associated two pairs of setae on the posterior margin of the seventh sternite; and a well-developed pair of

trichobothria on the tergite X; transverse sensoria on the antennal segments, and a well developed tentorium in the head.

Genus *Ankothrips* Crawford, 1909

***Ankothrips zayandicus* Minaei, Haftbaradaran et Mound, 2012**

DISTRIBUTION. Iran (Isfahan).

Genus *Melanthrips* Haliday, 1836

***Melanthrips fuscus* (Sulzer, 1776)**

DISTRIBUTION. Iran (Golestan, Khuzestan, Kerman, Fars, Alborz, Hamedan); China, North Africa, Cyprus, Palestine, Egypt, Europe.

***Melanthrips hei* Mirab-balou et Chen, 2012**

DISTRIBUTION. Iran (Hamedan, Kermanshah).

***Melanthrips knechteli* Priesner, 1936**

DISTRIBUTION. Iran (Hamedan, Kermanshah, Golestan); Turkey, Bulgaria, Romania, Albania, Czech Republic, Spain.

***Melanthrips pallidior* Priesner, 1919**

DISTRIBUTION. Iran (Golestan, Khorasan-e-Shomali, Khuzestan, Tehran, Alborz, Kerman, Hamedan, Kermanshah); China, Russia, Turkey, Palestine, Cyprus, Italy, Albania, Yugoslavia, Bulgaria, Switzerland, Romania, Austria, Slovakia, Germany and North Africa.

***Melanthrips rivnayi* Priesner, 1936**

DISTRIBUTION. Iran (Fars); Turkey, Israel, Slovenia, Italy, Southern France, Spain.

***Melanthrips separandus* Priesner, 1936**

DISTRIBUTION. Iran (Fars, Hamedan, Qazvin, Azarbaijan-e-Gharbi, Azarbaijan-e-Sharghi, Ardabil, Chehar-Mahal Bakhtiari, Ghom, Lorestan, Markazi, Kermanshah); Turkey, Israel, probably Eastern Mediterranean.

Family Stenurothripidae Bagnall, 1923

The members of Stenurothripidae (=Adiheterothripidae) is easily distinguished from other thrips by antennae 9-segmented, with a conical, turret-like sense cone at the apical margin of antennal segments III and IV. Besides the 6 extant species, there are 18 species of fossil thrips in this family, 16 of which belong to 8 fossil genera (Bhatti, 2006). Most species described in this family belong to the genus *Holarthrothrips* that seem to be associated with the flowers of date palms between India and the Mediterranean. The second genus, *Oligothrips*, is from California (Mound & Kibby, 1998). Recently Penalver and Nel (2010) described *Hispanothrips* as a new genus of this family. In Iran, only the following species was recorded from this family.

Genus *Holarthrothrips* Bagnall, 1924

***Holarthrothrips josephi* Bhatti, 1968**

DISTRIBUTION. Iran (Kerman); India.

Family Thripidae Stephens, 1829

Thripidae is one of the eight families recognized in the suborder Terebrantia. This family is currently interpreted as comprising more than 2000 described species, divided into four subfamilies, i.e., Dendrothripinae, Panchaetothripinae, Sericothripinae, and Thripinae (Bhatti, 1989). Among them, the Thripinae is the largest group and most of them feed either on plant leaves or on flowers, many being pests, but a few species are predatory (Mirab-balou et al., 2013). The members of Thripidae can usually be distinguished by the structure of the antennae and slender fore wings. In Iran, 135 species in 47 genera of this family has been recorded, belonging to the four subfamilies.

Subfamily Dendrothripinae Priesner, 1925

There are 16 genera and about 100 species listed in this subfamily in the world (ThripsWiki, 2013), of which 5 species in two genera has been recorded from Iran. This subfamily by metathoracic endofurca greatly enlarged and reaching into the mesothorax (lyre-shaped), and with basal transverse ridge is easily distinguished from other thripine species.

Genus *Dendrothrips* Uzel, 1895

***Dendrothrips degeeri* Uzel, 1895**

DISTRIBUTION. Iran (Khorasan-e-Shomali); Europe, Turkey.

***Dendrothrips karnyi* Priesner, 1921**

DISTRIBUTION. Iran (Khuzestan); Turkey, Poland, Yugoslavia, Italy.

***Dendrothrips phyllireae* (Bagnall, 1927)**

DISTRIBUTION. Iran (Golestan); Europe, Morocco, Israel.

***Dendrothrips saltator* Uzel, 1895**

DISTRIBUTION. Iran (Kerman, Hamedan, Khorasan-e-Shomali, Khuzestan); Europe, Russia (Siberia), North-West India.

Genus *Pseudodendrothrips* Schmutz, 1913

***Pseudodendrothrips mori* (Niwa, 1908)**

DISTRIBUTION. Iran (Guilan, Hamedan, Alborz, Kordestan, Azarbaijan-e-Gharbi); China, Korea, Japan, USA, Australia, Italy, Chile.

Subfamily Panchaetothripinae Bagnall, 1912

A total of about 125 species in 35 genera are currently recognized in this subfamily (ThripsWiki, 2013). This subfamily is distinguished by the following characters: head and legs usually strongly reticulate; terminal antennal segment usually very

slender and acute, apex needlelike; fore wing first vein usually fused with costal vein near base; meso- and metathoracic endofurca without spinula; and body strongly sclerotized. In Iran, 7 species in six genera has been recorded from this subfamily (Mirab-balou & Chen, 2012c).

Genus *Caliothrips* Daniel, 1904

***Caliothrips graminicola* (Bagnall et Cameron, 1932)**

DISTRIBUTION. Iran (Kerman, Khuzestan); India, Sudan, Sri Lanka, Thailand, South Africa, Australia.

***Caliothrips impurus* (Priesner, 1928)**

DISTRIBUTION. Iran (Kerman); Nigeria, Sudan, Gambia, Eritrea, India.

Genus *Heliothrips* Haliday, 1836

***Heliothrips haemorrhoidalis* (Bouché, 1833)**

DISTRIBUTION. Iran (Mazandaran, Guilan, Kordestan); widely distributed.

Genus *Parthenothrips* Uzel, 1895

***Parthenothrips dracaenae* (Heeger, 1854)**

DISTRIBUTION. Iran (Azarbaijan-e-Sharghi); Europe.

Genus *Retithrips* Marchal, 1910

***Retithrips syriacus* Mayet, 1890**

DISTRIBUTION. Iran (Khuzestan, Fars, Kerman); Brazil, Egypt, Ghana, India, Israel, Kenya, Lebanon, Libya, Somalia, Sudan, Syria, Tanzania, Uganda, USA, Puerto Rico.

Genus *Rhipiphorothrips* Morgan, 1913

***Rhipiphorothrips cruentatus* Hood, 1919**

DISTRIBUTION. Iran (Khuzestan); China, Afghanistan, Burma, West Bengal, Myanmar, Oman, India, Sri Lanka, Pakistan, Bangladesh.

Genus *Selenothrips* Karny, 1911

***Selenothrips rubrocinctus* (Giard, 1901)**

DISTRIBUTION. Iran (Kordestan); widespread in tropics.

Subfamily Sericothripinae Karny, 1921

Currently 140 species of three genera in this subfamily are recognized in the world (ThripsWiki, 2013); of which, 4 species in two genera has been recorded from Iran (Mirab-balou & Chen, 2013a).

Genus *Hydatothrips* Karny, 1913

***Hydatothrips abdominalis* Kurosawa, 1973**

DISTRIBUTION. Iran (Kordestan); Japan, Korea, China.

Genus *Neohydatothrips* John, 1929

***Neohydatothrips gracilipes* Hood, 1924**

DISTRIBUTION. Iran (Alborz); Mexico, China (Taiwan).

***Neohydatothrips gracilicornis* (Williams, 1916)**

DISTRIBUTION. Iran (Tehran, Golestan, Khorasan-e-Shomali, Hamedan, Zanjan); Europe, Morocco, Turkey, Israel, Iran, Japan.

***Neohydatothrips tadhicus* (Pelikan, 1964)**

DISTRIBUTION. Iran (Fars); Tajikistan.

Subfamily Thripinae Karny, 1921

This subfamily includes about 1700 species in 220 genera worldwide (ThripsWiki, 2013). Of these, 119 species in 37 genera are here recorded from Iran. The members of this subfamily are distinguished by the following character: head and legs usually not reticulate, if reticulate then terminal antennal segment not acute, and fore wing first vein not fused to costa near base; meso- and metasternum with or without spinula; and body usually not strongly sclerotized. They live in flowers, on leaves, and some species live in both habitats, particularly the important pest species, such as *Frankliniella occidentalis*, *Thrips tabaci*, *Thrips palmi*, *Scirtothrips dorsalis*, *Stenchaetothrips biformis* and *Megalurothrips distalis* (Reitz et al., 2011); and a few species of genus *Scolothrips* are known as obligate predators (Mirab-balou et al., 2013).

Keys are available for species of some Iranian genera, such as for the genera of *Thrips* and *Frankliniella* genus-groups (Mirab-balou & Chen, 2011a), the *Megalurothrips* genus-group (Mirab-balou & Chen, 2011b), the *Anaphothrips* genus-group (Mirab-balou & Chen, 2013b), and on *Mycterothrips* was discussed by Mirab-balou et al. (2011b). Recently, a key to 35 Thripinae genera was also published by Mirab-balou et al. (2013).

Genus *Agalmothrips* Priesner, 1964

***Agalmothrips parviceps* Priesner, 1965**

DISTRIBUTION. Iran (Khuzestan); India, Sudan.

Genus *Anaphothrips* Uzel, 1895

***Anaphothrips obscurus* (Müller, 1776)**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Fars, Golestan, Isfahan, Alborz, Mazandaran, Hamedan, Azarbaijan-e-Sharghi, Qazvin, Tehran); widely distributed.

***Anaphothrips sudanensis* Trybom, 1911**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Khuzestan, Kerman, Fars, Golestan, Hamedan); widely distributed.

Genus *Aptinothrips* Haliday, 1836

***Aptinothrips elegans* Priesner, 1924**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Kordestan, Hamedan, Alborz, Azarbaijan-e-sharghi); Western Europe, Russia.

***Aptinothrips rufus* (Haliday, 1836)**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Tehran, Golestan, Kerman, Hamedan, Kermanshah, Zanjan, Alborz and Azarbaijan-e-sharghi); China, Europe, Costa Rica.

***Aptinothrips stylifer* Trybom, 1894**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Tehran, Golestan, Hamedan); Palearctic.

Genus *Arorathrips* Bhatti, 1990

***Arorathrips mexicanus* (Crawford, 1909)**

DISTRIBUTION. Iran (Hormozgan); China, North America, Mexico, Caribbean Islands, Panama, Colombia, Argentina, Zimbabwe, Mozambique, Cuba, Brazil, West Indies, Thailand, Africa, Australia, Philippines.

Genus *Bregmatothrips* Hood, 1912

***Bregmatothrips bournieri* Pelikan, 1988**

DISTRIBUTION. Iran (Tehran, Hamedan); Tajikistan.

Genus *Chaetanaphothrips* Priesner, 1836

***Chaetanaphothrips* sp.**

NOTES. Genus *Chaetanaphothrips* was reported from Iran by Esmaili (1983) based on an undetermined species noted as pest of citrus fruits in Iran.

Genus *Chirothrips* Haliday, 1836

***Chirothrips aculeatus* Bagnall, 1927**

DISTRIBUTION. Iran (Isfahan, Hamedan); China, Hungary, England, France.

***Chirothrips africanus* Priesner, 1932**

DISTRIBUTION. Iran (Golestan); China (Taiwan), Cyprus, Egypt, Algeria, Italy, India, Uzbekistan, Yemen, Sudan, Ethiopia.

***Chirothrips atricorpus* Girault, 1927**

DISTRIBUTION. Iran (Khuzestan); Australia.

***Chirothrips kurdistanus* zur Strassen, 1967**

DISTRIBUTION. Iran (Fars, Tehran, Alborz); Turkey.

***Chirothrips manicatus* (Haliday, 1836)**

DISTRIBUTION. Iran (Alborz, Hamedan, Kermanshah, Azarbaijan-e-Sharghi, Kerman, Golestan, Khuzestan, Yazd, Khorasan-e-Shomali, Guilan); Palaeartic.

***Chirothrips maximi* Ananthkrishnan, 1957**

DISTRIBUTION. Iran (Hamedan); India.

***Chirothrips meridionalis* Bagnall, 1927**

DISTRIBUTION. Iran (Khuzestan, Kerman, Golestan, Mazandaran); France.

***Chirothrips molestus* Priesner, 1926**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Hamedan, Golestan); Czech Republic, Austria.

***Chirothrips pallidicornis* Priesner, 1925**

DISTRIBUTION. Iran (Fars); Poland, Czech Republic, Hungary, Germany, Italy.

Genus *Collembolothrips* Priesner, 1935

***Collembolothrips mediterraneus* Priesner, 1935**

DISTRIBUTION. Iran (Golestan, Hamedan, Kermanshah); Cyprus.

Genus *Drepanothrips* Uzel, 1895

***Drepanothrips reuteri* Uzel, 1895**

DISTRIBUTION. Iran (Khuzestan, Isfahan, Khorasan-e-Shomali); Europe, China, Japan, North America.

Genus *Eremiothrips* Priesner, 1950

***Eremiothrips antilope* (Priesner, 1923)**

DISTRIBUTION. Iran (Khuzestan); Egypt, Sudan, Morocco, Palestine, Saudi Arabia, India.

***Eremiothrips arya* (zur Strassen, 1975)**

DISTRIBUTION. Iran (Tehran).

***Eremiothrips bhattii* Minaei, 2012**

DISTRIBUTION. Iran (Fars).

***Eremiothrips dubius* (Priesner, 1933)**

DISTRIBUTION. Iran (Kerman, Yazd, Hamedan, Alborz); Canary Islands, Morocco.

***Eremiothrips efflatouni* (Priesner, 1965)**

DISTRIBUTION. Iran (Khuzestan); Egypt, Canary Islands, Israel.

***Eremiothrips farsi* Bhatti et Telmadarraiy, 2003**

DISTRIBUTION. Iran (Mazandaran).

***Eremiothrips shirabudinensis* (Yaknontov, 1929)**

DISTRIBUTION. Iran (Kerman, Khuzestan, Yazd, Khorasan-e-Shomali); Uzbekistan, Mongolia.

***Eremiothrips similis* Bhatti, 1988**

DISTRIBUTION. Iran (Khuzestan); Iraq.

***Eremiothrips taghizadehi* (zur Strassen, 1975)**

DISTRIBUTION. Iran (Golestan, Tehran, Khuzestan).

***Eremiothrips tamaricis* (zur Strassen, 1975)**

DISTRIBUTION. Iran (Golestan); Morocco.

***Eremiothrips varius* (Bhatti, 1967)**

DISTRIBUTION. Iran (Golestan, Khuzestan); India.

***Eremiothrips zurstrasseni* Bhatti, Bagheri et Ramezani, 2009**

DISTRIBUTION. Iran (Khuzestan).

Genus *Euphysothrips* Bagnall, 1926

***Euphysothrips minozzii* Bagnall, 1926**

DISTRIBUTION. Iran (Khorasan-e-Shomali); Turkey, India, Austria, France, Canary Islands, Egypt, Yemen, South Africa, Mozambique.

Genus *Exothrips* Priesner, 1939

***Exothrips redox* Bhatti, 1975**

DISTRIBUTION. Iran (Golestan); India.

Genus *Ficothrips* Minaei, 2012

***Ficothrips moundi* Minaei, 2012**

DISTRIBUTION. Iran (Fars).

Genus *Florithrips* Bhatti, 1970

***Florithrips traegardhi* (Trybom, 1911)**

DISTRIBUTION. Iran (Khuzestan); Egypt, Sudan.

Genus *Frankliniella* Karny, 1910

***Frankliniella intonsa* (Trybom, 1895)**

DISTRIBUTION. Iran (widely distributed); widespread around the world.

***Frankliniella occidentalis* (Pergande, 1895)**

DISTRIBUTION. Iran (Tehran, Khuzestan, Hamedan, Zanjan, Azarbaijan-e-Sharghi, Alborz, Qazvin); widespread around the world.

***Frankliniella pallida* (Uzel, 1895)**

DISTRIBUTION. Iran (Khuzestan, Fars, Lorestan, Tehran, Khorasan-e-Shomali, Hamedan, Kermanshah, Alborz, Kordestan, Qazvin, Zanjan); China, Austria, France, Tunisia, Czech Republic.

***Frankliniella schultzei* (Trybom, 1910)**

DISTRIBUTION. Iran (Khuzestan, Kerman, Tehran, Mazandaran, Kermanshah, Qazvin); Israel, Egypt, Spain, Morocco, Canary Islands.

***Frankliniella tenuicornis* (Uzel, 1895)**

DISTRIBUTION. Iran (Fars, Golestan, Isfahan, Tehran, Alborz, Guilan, Khorasan-e-Shomali, Mazandaran, Hamedan, Kermanshah, Azarbaijan-e-Sharghi); China, Czech, USA.

Genus *Kakothrips* Williams, 1914

***Kakothrips dentatus* Knechtel, 1939**

DISTRIBUTION. Iran (Kermanshah); Romania, Russia.

***Kakothrips pisivorus* (Westwood, 1880)**

DISTRIBUTION. Iran (Alborz, Hamedan); Czech Republic, England.

***Kakothrips priesneri* Pelikan, 1965**

DISTRIBUTION. Iran (Qazvin); Czechoslovakia, Israel.

Genus *Limothrips* Haliday, 1836

***Limothrips angulicornis* Jablonowski, 1894**

DISTRIBUTION. Iran (Western Palaearctic); Khuzestan, Hamedan, Azarbaijan-e-Sharghi, Kerman, Mazandaran, Khorasan-e-Shomali, Alborz, Azarbaijan-e-Gharbi, Golestan, Fars.

***Limothrips cerealium* (Haliday, 1836)**

DISTRIBUTION. Iran (Azarbaijan-e-Sharghi); Denmark, Italy, USA, Cyprus, Syria, England.

***Limothrips denticornis* (Haliday, 1836)**

DISTRIBUTION. Iran (Golestan); North America, Australia, Austria, Finland, England, Russia.

***Limothrips schmutzi* Priesner, 1919**

DISTRIBUTION. Iran (Khorasan-e-Shomali); Georgia, Romania, Bulgaria, Czech Republic, Austria, Germany, Italy, England.

***Limothrips transcaucasicus* Savenko, 1944**

DISTRIBUTION. Iran (Golestan, Hamedan); Georgia, Turkey, Uzbekistan.

Genus *Megalurothrips* Bagnall, 1915

***Megalurothrips distalis* (Karny, 1913)**

DISTRIBUTION. Iran (Hamedan); China, Korea, India, Indonesia, Sri Lanka, Philippines, Fiji.

Genus *Microcephalothrips* Bagnall, 1915

***Microcephalothrips abdominalis* (Crawford, 1913)**

DISTRIBUTION. Iran (Khuzestan, Teharn, Alborz, Golestan, Fars, Guilan, Hamedan); China (including Taiwan), Korea, India, Guam, Sri Lanka, Philippines, Indonesia, Egypt, Australia, New Zealand, USA, Canada, Cuba, Argentina, Mexico.

Genus *Mycterothrips* Trybom, 1910

***Mycterothrips consociatus* (Targioni-Tozzetti, 1887)**

DISTRIBUTION. Iran (Tehran, Khorasan-e-Shomali); Europe, Liberia, China, Japan.

***Mycterothrips glycines* (Okamoto, 1911)**

DISTRIBUTION. Iran (Hamedan); China (including Taiwan), Japan, Korea.

***Mycterothrips hamedaniensis* Mirab-balou, Shi et Chen, 2011**

DISTRIBUTION. Iran (Hamedan).

***Mycterothrips latus* (Bagnall, 1912)**

DISTRIBUTION. Iran (Khuzestan); Scotland, England, Germany.

***Mycterothrips salicis* (Reuter, 1879)**

DISTRIBUTION. Iran (Khuzestan); Europe.

***Mycterothrips tschirkunae* (Yakhontov, 1961)**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Khuzestan, Tehran); Tajikistan, Uzbekistan, Turkey.

***Mycterothrips weii* Mirab-balou, Shi et Chen, 2011**

DISTRIBUTION. Iran (Hamedan).

Genus *Odontothrips* Amyot et Serville, 1843

***Odontothrips confusus* Priesner, 1926**

DISTRIBUTION. Iran (Fars, Kerman, Yazd, Golestan, Lorestan, Alborz, Khorasan-e-Shomali, Hamedan, Kordestan, Qazvin, Zanjan); China, Hungary, Germany, Czech Republic.

***Odontothrips meliloti* Priesner, 1951**

DISTRIBUTION. Iran (Fars, Hamedan, Kermanshah, Kordestan, Qazvin, Zanjan); China, Southern England, France, Germany, Hungary, Czech Republic.

***Odontothrips loti* (Haliday, 1852)**

DISTRIBUTION. Iran (Zanjan); China, Russia, North America, Europe, Japan.

***Odontothrips phlomidinus* Priesner, 1954**

DISTRIBUTION. Iran (Fars).

Genus *Oxythrips* Uzel, 1895

***Oxythrips claripennis* Priesner, 1940**

DISTRIBUTION. Iran (Hamedan); Germany.

***Oxythrips halidayi* Bagnall, 1924**

DISTRIBUTION. Iran (Khuzestan); England, France.

***Oxythrips retamae* (Priesner, 1934)**

DISTRIBUTION. Iran (Khuzestan); Israel, Egypt, Spain, Morocco.

***Oxythrips ulmifoliorum* (Haliday, 1836)**

DISTRIBUTION. Iran (Golestan); Europe, China.

***Oxythrips wiltshirei* Priesner, 1954**

DISTRIBUTION. Iran (Fars).

Genus *Parascolothrips* Mound, 1967

***Parascolothrips priesneri* Mound, 1967**

DISTRIBUTION. Iran (Tehran, Hamedan); Iraq.

Genus *Pezothrips* Karny, 1907

***Pezothrips bactrianus* (Pelikan, 1968)**

DISTRIBUTION. Iran (Hamedan, Kermanshah); China, Turkey, Tajikistan.

Genus *Psilothrips* Hood, 1927

***Psilothrips bimaculatus* (Priesner, 1932)**

DISTRIBUTION. Iran (Khuzestan); Egypt.

Genus *Rubiothrips* Schliephake, 1975

***Rubiothrips parisae* Mirab-balou et Chen, 2013**

DISTRIBUTION. Iran (Hamedan).

***Rubiothrips tongi* Mirab-balou et Chen, 2013**

DISTRIBUTION. Iran (Hamedan, Kermanshah).

***Rubiothrips vitalbae* (Bagnall, 1926)**

DISTRIBUTION. Iran (Hamedan); Turkey, Austria, Hungary, Romania, Macedonia, Italy, Sicily, Southern France, Spain, Portugal.

***Rubiothrips vitis* (Priesner, 1933)**

DISTRIBUTION. Iran (Azarbaijan-e-Gharbi, Kermanshah); Romania, Turkey, Israel, Hungary, Romania, Bulgaria, Greece.

Genus *Scirtothrips* Shull, 1909

***Scirtothrips citri* (Moulton, 1909)**

DISTRIBUTION. Iran (Kerman); Southwestern U.S.A.

***Scirtothrips mangiferae* Priesner, 1932**

DISTRIBUTION. Iran (Khuzestan, Fars, Isfahan, Kerman); Yemen, Sudan, Gabon.

Genus *Scolothrips* Hinds, 1902

***Scolothrips latipennis* Priesner, 1950**

DISTRIBUTION. Iran (Khuzestan, Fars, Khorasan-e-Shomali, Kerman, Theran); Egypt, Crimea, Spain, Morocco, Canary Islands.

***Scolothrips longicornis* Priesner, 1926**

DISTRIBUTION. Iran (Khuzestan, Mazandaran, Golestan, Yazd, Fars, Khorasan-e-Shomali, Kerman, Tehran); Russia, Austria.

***Scolothrips rhagebianus* Priesner, 1950**

DISTRIBUTION. Iran (Khuzestan); India, Sudan.

Genus *Sitothrips* Priesner, 1931

***Sitothrips arabicus* Priesner, 1931**

DISTRIBUTION. Iran (Fars, Golestan, Kerman, Khorasan-e-Shomali, Khuzestan, Hamedan, Kermanshah, Kordestan, Azarbaijan-e-Sharghi); Egypt, Georgia.

Genus *Sphaeropothrips* Priesner, 1928

***Sphaeropothrips vittipennis* (Bagnall, 1927)**

DISTRIBUTION. Iran (Mazandaran); Poland, northern Germany, France, England, Austria, Hungary, Czech Republic, Egypt, India.

Genus *Stenchaetothrips* Bagnall, 1926

***Stenchaetothrips biformis* (Bagnall, 1913)**

DISTRIBUTION. Iran (Azarbaijan-e-sharghi); Afghanistan, Bangladesh, Bhutan, Cambodia, China (including Taiwan), Europe, India, Indonesia, Japan, Korea, Laos, Malaysia, Myanmar, Nepal, Papua-New Guinea, Philippines, South America, Sri Lanka, Thailand, Vietnam.

Genus *Stenothrips* Uzel, 1895

***Stenothrips graminum* Uzel, 1895**

DISTRIBUTION. Iran (Golestan, Azarbaijan-e-Sharghi); Czechoslovakia, Poland, Austria and Hungary.

Genus *Taeniothrips* Amyot et Serville, 1843

***Taeniothrips inconsequens* (Uzel, 1895)**

DISTRIBUTION. Iran (Guilan, Hamedan); Sweden to Japan, Korea, Canada, USA.

Genus *Tamaricothrips* Priesner, 1964

***Tamaricothrips tamaricis* (Bagnall, 1926)**

DISTRIBUTION. Iran (Kerman); Jordan, Israel, Egypt, Bulgaria, Italy, France, Spain, Morocco.

Genus *Tenothrips* Bhatti, 1967

***Tenothrips discolor* (Karny, 1907)**

DISTRIBUTION. Iran (Khuzestan, Mazandaran, Hamedan, Kermanshah, Fars, Khorasan-e-Shomali, Azarbaijan-e-Gharbi, Alborz); Kyrgyzstan, Canary Islands, Austria, France, Spain.

***Tenothrips frici* (Uzel, 1895)**

DISTRIBUTION. Iran (Fars, Khuzestan, Khorasan-e-Shomali, Guilan, Mazandaran, Hamedan, Kermanshah, Qazvin, Azarbaijan-e-Sharghi, Zanjan, Lorestan, Markazi, Ghom, Ardabil, Kordestan); Kazakhstan, Austria, Czech Republic, Romania, Hungary, Australia, India, USA.

***Tenothrips latoides* (Pelikán, 1968)**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Hamedan, Kordestan); Tajikistan.

***Tenothrips reichardtii* (Priesner, 1926)**

DISTRIBUTION. Iran (Azarbaijan-e-Gharbi); Russia, Poland, Mongolia, Russia (Western Siberia).

Genus *Thermothrips* Pelikán, 1949

***Thermothrips mohelensis* (Pelikán, 1949)**

DISTRIBUTION. Iran (Hamedan); Western Russia, Turkey, Czech Republic, Poland.

Genus *Thrips* Linnaeus, 1758

***Thrips alavii* Mirab-balou, Tong et Chen, 2012**

DISTRIBUTION. Iran (Hamedan).

***Thrips alliorum* (Priesner, 1935)**

DISTRIBUTION. Iran (Hamedan); China, Korea, Japan, Hawaii.

***Thrips angusticeps* Uzel, 1895**

DISTRIBUTION. Iran (Kerman, Hamedan, Kermanshah); Czech Republic, England, Italy, Austria, Turkey.

***Thrips atratus* Haliday, 1836**

DISTRIBUTION. Iran (Khorasan-e-Shomali, Golestan, Tehran, Markazi, Kerman, Yazd, Hamedan, Kermanshah, Kordestan, Mazandaran, Zanjan); China, Korea, Mongolia, Turkey, Cyprus, Europe, USA, Canada.

***Thrips australis* (Bagnall, 1915)**

DISTRIBUTION. Iran (Fars); Australia, China, Costa Rica, Colombia, Canada.

***Thrips coloratus* Schmutz, 1913**

DISTRIBUTION. Iran (Tehran); China, Korea, Japan, Nepal, India, Pakistan, Sri Lanka, Indonesia, New Guinea, Australia.

***Thrips dubius* Priesner, 1927**

DISTRIBUTION. Iran (Alborz, Hamedan); Hungary, Austria.

***Thrips euphorbiae* Knechtel, 1923**

DISTRIBUTION. Iran (Fars, Hamedan); Georgia, Turkey, Romania, Bulgaria, Hungary, Czech Republic, Germany, Switzerland.

***Thrips flavus* Schrank, 1776**

DISTRIBUTION. Iran (Khorasan–e–Shomali, Hamedan); China, Korea, Japan, Europe, North America.

***Thrips fraudulentus* (Priesner, 1954)**

DISTRIBUTION. Iran (Fars, Hamedan, Qazvin).

***Thrips fuscipennis* Haliday, 1836**

DISTRIBUTION. Iran (Mazandaran); China, Turkey, Russia, Europe, USA, Canada.

***Thrips hawaiiensis* (Morgan, 1913)**

DISTRIBUTION. Iran (Isfahan, Hamedan); widespread across Asia and the Pacific Islands, also Jamaica, Northern Australia and southern and eastern USA.

***Thrips iranicus* Yakhontov, 1951**

DISTRIBUTION. Iran (Kerman).

***Thrips major* Uzel, 1895**

DISTRIBUTION. Iran (Khorasan–e–Shomali, Golestan, Khuzestan, Tehran, Fars, Kerman, Mazandarn, Hamedan, Alborz); China, Mongolia, Turkey, Europe, Morocco.

***Thrips mareoticus* (Priesner, 1932)**

DISTRIBUTION. Iran (Azarbaijan–e–Sharghi, Hamedan); Turkey, Cyprus, Israel, Egypt, Morocco, Germany.

***Thrips meridionalis* (Priesner, 1926)**

DISTRIBUTION. Iran (Khorasan–e–Shomali, Golestan, Fars, Khuzestan, Lorestan, Tehran, Markazi, Kerman, Yazd, Mazandaran, Hamedan, Kermanshah, Zanjan, Alborz); Georgia, Armenia, Turkey, Cyprus, Lebanon, Israel, South Ukraine, Europe, Northern India, Iraq.

***Thrips minutissimus* Linnaeus, 1758**

DISTRIBUTION. Iran (Golestan, Mazandaran, Khorasan–e–Shomali, Fars); Europe, Georgia.

***Thrips nigropilosus* Uzel, 1895**

DISTRIBUTION. Iran (Khuzestan, Khorasan–e–Shomali, Guilan, Hamedan); China, Japan, Turkey, Russia, Egypt, Ethiopia, Kenya, Tanzania, Australia, Europe, Fiji, Hawaii, New Zealand, Canada, USA.

***Thrips pelikani* Schliephake, 1964**

DISTRIBUTION. Iran (Alborz); Turkey, Romania, Greece.

***Thrips physapus* Linnaeus, 1758**

DISTRIBUTION. Iran (Teharan, Markazi, Khorasan–e–Shomali, Hamedan, Zanjan, Kordestan, Qazvin); Europe, Morocco, Russia (Siberia), Mongolia.

***Thrips pillichii* Priesner, 1924**

DISTRIBUTION. Iran (Khorasan–e–Shomali, Tehran, Markazi, Kerman); China, Turkey, Ukraine, Romania, Slovakia, Hungary, Germany, France, England, Austria, Spain, Netherland.

***Thrips pistaciae* Yakhontov, 1951**

DISTRIBUTION. Iran (Kerman).

***Thrips simplex* (Morison, 1930)**

DISTRIBUTION. Iran (Tehran); worldwide distributed.

***Thrips tabaci* Lindeman, 1889**

DISTRIBUTION. Iran (widespread); across all the countries.

***Thrips trehernei* Priesner, 1927**

DISTRIBUTION. Iran (Khorasan–e–Shomali, Isfahan, Kerman, Markazi, Qazvin, Tehran, Hamedan); China, Turkey, North America, Europe, Australia.

***Thrips trybomi* (Karny, 1908)**

DISTRIBUTION. Iran (Fars); Europe.

***Thrips verbasci* (Priesner, 1920)**

DISTRIBUTION. Iran (Khorasan–e–Shomali); Europe.

***Thrips vuilleti* (Bagnall, 1933)**

DISTRIBUTION. Iran (Khorasan–e–Shomali, Khuzestan, Lorestan, Alborz, Azarbaijan–e–Gharbi, Azarbaijan–e–Sharghi, Guilan, Tehran, Hamedan, Kordestan, Kermanshah, Qazvin); Syria, Turkey, Cyprus, Bulgaria, Greece, Italy, South France, Spain.

***Thrips vulgatissimus* Haliday, 1836**

DISTRIBUTION. Iran (Tehran, Markazi, Hamedan, Kermanshah, Zanjan, Khorasan–e–Shomali); China, New Zealand, Europe, North America.

SUBORDER TUBULIFERA HALIDAY, 1836

The suborder Tubulifera consists of about 3500 species in 450 genera placed in the single family Phlaeothripidae (ThripsWiki, 2013), of which 51 species in 20 genera has been recorded in Iran. At least half of the species are fungus-feeders, mostly on hyphae but with one major group, the Idolothripinae, feeding on spores. More than one-third of the species are phytophagous, including the *Haplothrips* lineage in flowers, and the much larger *Liothrips* lineage on leaves. Some leaf-feeding species induce galls on their host plants (Mound, 1994). Still a few species are predatory on scale insects and mites (Palmer & Mound, 1991; Reyes, 1994) and the members of one small lineage feed on mosses (Mound, 1989). However, only a few species of the Phlaeothripidae are considered as crop pests. Pest Phlaeothripidae are primarily members of *Haplothrips* and reported on various crops in different parts of

the world (Mound & Marullo, 1996). Two subfamilies, Idolothripinae and Phlaeothripinae, are usually recognized within the Phlaeothripidae. When attempting to distinguish these two subfamilies, care must be taken not to confuse the maxillary stylets with the maxillary guides, where the guides are sometimes broader and more obvious than the stylets (Mound & Marullo, 1996).

Family Phlaeothripidae Uzel, 1895

Subfamily Idolothripinae Bagnall, 1908

This subfamily all feed fungi by ingesting whole spores and the adults are usually large and black. Idolothripines are particularly common on dead hanging leaves or on recently dead branches and twigs, but some live in leaf litter or at the bases of grasses and sedges (Mound & Marullo, 1996). About 700 species and 80 genera are currently included in this subfamily (ThripsWiki, 2013). Of these, five species in 4 genera are here listed from Iran.

Genus *Allothrips* Hood, 1908

***Allothrips bournieri* Mound, 1972**

DISTRIBUTION. Iran (Fars); France, Spain.

Genus *Compsothrips* Reuter, 1901

***Compsothrips albosignatus* (Reuter, 1884)**

DISTRIBUTION. Iran (Fars); Southern Europe, North Africa, Russia.

Genus *Megathrips* Targioni-Tozzetti, 1881

***Megathrips flavipes* (Reuter, 1901)**

DISTRIBUTION. Iran (Fars, Azarbaijan-e-Sharghi); Turkey, Greece, Mongolia.

***Megathrips inermis* Priesner, 1937**

DISTRIBUTION. Iran (Fars); Italy.

Genus *Pseudocryptothrips* Priesner, 1919

***Pseudocryptothrips flavipes* (Reuter, 1919)**

DISTRIBUTION. Iran (Fars, Hamedan); Turkey, Croatia, Albania, Italy, Spain.

Subfamily Phlaeothripinae Uzel, 1895

Phlaeothripines exhibit at a wide range of biology: a few are predatory, some are flower-feeding, many are leaf-feeding, and almost half are associated with fungi in leaf litter, on dead wood, twigs and leaves (Reyes, 1994). About 2800 species and 370 genera are presently included in this subfamily (ThripsWiki, 2013). Of these, 46 species in 16 genera are here listed from Iran. Among them, the genus *Haplothrips* is the largest groups in Iran with 26 species, respectively. *Haplothrips*

species have a diversity of biologies, with many described species apparently predatory and others phytophagous, particularly in the flowers of the families Asteraceae and Poaceae (Mirab-balou *et al.*, 2012c,d; Mirab-balou & Chen, 2012).

Genus *Aleurodothrips* Franklin, 1909

***Aleurodothrips fasciapennis* (Franklin, 1908)**

DISTRIBUTION. Iran (Zanjan); China (Including Taiwan), Vietnam, Japan, India, Sri Lanka, Indonesia, Barbados (West Indies), Reunion Island (Indian Ocean), Fiji (Pacific Ocean), Borneo, Micronesia (Oceania), Polynesia, Australia, Bermuda, USA, Jamaica, Cuba, Nassau, Puerto Rico, Belgium.

Genus *Ataliothrips* Bhatti, 1995

***Ataliothrips reuteri* (Bagnall, 1913)**

DISTRIBUTION. Iran (Kerman); Egypt, Yemen.

Genus *Bagnalliella* Karny, 1920

***Bagnalliella yuccae* (Hinds, 1902)**

DISTRIBUTION. Iran (Alborz, Hamedan); China, Japan, Korea, USA, Europe, Australia.

Genus *Cephalothrips* Uzel, 1895

***Cephalothrips coxalis* Bagnall, 1926**

DISTRIBUTION. Iran (Hamedan, Khorasan-e-Shomali); France.

***Cephalothrips monilicornis* (Reuter, 1880)**

DISTRIBUTION. Iran (Kordestan, Khorasan-e-Shomali); Russia (Siberia), Europe, North America.

Genus *Dolicholepta* Priesner, 1932

***Dolicholepta micrura* (Bagnall, 1914)**

DISTRIBUTION. Iran (Khuzestan); North Africa and southern Europe.

Genus *Haplothrips* Amyot et Serville, 1843

***Haplothrips (Haplothrips) aculeatus* (Fabricius, 1803)**

DISTRIBUTION. Iran (Kerman, Golestan, Fars, Mazandaran, Guilan, Tehran, Hamedan, Azarbaijan-e-Sharghi); China, Japan, South-East Asia, Western Europe.

***Haplothrips (Haplothrips) andresi* Priesner, 1931**

DISTRIBUTION. Iran (Khorasan-e-Shomali); Egypt, North Africa, Sinai, Palestine.

***Haplothrips (Haplothrips) caespitis* Priesner, 1936**

DISTRIBUTION. Iran (Khuzestan, Hamedan); Sudan.

***Haplothrips (Haplothrips) cahirensis* (Trybom, 1911)**

DISTRIBUTION. Iran (Fars); Egypt, Israel, Kenya.

- Haplothrips (Haplothrips) distinguendus (Uzel, 1895)***
DISTRIBUTION. Iran (Tehran); Europe.
- Haplothrips (Haplothrips) eragrostidis Priesner, 1931***
DISTRIBUTION. Iran (Golestan); Egypt.
- Haplothrips (Haplothrips) flavicinctus (Karny, 1910)***
DISTRIBUTION. Iran (Khuzestan, Khorasan-e-Shomali, Fars, Guilan, Mazandaran, Tehran, Hamedan, Azarbaijan-e-Sharghi); Southern Europe.
- Haplothrips (Haplothrips) flavitibia Williams, 1916***
DISTRIBUTION. Iran (Fars, Hamedan, Kerman, Yazd, Khorasan-e-Shomali, Khuzestan, Tehran); England, Germany.
- Haplothrips (Haplothrips) ganglbaueri Schmutz, 1913***
DISTRIBUTION. Iran (Khuzestan, Kermanshah, Hamedan, Azarbaijan-e-Sharghi, Fars, Tehran, Alborz); India, Thailand, Japan, China.
- Haplothrips (Haplothrips) globiceps Bagnall, 1934***
DISTRIBUTION. Iran (Tehran, Fars and Alborz, Hamedan); Turkey.
- Haplothrips (Haplothrips) herajius Minaei et Aleosfoor, 2012***
DISTRIBUTION. Iran (Fars).
- Haplothrips (Haplothrips) kermanensis zur Strassen, 1975***
DISTRIBUTION. Iran (Kerman).
- Haplothrips (Haplothrips) knechteli Priesner, 1923***
DISTRIBUTION. Iran (Fars); Europe.
- Haplothrips (Haplothrips) kurdjumovi Karny, 1913***
DISTRIBUTION. Iran (Azarbaijan-e-Sharghi, Khorasan-e-Shomali); Europe, North America, New Zealand, Japan, China.
- Haplothrips (Haplothrips) leucanthemi (Schrank, 1781)***
DISTRIBUTION. Iran (Hamedan, Kermanshah, Fars, Ardabil, Mazandaran); China, Argentina, Chile, North America.
- Haplothrips (Haplothrips) longipes Bgnall, 1926***
DISTRIBUTION. Iran (Khuzestan); Spain.
- Haplothrips (Haplothrips) maroccanus Priesner, 1950***
DISTRIBUTION. Iran (Khuzestan, Fars, Tehran); Morocco.
- Haplothrips (Haplothrips) minutus (Uzel, 1895)***
DISTRIBUTION. Iran (Kerman, Fars); Europe.
- Haplothrips (Haplothrips) phyllophilus Priesner, 1914***
DISTRIBUTION. Iran (Golestan); Europe.
- Haplothrips (Haplothrips) rabinovitchi Priesner, 1936***
DISTRIBUTION. Iran (Khuzestan); Palestine.

***Haplothrips (Haplothrips) reuteri* (Karny, 1907)**

DISTRIBUTION. Iran (Fars, Qazvin, Ghom, Kerman, Khorasan-e-Janubi, Khorasan-e-Shomali, Khuzestan, Lorestan, Mazandaran, Tehran, Zanjan, Yazd, Golestan, Alborz, Hamedan, Kermanshah, Azarbaijan-e-Sharghi, Azarbaijan-e-Gharbi, Markazi, Kordestan); China, Russia, Mongolia, India, Pakistan, Europe, Sudan, Egypt.

***Haplothrips (Haplothrips) subtilissimus* (Haliday, 1852)**

DISTRIBUTION. Iran (Hamedan, Fars, Tehran); China, Japan, Central Asia, Europe, North America.

***Haplothrips (Haplothrips) tamaricinus* Priesner, 1939**

DISTRIBUTION. Iran (Guilan); Egypt.

***Haplothrips (Haplothrips) tritici* (Kurdjumov, 1912)**

DISTRIBUTION. Iran (Tehran, Kerman, Yazd, Azarbaijan-e-Gharbi, Kermanshah, Azarbaijan-e-Sharghi, Semnan, Zanjan, Khuzestan, Isfahan, Kordestan, Fars, Chaharmahal-Bakhtiary, Khorasan-e-Shomali, Lorestan, Golestan, Alborz, Mazandaran, Hamedan, Qazvin, Ghom); China, Russia, Korea, Europe.

***Haplothrips (Haplothrips) vuilleti* Priesner, 1920**

DISTRIBUTION. Iran (Kermanshah, Hamedan); Europe.

***Haplothrips (Trybomiella) clarisetis* Priesner, 1931**

DISTRIBUTION. Iran (Kerman, Yazd, Khorasan-e-Shomali, Tehran, Fars, Mazandaran); Egypt, Sudan.

Genus *Hindsiothrips* Stannard, 1958

***Hindsiothrips sisakhti* Minaei, 2013**

DISTRIBUTION. Iran (Kohgiluyeh and Boyer-Ahmad).

Genus *Hoplandrothrips* Hood, 1912

***Hoplandrothrips bidens* (Bagnall, 1910)**

DISTRIBUTION. Iran (Mazandaran); China, Hungary, France, New Zealand.

***Hoplandrothrips hungaricus* Priesner, 1961**

DISTRIBUTION. Iran (Khorasan-e-Shomali); Hungary.

Genus *Hoplothrips* Amyot et Serville, 1843

***Hoplothrips* sp.**

NOTES. Jalali Sendi *et al.* (2011) have recorded this genus for Iran based on two females from Guilan province, but they didn't identify them into species.

Genus *Idiothrips* Faure, 1933

***Idiothrips bellus* Faure, 1933**

DISTRIBUTION. Iran (Kerman, Fars); India.

Genus *Liophloeothrips* Priesner, 1919

***Liophloeothrips hungaricus* (Priesner, 1924)**

DISTRIBUTION. Iran (Tehran); Hungary.

Genus *Liothrips* Uzel, 1895

***Liothrips (Liothrips) jakhontovi* Kreitzberg, 1955**

DISTRIBUTION. Iran (Zanjan, Kerman, Khorasan-e-Shomali); Turkmenistan.

***Liothrips (Liothrips) pragensis* Uzel, 1895**

DISTRIBUTION. Iran (Khuzestan); Czech Republic, Hungary, Albania, Rumania, France, Tadjikistan.

***Liothrips (Liothrips) setinodis* (Reuter, 1880)**

DISTRIBUTION. Iran (Guilan); Western Europe, China, India.

Genus *Neoheegeria* Schmutz, 1909

***Neoheegeria dalmatica* Schmutz, 1910**

DISTRIBUTION. Iran (Hamedan, Fars, Khuzestan, Mazandaran, Tehran); Turkey, Uzbekistan, Algeria.

***Neoheegeria gigantea* (Priesner, 1934)**

DISTRIBUTION. Iran (Fars); Egypt.

***Neoheegeria persica* Priesner, 1954**

DISTRIBUTION. Iran (Fars).

Genus *Phlaeothrips* Haliday, 1836

***Phlaeothrips coriaceus* (Haliday, 1836)**

DISTRIBUTION. Iran (Golestan); Western Europe.

Genus *Plicothrips* Bhatti, 1979

***Plicothrips apicalis* (Bagnall, 1915)**

DISTRIBUTION. Iran (Khorasan-e-Shomali); Thailand, China.

Genus *Stictothrips* Hood, 1925

***Stictothrips faurei* Hood, 1925**

DISTRIBUTION. Iran (Khuzestan); South Africa.

RESULTS

These studies have resulted in a substantial increase in the number of species known from Iran, totaling 217 species belonging to five families, adding 40 species to the last published checklist from Iran by Bhatti *et al.* (2009). The present checklist comprises 166 species of Terebrantia in 54 genera belonging to four families: Aeolothripidae, Melanthripidae, Stenurothripidae and Thripidae; and 51 species in 20 genera of family Phlaeothripidae in Tubulifera (Table 1).

Table 1. Number of genera and species of Thysanoptera recorded from Iran

Suborder	Family	Subfamily	Genera	Species
Terebrantia	Aeolothripidae	-	4	23
	Melanthripidae	-	2	7
	Stenurothripidae	-	1	1
	Thripidae	Dendrothripinae	2	5
		Panchaethripinae	6	7
		Sericothripinae	2	4
Thripinae		37	119	
Tubulifera	Phlaeothripidae	Idolothripinae	4	5
		Phlaeothripinae	16	46
Total			74	217

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REFERENCES

- Bhatti, J.S. 1979. A revised classification of Thysanoptera (Abstract). *Workshop on Advances in Insect Taxonomy in India and the Orient, Manali (H.P.)*, Delhi. October 9–12, 1979, Delhi. pp. 46–48.
- Bhatti, J.S. 1989. The classification of Thysanoptera into families. *Zoology (Journal of Pure and Applied Zoology)*, 2(1): 1–23.
- Bhatti, J.S. 1990. Family group names in the order Terebrantia. *Zoology (Journal of Pure and Applied Zoology)*, 2(4): 185–192.
- Bhatti, J.S. 2006. The classification of Terebrantia (Insecta) into families. *Oriental Insects*, 40: 339–375.
- Bhatti, J.S., Alavi, J., zur Strassen, R. & Telmadarraiy, Z. 2009. Thysanoptera in Iran 1938–2007. An Overview. Part 1. *Thrips*, 7: 1–82.
- Esmaili, M. 1983. *Important pests of fruit trees*. Sepehr Publishing Center, Tehran 578 pp.
- Jalali Sendi, J., Zibae, I. & Minaee, K. 2011. An investigation on thrips fauna of Guilan province, North of Iran (Insecta: Thysanoptera). *Munis Entomology & Zoology*, 6(1): 325–329.
- Minaei, K. & Aleosfoor, M. 2013. A new species of *Haplothrips* from southern Iran (Thysanoptera, Phlaeothripidae). *ZooKeys*, 275: 91–99.
- Minaei, K. & Mound, L.A. 2010. Grass-flower thrips of the genus *Chirothrips* (Thysanoptera: Thripidae), with a key to species from Iran. *Zootaxa*, 2411: 33–43.
- Minaei, K. 2011. Fungal spore-feeding thrips (Thysanoptera: Phlaeothripidae: Idolothripinae) from Iran with record of a fourth genus. *Journal of Insect Science*, 11: 1–5.
- Minaei, K. 2012a. *Ficothrips*, a new genus of Thripinae Thysanoptera from Iran. *Zootaxa*, 3361: 63–68.

- Minaei, K. 2012b. First report of an endemic Australian thrips, *Thrips australis* (Thysanoptera: Thripidae) on *Eucalyptus* in Shiraz, Iran. *Journal of Entomological and Acarological Research*, 44: 42–45.
- Minaei, K. 2012c. The genus *Eremiothrips* (Thysanoptera: Thripidae) in Iran, with one new species. *Zootaxa*, 3349: 56–62.
- Minaei, K. 2013a. The genus *Aeolothrips* in Iran (Thysanoptera: Aeolothripidae) with one new species. *Zootaxa*, 3630: 594–600.
- Minaei, K. 2013b. The *Phlaeothrips*-lineage of fungus feeding thrips in Iran with a new species of *Hindsiothrips*. *Zootaxa*, 3599: 279–290.
- Minaei, K., Haftbaradaran, F. & Khosravi, A.R. 2013. Occurrence of males among Aeolothripidae (Thysanoptera), with description of the male of *Aeolothrips afghanus*. *Zootaxa*, 3681: 286–288.
- Minaei, K., Haftbaradaran, F. & Mound, L.A. 2012. A new *Ankothrips* species (Thysanoptera: Melanthripidae) from Iran with unusually short setae. *Zootaxa*, 3552: 37–42.
- Mirab-balou, M. & Chen, X.X. 2010a. First description of the male of the wheat thrips, *Anaphothrips obscurus* (Thysanoptera: Thripidae). *Zootaxa*, 2540: 65–68.
- Mirab-balou, M. & Chen, X.X. 2010b. A new method for preparing and mounting thrips for microscopic examination. *Journal of Environmental Entomology*, 32(1): 115–121.
- Mirab-balou, M. & Chen, X.X. 2011a. Iranian Thripinae with ctenidia laterally on the abdominal tergites (Thysanoptera: Thripidae). *Natura Montenegrina*, 10(4): 435–466.
- Mirab-balou, M. & Chen, X.X. 2011b. The *Megalurothrips* genus-group in Iran (Thysanoptera: Thripidae). *Munis Entomology & Zoology*, 6(2): 944–952.
- Mirab-balou, M. & Chen, X.X. 2012a. Iranian thrips of family Aeolothripidae (Thysanoptera: Terebrantia), with four newly recorded species. *Vestnik Zoologii*, 46(6): 499–507.
- Mirab-balou, M. & Chen, X.X. 2012b. A new species of *Melanthrips* from Iran (Thysanoptera: Melanthripidae), with a key to the Iranian species. *Entomological News*, 122(5): 407–415.
- Mirab-balou, M. & Chen, X.X. 2012c. Subfamily Panchaetothripinae Bagnall (Thysanoptera: Thripidae) in Iran, with first report of the genus *Selenothrips* Karny. *Entomotaxonomia*, 34(1): 22–29.
- Mirab-balou, M. & Chen, X.X. 2012d. *Aleurodothrips fasciapennis* Franklin: A newly recorded genus and species for Iran (Thysanoptera: Phlaeothripidae). *Munis Entomology & Zoology*, 7(1): 334–338.
- Mirab-balou, M. & Chen, X.X. 2013a. Two new records of Sericothripinae (Thysanoptera: Thripidae) for Iran. *Far Eastern Entomologist*, 260: 12–16.
- Mirab-balou, M. & Chen, X.X. 2013b. New records and two new species of the *Anaphothrips* genus-group in Iran (Insecta: Thripidae). *Acta Zoologica Bulgarica*, 65(2): 159–164.
- Mirab-balou, M., Minaei, K. & Chen, X.X. 2013. An illustrated key to the genera of Thripinae (Thysanoptera, Thripidae) from Iran. *Zookeys*, 317: 27–52.
- Mirab-balou, M., Tong, X.L., Feng, J.N. & Chen, X.X. 2011a. Thrips (Insecta: Thysanoptera) of China. *Check List (Journal of Species Lists and Distribution)*, 7(6): 720–744.
- Mirab-balou, M., Shi, M. & Chen, X.X. 2011b. Two new species of the genus *Mycterothrips* from Iran (Thysanoptera: Thripidae). *Zootaxa*, 3130: 57–62.
- Mirab-balou, M., Tong, X.L. & Chen, X.X. 2012a. A new record and new species of the genus *Thrips* (Thysanoptera: Thripidae), with a key to species from Iran. *Journal of Insect Science*, 12(90): 1–15.
- Mirab-balou, M., Tong, X.L. & Chen, X.X. 2012b. A new species of *Scirtothrips* infesting *Ginkgo biloba* in eastern China. *Journal of Insect Science*, 12(117): 1–7.

- Mirab-balou, M., Shi, M. & Chen, X.X. 2012c. A newly recorded genus and species of Haplothripini (Thysanoptera: Phlaeothripidae) from Iran. *Far Eastern Entomologist*, 240: 1–8.
- Mirab-balou, M., Tong, X.L. & Chen, X.X. 2012d. Iranian *Haplothrips* with fore wings sub-basal setae arranged in a triangle (Tubulifera: Phlaeothripidae). *Persian Gulf Crop Protection*, 1(2): 15–21.
- Mound, L.A. & Kibby, G. 1998. *Thysanoptera: An Identification Guide*. 70 pp. 2nd Ed. CABI, Oxford and New York.
- Mound, L.A. & Marullo, R. 1996. The Thrips of Central and South America: An Introduction. *Memoirs on Entomology, International*, 6: 1–488.
- Mound, L.A. 1989. Systematics of thrips (Insecta: Thysanoptera) associated with mosses. *Zoological Journal of the Linnean Society*, 96: 1–17.
- Mound, L.A. 1994. Thrips and gall induction: a search for patterns. In: M.A.J. Williams (ed.). *Systematics Association Special Volume 49*: 131–149. Clarendon Press, Oxford.
- Nakahara, S. 1991. Systematics of Thysanoptera, pear thrips and other economic species. Pp. 41–59. In: Parker, B.L., M. Skinner, & T. Lewis (eds). *Towards Understanding Thysanoptera*. 464 pp. *Proceedings International Conference on Thrips, 1989, Burlington, Vermont USA*.
- Palmer, J.M. & Mound, L.A. 1991. Thysanoptera. Chapter 22. 5: 67–76. In: Rosen, D. (ed.). *The Armoured Scale Insects, Their Biology, Natural Enemies and Control*, Vol B. Amsterdam.
- Penalver, E. & Nel, P. 2010. *Hispanothrips* from Early Cretaceous Spanish amber, a new genus of the resurrected family Stenurothripidae (Insecta: Thysanoptera). *Annales de la Société entomologique de France, (N.S.)*, 46(1–2): 138–147.
- Reyes, C.P. 1994. Thysanoptera (Hexapoda) of the Philippine Islands. *Raffles Bulletin of Zoology*, 42: 107–507.
- ThripsWiki. 2013. ThripsWiki – providing information on the World's thrips. Available from: <http://thrips.info/wiki/>
- Tyagi, K., Kumar, V. & Mound, L.A. 2008. Sexual dimorphism among Thysanoptera Terebrantia, with a new species from Malaysia and remarkable species from India in Aeolothripidae and Thripidae. *Insect Systematics and Evolution*, 39(2):155–170.

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