

An annotated checklist of the thrips of Israel (Thysanoptera)

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ABSTRACT

One hundred and fifty-seven species of Thysanoptera are recorded from Israel, including 32 newly recorded species. A bibliography on this thrips fauna is provided. The thrips in Israel comprise two groups: the native and the introduced species. The native species mainly comprise typical Mediterranean elements; whereas the introduced species mainly comprise agricultural pests.

KEYWORDS: Thysanoptera, Israel, checklist

INTRODUCTION

Thrips (Thysanoptera) are a rather small group of insects comprising about 6,000 species, including phyto-, myco-, and zoophages. They sometimes act as vectors of virus diseases in plants.

The first faunistic review of the thrips of Israel was published by Bodenheimer (1937), followed by a major contribution by Priesner (1936–1965). Halperin and zur Strassen (1981) reviewed the knowledge of the Israeli fauna current for that year. zur Strassen (2003) provided the distribution of the Terebrantia species in Europe and also referred to their distribution in Israel. In addition to these reviews there are individual publications relating to individual species of faunistic value (see Checklist below). Currently 157 species of Thysanoptera are known from Israel.

The Israel thrips fauna comprises two groups: the native and the introduced species. The native species comprise mainly typical representatives of the Mediterranean fauna; while the introduced species comprise mainly pests of agricultural and ornamental plants. Bytinski-Salz (1966) noted 7 introduced species: *Heliothrips haemorrhoidalis* (Bouché), *Hercinothrips femoralis* (Reuter), *Kakothrips robustus* (Uzel), *Liothrips vaneeckei* Priesner, *Gynaikothrips ficorum* (Marchal), *Thrips tabaci* Lindeman, and *T. simplex* (Morison). The group of introduced species has considerably increased in numbers in recent decades due to the intensification of agriculture in Israel, i.e., increased cultivated areas, diversity of plants and their cultivation systems, increased importation of agricultural produce into the country, and introduction by tourists. Currently, this group can be divided into three subgroups:

1. Thrips acclimatized in Israel and located not only on agricultural and ornamental plants, but also on wild plants: *H. femoralis*, *Frankliniella occidentalis* (Pergande), and *Scirtothrips dorsalis* Hood.

2. Thrips acclimatized in Israel and restricted only to cultivated agricultural and ornamental plants: *G. ficorum*, *Echinothrips americanus* Morgan, *Chaetanaphothrips orchidii* (Moulton), *Anascirtothrips arorai* Bhatti, *Thrips nigropilosus* Uzel, *Holarthrothrips josephi* Bhatti, *H. tenuicornis* Bagnall, and *Palmiothrips palmae* (Ramakrishna).

3. Thrips that invaded Israel either once or periodically, but were unable to establish permanent populations: *Hercinothrips bicinctus* (Bagnall), *Frankliniella bondari* Hood, and *L. vaneekae* Priesner. These species have only been mentioned once in the literature for Israel, and have not been found during our study.

MATERIALS AND METHODS

Most of the material was collected in 1998–2005, during inspection of cultured plants and while collecting from wild plants. Thrips were preserved in AGA mixture (60% alcohol, glycerine and acetic acid at a ratio 10:1:1). For identification, some of the specimens were mounted on slides in Bayer's solution, and the edges of the cover glass were sealed with coating red GLPT insulating varnish. The majority of the material is stored in the Zoological Museum of Tel Aviv University. Pest species are also preserved at the Plant Protection and Inspection Services of the Ministry of Agriculture, Israel (PPIS).

Geographical Areas in Israel and their abbreviations (Freidberg and Kugler, 1989) are as follows: AV—Arava Valley, CCP—Central Coastal Plain, CN—Central Negev, CR—Carmel Ridge, DSA—Dead Sea Area, FJ—Foothills of Judea, GH—Golan Heights, JD—Judean Desert, JH—Judean Hills, JV—Jordan Valley and Southern Golan, LG—Lower Galilee, MH—Har Hermon, NCP—Northern Coastal Plain, NN—Northern Negev, S—Samaria, SCP—Southern Coastal Plain, SN—Southern Negev, UG—Upper Galilee, VY—Valley of Yizre'el.

CHECKLIST OF THE THYSANOPTERA IN ISRAEL

This checklist includes all species recorded from Israel. As a rule, publications related to damage caused by thrips and to methods of pest control are not cited. Synonyms (marked by “=”) are given only for species referred to by these names in earlier publications dealing with Israel. Species newly recorded for the Israeli fauna are marked with an asterisk (only specimens mounted on microscope slides were treated). Names of three species found in Israel and mentioned in the literature, but to our opinion not established in the country (subgroup 3, see above), were put in brackets. The names of the collectors are cited except for specimens collected by W. Kuslitzky.

SUBORDER TEREBRANTIA

AEOLOTHRIPIDAE

Aeolothrips astutus Priesner: Bodenheimer, 1937; zur Strassen, 2003.

A. collaris Priesner: Bodenheimer, 1937; Gerling and Kugler, 1973.

A. deserticola Priesner: Bodenheimer, 1937; zur Strassen, 2003.

A. ericae Bagnall: zur Strassen and Halperin, 1990; Reuveny et al., 2005.

A. gloriosus Bagnall: Halperin and zur Strassen, 1981.

A. intermedius Bagnall: Mantel and Vierbergen, 1996; Reuveny et al., 2005.

A. linarius Priesner: Priesner, 1940; zur Strassen, 2003; Reuveny et al., 2005.

A. propinquus Bagnall: Priesner, 1948.

A. tenuicornis Bagnall (= *A. ghabni* Priesner): Priesner, 1948; zur Strassen and Halperin, 1990; Reuveny et al., 2005.

A. wittmeri Priesner: zur Strassen and Halperin, 1990; Mantel and Vierbergen, 1996; zur Strassen, 2003.

Franklinothrips megalops (Trybom) (= *F. myrmicaeformis* Zanon): Bodenheimer, 1937; Avidov and Harpaz, 1969; Halperin and zur Strassen, 1981; Swirski et al., 2002.

Melanthrips areolatus Priesner: zur Strassen, 2000; Halperin and zur Strassen, 2001; zur Strassen, 2003.

M. fuscus (Sulzer) (= *M. gracilicornis* Maltbaek): Priesner, 1936; Bodenheimer, 1937; Reuveny et al., 2005.

**M. libycus* Priesner

Distribution: S. Spain, S. Italy, Malta, Libya, Egypt.

Material examined: UG: Maḥanayim, 14.iv.1999, grapefruit (1♀). DSA: Newé Zohar, 27.i.2005, *Erucaria hispanica* (1♂, 2♀).

**M.* probably *nigricornis* Bagnall

Distribution: France, Spain, Italy, Tunisia.

Material examined: LG: Lavi, 12.iv.1999, pear, S. Ben-Yehuda (1♀). CCP: Hadéra, 14.i.1999, *Citrus* sp. (1♂).

M. pallidior Priesner: Priesner, 1936; Bodenheimer, 1937.

M. rivnayi Priesner: Bodenheimer, 1937; Halperin and zur Strassen, 1981; zur Strassen, 2003; Reuveny et al., 2005.

M. separandus Priesner: Bodenheimer, 1937; zur Strassen, 2003.

M. trifasciatus Priesner: Halperin and zur Strassen, 1981.

M. tristis Priesner: Bodenheimer, 1937; zur Strassen, 2003.

Rhipidothrips brunneus Williams: zur Strassen and Halperin, 1990.

R. gratiosus Uzel: Reuveny et al., 2005.

STENUROTHRIPIDAE

***Holarthothrips josephi* Bhatti:** Blumberg, 2008; Kuslitzky and zur Strassen (Kuslitzky and zur Strassen, 2012).

***H. tenuicornis* Bagnall:** Blumberg, 2008; Kuslitzky and zur Strassen (Kuslitzky and zur Strassen, 2012).

THRIPIDAE****Anaphothrips graminum* Priesner**

Distribution: Greece, Cyprus, S. Turkey, Madeira, Canary Islands, Yemen.

Material examined: FJ: Ben Shemen, 27.iv.2004, *Hyparrhenia hirta* (1♂, 2♀).

***A. obscurus* (Müller):** Gerling and Kugler, 1973.

***A. sudanensis* Trybom:** Gerling and Kugler, 1973; zur Strassen, 2003.

***Anascirtothrips arorai* Bhatti:** zur Strassen and Kuslitzky, 2007.

****Aptinothrips rufus* Haliday**

Distribution: Cosmopolitan.

Material examined: FJ: Ben Shemen, 27.iv.2004, *Hyparrhenia hirta* (1♀).

***Asphodelothrips croceicollis* (Karny):** zur Strassen, 2000; Halperin and zur Strassen, 2001.

***Chaetanaphothrips orchidii* (Moulton):** Izhar et al., 1997; Wysoki, 1999; Argov, 2000; Swirski et al., 2002.

****Chirothrips ?africanus* Priesner**

Distribution: S. Italy, Cyprus, Egypt, Ethiopia, Sudan, Yemen, Uzbekistan, India, Taiwan.

Material examined: SCP: Rehovot, 17.v.2001, grape (1♀); 20.iv.2002, wheat (1♀).

****C. cypriotes* Hood**

Distribution: Cyprus, Yemen.

Material examined: FJ: Ben Shemen, 27.iv.2000, *Prunus* sp. (1♀); 27.iv.2004, *Hyparrhenia hirta* (2♂, 1♀).

***C. kurdistanus* zur Strassen:** Gerling and Kugler, 1973; zur Strassen, 2003.

***C. manicatus* Haliday:** Gerling and Kugler, 1973; Reuveny et al., 2005.

***C. meridionalis* (Bagnall):** Gerling and Kugler, 1973.

****Dendrothrips ?karnyi* Priesner**

Distribution: Poland, Moldova, Crimea, Italy, Croatia, Turkey.

Material examined: SCP: Rehovot, 24.iv, 17.v.2002, 23.v.2003, all *Vitex trifolia* (2♂, 4♀).

D. phyllireae (Bagnall): zur Strassen and Halperin, 1990; zur Strassen, 2003.

D. saltator Uzel: Halperin and zur Strassen, 1981; zur Strassen, 2003 (as *D. saltatrix* Uzel); Reuveny et al., 2005 (as *D. saltatrix* Uzel).

****Echinothrips americanus* Morgan**

Distribution: N. America, Europe (occasional introduction).

Material examined: CCP: Bet Yizhaq, 9.ix.1999, *Anigosanthus* sp., T. Ben-David (1♂, 2♀); 22.vi.2000 (2♂, 4♀). SCP: Qidron, 26.viii.2001, *Pittosporum* sp. (2♀).

Eremiothrips antilope (Priesner): Priesner, 1964; zur Strassen, 2003.

****E. ?brunneus* (zur Strassen)**

Distribution: S. Morocco, Canary Islands.

Material examined: DSA: Newé Zohar, 27.i.2005, *Atriplex* sp. (1♀) and *Arundo donax* (1♀).

E. efflatouni (Priesner): zur Strassen, 2000; 2003; Halperin and zur Strassen, 2001.

****E. ?similis* Bhatti**

Distribution: Iran, Iraq.

Material examined: S: Mehola, 20.vii.2003, *Prosopis farcta* (1♂, 3♀).

****E. ?taghizadehi* (zur Strassen)**

Distribution: Spain, Iran.

Material examined: S: Mehola, 20.vii.2003, *Prosopis farcta* (2♀). SCP: Rehovot, 20.ii.2002, *Citrus* sp. (2♀); 14.vii, 1.ix.2002, *Parkinsonia* sp. (2♀); 1.ix.2002, *Amaranthus* sp. (2♀). Magén, 20.vi.2002, orange (2♀). AV: Ne'ot haKikkar, 28.viii.2002, *Portulaca* sp. (2♀); yellow trap, 28.viii.2002 (2♀). NN: Ze'elim, 12.vi.2002 (1♀). CN: Sedé Boqér, 19.viii.2002, *Gypsophila* sp. (2♂, 1♀); 23.ix.2002, grape (2♀).

Eryngyothrips eryngii (Priesner): Priesner, 1940; zur Strassen, 2003.

****Euphysothrips minozzii* Bagnall**

Distribution: S. France, Austria, Turkey, Iran, India, S. Africa, Canary Islands, Yemen, Mozambique.

Material examined: VY: Newé Ya'ar, 21.ix.2001, plum, S. Ben-Yehuda, (2♀, 1♂). S: Mehola, 20.vii.2003, *Prosopis farcta* (2♀).

****Florithrips dilutus* (Hood)**

Distribution: Africa.

Material examined: DSA: Newé Zohar, 27.i.2005, *Ochradenus baccatus* (1♀). SN: Elat, 15.iii.2005, *Reseda* sp. (1♀).

***F. traegardhi* (Trybom)**: zur Strassen and Halperin, 1990; zur Strassen, 2003.

[***Frankliniella bondari* Hood**: Nakahara, 1992; zur Strassen, 2003.].

***F. intonsa* (Trybom)**: zur Strassen and Halperin, 1990.

***F. occidentalis* (Pergande)**: Argaman et al., 1989; Halperin et al., 1989; Swirski et al., 2002; Reuveny et al., 2005.

***F. schultzei* (Trybom)** (= *F. dampfi* Priesner): Bodenheimer, 1937; zur Strassen, 2003.

***F. tenuicornis* (Uzel)**: Gerling and Kugler, 1973; Reuveny et al., 2005.

***Heliothrips haemorrhoidalis* (Bouché)**: Bodenheimer, 1937; Bytinski-Salz, 1966; Avidov and Harpaz, 1969; Halperin and zur Strassen, 1981; Halperin, 1990; Swirski et al., 2002; zur Strassen, 2003.

[***Hercinothrips bicinctus* (Bagnall)**: Halperin et al., 1989.].

***H. femoralis* (Reuter)**: Bodenheimer, 1937; Bytinski-Salz, 1966; Avidov and Harpaz, 1969; Swirski et al., 2002.

***Hydatothrips boerhaaviae* Seshadri and Ananthkrishnan**: Halperin and zur Strassen, 1981; zur Strassen, 2003.

***Kakothrips pisivorus* Westwood** (= *K. robustus* (Uzel)): Bodenheimer, 1937; Bytinski-Salz, 1966.

***K. priesneri* Pelikan**: Pelikan, 1965; zur Strassen, 2003.

***Limothrips angulicornis* Jablonowski**: zur Strassen and Halperin, 1990.

***L. cerealium* Haliday**: Bodenheimer, 1937; Gerling and Kugler, 1973; Halperin and zur Strassen, 1981; Swirski et al., 2002; Reuveny et al., 2005.

***Microcephalothrips abdominalis* (D.L. Crawford)** (= *M. microcephalus* Priesner): Bodenheimer, 1937; zur Strassen, 2003.

***Mycterothrips acaciae* Priesner**: zur Strassen, 2003.

****M. tschirkunae* (Jachontov)**

Distribution: Turkey, Iran, Uzbekistan.

Material examined: JV: N. Kinneret, 4.v.2004, rose (1♂).

****Neohydatothrips ?abnormis* (Karny)**

Distribution: Europe.

Material examined: S: Mehola, 20.vii.2003, *Prosopis farcta* (1♀).

***N. gracilicornis* (Williams)**: zur Strassen, 1973; Halperin and zur Strassen, 1981.

***Odontothrips confusus* Priesner**: zur Strassen and Halperin, 1990.

***O. karnyi* Priesner**: Bodenheimer, 1937; Bytinski-Salz and Sternlicht, 1967; Gerling and Kugler, 1973; Halperin and zur Strassen, 1981; Reuveny et al., 2005.

***O. meridionalis* Priesner:** Halperin and zur Strassen, 1981.

***O. viciae* Priesner:** Priesner, 1951; zur Strassen, 2003.

***Oxythrips ajugae* Uzel:** Priesner, 1964; Halperin and zur Strassen, 1981; Reuveny et al., 2005.

***O. claripennis* Priesner:** zur Strassen and Halperin, 1990; zur Strassen, 2003.

***O. uncinatus* Priesner:** Priesner, 1940; Halperin and zur Strassen, 1981; zur Strassen, 2003.

***Palmiothrips palmae* (Ramakrishna):** Blumberg, 2008; Kuslitzky and zur Strassen, 2012.

***Parascolothrips priesneri* Mound:** Halperin and zur Strassen, 1981; zur Strassen, 2003.

***Pezothrips kellyanus* (Bagnall):** zur Strassen, 2000; zur Strassen, 2003.

***Plesiothrips perplexus* (Beach):** Gerling and Kugler, 1973; Mound and Palmer, 1974; zur Strassen, 2003.

***Prosopothrips nigriceps* Bagnall:** Priesner, 1964; zur Strassen, 2003.

***Pseudodendrothrips aegyptiacus* (Priesner):** zur Strassen, 2003.

***Pseudoxythrips umbraticornis* (Priesner):** Priesner, 1940; zur Strassen, 2003.

***Psilothrips bimaculatus* (Priesner):** Bodenheimer, 1937; Halperin and zur Strassen, 1981; zur Strassen, 2003.

***Retamothrips retamae* (Priesner):** zur Strassen and Halperin, 1990.

***Retithrips syriacus* (Mayet):** Bodenheimer, 1937; Rivnay, 1939; Avidov and Harpaz, 1969; Halperin and zur Strassen, 1981; Halperin, 1990; Swirski et al., 2002; zur Strassen, 2003.

***Rubiothrips vitis* (Priesner):** Bodenheimer, 1937.

****Scirtothrips dorsalis* Hood**

Distribution: Cosmopolitan.

Material examined: UG, S, JV, CCP, SCP, JF, AV, NN, CN. From 2001, all months. Avocado, mango, persimmon, *Citrus* spp., grape, litchi, cotton, rose, *Carissa* sp., *Ricinus communis*, *Calliandra* sp., *Ctenopodium* sp., *Ambrosia* sp., *Acacia* spp., *Myrtus communis*, *Lisianthus* sp.

****S. inermis* Priesner**

Distribution: Cosmopolitan.

Material examined: UG: Tuval, 23.vii.2002, kiwi (2♀). SCP: Rehovot, 14, 28.iv, 30.vi.2002, 10.ii, 17.v, 23.v.2003, *Viburnum tinus* (7♀); 24.iv.2002, 23.v.2003, *Carissa grandiflora* (3♀); 24.iv.2002, *Melia azedarach* (1♀); 28.iv.2002, *Rosmarinus officinalis* (1♀).

***S. mangiferae* Priesner:** Halperin and zur Strassen, 1981; Swirski et al., 2002.

****S. nubicus* Priesner**

Distribution: Egypt, Sudan.

Material examined: SCP: Rehovot, 28.viii.2001, *Acacia* sp. (1♀). AV: Sappir, 26.xi.2002, *Acacia* sp. (2♀, 3♂).

****Scolothrips latipennis* Priesner**

Distribution: Iran, Crimea, Egypt, Spain, Morocco, Canary Islands.

Material examined: AV: Yahél, 30.ix.2001, pomello (2♀, 2♂).

***S. longicornis* Priesner:** zur Strassen and Halperin, 1990; Wysoki, 1999; Swirski et al., 2002.

***Sitothrips arabicus* Priesner:** Mound and Palmer, 1974; zur Strassen, 2003.

***Taeniothrips inconsequens* (Uzel):** Bodenheimer, 1937; Halperin and zur Strassen, 1981.

***Tamaricothrips tamaricis* (Bagnall):** zur Strassen and Halperin, 1990; zur Strassen, 2003.

***Tenothrips anatolicus* (Priesner):** Halperin and zur Strassen, 2001; zur Strassen, 2003.

****T. ?croceicollis* (Priesner)**

Distribution: Ponto-Mediterranean.

Material examined: CCP: Bet Yizhak, 22.vii.2004, *Solidago* sp. (1♀, 1♂). SCP: Rehovot, 14.vii.2002, *Parkinsonia* sp. (1♀).

***T. discolor* (Karny):** Bodenheimer, 1937; Gerling and Kugler, 1973; Reuveny et al., 2005.

***T. frici* (Uzel) (= *T. pallidivestis* Priesner):** Gerling and Kugler, 1973; Halperin and zur Strassen, 1981; Reuveny et al., 2005.

***Thrips angusticeps* Uzel:** Bodenheimer, 1937; Gerling and Kugler, 1973; Halperin and zur Strassen, 1981; Reuveny et al., 2005.

****T. ?asparagi* zur Strassen**

Distribution: Spain, Morocco.

Material examined: CCP: Yad Mordekhay, 7.v.2002, *Plantago major* (2♀).

***T. australis* Bagnall:** Halperin and zur Strassen, 1981 (as *Isoneurothrips australis*); Reuveny et al., 2005 (as *I. australis*).

***T. biunculatus* Priesner:** Priesner, 1940; zur Strassen, 1978; zur Strassen, 2003.

****T. ?dubius* Priesner**

Distribution: Germany, Poland, Czech Republic, Austria, Hungary, France, Ukraine, Georgia, Turkey, Cyprus.

Material examined: DSA: Newé Zohar, 27.i.2005, *Erucaria hispanica* (1♀).

T. major **Uzel**: Bodenheimer, 1937; Halperin and zur Strassen, 1981; Swirski et al., 2002; Reuveny et al., 2005.

T. mareoticus (**Priesner**): Bodenheimer, 1937; zur Strassen, 2003.

T. mediterraneus **Priesner**: Halperin and zur Strassen, 2001.

T. meridionalis (**Priesner**): Bodenheimer, 1937; Bytinski-Salz and Sternlicht, 1967; Halperin and zur Strassen, 1981; Mantel and Vierbergen, 1996; zur Strassen, 2003; Reuveny et al., 2005.

T. microchaetus **Karny**: zur Strassen, 2003.

T. minutissimus **Linnaeus**: Priesner, 1964.

****T. nigropilosus* Uzel**

Distribution: Cosmopolitan.

Material examined: UG: Meḥola, 20.vii.2003, basil (3♀). CCP: Bet Yizḥaq, 18.x.2004, basil (1♀).

****T. ?panousei* zur Strassen**

Distribution: Morocco.

Material examined: SCP: Rehovot, 20.iv.2002, *Calligonum comosum* (6♀, 4♂).

T. simplex (**Morison**): Bytinski-Salz, 1966; Avidov and Harpaz, 1969.

T. speratus **zur Strassen** (= *T. emulatus* Ananthakrishnan): Mantel and Vierbergen, 1996.

T. tabaci **Lindeman**: Bodenheimer, 1937; Avidov and Harpaz, 1969; Bytinski-Salz, 1966; Gerling and Kugler, 1973; Halperin and zur Strassen, 1981; Swirski et al., 2002; Reuveny et al., 2005.

****T. vulgatissimus* Haliday**

Distribution: Europe, Palaearctic Asia, N. America.

Material examined: CCP: Kefar Ḥayyim, 27.iv.1999, flowers of mandarin (1♀); Ramat haSharon, 9.iv.2002, *Verbena* sp., I. Shouster (1♀).

SUBORDER TUBULIFERA

PHLAEOTHIRIPIDAE

Apterygothrips priesneri **zur Strassen**: zur Strassen, 1966; Halperin and zur Strassen, 1981.

Ataliothrips reuteri (**Bagnall**): Gerling and Kugler, 1973; Halperin and zur Strassen, 1981.

Chiraplothrips graminellus **Priesner**: Gerling and Kugler, 1973; Mound and Palmer, 1974.

Cryptothrips nigripes (Reuter): zur Strassen, 1973; Halperin and zur Strassen, 1981.

Dolicholepta micrura (Bagnall): Halperin and zur Strassen, 1981.

Gynaikothrips ficorum (Marchal): Rivnay, 1947; Bytinski-Salz, 1966; Avidov and Harpaz, 1969; Halperin and zur Strassen, 1981.

Haplothrips amygdali Priesner: Priesner, 1950.

H. andresi Priesner (= *H. cypriotes* Priesner; = *H. phyllireae* Bagnall): Bodenheimer, 1937; Halperin and zur Strassen, 1981; Halperin, 1990; Swirski et al., 2002.

H. anthemidinus Priesner: Priesner, 1950.

H. articulatus (Bagnall) (= *H. jordanicus* Priesner): Bodenheimer, 1937.

H. atriplicis Priesner: Bodenheimer, 1937; Halperin and zur Strassen, 1981.

****H. bolacophilus* Priesner**

Distribution: Greece, Crete, Cyprus, Near East.

Material examined: Ramat haNegev, 23.iv.2002, *Philodendron* sp. (1♀, 1♂).

H. cahirensis (Trybom): Bodenheimer, 1937.

H. cerealis Priesner: Priesner, 1950; Halperin and zur Strassen, 1981.

H. chrysanthemi Priesner: Mantel and Vierbergen, 1996.

H. clarisetis Priesner: Bodenheimer, 1937; Gerling and Kugler, 1973; Halperin and zur Strassen, 1981.

H. distinguendus (Uzel): Bodenheimer, 1937; Halperin and zur Strassen, 1981; Swirski et al., 2002; Reuveny et al., 2005.

H. eothripinus Priesner: Priesner, 1936.

H. eragrostidis Priesner: Priesner, 1936.

H. flavicinctus (Karny): Gerling and Kugler, 1973; Mound and Palmer, 1974; Reuveny et al., 2005.

****H. ?ganglbaueri* Schmutz**

Distribution: Pakistan, India, Sri Lanka.

Material examined: Negev, 11.vi.2003, I. Lerner (1♀).

H. gowdeyi (Franklin): Bodenheimer, 1937; Gerling and Kugler, 1973; Halperin and zur Strassen, 1981; Swirski et al., 2002.

H. hispanicus Priesner: Bodenheimer, 1937.

H. hukkineni Priesner: Bodenheimer, 1937.

H. juncorum Bagnall: Bodenheimer, 1937.

****H. ?knechteli* Priesner**

Distribution: Czech Republic, Romania, Ukraine, Spain, Italy, Near East.

Material examined: VY: Newé Ya'ar, 19.iii.1999, flowers of nectarina, S. Ben-Yehuda (1♀).

H. ochradeni Priesner: zur Strassen and Halperin, 1990.

***H. palaestinensis* Priesner:** Bodenheimer, 1937.

***H. rabinovitchi* Priesner:** Bodenheimer, 1937; Halperin and zur Strassen, 1981; Swirski et al., 2002.

***H. reuteri* (Karny):** Bodenheimer, 1937; Mantel and Vierbergen, 1996; Swirski et al., 2002.

***H. rivnayi* Priesner:** Bodenheimer, 1937.

****H. setiger* Priesner (form *alexandrinus*)**

Distribution: Europe.

Material examined: CCP: Ha'Ogen, 7.iv.1994, avocado, M. Wysoki (1♀).

****H. siwanus* Priesner**

Distribution: Egypt.

Material examined: UG: Ga'ton, 29.xii.2002, loquat (1♀); Mazzuva, 15.vi.2003 (2♀). SCP: Rehovot, 5.v.2002, *Nicotiana* sp. (2♀); Zerifin, 9.vi.1999, *Citrus* sp. (2♀). FJ: Tirat Yehuda, 11.xi.2002, *Ricinus communis* (1♂).

****H. subtilissimus* (Haliday)**

Distribution: Europe.

Material examined: SN: Elat, 15.iii.2005, *Batanites aegyptiaca* (1♂).

***H. tardus* Priesner:** Bodenheimer, 1937.

***H. tricoli* (Kurdjumov):** Bodenheimer, 1937.

***Hoplandrothrips bidens* (Bagnall):** zur Strassen and Halperin, 1990.

***Karnyothrips flavipes* (Jones) (= *K. longisetis* Bagnall):** Bodenheimer, 1937; Priesner, 1964; Halperin and zur Strassen, 1981.

***Leptothrips karnyi* Trybom:** zur Strassen and Halperin, 1990.

***Liothrips oleae* (Costa):** Bodenheimer, 1937; Halperin and zur Strassen, 1981.

****L. pragensis* Uzel**

Distribution: Central and S. Europe, Near East.

Material examined: UG: Har Merom, 10.v. 2001, *Quercus* sp. (1♀).

[***L. vaneeckeii* Priesner:** Bytinski-Salz, 1966.]

***Neoheegeria dalmatica* (Schmütz):** Bodenheimer, 1937.

***N. giganteus* Priesner:** Halperin and zur Strassen, 2001.

***Treherniella afra* Priesner:** Priesner, 1965.

NOTES

In 2000, there was an attempt to acclimatize *Franklinothrips orizabensis* Johansen, 1974 (as "*F. n. sp.*"—Yael Argov, personal communication) and *F. vespiformis* (D.L.

Crawford) for biocontrol of *Chaetanaphothrips orchidii* (Moulton) (Argov, 2000). The results are unknown.

The current status of *Cephalothrips pini* Priesner in Israel (see Bodenheimer, 1937), is not clear. *Thrips italicus* Bagnall was recorded from Israel only from an internet site—"World Thysanoptera. Distribution List: Israel" (<http://anic.ento.csiro.au/thrips/resources/Israel.htm>), therefore these species are not included in the current list.

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