

The Thrips (*Thysanoptera*) of Slovakia

P. J. FEDOR¹, W. SIERKA² and O. MAJZLAN³

¹Department of Ecozoology, Faculty of Natural Sciences, Comenius University, Mlynská dolina, 842 15 Bratislava, Slovakia, e-mail: fedor@fns.uniba.sk

²Department of Zoology, Faculty of Biology and Environmental Protection, University of Silesia, Bankowa 9, 40-007 Katowice, Poland, e-mail: wsierka@us.edu.pl

³Institute of Molecular Biology, Slovak Academy of Sciences, Dúbravská cesta 9, 842 06 Bratislava, Slovakia, e-mail: Oto.Majzlan@fcd.u.uniba.sk

In the past years thrips have not been more intensively studied in Slovakia than other systematic entomological groups. However, at the end of the 20th century a new generation of thysanopterologists was established to deal with faunistic, taxonomic, ecological, geographical as well as other main aspects of Slovakian thrips. The contribution presents the first national check-list of thrips (*Insecta: Thysanoptera*) of Slovakia accompanied with ecological and zoogeographical characteristics. According to older references published mostly in former Czechoslovakia the actual number of thrips in Slovakia has been estimated up to 151 species belonging to three families: *Acolothripidae* Uzel, 1895 (12 spp.), *Thripidae* Stephens, 1829 (95 spp.) and *Phlaeothripidae* Uzel, 1895 (44 spp.).

Keywords: *Thysanoptera*, thrips.

Today, several centuries since the first thrips were discovered, it seems difficult to disprove a deeply-rooted fact, that baron Carl Degeer from the 18th century Swedish royal court was not the first who recorded some specimens of a later named order *Thysanoptera*. However in 1691 Filippo Bonanni, a Roman Catholic priest, admittedly presented the first sketches of thrips (in 1895 determined by Uzel as a male of tubuliferan *Anthothrips sticticus*) in his book *Observationes circa viventia, quae in rebus non viventibus reperiuntur* (Bonanni, 1691).

Although the "Czechoslovak thysanopterological school" developed on really firm and stable fundamentals in 1895, when a Prague professor Jindřich Uzel published the first monograph on *Thysanoptera* (Uzel, 1895) ever, the area of Slovakia was often excluded from a more intensive research on thrips. No general book focusing on the thrips of Slovakia has been published yet. Most of the papers have a faunistic character presenting either first records or generally the diversity of thrips at selected sites.

This check-list, generally the first on the national level, was formed in the last years of the 20th century and is based especially on the determination key databases by Pelikán (1957) as well as the complex checklist of the former Czechoslovakia – *Enumeratio Insectorum Bohemoslovakiae* (Pelikán, 1977). Though these lists have been up-dated for the past 25 years many new first faunistic records can be expected in the future.

Slovakian thrips

By the year 2003 a total of 151 thrips (*Thysanoptera*) species has been recorded on the area of Slovakia. They belong into two suborders and three families:

TEREBRANTIA:

- *Aeolothripidae* Uzel, 1895: 12 species
- *Thripidae* Stephens, 1829: 95 species

TUBULIFERA:

- *Phlaeothripidae* Uzel, 1895: 44 species

Most of the species were recorded in Slovakia by Pelikán (1957, 1977). However, in recent years, more than 20 species were discovered in the national fauna for the first time (Pelikán, 1990, 1992; Pelikán et al., 2002; Fedor et al., 2001; Sierka, 2003). In 1977 Pelikán presented 230 thrips species classified into 60 genera and three families in former Czechoslovakia. 123 of them were mentioned from the territory of Slovakia (*Aeolothripidae*: 10 spp., *Thripidae*: 78 spp., *Phlaeothripidae*: 35 spp.). Some of them were considered with a probable occurrence, e.g. *Oxythrips dentatus* Knechtel, 1923 as well as *Hoplothrips quercinus* Knechtel, 1935, which later were found and recorded in Slovakia.

The thrips fauna of Slovakia naturally reflects a diversity of ecological conditions, specific for this country including xerothermophilous as well as mesophilous, umbro-hydrophilous and skiophilous species. Except for cosmopolite species and thrips common in Central Europe the spectrum includes some other interesting and often rare insects. The southern lowlands provide suitable conditions for Pannonian and sub-Mediterranean species (e.g. *Aptinothrips elegans* Priesner, 1924), xerothermophilous and infiltrating from South, especially from Hungary and Austria. On the other hand, mountainous regions, especially those in the alpine zone, usually with low stands of *Pinus mugo* and *Pinus cembra* are rich in psychrophilous thrips such as *Oxythrips tatricus* Pelikán, 1955.

The species are presented below together with their first references. And though a lot of species were recorded in various papers before, the Pelikán's check list (1977) was considered as the first databases that included the older references. Abbreviations following species name:

ecological characteristics: xt – xerothermophilous (inhabiting dry and warm places), hg – hydrophilous (moisture-loving), me – mesophilous (preferring medium values), sk – skiophilous (shade-loving); ps – psychrophilous (cold-loving);

additional characteristics: ar – arboricolous (inhabitant of deciduous and coniferous trees and shrubs), cr – corticolous (associated with bark), fl – floricolous (inhabitant of flowers), fo – follicolous (inhabitant of leaves), gr – graminicolous (inhabitant of grasses);

trophic relations: (in the case of specialised phytophagous species their host is given): mo – monophagous, ol – oligophagous, po – polyphagous, my – mycophagous, pr – predatory;

distribution: COS – Cosmopolitan, EUR – European, HOL – Holarctic, SBM – sub-Mediterranean (= S&C Europe), EUS – Eurosiberian, PAL – Palaeartic; nn – nature unknown.

Family: *Aeolothripidae* Uzel, 1895

Subfamily: *Melanthripinae* Bagnall, 1913

- *Ankothrips flavidus* Pelikán, 1958: hg, EUR, Pelikán (1977)
- *Ankothrips niezabitowskii* (Schille, 1911): fl, ol, EUR, *Juniperus* (esp. *J. communis*), Pelikán (1977)
- *Melanthrips fuscus* (Sultzer, 1776): me, fl, po, W – PAL, *Brassicaceae*, Pelikán (1977)
- *Melanthrips pallidior* Priesner, 1919: xt, fl, po, PAL (introduced to N-America), *Asteraceae*, *Brassicaceae*, *Fabaceae*, Pelikán (1977)

Subfamily: *Aeolothripinae* Uzel, 1895

- *Rhipidothrips elegans* Pelikán, 1961: Pelikán (1977)
- *Rhipidothrips graciosus* Uzel, 1895: pr, HOL, Pelikán (1977)
- ⊙ *Aeolothrips albicinctus* Haliday, 1836: sk, gr, po, pr, HOL, *Calamagrostis* (females mostly brachypterous; macropterous and hemimacropterous forms are rare; males always apterous), Pelikán (1977)
- *Aeolothrips ericae* Bagnall, 1920: me, fl, ol, HOL (introduced to N-America), *Fabaceae*, Pelikán (1977)
- ⊙ *Aeolothrips intermedius* Bagnall, 1934: me, fl, po, pr, PAL, Pelikán (1977)
- ⊙ *Aeolothrips melaleucus* Haliday, 1852: me, fo, ar, po, pr, HOL, *Quercus*, *Crataegus*, *Fraxinus*, *Ligustrum*, Pelikán (1977)
- *Aeolothrips propinquus* Bagnal, 1924: xt, fl, mo, EUR, *Echium vulgare*, Sierka (2003)
- ⊙ *Aeolothrips versicolor* Uzel, 1895: fo, ar, ol, HOL (introduced to N-America), *Quercus*, *Tilia*, *Fraxinus*, Sierka (2003)

Family: *Thripidae* Stephens, 1829

Subfamily: *Panchaetothripinae* Bagnall, 1912

- *Heliothrips haemorrhoidalis* (Bouché, 1833): greenhouses, fo, COS, Pelikán (1977)
- *Hercinothrips femoralis* (O. M. Reuter, 1891): greenhouses, fo, Pelikán (1977)
- *Parthenothrips dracaenae* (Heeger, 1852): greenhouses, (esp. monocotyledonous), fo, Pelikán (1977)

Subfamily: *Thripinae* Stephens, 1829

- ⊙ *Dendrothrips degeeri* Uzel, 1895: fo, ar, po, EUR, *Fraxinus excelsior*, Fedor et al. (2001)
- *Dendrothrips ornatus* (Jablonowski, 1894): fo, ar, po, EUR (and Asiatic part of Russia, and China, introduced to N-America), *Syringa*, *Ligustrum*, *Fraxinus*, *Tilia*, Pelikán (1977)

- *Dendrothrips saltatrix* Uzel, 1895: fo, (ar) po, EUS (NW-India, Iran), *Quercus*, *Eupatorium annabium*, Pelikán (1977)
 - *Neohydatothrips abnormis* (Karny, 1910): xt, gr, po, EUR, *Fabaceae* (esp. *Genista*, *Astragalus*), Pelikán (1977) (*Sericothrips*)
 - *Neohydatothrips gracilicornis* (Williams, 1916): xt, gr, fo, po, PAL, *Vicia*, various species of trees, Pelikán (1977) (*Sericothrips*)
 - *Stenothrips graminum* Uzel, 1895: me, gr, po, W – PAL (introduced to N-America), *Poaceae* (esp. *Avena sativa*, *Triticum*), Pelikán (1977)
 - *Drepanothrips reuteri* Uzel, 1895: me, fo, ol, PAL, *Vitis vinifera*, *Betula*, *Corylus*, *Quercus*, Pelikán (1977)
 - *Chirothrips aculeatus* Bagnall, 1927: me, gr, ol, EUS, *Alopecurus*, *Avena*, *Bromus*, *Lolium*, *Poa*, Sierka (2003)
 - *Chirothrips ambulans* Bagnall, 1932: gr, EUR (*f. macropterus* and *f. brachypteros*), *Poa pratensis*, Sierka (2003)
 - *Chirothrips hamatus* Trybom, 1895: hg, gr, mo, HOL, *Alopecurus pratensis*, Pelikán (1977)
 - *Chirothrips manicatus* Haliday, 1836: me, gr, po, HOL, *Poaceae* (very common macropterous forms, brachypterous forms exceedingly rare), Pelikán (1977)
 - *Limothrips cerealium* Haliday, 1836: me, gr, ol, COS, cereals, Sierka (2003)
 - *Limothrips consimilis* Priesner, 1926: xt, gr, po, EUS, *Poaceae* (esp. *Bromus erectus*), Sierka (2003)
 - *Limothrips angulicornis* Jablonowski, 1894: gr, po, W-PAL, Pelikán (1992)
- *Limothrips denticornis* Haliday, 1836: me, gr, po, HOL (introduced to Australia and N-Africa), *Poaceae*, Pelikán (1977)
 - *Anaphothrips badius* Williams, 1913: hg, fo, EUR, *Carex*, *Phragmites*, Sierka (2003)
 - *Anaphothrips euphorbiae* Uzel, 1895: xt, fl, ol, SBM, *Euphorbia* (esp. *E. cyparissias*), Pelikán (1977)
 - *Anaphothrips obscurus* (Müller, 1776): hg, gr, po, COS, *Poaceae*, Pelikán (1977)
 - *Aptinothrips elegans* Priesner, 1924: xt, gr, po, SBM, Pelikán (1977)
 - *Aptinothrips rufus* (Haliday, 1836): xt, gr, po, COS, *Gramineae*, *Poaceae*, at altitudes of up to 3300 m a.s.l., Pelikán (1977)
 - *Aptinothrips stylifer* Trybom, 1894: sk, me, gr, po, HOL, *Poaceae*, at altitudes of up to 3800 m a.s.l., Pelikán (1977)
 - *Belothrips acuminatus* Haliday, 1836: xt, fl, ol, EUR, *Galium*, Sierka (2003)
 - *Belothrips morio* O. M. Reuter, 1899: hg, fl, ol, EUR, *Galium*, Sierka (2003)
 - *Dictyothrips betae* (Uzel, 1895): gr, fl, po, EUR, Pelikán (1977)
 - *Oxythrips ajugae* Uzel, 1895: me, fo, ol, EUR, *Pinus*, Pelikán (1977)
 - *Oxythrips bicolor* (O. M. Reuter, 1836): me, fl, ar, ol, EUR, *Pinus* and various grasses in forest meadows, Pelikán (1977),
 - *Oxythrips dentatus* Knechtel, 1923: xt, EUR, *Asteraceae*, Pelikán (1977, 1983, 1990)
 - *Oxythrips priesneri* Pelikán, 1957: xt, fl, mo, SBM, *Pinus nigra*, Pelikán (1977)
 - *Oxythrips tatricus* Pelikán, 1955: EUR, *Pinus cembra* and *P. mugo*, mountain species, Pelikán (1977)

- *Oxythrips ulmifoliorum* (Haliday, 1836): me, fo, ol, EUR, *Ulmus*, *Fraxinus*, Pelikán (1977)
- *Prosopothrips vej dovskyi* Uzel, 1895: xt, fl, EUR, forest species, Pelikán (1977)
- *Rubiothrips ferrugineus* (Uzel, 1895): xt, po, EUR, at altitudes of up to 1700 m a.s.l., Sierka (2003)
- *Rubiothrips silvarum* (Priesner, 1920): xt, fl, ol, EUS, *Galium*, at altitudes of up to 1700 m a.s.l., Pelikán (1977) (*Anaphothrips*)
- *Rubiothrips sordidus* (Uzel, 1895): po, continental EUR (without Scandinavia), *Galium*, at altitudes of up to 2000 m a.s.l., Sierka (2003)
- *Rubiothrips validus* (Karny, 1910): xt, me, fl, ol, EUR, *Galium*, Sierka (2003)
- *Baliothrips dispar* (Haliday, 1836): hg, fo, po, EUS (introduced to N-America), *Poaceae*, *Cyperaceae*, Pelikán (1977)
- *Sphaeropothrips vittipennis* Bagnall, 1927: gr, EUR (and India, Egypt), Pelikán (1977) (*Baliothrips*)
- *Bolacothrips jordani* Uzel, 1895: me, gr, po, EUR, *Alopecurus*, *Dactylis*, *Calamagrostis*, Pelikán (1977)
- *Frankliniella intonsa* (Trybom, 1895): fl, me, po, PAL, Pelikán (1977)
- *Frankliniella pallida* (Uzel, 1895): xt, fl, ol, EUR, Pelikán (1977)
- *Frankliniella tenuicornis* (Uzel, 1895): gr, po, COS, *Poaceae*, Pelikán (1977)
- *Iridothrips iridis* (Watson, 1924): hg, fo, mo, EUR (introduced to N-America), *Iris pseudacorus*, Sierka (2003)
- *Kakothrips robustus* (Uzel, 1895): me, fl, ol, HOL, *Fabaceae*, Pelikán (1977)
- *Mycterothrips albidicornis* (Knechtel, 1923): fo, ar, EUR (without Scandinavia), Fedor et al. (2001) (*Physothrips*)
- *Mycterothrips salicis* (O. M. Reuter, 1878): hg, fo, ol, EUS (introduced to N-America), *Salix*, Pelikán (1977) (*Physothrips*)
- *Mycterothrips annulicornis* (Uzel, 1895): xt, EUR (without N), Pelikán (1977) (*Rhopalandrotrips*)
- *Mycterothrips consociatus* (Targioni-Tozzetti, 1886): fo, ar, ol, EUS, *Alnus*, *Betula*, *Corylus*, *Quercus*, *Salix*, Pelikán (1977) (*Rhopalandrotrips*)
- *Mycterothrips latus* Bagnall 1912: fo, ol, EUS, *Betula*, *Alnus*, *Corylus*, *Larix*, *Sambucus*, Pelikán (1977) (*Taeniothrips propinquus*)
- *Odontothrips confusus* Priesner, 1926: me, fl, ol, EUS, *Fabaceae* (esp. *Medicago*), Pelikán (1977)
- *Odontothrips intermedius* (Uzel, 1895): fl, ol, EUR, *Fabaceae* (esp. *Lathyrus*), Pelikán (1977)
- *Odontothrips loti* (Haliday, 1852): me, fl, ol, HOL (introduced to N-America), *Fabaceae*, Pelikán (1977)
- *Odontothrips meliloti* Priesner, 1951: me, fl, ol, EUS, *Fabaceae* (esp. *Melilotus*), Pelikán (1977)
- *Pezothrips dianthi* Priesner, 1921: fl, ol, W – PAL, *Dianthus* (esp. *D. carthusianorum*), Pelikán (1977) (*Taeniothrips*)
- *Pezothrips frontalis* (Uzel, 1895): xt, EUR (without the British Isles), Sierka (2003)

- *Platythrips tunicatus* (Haliday, 1852): me, fl, ol, EUR, *Galium* (esp. *G. mollugo*), Pelikán (1977)
- *Rhaphidothrips longistylus* Uzel, 1895: hg, gr, EUR (introduced to N-America), Pelikán (1977)
- *Ceratothrips ericae* (Haliday, 1836): fl, EUR, *Erica*, *Calluna vulgaris*, Pelikán (1977) (*Taeniothrips*)
- *Taeniothrips inconsequens* (Uzel, 1895): ar, ol, HOL, *Rosaceae* (esp. *Pyrus communis*, pest), Pelikán (1977)
- *Taeniothrips nigriventris* Pelikán, 1954: xt, fl, EUR, *Papilionaceae*, Pelikán (1977)
- *Taeniothrips picipes* (Zetterstedt, 1828): me, sk, fl, po, PAL, *Anemone*, *Digitalis*, Pelikán (1977)
- *Taeniothrips pini* (Uzel, 1895): Europe, North America, *Pinus* spp., *Larix decidua*, Pelikán (1977)
- *Tenothrips frici* (Uzel, 1895): me, fl, ol, W-PAL, *Asteraceae*, Pelikán (1977)
- *Theilopedothrips pilosus* (Uzel, 1895): xt, fl, ol, EUR, Sierka (2003)
- *Thrips albopilosus* Uzel, 1895: po, fl, EUS, *Humulus lupulus* (cone), Pelikán et al. (2002)
- *Thrips alni* Uzel, 1895: fo, ar, ol, EUR, *Alnus*, Pelikán (1977)
- *Thrips angusticeps* Uzel, 1895: me, fl, po, W – PAL, brachypterous specimens of females and males – first generation (overwintering), macropterous females and males – second generation, Pelikán (1977)
- *Thrips atratus* (Haliday, 1836): (*Taeniothrips pini* (Uzel, 1895), *Taeniothrips montanus* Priesner, 1920, *Taeniothrips laricivorus* Kratochvíl et Farský, 1941), me, fl, po, HOL, *Caryophyllaceae*, Pelikán (1977) (*Taeniothrips*)
- *Thrips dilatatus* Uzel, 1895: fl, po, EUR, *Scrophulariaceae* (esp. *Euphrasia*, *Pedicularis*, *Rhinanthus*), Pelikán (1977)
- *Thrips discolor* Haliday, 1836: po, fl, EUR (introduced to N-America), Pelikán (1977)
- *Thrips flavus* Schrank, 1776: me, fl, po, COS, Pelikán (1977)
- *Thrips fulvipes* Bagnall, 1923: po, EUS, *Mercurialis perennis*, Pelikán (1977)
- *Thrips fuscipennis* Haliday, 1836: me, fl, fo, po, PAL (without N-Africa, introduced to N-America), Pelikán (1977)
- *Thrips herricki* Bagnall, 1926: fl, ol, EUR (introduced to N-America), *Veratrum album*, mountain species, Pelikán (1977)
- *Thrips juniperinus* Linnaeus, 1758: (*T. carpathicus* Knechtel, 1948): fl, mo, EUS, *Juniperus communis*, Pelikán (1977)
- *Thrips liniarius* Uzel, 1895: mo, EUR, *Linum usitatissimum*, Pelikán (1977)
- *Thrips major* Uzel, 1895: me, fl, po, PAL, *Rosaceae*, Pelikán (1977)
- *Thrips menyanthidis* Bagnall, 1923: po, EUR, Pelikán (1977)
- *Thrips minutissimus* Linnaeus, 1761: fo, ar, po, EUS, *Rosaceae*, *Carpinus*, *Quercus*, Pelikán (1977)
- *Thrips nigropilosus* Uzel, 1895: fl, po, EUR (introduced to other continents), Pelikán (1977)

- *Thrips palustris* O. M. Reuter, 1899: hg, Pelikán (1977) (*T. paluster*)
- *Thrips physapus* Linnaeus, 1758: me, fl, po, EUS, Asteraceae, Pelikán (1977)
- *Thrips pillichii* Priesner, 1924: me, fl, po, EUR, Asteraceae (esp. *Tanacetum vulgare*), Pelikán (1977)
- *Thrips praetermissus* Priesner, 1920: xt, EUS, Pelikán (1977)
- *Thrips sambuci* Heeger, 1854: mo, sk, fl, EUR, *Sambucus nigra*, Pelikán (1977)
- *Thrips tabaci* Lindeman, 1888: po, me, fl, fo, COS, (vector of TSWV), Pelikán (1977)
- *Thrips trehernei* Priesner, 1927: (*T. hukkineni* Priesner, 1937); me, fl, po, HOL, Asteraceae, Pelikán (1977)
- *Thrips trybomi* (Karny, 1908): fl, po, EUR, mountain species, at altitudes of up to 2000 m above sea level, Pelikán (1977) (*Taeniothrips*)
- *Thrips urticae* Fabricius, 1781: fl, po, EUR, *Urtica dioica*, Pelikán (1977)
- *Thrips validus* Uzel, 1895: me, fl, po, EUS (introduced to N-America), Asteraceae, Pelikán (1977)
- *Thrips (Parafrankliniella) verbasci* (Priesner, 1920): xt, fl, ol, EUR, *Verbascum*, Pelikán (1977)
- *Thrips viminalis* Uzel, 1895: sk, fo, (ar) ol, EUS, *Salix*, *Populus*, *Abus*, Pelikán (1977)
- *Thrips vulgarissimus* (Haliday, 1836): po, fl, EUR (introduced to N-America), Pelikán (1977) (*Taeniothrips*)

Family: *Phlaeothripidae* Uzel, 1895

Subfamily: *Idolothripinae* Bagnall, 1908

- *Bolothrips bicolor* (Heeger, 1852): xt, gr, po, EUR, Pelikán (1977) (*Nesothrips*)
 - *Bolothrips dentipes* (O. M. Reuter, 1880): me, gr, po, EUR, *Carex*, Pelikán (1977) (*Nesothrips*)
 - *Bolothrips icarus* (Uzel, 1895): xt, gr, po, EUR, Pelikán (1977) (*Nesothrips*)
 - *Cryptaplothrips famelicus* Priesner, 1926: nn, Pelikán (1992)
 - *Cryptaplothrips nigripes* (O. M. Reuter, 1880): ar, (cr) po, my, PAL, Pelikán (1977) (*Cryptothrips*)
- ↳ pod kôrou označené chrómov

Subfamily: *Phlaeothripinae* Uzel, 1895

- *Haplothrips acanthoscelis* (Karny, 1909): xt, fl, po, EUS, Pelikán (1977)
- *Haplothrips aculeatus* (Fabricius, 1803): me, gr, po, PAL, Pelikán (1977)
- *Haplothrips alpester* Priesner, 1914: fl, po, EUR, Asteraceae, mountain species, Pelikán (1977)
- *Haplothrips alpicola* Priesner, 1950: *Senecio fuchsii*, Pelikán (1983)
- *Haplothrips angusticornis* Priesner, 1921: me, fl, ol, EUR, Asteraceae (esp. *Helichrysum arenarium*), Pelikán (1977)
- *Haplothrips crassicornis* (John, 1924): me, gr, po, EUS, Sierka (2003)
- *Haplothrips distinguendus* (Uzel, 1895): me, fl, po, EUS, Asteraceae (esp. *Carduus*, *Cirsium*), Pelikán (1977)
- *Haplothrips dudichi* Priesner, 1961: nn, Pelikán (1977)

- *Haplothrips flavicinctus* (Karny, 1910): xt, gr, mo, SBM, Pelikán (1977)
- *Haplothrips floricae* Knechtel, 1960: nn, Pelikán (1983, 1990)
- *Haplothrips knechteli* Priesner, 1923: *Cearsus avium*, Pelikán (1983)
- *Haplothrips kurdjumovi* Karny, 1913: me, fo, (ar), po, HOL, *Quercus*, *Tilia*, *Ulmus*, Pelikán (1977)
- *Haplothrips leucantheri* (Schränk, 1781): me, fl, mo, HOL, *Asteraceae* (esp. *Chrysanthemum leucanthemum*), Pelikán (1977)
- *Haplothrips niger* (Osborn, 1883): me, fl, ol, PAL, *Fabaceae*, Pelikán (1977)
- *Haplothrips pannonicus* Fabián, 1938: xt, EUR, grassland species, Pelikán (1977)
- *Haplothrips phyllophilus* Priesner, 1938: fo, (ar), po, EUR, *Quercus*, *Fagus*, *Salix*, *Tilia*, *Ulmus*, Pelikán (1977)
- *Haplothrips setiger* Priesner, 1921: me, fl, po, Eur, *Asteraceae* (esp. *Senecio jacobaea*), Pelikán (1977)
- *Haplothrips subtilissimus* (Haliday, 1852): fo, (ar), pr, PAL, *Quercus*, *Tilia*, Pelikán (1977)
- *Haplothrips tritici* Kurdjumov, 1912: me, gr, ol, EUR, cereals, Pelikán (1977)
- *Haplothrips vuilleti* Priesner, 1920: EUR, *Fabaceae* (esp. *Anthyllis*, *Cytisus*, *Trifolium*), Pelikán (1977)
- *Xylaplothrips fuliginosus* (Schille, 1910): (ar), (cr), po, my, EUR, Fedor et al. (2001)
- *Acanthothrips albovittatus* Schille, 1910: (ar), po, EUR, *Ahnus*, *Populus*, *Salix*, Pelikán (1977)
- *Acanthothrips nodicornis* (O. M. Reuter, 1880): (ar), (cr), po, my, HOL, Pelikán (1977)
- *Hoplandrothrips bidens* (Bagnall, 1910): (ar), (cr), po, my, EUR, Pelikán (1977)
- *Hoplandrothrips williamsianus* Priesner, 1923: (ar), (cr), my, EUR, *Quercus*, Sierka (2003)
- *Phlaeothrips annulipes* O. M. Reuter, 1880: (ar), (cr), ol, my, EUR, *Salix*, Pelikán (1977)
- *Phlaeothrips coriaceus* Haliday, 1836: (ar), (cr), po, my, EUR, Pelikán (1977) & Bekub
- *Cephalothrips monilicornis* (O. M. Reuter, 1880): xt, gr, po, HOL, Pelikán (1977)
- *Hoplothrips carpathicus* Pelikán, 1961: EUR, mountain species, Pelikán (1977)
- *Hoplothrips lichenis* Knechtel, 1954: xt, Pelikán (1983)
- *Hoplothrips quercinus* Knechtel, 1935: nn, Pelikán (1977, 1983, 1990)
- *Hoplothrips semicaecus* (Uzel, 1895): me, fl, po, Eur, *Asteraceae* (esp. *Senecio jacobaea*), Pelikán et al. (2002)
- *Liophloeothrips hungaricus* (Priesner, 1924): (ar), (cr), my, ol, *Salix*, Pelikán (1977)
- *Liothrips austriacus* Karny, 1909: fo, (ar), po, EUR, Pelikán (1977)
- *Liothrips pragensis* Uzel, 1895: fo, (ar), po, EUR, Pelikán (1977)
- *Liothrips setinodis* (O. M. Reuter, 1880): fo, (ar), po, EUR, Pelikán (1977)
- *Megalothrips bonannii* Uzel, 1895: (ar), (cr), my, EUR, Pelikán (1977)
- *Megathrips lativentris* (Heeger, 1852): (ar), my, EUR, Pelikán (1977)
- *Lispthrips crassipes* (Jablonowski, 1894): fl, EUR, *Ononis arvensis*, *Populus tremula*, Pelikán (1977)

Literature

- Bonanni, Ph. (1691): Observationes circa viventia, quae in rebus non viventibus reperiuntur. Cum Micrographia Curiosa sive Rerum minutissimarum observatiniibus, quae oope Microscopii recognitae ad vivum exprimuntur. His accesserunt aliquot Animalium Testaceorum Icones non antea in lucem editae. Omnia curiosorum Naturae Exploratorum Utilitati at Iucunditati expressa et oblata. Illustrissimo Domino D. Leoni Strozzae excellentissimi Ducis Strozzae filio, A Patrae Philippo Bonanni Societ. Jesu Sacerdote. Romae, Tapis Dominici Antonii Herculis MDCXCI.
- Fedor, P. J., Pelikán, J., Cyprich, D. and Krumpál, M. (2001): *Thrips (Thysanoptera)* in the nests of birds and mammals of the NPR Jurský Šúr. Folia faunistica Slovaca, Bratislava 6, 69–73.
- Pelikán, J. (1957): Řád třísnokáčidli – Thysanoptera. In: Kratochvíl, J. (ed.), Klíč zviereny ČSR. Vol. 2. ČSAV, Praha, 9–34.
- Pelikán, J. (1977): *Thysanoptera*. In: Dlabola, J. (ed.): Check list – Enumeratio insectorum bohemoslovakiae. Acta Faun. Entomol. Mus. Nat. Pragae, 15, 55–59.
- Pelikán, J. (1983): Zur Faunistik der Thysanopteren Mitteleuropas. Verh. SIEEC X. Budapest, 295–297.
- Pelikán, J. (1990): *Thysanoptera*, Faunistic records from Czechoslovakia. Acta Entomol. Bohemoslov 87, 232–234.
- Pelikán, J. (1992): *Cryptoplothrips famelicus* Priesner, 1926 a *Limothrips angulicornis* Jablonowski, 1894. Faunistic records from Czechoslovakia. Acta Entomol. Bohemoslov 89, 168.
- Pelikán, J., Fedor, P. J., Krumpál, M. and Cyprich, D. (2002): *Thrips (Thysanoptera)* in nests of birds and mammals in Slovakia. Ekológia (Bratislava) 21, 275–282.
- Sierka, W. (2003): *Thrips (Insecta, Thysanoptera)* of the NPR Šúr near Bratislava. Entomofauna Carpathica (in press).
- Uzel, B. (1895): Monographie der Ordnung Thysanoptera. Königgrätz.