

## The geographical distribution of the Romanian Thysanoptera species (Insecta: Thysanoptera)

Liliana VASILIU-OROMULU

### Abstract:

### Distribuția geografică a speciilor de tisanoptere (Insecta: Thysanoptera) din România

Autorul prezintă, răspândirea geografică a celor 215 specii de tisanoptere din fauna României.

**Keywords:** Thysanoptera, geographical distribution, Romania,

Romania, due to its variety of relief, to its geographic position (45°N lat) has one of the richest Thysanoptera fauna in Europe (215 species). It has been possible to determine the type of the zoogeographical element for each species, on the basis of arealogeographical knowledge of each of them.

The Romanian Thysanoptera fauna is composed by species that fit the faunistic elements suggested by G. DE LATTIN (1967) the great zoogeographer having established the basic principles that influenced the present species spreading as a consequence of the Quaternary glaciations.

Because of this climatic changes the animal and plant species retired in glacial refuges. During the post-glacial period the repopulation was made on the basis of some "faunistical circles", each of them having zoogeographical characteristic elements.

Among the West-Palaeartic elements, the following belong to the Mediterranean center: *Oxythrips ajugae*, *Thrips major*, *Haplothrips distinguendus*.

In the Romanian Thysanoptera fauna there are: 7 Cosmopolitan elements, 23 Holarctic 15 Palaeartic, 27 West-Palaeartic 1 West-Palaeartic and Mongolian, 80 Europeans, 3 Central Europeans 1 East-European, 3 South-East Europeans 1 Europeans and Egyptian, 24 Euro-Siberians, 3 West-Euro-Siberians 1 Pontomediterranean 1 Pontosubmediterranean 11 Submediterranean 1 Circumsubmediterranean 1 Turano-European 1 Turano-European-Submediterranean 1 Turano- Pontomediterranean 1 in France and Spain 1 in France and Ukraine 1 in Czechia and Ukraine 1 in Azerbaijan and 6 in Romania.

We shall present now the geographical spreading of the 215 Thysanoptera species in Romania:

### Ord. Thysanoptera S/Ord. Terebrantia Fam. Aeolothripidae

<i>Aeolothrips albicinctus</i> Haliday 1836	PAL
<i>Aeolothrips astutus</i> Priesner 1926	EUR
<i>Aeolothrips collaris</i> Priesner 1919	SBM
<i>Aeolothrips ericae</i> Bagnall 1920	WPAL
<i>Aeolothrips fasciatus</i> (Linnaeus 1758)	HOL
<i>Aeolothrips intermedius</i> Bagnall 1934	PAL
<i>Aeolothrips melaleucus</i> Haliday 1852	HOL
<i>Aeolothrips priesneri</i> Knechtel 1922	EUR
<i>Aeolothrips pulcher</i> Oettingen 1943	EUR
<i>Aeolothrips verbasci</i> Knechtel 1955	Romania
<i>Aeolothrips versicolor</i> Uzel 1895	EUS
<i>Aeolothrips vittatus</i> Haliday 1836	EUR
<i>Melanthrips fuscus</i> (Sulzer 1776)	WPAL
<i>Melanthrips knechteli</i> Priesner 1936	SBM

<i>Melanthrips pallidior</i> Priesner 1919	SBM
<i>Melanthrips paspalevi</i> Pelikán 1960	E-EUR
<i>Rhipidothrips gratosus</i> Uzel 1895	HOL

#### Fam. Heterothripidae

<i>Ropotamothrips resslii</i> Priesner 1961	SBM
---	-----

#### Fam. Thripidae

<i>Anaphothrips atroapterus</i> Priesner 1920	EUR
<i>Anaphothrips euphorbiae</i> Uzel 1895	SBM
<i>Anaphothrips obscurus</i> (O. F. Müller 1776)	COS
<i>Apterothrips secticornis</i> (Trybom 1896)	HOL, glacial relict
<i>Aptinothrips elegans</i> Priesner 1924	SBM
<i>Aptinothrips rufus</i> (Haliday 1836)	COS
<i>Aptinothrips stylifer</i> Trybom 1894	HOL
<i>Baliothrips dispar</i> (Haliday 1836)	EUS
<i>Belothrips acuminatus</i> (Haliday 1836)	EUR
<i>Bolacothrips jordani</i> Uzel 1895	EUR
<i>Ceratothripoides dianthi</i> (Priesner 1921)	WPAL
<i>Chirothrips aculeatus</i> Bagnall 1927	WPAL
<i>Chirothrips manicatus</i> (Haliday 1836)	HOL
<i>Chirothrips ruptipennis</i> Priesner 1938	EUR
<i>Ctenothrips distinctus</i> (Uzel 1895)	EUR
<i>Dendrothrips degeeri</i> Uzel 1895	EUR
<i>Dendrothrips ornatus</i> (Jablonowski 1894)	WPAL
<i>Dendrothrips saltatrix</i> Uzel 1895	EUS
<i>Dictyothrips betae</i> Uzel 1895	EUR
<i>Drepanothrips reuteri</i> Uzel 1895	PAL
<i>Ereikethrips calcaratus</i> Knechtel 1960	Romania
<i>Eremiothrips manolachei</i> (Knechtel 1955)	Romania, France, Spain
<i>Euchaetothrips krolli</i> (Schille 1910)	EUR
<i>Firmothrips firmus</i> (Uzel 1895)	EUS
<i>Frankliniella intonsa</i> (Trybom 1895)	EUS
<i>Frankliniella occidentalis</i> (Pergande 1895)	HOL
<i>Frankliniella pallida</i> (Uzel 1895)	EUR
<i>Frankliniella schultzei</i> (Trybom 1910)	HOL
<i>Frankliniella tenuicornis</i> (Uzel 1895)	COS
<i>Heliothrips haemorrhoidalis</i> (Bouché 1833)	CIRCUMSUBTR
<i>Hemianaphothrips articulatus</i> (Priesner 1925)	EUR
<i>Hercinothrips femoralis</i> O. M. Reuter 1891	HOL
<i>Idolimothrips paradoxus</i> Priesner 1920	EUR
<i>Iridothrips iridis</i> (Watson 1924)	EUR
<i>Iridothrips mariae</i> Pelikán 1961	EUR
<i>Kakothrips dentatus</i> Knechtel 1939	SBM
<i>Kakothrips robustus</i> Uzel 1895	EUR
<i>Limothrips angulicornis</i> Jablonowski 1894	WPAL
<i>Limothrips cerealium</i> Haliday 1836	COS
<i>Limothrips consimilis</i> Priesner 1926	EUS
<i>Limothrips denticornis</i> (Haliday 1836)	EUS

<i>Limothrips schmutzi</i> Priesner 1919	EUR
<i>Mycterothrips albidicornis</i> (Knechtel 1923)	EUR
<i>Mycterothrips annulicornis</i> (Uzel, 1895)	EUR
<i>Mycterothrips salicis</i> (O. M. Reuter 1878)	EUS
<i>Neohydatothrips abnormis</i> (Karny 1910)	EUR
<i>Neohydatothrips gracilicornis</i> (Williams, 1916)	PAL
<i>Odontothrips aemulans</i> Priesner 1924	EUR
<i>Odontothrips biuncus</i> John 1921	HOL
<i>Odontothrips confusus</i> Priesner 1926	EUS
<i>Odontothrips intermedius</i> (Uzel 1895)	EUR
<i>Odontothrips loti</i> (Haliday 1852)	HOL
<i>Odontothrips meliloti</i> Priesner 1951	EUS
<i>Odontothrips meridionalis</i> Priesner 1919	EUR
<i>Odontothrips phaleratus</i> (Haliday 1836)	EUS
<i>Oxythrips ajugae</i> Uzel 1895	WPAL
<i>Oxythrips bicolor</i> (O. M. Reuter 1897)	TUR-EUR
<i>Oxythrips cannabensis</i> Knechtel 1923	HOL
<i>Oxythrips dentatus</i> Knechtel 1923	EUR
<i>Oxythrips eucinus</i> Knechtel 1932	Romania, Ukraine
<i>Oxythrips ulmifoliorum</i> (Haliday 1836)	EUR
<i>Parafrankliniella verbasci</i> Priesner 1920	EUR
<i>Parthenothrips dracaenae</i> (Heeger 1854)	HOL
<i>Pezothrips frontalis</i> (Uzel 1895)	EUR
<i>Pezothrips pilosus</i> (Uzel 1895)	EUR
<i>Platythrips tunicatus</i> (Haliday 1852)	EUR
<i>Prosopothrips vej dovskyi</i> Uzel 1895	EUR
<i>Rhaphidothrips longistylus</i> Uzel 1895	HOL
<i>Rubiothrips silvarum</i> (Priesner 1920)	EUS
<i>Rubiothrips sordidus</i> (Uzel 1895)	EUR
<i>Rubiothrips validus</i> (Karny 1910)	EUR
<i>Rubiothrips vitalbae</i> (Bagnall 1926)	EUR
<i>Rubiothrips vitis</i> (Priesner 1933)	EUR
<i>Scolothrips longicornis</i> Priesner 1926	EUR
<i>Sericothrips bicornis</i> (Karny 1910)	EUS
<i>Sericothrips staphylinus</i> Haliday 1836	EUR
<i>Sminyothrips biuncatus</i> Uzel 1895	EUR
<i>Sminyothrips biuncinatus</i> Uzel 1895	EUR
<i>Stenchaetothrips biformis</i> (Bagnall 1913)	HOL
<i>Stenothrips graminum</i> Uzel 1895	WPAL
<i>Taeniothrips inconsequens</i> (Uzel 1895)	PAL
<i>Taeniothrips picipes</i> (Zetterstedt 1828)	PAL
<i>Tenothrips discolor</i> (Karny 1907)	EUR
<i>Tenothrips frici</i> (Uzel 1895)	WPAL
<i>Tenothrips hispanicus</i> (Bagnall 1921)	EUR
<i>Tenothrips pallidivestis</i> (Priesner 1926)	PON-SBM
<i>Thrips alni</i> Uzel 1895	EUR
<i>Thrips angusticeps</i> Uzel 1895	WPAL
<i>Thrips atratus</i> Haliday 1836	PAL
<i>Thrips brevicornis</i> Priesner 1920	EUS
<i>Thrips calcaratus</i> Uzel 1895	EUR
<i>Thrips crassicornis</i> Bagnall 1923	EUR
<i>Thrips difficilis</i> Priesner 1920	EUR

<i>Thrips dilatatus</i> Uzel 1895	EUR
<i>Thrips discolor</i> Haliday 1836	EUR
<i>Thrips euphorbiae</i> Knechtel 1923	EUR
<i>Thrips flavus</i> Schrank 1776	COS
<i>Thrips fulvipes</i> Bagnall 1923	EUR
<i>Thrips fuscipennis</i> Haliday 1836	PAL
<i>Thrips incognitus</i> Priesner 1914	EUR
<i>Thrips juniperinus</i> Linnaeus 1758	EUR
<i>Thrips linariae</i> (Priesner 1928)	EUR
<i>Thrips linarius</i> Uzel 1895	EUR
<i>Thrips major</i> Uzel 1895	WPAL
<i>Thrips meridionalis</i> (Priesner 1926)	TURPONTOMED
<i>Thrips minutissimus</i> Linnaeus, 1758	EUR
<i>Thrips montanus</i> (Priesner 1920)	WPAL
<i>Thrips montivagus</i> Priesner 1923	EUR
<i>Thrips nigropilosus</i> Uzel 1895	WPAL
<i>Thrips origani</i> Priesner 1926	EUR
<i>Thrips pelikani</i> (Schliephake 1964)	WPAL
<i>Thrips physapus</i> Linnaeus 1761	EUS
<i>Thrips pillichii</i> Priesner 1924	WPAL
<i>Thrips pini</i> (Uzel 1895)	WPAL
<i>Thrips robustus</i> Priesner 1920	EUR
<i>Thrips sambuci</i> Heeger 1854	EUR
<i>Thrips simplex</i> (Morison 1930)	COS
<i>Thrips tabaci</i> Lindeman 1888	COS
<i>Thrips timidus</i> Priesner 1926	WPAL
<i>Thrips trehernei</i> Priesner 1927	HOL
<i>Thrips trybomi</i> (Karny 1908)	EUR
<i>Thrips validus</i> Uzel 1895	EUS
<i>Thrips viminalis</i> Uzel 1895	EUR
<i>Thrips vulgatissimus</i> Haliday 1836	HOL
<i>Tmetothrips subapterus</i> (Haliday 1836)	PAL

S/Ord. Tubulifera  
Fam. Phlaeothripidae

<i>Acanthothrips nodicornis</i> (O. M. Reuter 1880)	HOL
<i>Allothrips pillichellus</i> (Priesner 1925)	EUR
<i>Bagnalliella yuccae</i> Hinds 1902	HOL
<i>Bolothrips bicolor</i> (Heeger 1852)	EUR
<i>Bolothrips icarus</i> (Uzel 1895)	HOL
<i>Cephalothrips monilicornis</i> (O. M. Reuter 1880)	HOL
<i>Compsothrips uzeli</i> Hood 1951	EUR
<i>Cryptothrips nigripes</i> (O. M. Reuter 1880)	PAL
<i>Haplothrips acanthoscelis</i> Karny 1909	EUS
<i>Haplothrips aculeatus</i> (Fabricius 1803)	PAL
<i>Haplothrips alpester</i> Priesner 1921	EUR
<i>Haplothrips angusticornis</i> Priesner 1921	WPAL
<i>Haplothrips arenarius</i> Priesner 1920	EUS
<i>Haplothrips cerealis</i> Priesner 1939	PAL
<i>Haplothrips dianthinus</i> Priesner 1924	EUR
<i>Haplothrips distinguendus</i> (Uzel 1895)	WPAL

<i>Haplothrips flavicinctus</i> (Karny 1909)	SBM
<i>Haplothrips floricae</i> Knechtel 1960	Romania
<i>Haplothrips hukkineni</i> Priesner 1950	EUR and Egypt
<i>Haplothrips juncorum</i> Bagnall 1913	WPAL
<i>Haplothrips knechteli</i> Priesner 1923	EUR
<i>Haplothrips kurdjumovi</i> Karny 1913	PAL
<i>Haplothrips leucanthemi</i> (Schrank 1781)	EUS
<i>Haplothrips minutus</i> (Uzel 1815)	EUR
<i>Haplothrips niger</i> (Osborn 1883)	WEUS
<i>Haplothrips nigricans</i> Bagnall 1934	EUR
<i>Haplothrips pannonicus</i> Fábíán 1938	EUR
<i>Haplothrips phyllophilus</i> Priesner 1938	WEUS
<i>Haplothrips reuteri</i> Karny 1907	PON-MED
<i>Haplothrips scythicus</i> Knechtel 1961	Romania
<i>Haplothrips setiger</i> Priesner 1921	WPAL
<i>Haplothrips statices</i> (Haliday 1836)	EUR
<i>Haplothrips subtilissimus</i> (Haliday 1852)	EUS
<i>Haplothrips titschacki</i> Pelikán 1965	Romania
<i>Haplothrips tritici</i> Kurdjumov 1912	WPAL
<i>Holothrips schaubergeri</i> (Priesner 1920)	EUR
<i>Hoplandrothrips bidens</i> (Bagnall 1910)	WPAL
<i>Hoplandrothrips hungaricus</i> (Priesner 1961)	SBM
<i>Hoplandrothrips priesneri</i> (John 1927)	EUR
<i>Hoplothrips absimilis</i> Knechtel 1954	Romania
<i>Hoplothrips caespitis</i> (Uzel 1895)	EUS
<i>Hoplothrips corticis</i> (De Geer 1773)	WPAL
<i>Hoplothrips grisescens</i> (Priesner 1924)	EUR
<i>Hoplothrips lichenis</i> Knechtel 1954	SBM
<i>Hoplothrips muscicola</i> Knechtel 1954	Romania
<i>Hoplothrips pedicularius</i> (Haliday 1836)	WPAL
<i>Hoplothrips quercinus</i> Knechtel 1935	EUR
<i>Hoplothrips ulmi</i> (Fabricius 1781)	EUS
<i>Liothrips austriacus</i> (Karny 1910)	EUR
<i>Liothrips pragensis</i> Uzel 1895	EUR
<i>Liothrips setinodis</i> O. M. Reuter 1880	WPAL
<i>Lispthrips crassipes</i> (Jablonowski 1894)	EUR
<i>Megalothrips bonanni</i> Uzel 1895	EUR
<i>Megalothrips delmasi</i> Bournier 1956	France, Romania
<i>Megathrips lativentris</i> (Heeger 1852)	EUS
<i>Neoheegeria biroi</i> Priesner 1928	EUR
<i>Neoheegeria dalmatica</i> Schmutz 1909	PAL
<i>Neoheegeria hammani</i> Priesner 1961	PAL
<i>Neoheegeria verbasci</i> (Osborn 1896)	HOL
<i>Notothrips albovittatus</i> (Schille 1910)	EUS
<i>Pezidothrips robiniae</i> (Priesner 1924)	EUR
<i>Phlaeothrips annulipes</i> O. M. Reuter 1880	EUR
<i>Phlaeothrips bacauensis</i> Knechtel 1948	România, Azerbaidjan
<i>Phlaeothrips bispinosus</i> Priesner 1919	WPAL + Mongolia
<i>Phlaeothrips coriaceus</i> Haliday 1836	HOL
<i>Phlaeothrips parvus</i> Uzel 1895	EUR
<i>Phlaeothrips pillichianus</i> Priesner 1924	SBM
<i>Poecilothrips albopictus</i> Uzel 1895	WPAL

<i>Priesneriella clavicornis</i> (Knechtel 1935)	Romania, France
<i>Pseudocryptothrips meridionalis</i> Priesner 1919	EUR
<i>Torybothrips unicolor</i> (Schille 1910)	SBM
<i>Xylaplothrips fulginosus</i> (Schille, 1910)	WEUS

#### The abbreviation explanation

CIRCUMSUBTR=Circumsubtropical	PON=Pontic
COS=Cosmopolitan	SBM=Submediterranean
EUA=Eurasiatic	TUR=Turanic
EUR=European	TUR-EUR=Turano-European
EUS=Euro-Siberian	TURPONTOMED=Turanopontomediterranean
HOL=Holarctic	WEUS=West-Eurosiberian
MED=Mediterranean	WPAL=West-Palaeartic
PAL=Palaeartic	

#### Conclusions

In the Romanian Thysanoptera fauna there are 7 Cosmopolitan elements, 23 Holarctic 15 Palaeartic, 27 West-Palaeartic 1 West-Palaeartic and Mongolian, 80 Europeans, 3 Central Europeans 1 East-Europeans, 3 South-East Europeans 1 Europeans and Egyptians, 24 Euro-Siberians, 3 West-Euro-Siberians 1 Pontomediterranean 1 Pontosubmediterranean 11 Submediterranean 1 Circumsubmediterranean 1 Turano-European 1 Turano-European-Submediterranean 1 Turano- Pontomediterranean 1 in France and Spain 1 in France and Ukraine 1 in Czechia and Ukraine 1 in Azerbaijan and 6 in Romania.

#### REFERENCES

- KNECHTEL, W., K. 1951, Thysanoptera Fauna R.P.R. Insecta, Edit. Acad. Rom., 8 (1).
- MOUND, L., A., MORISON, D., G., PITKIN, R., B., PALMER, J., M. 1976, Thysanoptera Royal Ent. Soc. London, 1(2): 79.
- SCHLIEPHAKE, G., KLIMT, K. 1979, Thysanoptera, Fransenflügler, VEB Gustav Fisch. Ver., Jena.
- STRASSEN, R. 1996, Neue Daten zur Systematik und Verbreitung einiger west-paläarktischer Terebrantia-Arten (Thysanoptera), Ent. Nachr. Ber., 40: 111-118.
- VASILIU-OROMULU, L. 1994. Ecological monitoring in Thysanopterology in "Cour. Forsch. Senckenberg" 178: 101-106, Frankfurt am Main.
- VASILIU-OROMULU, L. 1998. Lista revizuită a speciilor de thysanoptere din România, St. Cerc. Biol. s. Zool. 2: 77-83.

Thanks: I would like to thank to Dr. R. Z STRASSEN (Senckenberg Museum) and Dr. L. A. MOUND (British Museum) for the useful discussions about general geographical distribution of Thysanoptera species.

Liliana VASILIU-OROMULU  
 Institutul de Biologie  
 Spl. Independenței 296  
 RO-79651 - București

Primit la redacție / Received: 1.03.1999  
 Acceptat / Accepted: 5.10.1999  
 Apărut / Printed: 30.11.1999