

CHECK LIST ON THYSANOPTERA IN CROATIA

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On the base of literature data and three years thrips fauna investigation by Raspudić (1996) in Croatia, in this paper the check-list is given. In Croatia 119 thrips species were recorded. Suborder Tubulifera is presented by 39% and Terebrantia by 61%. Raspudić (1996) discovered 6 new species for Croatia: *Aeolothrips melaleucus* (Haliday, 1852), *Oxythrips bicolor* (O.M. Reuter, 1879), *Stenothrips graminum* Uzel, 1895, *Thrips linarius* Uzel, 1895, *Liothrips vaneeckei* Priesner, 1920 and *Poecilotriphs albopictus* Uzel, 1895.

Thysanoptera, check list, newly established species, Croatia

RASPUDIĆ, E¹., IVEZIĆ, M¹. & JENSER, G². Popis Thysanoptera u Hrvatskoj,
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U radu je prikazan popis faune tripsa u Hrvatskoj koji je nastao na osnovu litera-
turnih podataka te trogodišnjih faunističkih istraživanja Raspudić (1996.). Na po-
dručju Hrvatske je nađeno 119 vrsta tripsa. Podred Tubulifera zastupljen je s 39% a
Terebrantia sa 61% vrsta. Raspudić (1996.) otkrila je 6 novih vrsta za Hrvatsku i to:
Aeolothrips melaleucus (Haliday, 1852), *Oxythrips bicolor* (O.M. Reuter, 1879),
Stenothrips graminum Uzel, 1895, *Thrips linarius* Uzel, 1895, *Liothrips vaneeckei*
Priesner, 1920 i *Poecilotriphs albopictus* Uzel, 1895.

Thysanoptera, popis vrsta, novootvrđene vrste, Hrvatska

Introduction

The order Thysanoptera is homogeneous group of insects with characteristic wings that have long fringe and very poor nervature. They are only few mm long. Up to date more than 5000 species from two suborders and 8 families are described. 93% of species belong to the families Thripidae and Phlaeothripiidae (MOUND 1997).

Thrips fauna in Croatia was investigated by several authors: KOVAČEVIĆ (1964), zur STRASSEN (1981, 1984); RASPUDIĆ (1996); HRAŠOVEC & LOVAS (1996); ANDJUS (1997); BANJEGLAV (2003).

In this paper the complete check list of thrips fauna for Croatia is given.

Material and methods

The thrips data by KOVAČEVIĆ (1964), zur STRASSEN (1981, 1984); HRAŠOVEC & LOVAS (1996); ANDJUS (1997); BANJEGLAV (2003) are taken from the literature. RASPUDIĆ (1996) published doctoral Dissertation about Thysanoptera in Croatia. Scientific research of thrips fauna (Thysanoptera), were carried out in Croatia from 1993-1996. Total of 662 samples on 235 different plant species were taken. Identification was carried out on the basis on 1058 permanent slides using the morphological identification keys of JENSER (1982), OKUMURA and PAPP (1991), MORITZ (1994).

Results

Check list

Order THYSANOPTERA

Suborder: TEREBRANTIA

Family: AEOLOTHRIPIDAE

1. *Aeolothrips collaris* Priesner 1919: zur Strassen 1984
2. *Aeolothrips ericae* Bagnall 1920: Priesner, 1919; zur Strassen 1984; Raspudić, 1996
3. *Aeolothrips fasciatus* (Linnaeus, 1758): Karny, 1907; Morison & Tanasijević, 1966; zur Strassen 1984
4. *Aeolothrips gloriosus* Bagnall 1914: zur Strassen 1984
5. *Aeolothrips intermedius* Bagnall, 1934: Kovačević, 1964; zur Strassen 1984; Raspudić, 1996; Andjus 1997
6. *Aeolothrips melaleucus* (Haliday, 1852): Raspudić, 1996
7. *Aeolothrips propinquus* Bagnall, 1924: zur Strassen 1984
8. *Aeolothrips versicolor* Uzel, 1895: Priesner, 1919
9. *Melanotriops pallidior* Priesner, 1919: Kovačević, 1964; Morison & Tanasijević, 1966; zur Strassen 1984; Raspudić, 1996

Family: THRIPIDAE

10. *Anaphothrips obscurus* (Müller, 1776): Kovačević, 1964; zur Strassen 1984; Raspudić 1996; Andjus 1997
11. *Aptinothrips elegans* Priesner, 1924: zur Strassen 1984
12. *Aptinothrips mediterraneus* Priesner, 1919: zur Strassen 1984
13. *Aptinothrips rufus* Haliday, 1936: Priesner, 1919; Kovačević, 1964; zur Strassen 1984; Raspudić, 1996; Andjus 1997
14. *Aptinothrips stylifer* Trybom, 1894: Kovačević, 1964; zur Strassen 1984; Raspudić, 1996
15. *Baliothrips dispar* (Haliday, 1836): zur Strassen 1984
16. *Bregmatothrips dimorphus* (Priesner, 1919): zur Strassen 1984
17. *Ceratothrips croceicollis* (Karny, 1914): zur Strassen 1984
18. *Ceratothrips ericae* (Haliday, 1836): zur Strassen 1984; Raspudić, 1996
19. *Chirothrips aculeatus* Bagnall, 1927: Raspudić, 1996; Andjus, 1997
20. *Chirothrips hamatus* Trybom, 1895: zur Strassen 1984
21. *Chirothrips manicatus* Haliday, 1836: Priesner, 1919; Kovačević, 1964; zur Strassen 1984; Raspudić, 1996; Andjus, 1997
22. *Chirothrips molestus* Priesner, 1919: Kovačević, 1964
23. *Dendrothrips degeeri* Uzel, 1895: zur Strassen 1984
24. *Dendrothrips reuteri* Uzel, 1895: zur Strassen, 1981; zur Strassen 1984; Ciglar & Žužić, 1990; Raspudić, 1996
25. *Frankliniella intonsa* (Trybom, 1895): Kovačević, 1964; Morison & Tanasijević, 1966; zur Strassen 1984; Raspudić, 1996; Andjus, 1997
26. *Frankliniella occidentalis* (Pergande, 1895): Šimala, 1991; Raspudić, 1996
27. *Frankliniella pallida* (Uzel, 1895): zur Strassen 1984; Raspudić, 1996
28. *Frankliniella tenuicornis* (Uzel, 1895): Kovačević, 1964; Morison & Tanasijević, 1966; zur Strassen 1984; Raspudić, 1996
29. *Idolimothrips paradoxus*, Priesner, 1920: Kovačević, 1964
30. *Kakothrips robustus* (Uzel, 1895): Kovačević, 1964; Raspudić, 1996
31. *Limothrips cerealium* (Haliday, 1836): zur Strassen 1984; Raspudić, 1996
32. *Limothrips consimilis* Priesner, 1926: zur Strassen 1984
33. *Limothrips denticornis* (Haliday, 1836): Kovačević, 1964; zur Strassen 1984; Raspudić, 1996
34. *Neohydatothrips abnormis* (Karny, 1910): zur Strassen 1984
35. *Neohydatothrips gracilicornis* (Williams, 1916): zur Strassen 1984
36. *Odontothrips confusus* Priesner, 1926: Kovačević, 1964; zur Strassen 1984; Raspudić, 1996

37. *Odontothrips loti* (Haliday, 1852): Kovačević, 1964; Morison & Tanasijević, 1966; zur Strassen 1984; Raspudić, 1996
38. *Odontothrips meridionalis* Priesner, 1919: zur Strassen 1984
39. *Odontothrips paraconfusus* Pelikan, 1958: Andjus, 1997
40. *Odontothrips phalratus* Haliday, 1836: Kovačević, 1964; zur Strassen 1984
41. *Oxythrips bicolor* (O.M. Reuter, 1879): Raspudić, 1996
42. *Physothrips salicis* (O.M. Reuter, 1879): zur Strassen 1984
43. *Prosopothrips vejdovskyi* Uzel, 1895: zur Strassen 1984
44. *Rhopalandrothrips annulicornis* (Uzel, 1895): Kovačević, 1964
45. *Sericothrips bicornis* (Karny, 1909): Kovačević, 1964; zur Strassen 1984;
Raspudić, 1996; Andjus, 1997
46. *Stenothrips graminum* Uzel, 1895: Raspudić, 1996
47. *Taeniothrips annulatus* (Karny, 1907): zur Strassen 1984
48. *Tenothrips discolor* (Karny, 1907): zur Strassen 1984
49. *Tenothrips frici* (Uzel, 1895): Morison & Tanasijević, 1966; zur Strassen 1984
50. *Tenothrips hispanicus* (Bagnall, 1921): zur Strassen 1984
51. *Tenothrips pallidivestis* (Preisner, 1926): Kovačević, 1964; zur Strassen 1984
52. *Taeniothrips inconsequens* (Uzel, 1895): zur Strassen 1984; Raspudić, 1996
53. *Taeniothrips montanus* Priesner, 1920: zur Strassen 1984
54. *Taeniothrips picipes* (Zetterstedt, 1828): Kovačević, 1964; Andjus, 1997
55. *Tenothrips pallidivestis* Priesner, 1927: Kovačević, 1964
56. *Theilopodothrips pilosus* (Uzel, 1895): Andjus, 1997
57. *Thrips albopilosus* Uzel, 1895: Andjus, 1997
58. *Thrips atratus* (Haliday, 1836): Kovačević, 1964; zur Strassen 1984; Raspudić, 1996
59. *Thrips brevicornis* Priesner, 1920: Andjus, 1997
60. *Thrips calcaratus* Uzel, 1895: Banjeglav, 2003
61. *Thrips flavus* Schrank, 1776: Kovačević, 1964; zur Strassen 1984; Raspudić, 1996
62. *Thrips fuscipennis* Haliday, 1836: Kovačević, 1964; zur Strassen 1984; Raspudić, 1996; Andjus, 1997
63. *Thrips juniperinus* Linnaeus, 1758: zur Strassen 1984
64. *Thrips linarius* Uzel, 1895: Raspudić, 1996
65. *Thrips major* Uzel, 1895: Kovačević, 1964; zur Strassen 1984; Raspudić, 1996; Andjus, 1997
66. *Thrips meridionalis* Priesner, 1926: zur Strassen 1984; Ciglar et al., 1984

67. *Thrips minutissimus* Linnaeus, 1758: Raspudić, 1996; Andjus, 1997
68. *Thrips nigropilosus* Uzel, 1895: Kovačević, 1964; zur Strassen 1984; Raspudić, 1996
69. *Thrips physapus* Linnaeus, 1758: Kovačević, 1964; zur Strassen 1984; Raspudić, 1996; Andjus, 1997
70. *Thrips tabaci* Lindeman, 1888: Karny, 1907; Kovačević, 1964; zur Strassen 1984; Raspudić, 1996; Andjus, 1997
71. *Thrips trehernei* Priesner, 1927: Kovačević, 1964
72. *Thrips validus* Uzel, 1895: Kovačević, 1964; zur Strassen 1984; Andjus, 1997
73. *Thrips vulgarissimus* (Haliday, 1836): zur Strassen 1984; Raspudić, 1996

Suborder: TUBULIFERA

Family: PHLAEOTHRIPIDAE

74. *Apterygothrips priesneri* (John, 1927): Kovačević, 1964; zur Strassen 1984
75. *Bacillothrips longiceps* (O.M.Reuter, 1901): zur Strassen 1984
76. *Bolothrips bicolor* (Heeger, 1852): Kovačević, 1964
77. *Bolothrips cingulatus* (Karny, 1916): zur Strassen 1984
78. *Bolothrips icarus* (Uzel, 1895): Kovačević, 1964; zur Strassen 1984; Raspudić, 1996
79. *Bolothrips insularis* (Bagnall, 1914): zur Strassen 1984
80. *Cephalothrips coxalis* Bagnall, 1914: zur Strassen 1984
81. *Cephalothrips monilicornis* (O.M.Reuter, 1880): zur Strassen 1984; Raspudić, 1996
82. *Cryptothrips nigripes* (O.M.Reuter, 1880): zur Strassen 1984; Raspudić, 1996
83. *Haplothrips acanthoscelis* (Karny, 1910): zur Strassen 1984
84. *Haplothrips aculeatus* (Fabricius, 1803): Karny, 1907; Kovačević, 1964;
Morison & Tanasijević, 1966; zur Strassen 1984; Raspudić, 1996; Andjus, 1997
85. *Haplothrips alpester* Priesner, 1914: Kovačević, 1964
86. *Haplothrips angusticornis* Priesner, 1921: Kovačević, 1964
87. *Haplothrips crassicornis* (John, 1924): zur Strassen 1984
88. *Haplothrips distinguendus* Uzel, 1895: Kovačević, 1964; zur Strassen 1984
89. *Haplothrips hispanicus* Priesner, 1924: zur Strassen 1984
90. *Haplothrips hukkineni* Priesner, 1950: zur Strassen 1984
91. *Haplothrips juncorum* Bagnall, 1913: zur Strassen 1984
92. *Haplothrips kurdjumovi* Karny, 1913: Kovačević, 1964; zur Strassen 1984;
Andjus, 1997

93. *Haplothrips leucanthemi* (Schrank, 1781): zur Strassen 1984; Raspudić, 1996
94. *Haplothrips marrubicola* Bagnall, 1933: zur Strassen 1984
95. *Haplothrips minutus* (Uzel, 1815): zur Strassen 1984; Raspudić, 1996
96. *Haplothrips niger* (Osborn, 1833): Kovačević, 1964; Morison & Tanasijević, 1966; zur Strassen 1984; Raspudić, 1996
97. *Haplothrips phyllophilus* Priesner, 1916: zur Strassen 1984
98. *Haplothrips reuteri* (Karny, 1907): Karny, 1907; zur Strassen 1984
99. *Haplothrips setiger* Priesner, 1924: Karny, 1907; Kovačević, 1964; zur Strassen 1984; Raspudić, 1996; Andjus, 1997
100. *Haplothrips setigeriformis* Fábián, 1938: zur Strassen 1984
101. *Haplothrips statices* (Haliday, 1836): zur Strassen 1984
102. *Haplothrips subtilissimus* (Haliday, 1836): zur Strassen 1984
103. *Haplothrips tritici* Kurdjumov, 1912: Kovačević, 1964; Morison & Tanasijević, 1966; zur Strassen 1984; Raspudić, 1996
104. *Hoplandrothrips bidens* (Bagnall, 1910): Andjus, 1997
105. *Hoplandrothrips priesner* (John, 1927): Kovačević, 1964
106. *Hoplothrips corticis* (De Geer, 1778): zur Strassen 1984
107. *Hoplothrips fieldsi* J.C. Crawford, 1939: zur Strassen 1984
108. *Liothrips oleae* (Costa, 1883): zur Strassen 1984
109. *Liothrips pragensis* Uzel, 1895: zur Strassen 1984
110. *Liothrips setinodis* (O.M.Reuter, 1880): zur Strassen 1984
111. *Liothrips vaneeckei* Priesner, 1920: Raspudić, 1996
112. *Lispothrips crassipes* Jablonowski, 1894: Hrašovec & Lovas, 1996
113. *Megathrips lativentris* (Heeger, 1852): zur Strassen 1984
114. *Neoheegeria dalmatica* Schmutz, 1909: zur Strassen 1984
115. *Neoheegeria verbasci* (Osborn, 1896): zur Strassen 1984; Raspudić, 1996
116. *Phlaeothrips coriaceus* Haliday, 1836: zur Strassen 1984; Raspudić, 1996; Andjus, 1997
117. *Poecilotriphs albopictus* Uzel, 1895: Raspudić, 1996
118. *Pseudocryptothrips meridionalis* Priesner, 1919: zur Strassen 1984
119. *Xylaphothrips fuliginosus* (Schille, 1910): zur Strassen 1984; Raspudić, 1996

Discussion

In Croatia thrips fauna was investigated by KOVAČEVIĆ, 1964, MORISON & TANASIEVIĆ, 1966, zur STRASSEN 1981, 1984, RASPUDIĆ, 1996, HRAŠOVEC & LOVAS, 1996, ANDJUS, 1997, and BANJEGLAV 2003.

On the base of literature data and three years detailed investigation on Thysanoptera on 235 different plant species by RASPUDIĆ (1996) in Croatia, 119 species are reported. Suborder Tubulifera is presented by 39 % and Terebrantia by 61 %. Among 48 thrips species RASPUDIĆ (1996), discovered 6 new ones for Croatia: *Aeolothrips melaleucus* (Haliday, 1852), *Oxythrips bicolor* (O.M. Reuter, 1879), *Stenothrips graminum* Uzel, 1895, *Thrips linarius* Uzel, 1895, *Liothrips vaneeckei* Priesner, 1920 and *Poecilotriphs albopictus* Uzel, 1895.

References

- ANDJUS, Lj., 1997, Check-list of Thysanoptera in the former Yugoslavia. Acta entomol. serbica, 2 (1/2), 117-136
- BANJEGLAV, B., 2003, *Thrips calcaratus* Uzel – nedovoljno poznat štetnik lipe u Hrvatskoj. Diplomski rad, Šumarski fakultet, Zagreb
- CIGLAR, I., MEDIN, A., BUŠIĆ, Z., BREKALO, J. & LJUBIĆIĆ, M., 1984, *Taeniothrips meriodinalis* (Priesner.) novi štetnik bresaka u nas. Glasnik zašt. bilja, 12, 423-424.
- CIGLAR, I. & ŽUŽIĆ, I., 1990, Lozin trips - *Drepanothrips reuteri* Uzel sve češći štetnik u vinogradima. Glasnik zašt. bilja 12, 422 – 423
- HRAŠOVEC, B. & LOVAS, O., 1996, *Lispothrips crassipes* Jabl. - Poplar Pest in Northeastern Croatia. Proceedings, 20th Session of the International Poplar Commission, 1-4 Oct. 1996, Budapest, Vol. I, 236-241.
- JENSER, G., 1982, Tripszek – Thysanoptera, Magyaroszág Állatvilága Fauna Hungariae, Akadémiai Kiadó, Budapest.
- KARNY, H. 1907, Die Orthopterenfauna des Kustengebietes von Österreich-Ungarn. Berliner Entomol. Z, 52 (1), 17-52.
- KARNY, H. 1908, Die zoologische Reise des naturwissenschaftlichen Vereins nach Dalmatien im April 1906. Mitt. Naturwiss. Ver. Univ. Wien, 6 (8), 101-113.
- KOVAČEVIĆ, Ž., 1964, Kretanje, brojnost i zastupljenost nekih rodova insekata na lucerištima, djetelištima i livadama. Zaštita bilja, 82, XV, 667-685.
- MORISON, G., TANASIEVIĆ, N., 1966, The frequency of Thysanoptera on some crop plants of Yugoslavia. The Entomologist, London, 99, 28 - 43.
- MORITZ, G., 1994, Pictoral key to the economically important species of Thysanoptera in Central Europe. Bulletin OEPP/EPPO 24, 181-208.
- MOUND, A. L., 1997, Biological Diversity. In Lewis (Ed.): Thrips as crop pests, 198-215 pp, CAB International, UK : Cambridge University Press.
- OKUMURA, T. G., PAPP, S. C., 1991, Thrips (Thysanoptera). In Gorham, (Ed.): Insect and Mite Pests in Food , vol. 2., 403-414 pp, Washington, USA.
- ŠIMALA, M., 1991, *Frankliniella occidentalis* (Perg.) (Thysanoptera, Thripidae) novi štetnik povrća i ukrasnog bilja u Jugoslaviji. Agron. glasnik 4-5, 255-258.
- ZUR STRASSEN, R., 1981, Erste daten zur Thysanopteren-fauna des nordwestlichen Istrien (Jugoslawien). Acta entomol. Jugoslavica, 17 (1-2), 143-151.
- ZUR STRASSEN, R., 1984, Zur Thysanopteren-Faunistik des Alpen-Vorlandes von Slowenien, Nebst Einer Check-List der Fransenflügler-Arten von Jugoslawien. Acta entomol. Jugoslavica 20, (1-2), 31-51.