

# Nomina Collembola Latviae

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**Abstract:** Studies on Collembola in Latvia started sixty years ago. The checklist of the Collembola fauna of Latvia now contains 197 species. This list is based on literature sources and private collections.

**Key words:** Collembola, checklist, Latvia.

## Introduction

In Latvia studies of the Collembola started about sixty years ago, and the first data on Latvian Collembola were published in 1946 by A.Grinbergs (1946). However, the first records of Collembola from Latvia are those of F.Pagast & H.Froese who mentioned species *Isotomurus palustris*, *Isotoma riparia* and *Podura aquatica* in their work “Beitrag zur Kenntnis der Quellenfauna Lettlands” in 1933 (cited from Grinbergs, 1946). In the early 1950s V.Eglitis has made the comprehensive investigation on the soil fauna of Latvia (Eglitis, 1951, 1954). Meanwhile research on Collembola of Latvia was continued by A.Grinbergs (1956, 1958a, 1958b, 1958c). In 1960 A.Grinbergs published the first extensive review of the Collembola of the Soviet Union in which 122 species were mentioned from Latvia (Grinbergs, 1960a). Since then the data on the Collembola fauna of Latvia are scattered over different publications (Berina et all., 1989, Fjellberg, Jucevica, 2000, Grinbergs, 1960b, 1961, 1971, 1974, 1991, Grinbergs, Melecis, 1983, Jucevica, 2001, Jucevica, Melecis, 2002, Karpa et all., 1990, Melecis, 1985, Melecis et all., 1994, Paulina, Salmane, 1999, Salmane et all., 1999).

The checklist is only provisional because it does not include all observations and needs to be worked on and regularly updated.

Nomenclature according to B.Zimdars, W.Dunger (1994), A.Fjellberg (1998), G.Bretfeld (1999), and M.Potapov (2001).

## Systematic checklist of the Collembola of Latvia

Class Collembola

Order Arthropleona

Family Brachystomellidae

1. *Brachystomella parvula* (Schäffer, 1896)

Family Hypogastruridae

2. *Ceratophysella armata* (Nicolet, 1841)

3. *Ceratophysella bengtsoni* (Ågren, 1904)

4. *Ceratophysella denticulata* (Bagnall, 1941)

5. *Choreutinula inermis* (Tullberg, 1871)

6. *Hypogastrura assimilis* Krausbauer, 1898

7. *Hypogastrura lapponica* (Axelson, 1902)

8. *Hypogastrura manubrialis* (Tullberg, 1869)

9. *Hypogastrura neglecta* Börner, 1901

10. *Hypogastrura purpurescens* (Lubbock, 1867)

11. *Hypogastrura sahlbergi* (Reuter, 1859)

12. *Hypogastrura socialis* (Uzel, 1891)

13. *Hypogastrura vernalis* (Carl, 1901)

14. *Hypogastrura viatica* (Tullberg, 1872)

15. *Schoettella ununguiculata* (Tullberg, 1871)

16. *Willemia anophthalma* Börner, 1901

17. *Willemia denisi* Mills, 1932

18. *Willemia intermedia* Mills, 1949

19. *Willemia scandinavica* Stach, 1949

20. *Xenylla acauda* Gisin, 1947

21. *Xenylla boernerii* Axelson, 1905

22. *Xenylla brevicauda* Tullberg, 1869

23. *Xenylla corticalis* Börner, 1901

24. *Xenylla humicola* (Fabricius, 1780)

25. *Xenylla maritima* Tullberg, 1869

26. *Xenylla schillei* Börner, 1903

- Family Neanuridae  
Subfamily Frieseinae
27. *Friesea baltica* Szeptycki, 1964
  28. *Friesea claviseta* Axelson, 1900
  29. *Friesea mirabilis* (Tullberg, 1871)
  30. *Friesea truncata* Cassagnau, 1958
- Subfamily Neanurinae
31. *Neanura muscorum* (Templeton, 1835)
  32. *Paranura sexpunctata* Axelson, 1902
- Subfamily Pseudachorutinae
33. *Anurida anophthalmica* Stach, 1949
  34. *Anurida granaria* (Nicolet, 1847)
  35. *Anurida pseudogranaria* Stach, 1949
  36. *Anurida tullbergi* Schött, 1894
  37. *Micranurida granulata* (Agrell, 1943)
  38. *Micranurida pygmaea* (Börner, 1901)
  39. *Pseudachorutella asigillata* (Börner, 1901)
  40. *Pseudachorutes corticicolus* (Schäffer, 1896)
  41. *Pseudachorutes dubius* Krausbauer, 1898
  42. *Pseudachorutes parvulus* Börner, 1901
  43. *Pseudachorutes subcrassus* Tullberg, 1871
- Family Odontellidae
44. *Axenyllodes echinatus* Fjellberg, 1988
  45. *Odontella lamellifera* (Axelson, 1903)
  46. *Pseudostachia populosa* (Selga, 1963)
  47. *Xenyllodes armatus* Axelson, 1903
- Family Onychiuridae  
Subfamily Onychiurinae
48. *Hymenaphorura polonica* Pomorski, 1990
  49. *Micraphorura absoloni* (Börner, 1901)
  50. *Onychiurus ambulans* (Linnaeus, 1758)
  51. *Onychiurus fimetarius* (Linnaeus, 1767)
  52. *Onychiurus volinensis* Szeptycki, 1964
  53. *Protaphorura armata* (Tullberg, 1869)
  54. *Protaphorura octopunctata* (Tullberg, 1876)
  55. *Supraphorura furcifera* Stach, 1954
- Subfamily Tullbergiinae
56. *Doutnacia xerophila* Rusek, 1974
57. *Karlstejnia norvegica* Fjellberg, 1974
58. *Mesaphorura hylophila* Rusek, 1982
59. *Mesaphorura krausbaueri* Börner, 1901
60. *Mesaphorura macrochaeta* (Rusek, 1976)
61. *Mesaphorura sylvatica* (Rusek, 1971)
62. *Mesaphorura tenuisensillata* (Rusek, 1974)
63. *Mesaphorura yosii* Rusek, 1971
64. *Metaphorura affinis* (Börner, 1902)
65. *Neotullbergia crassicuspis* Gisin, 1944
66. *Paratullbergia callipygos* (Börner, 1902)
67. *Psammophorura gedanica* Thibaud et Weiner, 1994
68. *Scaphaphorura arenaria* (Petersen, 1965)
69. *Stenaphorura quadrispina* Börner, 1901
- Family Poduridae
70. *Podura aquatica* Linnaeus, 1758
- Family Isotomidae
71. *Anurophorus laricis* Nicolet, 1842
  72. *Anurophorus septentrionalis* Palissa, 1966
  73. *Archisotoma besselsi* (Packard, 1877)
  74. *Archisotoma martae* Fjellberg et Jucevica, 2000
  75. *Archisotoma theae* Fjellberg, 1979
  76. *Ballistura schoetti* (Dalla Torre, 1895)
  77. *Cryptopygus bipunctatus* (Axelson, 1903)
  78. *Cryptopygus thermophilus* (Axelson, 1900)
  79. *Desoria antennalis* Bagnall, 1940
  80. *Desoria blekeni* (Leinaas, 1980)
  81. *Desoria fennica* (Reuter, 1895)
  82. *Desoria hiemalis* (Schött, 1893)
  83. *Desoria nivea* (Schäffer, 1896)
  84. *Desoria olivacea* Tullberg, 1871
  85. *Desoria propinqua* Axelson, 1902
  86. *Desoria tigrina* Nicolet, 1842
  87. *Desoria violacea* (Tullberg, 1876)
  88. *Folsomia bisetosa* Gisin, 1953
  89. *Folsomia candida* (Willem, 1902)
  90. *Folsomia diplophthalma* (Axelson, 1902)
  91. *Folsomia dovrensis* Fjellberg, 1976
  92. *Folsomia fimetaria* (Linnaeus, 1758)
  93. *Folsomia fimetarioides* (Axelson, 1903)
  94. *Folsomia inoculata* Stach, 1947
  95. *Folsomia lawrencei* Rusek, 1984
  96. *Folsomia manolachei* Bagnall, 1939
  97. *Folsomia quadrioculata* (Tullberg, 1871)
  98. *Folsomia sexoculata* (Tullberg, 1871)
  99. *Halisotoma maritima* (Tullberg, 1871)

100. *Isotoma anglicana* Lubbock, 1862  
 101. *Isotoma intermedia* Schött, 1902  
 102. *Isotoma riparia* (Nicolet, 1842)  
 103. *Isotoma viridis* Bourlet, 1839  
 104. *Isotomiella minor* (Schäffer, 1896)  
 105. *Isotomodes armatus* Naglitsch, 1962  
 106. *Isotomodes productus* (Axelson, 1906)  
 107. *Isotomurus balteatus* (Reuter, 1876)  
 108. *Isotomurus fuciculus* (Schött, 1893)  
 109. *Isotomurus palustris* (Müller, 1776)  
 110. *Isotomurus prasinus* (Reuter, 1891)  
 111. *Isotomurus stuxbergi* (Tullberg, 1876)  
 112. *Jesenikia filiformis* Rusek, 1997  
 113. *Pachyotoma crassicauda* (Tullberg, 1871)  
 114. *Parisotoma notabilis* (Schäffer, 1896)  
 115. *Proisotoma buddenbrocki* Strenzke, 1954  
 116. *Proisotoma minima* (Absolon, 1901)  
 117. *Proisotoma minuta* (Tullberg, 1871)  
 118. *Proisotoma ripicola* Linnaniemi, 1912  
 119. *Pseudanurophorus binocularis* Kseneman, 1934  
 120. *Pseudisotoma sensibilis* Tullberg, 1876  
 121. *Tetraclantha pilosa* Schött, 1891  
 122. *Vertagopus cinereus* (Nicolet, 1841)  
 123. *Vertagopus westerlundi* (Reuter, 1897)

#### Family Cyphoderidae

124. *Cyphoderus albinus* Nicolet, 1841

#### Family Entomobryidae

##### Subfamily Entomobryinae

125. *Entomobrya corticalis* (Nicolet, 1841)  
 126. *Entomobrya lanuginosa* (Nicolet, 1841)  
 127. *Entomobrya marginata* (Tullberg, 1871)  
 128. *Entomobrya multifasciata* (Tullberg, 1871)  
 129. *Entomobrya muscorum* (Nicolet, 1841)  
 130. *Entomobrya nicoleti* (Lubbock, 1867)  
 131. *Entomobrya nivalis* (Linnaeus, 1758)  
 132. *Entomobrya superba* Reuter, 1876  
 133. *Entomobryoides myrmecophilus* (Reuter, 1886)  
 134. *Lepidocyrtus curvicollis* Bourlet, 1839  
 135. *Lepidocyrtus cyaneus* Tullberg, 1871  
 136. *Lepidocyrtus lanuginosus* (Gmelin, 1788)  
 137. *Lepidocyrtus lignorum* (Fabricius, 1781)  
 138. *Lepidocyrtus paradoxus* Uzel, 1890  
 139. *Lepidocyrtus ruber* Schött, 1902  
 140. *Lepidocyrtus violaceus* (Fourcroy, 1785)  
 141. *Pseudosinella alba* (Packard, 1873)

142. *Pseudosinella immaculata* (Lie-Petersen, 1896)  
 143. *Pseudosinella octopunctata* Börner, 1901  
 144. *Sinella coeca* (Schött, 1896)  
 145. *Willowsia buski* (Lubbock, 1869)  
 146. *Willowsia nigromaculata* (Lubbock, 1873)  
 147. *Willowsia platani* (Nicolet, 1841)

#### Subfamily Orchesellinae

148. *Heteromurus nitidus* (Templeton, 1835)  
 149. *Orchesella alticola* Uzel, 1890  
 150. *Orchesella bifasciata* Nicolet, 1841  
 151. *Orchesella cincta* (Linnaeus, 1758)  
 152. *Orchesella flavescens* (Bourlet, 1839)  
 153. *Orchesella quinquefasciata* Bourlet, 1842

#### Family Tomoceridae

154. *Pogonognathellus flavescens* (Tullberg, 1871)  
 155. *Pogonognathellus longicornis* (Müller, 1776)  
 156. *Tomocerus minor* (Lubbock, 1862)  
 157. *Tomocerus vulgaris* (Tullberg, 1871)

#### Order Neelipleona

##### Family Neelidae

158. *Megalothorax minimus* (Willem, 1900)  
 159. *Neelides minutus* (Folsom, 1901)  
 160. *Neelus murinus* Folsom, 1896

#### Order Symphypleona

##### Family Arrhopalitidae

161. *Arrhopalites caecus* (Tullberg, 1871)  
 162. *Arrhopalites cochlearifer* Gisin, 1947  
 163. *Arrhopalites principalis* Stach, 1945  
 164. *Arrhopalites pygmaeus* (Wankel, 1860)  
 165. *Arrhopalites sericus* Gisin, 1947

#### Family Bourletiellidae

166. *Bourletiella arvalis* (Fitch, 1863)  
 167. *Bourletiella lutea* (Lubbock, 1867)  
 168. *Bourletiella hortensis* (Fitch, 1863)  
 169. *Deuterostimnthus bicinctus* (Koch, 1840)  
 170. *Deuterostimnthus repandus* (Agren, 1903)  
 171. *Heterostimnthus bilineatus* (Bourlet, 1842)  
 172. *Heterostimnthus insignis* (Reuter, 1876)  
 173. *Heterostimnthus novemlineatus* (Tullberg, 1871)

## Family Dicyrtomidae

174. *Dicyrtoma fusca* (Lucas, 1842)  
 175. *Dicyrtomina minuta* (Fabricius, 1783)  
 176. *Ptenotrix atra* (Linnaeus, 1758)

## Family Katiannidae

177. *Gisinianus flammeolus* (Gisin, 1957)  
 178. *Sminthurinus albifrons* (Tullberg, 1871)  
 179. *Sminthurinus aureus* (Lubbock, 1862)  
 180. *Sminthurinus bimaculatus* (Axelson, 1902)  
 181. *Sminthurinus elegans* (Fitch, 1863)  
 182. *Sminthurinus igniceps* (Reuter, 1881)  
 183. *Sminthurinus niger* (Lubbock, 1876)

## Family Sminthuridae

184. *Allacma fusca* (Linnaeus, 1758)  
 185. *Lipothrix lubbocki* (Tullberg, 1872)  
 186. *Sminthurus marginatus* (Schött, 1893)  
 187. *Sminthurus viridis* Linnaeus, 1758  
 188. *Sminthurus nigromaculatus* Tullberg, 1872  
 189. *Spatulosminthurus flaviceps* (Tullberg, 1871)

## Family Sminthurididae

190. *Sminthurides aquaticus* (Bourlet, 1842)  
 191. *Sminthurides assimilis* Krausbauer, 1898  
 192. *Sminthurides malmgreni* (Tullberg, 1876)  
 193. *Sminthurides parvulus* (Krausbauer, 1898)  
 194. *Sminthurides penicillifer* (Schäffer, 1896)  
 195. *Sminthurides pseudassimilis* Stach, 1956  
 196. *Sminthurides schoetti* Axelson, 1903  
 197. *Sphaeridia pumilis* (Krausbauer, 1898)

**Kopsavilkums**

Kolembolu pētījumi Latvijā aizsākās pirms 60 gadiem. Rakstā sniegtis sistemātisks Latvijā līdz šim atrasto kolembolu saraksts. Kopumā Latvijas kolembolu fauna pašlaik pārstāvēta ar 197 sugām.

**References**

- Berina D., Lapina I., Melecis V., Spungis V. 1989. Investigation of the impact of

highway transport emissions on soil microarthropods by the method of principal components. – In: The impact of highway transport emissions on natural environment. Rīga, Zinātne: 48-73 (in Russian, English abstract).

Bretfeld G. 1999. Synopses on Palaearctic Collembola, Volume 2: Symphyleona. - Abh. Ber. Naturkundemus. Görlitz, 71, 1: 1-318.

Eglitis V. [Эглитис Б.] 1951. [Investigations on soil fauna of the Latvian SSR]. – Augsne un raža, 1: 88-134 (in Russian).

Eglitis V. [Эглитис Б.] 1954. [Soil fauna of the Latvian SSR]. – Rīga, Publishing House of the Academy of Sciences of Latvian SSR: 1-263 (in Russian).

Fjellberg A. 1998. The Collembola of Fennoscandia and Denmark, Part I. Poduromorpha. - Fauna Entomol. Scand., 35: 1-184.

Fjellberg A., Jucevica E. 2000. A new species of *Archisotoma* Linnaniemi, 1912 from the Baltic coast of Latvia (Collembola, Isotomidae). – Norw. J. Entomol., 47: 21-23.

Grinbergs A. 1946. [Fauna of the Collembola of Jelgava district]. Diploma thesis. Rīga (in Latvian).

Grinbergs A. 1956. [Materials on fauna of springtails (Collembola) of the Latvian SSR. I]. – Latv. PSR ZA Vēstis, 8 (109): 100-104 (in Latvian).

Grinbergs A. 1958a. [Materials on fauna of springtails (Collembola) of the Latvian SSR. II]. – Latv. PSR ZA Vēstis, 1 (126): 75-80 (in Latvian).

Grinbergs A. [Гринбергс А.П.] 1958b. [Investigations on springtails of the Latvian SSR]. – Proceedings of the Institute of Biology, 5: 187-218 (in Russian).

Grinbergs A. [Гринбергс А.П.] 1958c. [Springtails as pests of the cultivated plants]. – In: Proceedings of XI Meeting on plant protection research of the northwest of USSR. Rīga: 11-13 (in Russian).

Grinbergs A. 1960a. On the Fauna of Springtails (Collembola) of the Soviet Union. Part I.

- Catalogue of Collembola of the USSR. – Latv. Entomol., 2: 21-68 (in Russian, English abstract).
- Grinbergs A. 1960b. On mass occurrence and migration of Collembola. – Opusc. Ent., 25: 52-58.
- Grinbergs A. 1961. Seasonal dynamics of springtails *Neanura muscorum* (Templeton, 1835) Börner, 1906 in the pine forest Pinetum Vacciniosum. – Zoological Journal of Academy of Sciences of USSR, 40, 1: 137-138 (in Russian, English abstract).
- Grinbergs A. 1971. Beitrag zur Kenntnis über Collembolen von Litoralzonen der Seen Lettlands. – Rev. Ecol. Biol. Sol., 8, 2: 301-303.
- Grinbergs A. 1974. Die Collembolen der Seen Nordostlettlands. – Latv. Entomol., 16: 47-54 (in Russian, German abstract).
- Grinbergs A., Melecis V. [Гринбергс А., Мелецис В.] 1983. [Springtails (Insecta: Collembola)]. – In: The Moricsala reserve. Flora and fauna. Riga: 47-52 (in Russian).
- Grinbergs A. 1991. Collembola from Lakes in the Teiči Reserve. – Latv. Entomol., 34: 40-45 (in Russian, English abstract).
- Jucevica E. 2001. Collembola from the Baltic Sea coast. – Norw. J. Entomol., 48: 217-222.
- Jucevica E., Melecis V. 2002. Long-term dynamics of Collembola in a pine forest ecosystem. – Pedobiologia, 46: 365-372.
- Karpa A., Lapina I., Melecis V., Spungis V., Sternbergs M. 1990. A pollution of environment by sludge of pig-breeding complex. Rīga, Zinātne: 1-237 (in Russian, English abstract).
- Melecis V. 1985. Bioindicational significance of springtails (*Collembola*) concerning calciferous dust soil pollution in the *Betuletum oxalidosum*. – In: Pollution of natural environment by calciferous dust. Rīga, Zinātne: 149-209 (in Russian, English abstract).
- Melecis V., Spote I., Pauliņa E. 1994. Soil microarthropods as potential bioindicators for coastal monitoring. – In: Abstr. Int. Conf. “Coastal conservation and management in the Baltic region”, Klaipeda: 111-115.
- Pauliņa E., Salmane I. 1999. Collembola and gamasin mites of the restricted area Lake Engure, Latvia. – In: Proc. XXIV Nordic Cong. Entomol., Tartu: 145-150.
- Potapov M. 2001. Synopses on Palaearctic Collembola, Volume 3: Isotomidae. - Abh. Ber. Naturkundemus. Görlitz 73, 3: 1-603.
- Salmane I., Melecis V., Pauliņa E. 1999. Soil Collembola (Insecta) and Gamasina (Acari) of salty coastal meadows of Latvia. – In: Proc. XXIV Nordic Cong. of Entomol., Tartu: 157-162.
- Zimdars B., Dunger W. 1994. Synopses on Palaearctic Collembola, Volume I. Tullbergiinae Bagnall, 1935. - Abh. Ber. Naturkundemus. Görlitz, 68, 4: 1-71.

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