

An annotated checklist of the springtail fauna of Hungary (Hexapoda: Collembola)

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Abstract. A checklist of the species of springtails (Hexapoda: Collembola) hitherto recorded from Hungary is presented. Each entry is accompanied by complete references, and remarks where appropriate. The present list contains 414 species.

The Collembola fauna of several countries in the world was already overwied in the recent past (e.g. Babenko & Fjellberg 2006, Culik & Zeppelini Filho 2003, Skidmore 1995, Waltz & Hart 1996, Zhao *et al.* 1997). The importance of such catalogues was stressed by several authors (e.g. Csuzdi *et al.*, 2006: 2) and their topicality is indicated also by the fact that several cheklists referring even to European states were published most recently (e.g. Fiera (2007) on Romania, Juceviča (2003) on Latvia, Kaprus *et al.* (2004) on the Ukrain, Skarzynskiet *al.* (2002) on Poland). In spite of these facts, the last comprehensive article on the Hungarian springtail fauna was published about 80 years ago (Stach 1929), eventhough such critical reviews have a special importance in the case of this country because of the large changes of the political borders in the area during the last century (Csuzdi & Zicsi 2003, Mahunka & Papp 2005). Because of these changes, there are many records in literature which were reported as Hungarian, but in fact lie outside of the present borders of Hungary. This means that between the early „Hungarian” data we can find several, wich refer to localities at high elevations in the Slovakian, Ukrainian or Romanian Carpathians, in the Croatian Dinarids, while some others refer to the Mediterranean seeshore of the Adria. These special habitat-types are lacking from present-day Hungary, so there are a lot of species not present in this smaller area. Now we aim to give a clear base for further faunistical research presenting a

critical review of the literature data of Collembola referring to Hungary.

HISTORY

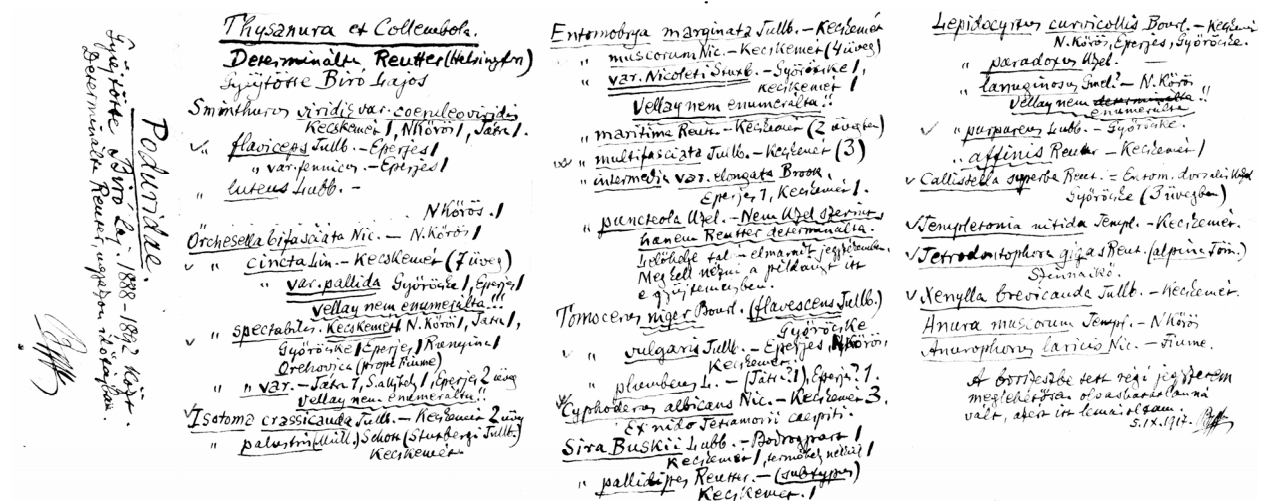
The first records of Collembola referring to Hungary are some notes on the mass occurrence of certain species (Frenzel 1673, Mollerus 1673, Steltzner 1881), which however, are without any taxonomical or faunistical value, as it has already been pointed out by Stach (1922, 1929). The next springtail reference to Hungary is to be found in the zoological book of János Földy (1801), which was the first time the group was mentioned in Hungarian language in the scientific literature, eventhough this work doesn't contain relevant faunistical records of the taxon. After a long spell of time, it were Ottó Herman (1865) and Géza Horváth (1888) who discussed the mass occurrences of *Podura aquatica* Linnaeus, 1785, and the first serious works on this group in Hungary were made by Ödön Tömösváry (1882, 1883, 1884a, 1884b). Tömösváry described two species and one varietas new to the science, from which *Sminthurus maculatus* Tömösváry, 1883 is still valid today. Tömösváry reported altogether 40 Collembola taxa from historical Hungary, from which however only 23 records refer to the present-day territory of the country. After Tömösváry's tragically early death, O.M. Reuter reported on some materials of the meticulous collector, Lajos Bíró (Reuter 1895a, 1895b). He described

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one species (*Seira pallidipes* Reuter, 1895) new to the science from Hungary (Reuter 1895a), then reported on 14 species without indicating the precise collecting localities, only writing „Ungarn” (Hungary). This is of no use for faunistical analysis as mentioned above, however, more precise information were given later by Imre Vellay in his checklist (Vellay 1900), which was the first comprehensive work on the Hungarian springtail fauna. It listed 39 species and 6 varieties from the present area of the country. Vellay wasn't a Collembola expert, his catalogue is based on Tömösváry's data and on the identified material deposited in the Hungarian Natural History Museum at that time (Vellay 1900). One further source was found in Lajos Bíró's heritage, which confirms and completes the localities published by Vellay. It is

a note written by Bíró, listing the species together with the collecting sites from which the collected materials were identified by Reuter (fig. 1). The note contains some further records which were missing at Vellay (1900) as well. According to Bíró's draft and Vellay (1900), 13 of the 14 species mentioned by Reuter (1895b) from „Ungarn” were in fact collected in the present area of Hungary. There are 10 further taxa which were indicated only generally as European in Reuter's work, eventhough Bíró's note and Vellay name more precise localities, lying within present-day Hungary. However, the greater part of Reuter's material was collected outside of present-day Hungary, thus, many of the data cited by Vellay (1900) refer indeed to Poland, the Ukraine, Romania, Slovakia, Slovenia or Croatia today



Figures 1. The two sides of the note written by Lajos Bíró on the materials collected by him and identified by Reuter.

After Vellay's checklist was published there was a break in Hungarian Collembola research, till the next period was started by the Pole Jan Stach. Stach enriched our knowledge on Collembola in the world to a great extent and his works include the fauna of Hungary as well. He wrote a paper on the Apterygota fauna of „Northwest Hungary” (Stach 1922), which, however, contains only records from north of the River Danube, referring today not to Hungary, but to contemporary Slovakia. He produced also some sporadic data of Hungarian springtails and described three species new to the science from Hungary (Stach 1926a, 1926b, 1928). His next

work on the Hungarian fauna was a checklist which contained records of 242 taxa, 141 of which refer to the present area of the country. Even later, during his huge life-work, Stach reported several data on the Hungarian Collembola fauna (Stach 1930-1963). Stach identifies also the springtails collected mainly in caves in Hungary by Endre Dudich and Antal Gebhardt. These results were published in the papers of the collectors (Dudich 1929, 1930, 1932, 1947; Gebhardt 1933, 1934) later.

Contemporary with Stach, Hungarian researchers work on the group as well. József Szent-Ivány

published some papers on Collembola faunistics (Szent-Ivány 1938, 1940a, 1940b, 1941) discussing the fauna of the Kőszeg Mts. in detail. He reports on 42 species from that region of the country (Szent-Ivány 1940a). In the early 40-ies, a biospeleological communication on the Tapolca cave (Geyer & Mann 1940) and an anatomical paper on the guts of Collembola were published (Tóth 1942), in which Szent-Ivány identified at least part of the specimens.

The next period of Hungarian Collembola research is linked to the name of Imre Loksa. Loksa investigated the fauna of several areas of the country, such as the Bükk Mts. (Loksa 1956a, 1977), the Buda Mts., the environs of Barcs, the Hortobágy, the Kiskunság, the nature reserves of Bátorliget and the Bakony Mts. (Loksa 1956b, 1978a, 1983, 1987, 1991, Loksa & Rubio 1966, respectively). We have to mention separately his huge ecological work on the fauna of the Pannonian karstic white-oak low woods (Cerraso-Quercetum, Cotino-Quercetum, Quercetum pubescenti) all around the country's mountains (Loksa 1966). Similar surveys are scarce in the world's literature. Another focus of Loksa's interest lied on subterranean species (Loksa 1959a, 1959b, 1960, 1961a, 1961b, 1962, 1967, 1969a), resulting in descriptions of 12 species new to science from Hungarian caves. Loksa's identifications gave the base of Dániel Bajomi's paper on the fauna of the Meteor cave (Bajomi 1969) too.

Beside Loksa some further researchers investigated the Hungarian Collembola fauna at this time. István Kovács published three short communications on Bátorliget and the Aggtelek Karst (Kovács 1953a, 1953b, 1954), then Katalin Csuták wrote on feeding biology of some Collembola species (Csuták 1977) and Erzsébet Hornung reported on the fauna of a sandy grassland in the Kiskunság (Hornung 1986). In the 1980-ies György Traser started his studies on springtails, dealing in his early papers with the Collembola fauna of the Bakony Mts. and with some ecological questions (Traser 1980, 1981, 1983, 1989). At this time not only Hungarian but also foreign experts were involved in the exploration of the springtails fauna. Thus, Jiří Paclt reported on

some records from different parts of Hungary (Paclt 1960), then Wolfgang Dunger described two species new to the science from the country (Dunger 1974). One year later Dunger proposed a work on the springtail fauna of the Börzsöny Mts. (Dunger 1975), which contains data of 144 species, many of them being new to the fauna of Hungary.

After Loksa's unexpected death, János Farkas worked on regions around Lake Balaton (Farkas 1995, 1996, 1997; Farkas & Szathmáry 1997; Farkas *et al.* 1998) and Traser's investigations were continued as well. He reported on the fauna of the Sopron Mountains, the Órség, the Szigetköz, the Aggtelek National Park, the Bükk Mts., the Gerecse Mts. (Traser 1994, 1995, 1997, 1999, 2002b, 2006, respectively), the Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006) and the Kiskunság (Sousa *et al.* 2006, Traser 2002c; Traser & Csóka 2000, 2001; Traser & Horváth-Szováti 2004, 2006). Together with co-authors, Traser described also seven species new to the science from Hungary (Traser 2000; Traser & Christian 1992; Traser & Thibaud 1999; Traser *et al.* 1993; Traser & Weiner 1999). Further species new to the science has been published from Hungary by Castaño-Meneses *et al.* (2000), Chen *et al.* (2002) and Christian & Thibaud (1988) during the last two decades. A further faunistical work was published by Kontschán *et al.* (2003) on the distribution of *Tetrodontophora bielanensis* (Waga, 1842) incorporating new data from Hungary as well.

In addition to the faunistical and taxonomical works discussed above, we have to mention also the great amount of ecological investigations on springtails carried out in Hungary. An increasing number of ecological papers have been published during the last decades, some of which contain faunistically relevant data as well. The research group of Gábor Bakonyi wrote several papers on the role and importance of Collembola in agricultural systems (e.g. Bakonyi 1989, 1998; Bakonyi & Kiss 1986, 1995; Seres *et al.* 2003, 2006). János Kimmel and István Kiss investigated the effect of insecticides and pesticides on springtails

(Kimmel & Traser 1999; Kiss & Bakonyi 1990, 1992; Kiss & Jager 1985, 1987). Miklós Dombos wrote on the effects of grazing on Collembola communities (Dombos 2001) and János Varga investigated the bryofauna of the Bükk Mts. (Varga 1991, 1992; Varga & Naár 2002; Varga *et al.* 2000, 2002a, 2002b; Varga & Oldal 1998; Varga & Vargha 1992).

MATERIAL AND METHODS

The present catalogue is based on critically reviewed literature records. Generic quotations, like „Hungary” (e.g. Schött 1893; Stach 1930, 1959) are ignored in this catalogue, as the changes of the political borders in the past make it impossible to evaluate their real relevance. Citations of already published data (e.g. Baumgartner-Gamauf 1959, Bretfeld 1999, Potapow 2001, Thibaud *et al.* 2004) or of type localities are not included. There are also some localities published by Stach, which were presented erroneously as Hungarian. „Besztercebánya” (Stach 1956) lies in Slovakia („Banská Bystrica” today). „Komárom” is a city divided by the River Danube, lying half on Hungarian and half on Slovakian territory. Stach (1929, 1956) cited his records from this city as Hungarian, however he wrote earlier (Stach 1922: 4) that the material was collected only on the left (northern) side of the river, which is actually Slovakian.

There are also some further publications which could be listed here (e.g. Lakatos *et al.* 2003; Loksa 1969b, Szemerei & Traser 1994), but as they are of rather popular style, they were ignored in the present checklist.

As it was emphasized by Hopkin (1997: 44): „national boundaries may cut across areas with similar climate or vegetation type. It is more relevant from a biological point of view to divide the world into biogeographical regions.” Although, according to Christiansen & Bellinger (1995) the whole area of Hungary belongs to the „European” province, in our opinion, patterns in distribution of several species can be recognised on a finer geographic scale as well, which can even be of biogeographical relevance. Accordingly, we arranged the reported occurrences into smaller

geographical units (as mountains, depressions, etc.) within Hungary (Plate X.).

Species are listed according to the system of Deharveng (2007), marking the suborders, the families, the subfamilies and the genera.

For each species is reported: a) the latin name, the complete name of the author and year of publication; b) the bibliographic quotations concerning the studied area listed according to the names of the species as originally quoted; c) taxonomical remarks, where possible; d) the general geographic distribution according to Babenko & Fjellberg (2006), Bretfeld (1999), Christian (1987), Fjellberg (1998), Gisin (1960), Jordana *et al.* (1997), Pomorski (1998), Potapow (2001), Zimdars & Dunger (1994); e) the list of the published occurrences in Hungary arranged according to geographical regions;

Records are updated to 01.05.2008.

LIST OF THE SPECIES

Suborder: **PODUROMORPHA**

Family: **Brachystomellidae**

***Brachystomella* Ågren, 1903**

***Brachystomella curvula* Gisin, 1948**

Brachystomella curvula Gisin: Loksa & Rubio 1966a: 142; Hornung 1986: 138; Loksa 1987: 79; Christian & Thibaud 1988: 232; Traser 2002c: 48; Traser & Horváth-Szováti 2004: 59; Traser & Horváth-Szováti 2006: 333.

General distribution: Central Europe, North America.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Kiskunság (Hornung 1986; Loksa 1987; Traser 2002c; Traser & Horváth-Szováti 2004, 2006), Mezőföld (Christian & Thibaud 1988).

Ecological note: xerothermophilic.

***Brachystomella parvula* (Schäffer, 1896)**

Brachystomella parvula (Schäffer): Stach 1928: 364, pl. 19.; Stach 1929: 281; Stach 1949b: 310, pl. 32;

Loksa 1966: 379; Loksa 1977: 210; Loksa 1978b: 95; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 72; *Schöttella* (sic!) *parvula* Schäffer: Loksa 1956a: 413.

General distribution: cosmopolitan.

Distribution in Hungary: Balatonfelvidék (Stach 1928, 1929, 1949b; Loksa 1966), Börzsöny Mts. (Loksa 1966), Buda Mts. (Stach 1928, 1929, 1949b; Loksa 1966), Bükk Mts. (Loksa 1956a, Loksa 1977), Cserhát (Loksa 1978b), Fertő-Hanság (Traser *et al.* 2006), Keszthely Mts. (Loksa 1966), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Pilis Mts. (Loksa 1966), Visegrád Mts. (Loksa 1966).

Family: **Hypogastruridae**

Bonetogastrura Thibaud, 1974

***Bonetogastrura cavicola* (Börner 1901)**

Hypogastrura cavicola (Börner): Gebhardt 1933: 39; Bajomi 1969: 242; *Hypogastrura* (*Ceratophysella*) *cavicola* (Börner): Loksa 1962: 75, figs 4-11; *Neogastrura cavicola* (Börner): Stach 1949b: 110, pl. 12.

General distribution: Europe, Afghanistan.

Distribution in Hungary: Aggtelek Karst (Bajomi 1969), Bükk Mts. (Loksa 1962), Mecsek Mts. (Gebhardt 1933; Stach 1949b; Loksa 1962).

Ecological note: occurs mostly in caves.

***Ceratophysella* Börner, 1932**

***Ceratophysella armata* (Nicolet, 1841)**

Achorutes armatus Nicolet: Tömösváry 1884a: 50; Tömösváry 1884b: 231; Vellay 1900: 21; *Ceratophysella armata* (Nicolet): Stach 1949b: 126, pl. 12; Loksa 1978a: 53; Traser 1995: 44; Traser 1999: 50; Traser & Horváth-Szováti 2006: 332; Traser & Salló 2004: 230; *Ceratophysella armata* (Uzel (sic!)): Traser 2002a: 261; *Hypogastrura armata* (Nicolet): Stach 1929: 279; Dudich 1932: 48; Gebhardt 1934: 138; Szent-Ivány 1940a: 427; Loksa 1956a: 391; Loksa 1966: 377; Loksa 1991: 270; Farkas & Szathmáry 1997: 39; *Hypogastrura* (*Ceratophysella*) *armata* (Nicolet): Paclt 1960: 156; Loksa & Rubio 1966a: 140; Dungen 1975: 15; Traser 1980: 20; Loksa 1983: 71; Loksa 1987: 78; *Ceratophysella crassispina* (Cassagnau): Traser 1999: 50.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999; Stach 1949b; Dudich 1932), Bakony

Mts. (Loksa 1966; Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Tömösváry 1884a; Tömösváry 1884b; Vellay 1900; Stach 1949b, 1929; Farkas & Szathmáry 1997), Börzsöny Mts. (Dungen 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1956a), Dráva Plain (Loksa 1978a), Hortobágy (Loksa 1983), Kiskunság (Traser & Horváth-Szováti 2006; Loksa 1987), Kőszeg Mts. (Traser & Salló 2004; Szent-Ivány 1940a), Mecsek Mts. (Stach 1949b; Paclt 1960; Loksa 1966), Mecsek Mts. (Gebhardt 1934), Mezőföld (Stach 1929, 1949b), Nyírség (Loksa 1991), Őrség (Traser 1995), Sopron Mts. (Traser 2002a), Villány Mts. (Loksa 1966).

Ecological note: frequent eurytopic species.

***Ceratophysella bengtssoni* (Ågren, 1904)**

Ceratophysella bengtssoni (Ågren): Stach 1949b: 142, pl. 15; Traser 1999: 50; *Hypogastrura* (*Ceratophysella*) *bengtssoni* (Ågren): Loksa 1962: 75, figs 12-16.

General distribution: Europe, North America.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Balatonfelvidék (Stach 1949b; Loksa 1962), Budapest (Stach 1949b; Loksa 1962), Bükk Mts. (Loksa 1962), Pilis Mts. (Stach 1949b; Loksa 1962).

Ecological note: guanophil.

***Ceratophysella bispinata* Loksa, 1977**

Hypogastrura (*Ceratophysella*) *bispinata* Loksa: Loksa 1977: 206; *Hypogastrura bispinata* Loksa: Loksa 1980: 110.

Remarks: Species inquirenda according to Thibaud *et al.* (2004). Maybe junior synonym of *Ceratophysella silvatica* Rusek, 1964.

General distribution: Endemic?

Distribution in Hungary: Bükk Mts. (Loksa 1977), Mátra Mts. (Loksa 1980).

***Ceratophysella* cf. *laricis* Martinova, 1977**

Ceratophysella cf. *laricis* Martinova, 1977: Traser 1999: 51.

General distribution: East-Palaeartic.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

***Ceratophysella denticulata* (Bagnall, 1941)**

Ceratophysella denticulata (Bagnall): Traser 1997: 61; Traser 1999: 50; Traser 2002a: 261; Traser & Horváth-Szováti 2006: 332; *Hypogastrura* (*Ceratophysella*) *denticulata* (Bagnall): Loksa & Rubio 1966a: 140; Dunger 1975: 15; Traser 1980: 22; Loksa 1987: 78; *Hypogastrura denticulata* (Bagnall): Loksa 1966: 377; Loksa 1977: 210; Loksa 1980: 110; Traser 1981: 133; Loksa 1991: 270; Varga & Vargha 1992: 315; Farkas 1995: 46; Farkas 1996: 287; Farkas 1997: 56; Farkas *et al.* 1998: 57; Dombos 2001: 2041.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Farkas 1995, 1997), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1966, 1977), Bükk Mts. (Varga & Vargha 1992), Kis-Balaton (Farkas 1996, 1997), Kis-kunság (Traser & Horváth-Szováti 2006; Loksa 1987), Mátra Mts. (Loksa 1980), Mezőföld (Dombos 2001), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981, 2002a), Szigetköz (Traser 1997, 2002a), Vas-Sopron Plain (Traser 1981).

Ecological note: detritophilous.

***Ceratophysella gibbosa* (Bagnall, 1940)**

Hypogastrura (*Ceratophysella*) *gibbosa* (Bagnall): Loksa & Rubio 1966a: 140, figs 1-10; *Hypogastrura* (*Ceratophysella*) *occidentalis* Gisin: Loksa & Rubio 1966a: 140.

General distribution: Holarctic.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

Ecological note: in mountains' forest litter.

***Ceratophysella granulata* Stach, 1949**

Hypogastrura (*Ceratophysella*) *granulata* (Stach): Loksa 1978b: 94; *Hypogastrura granulata* Stach: Loksa 1966: 377; Loksa 1991: 270; *Ceratophysella* cf. *granulata* Stach: Traser 1999: 50.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Cserhát (Loksa 1978b), Nyírség (Loksa 1991), Pilis Mts. (Loksa 1966).

Ecological note: in mountains' forest litter.

***Ceratophysella luteospina* (Stach, 1920)**

Hypogastrura (*Ceratophysella*) *luteospina* (Stach): Loksa & Rubio 1966a: 140; Dunger 1975: 15;

Hypogastrura luteospina Stach: Loksa 1966: 377; Loksa 1977: 210; Loksa 1978a: 53; Loksa 1980: 110; Farkas *et al.* 1998: 57.

General distribution: East and Central Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a; Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Dunger 1975; Loksa 1966), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1977), Dráva Plain (Loksa 1978a), Keszthely Mts. (Loksa 1966), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: in mountains' forest litter.

***Ceratophysella mosquensis* (Becker, 1905)**

Hypogastrura monstrosa Gisin: Loksa 1980: 107, figs 2a-c; Loksa 1991: 270.

General distribution: Central Europe, Siberia.

Distribution in Hungary: Mátra Mts. (Loksa 1980), Nyírség (Loksa 1991).

Ecological note: tyrophilous.

***Ceratophysella sigillata* (Uzel, 1890)**

Hypogastrura sigillata Uzel: Dudich 1929: 42; Stach 1929: 279; Dudich 1932: 48; *Ceratophysella sigillata* (Uzel): Traser 1999: 51.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Traser 1999), Balatonfelvidék (Stach 1929), Budapest (Dudich 1929; Stach 1929), Pilis Mts. (Dudich 1929; Stach 1929).

Ecological note: in mountains' forest litter.

***Ceratophysella silvatica* (Rusek, 1964)**

Hypogastrura (*Ceratophysella*) *silvatica* Rusek: Dunger 1975: 15.

General distribution: Europe, Carpathian Mts.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

Ecological note: in mountains' forest litter.

***Ceratophysella succinea* (Gisin, 1949)**

Ceratophysella succinea (Gisin): Traser 1999: 51; *Hypogastrura* cf. *succinea* Gisin: Traser 2000: 68;

Ceratophysella cf. *succinea* (Gisin): Traser 2002a: 261.

General distribution: Europe, North America.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Fertő-Hanság (Traser 2000, 2002a).

Ecological note: troglophilous.

***Ceratophysella toemoesvaryi* Loksa, 1964**

Hypogastrura (*Ceratophysella*) *tömösvaryi* (sic!) Loksa: Loksa 1964: 83, figs 1-8; *Hypogastrura tömösvaryi* (sic!) Loksa: Loksa 1966: 378.

Remark: Not included in the key of Thibaud *et al.* (2004: 40).

General distribution: Hungary.

Distribution in Hungary: Mecsek Mts. (Loksa 1964, 1966), Villány Mts (Loksa 1964, 1966).

Ecological note: in xerotherm forests.

***Choreutinula* Paclt, 1944**

***Choreutinula inermis* (Tullberg, 1871)**

Beckerella inermis Tullberg: Loksa 1956a: 413; *Hypogastrura inermis* Tullberg: Loksa 1966: 377; Traser 1999: 49; *Hypogastrura* (*Schoettella*) *inermis* (Tullberg): Dunger 1975: 15; *Hypogastrura* (*Schoettella*) *inermis* (Tullberg): Loksa 1978a: 53; *Hypogastrura* (*Choreutinula*) *inermis* Tullberg: Traser 1994: 102; *Ceratophysella inermis* (Tullberg): Traser 1999: 51; *Schoettella inermis* (Tullberg): Traser 2002a: 261; *Choreutinula inermis* (Tullberg): Traser & Horváth-Szováti 2006: 332.

General distribution: Palaeartic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1956a, 1966), Dráva Plain (Loksa 1978a), Gerecse Mts. (Loksa 1966), Kiskunság (Traser & Horváth-Szováti 2006), Sopron Mts. (Traser 1994, 2002a).

Ecological note: hemiedaphic, in forest litter.

***Hypogastrura* Bourlet, 1839**

***Hypogastrura aequipilosa* (Stach, 1949)**

Hypogastrura aequipilosa (Stach): Traser 1999: 50.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Ecological note: in mountains' forest litter.

***Hypogastrura assimilis* (Krausbauer, 1898)**

Hypogastrura manubrialis var. *assimilis* (Krausbauer): Stach 1929: 280; *Hypogastrura* (*Hypogastrura*) *assimilis* (Krausbauer): Dunger 1975: 14; *Hypogastrura assimilis* Krausbauer: Traser 1999: 50.

General distribution: Palaeartic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Pilis Mts. (Stach 1929).

Ecological note: detritophilous.

***Hypogastrura calceolaris* Latzel, 1918**

Hypogastrura calceolaris Latzel: Loksa 1991: 270.

Remark: Species inquirenda according to Gisin (1960) and Thibaud *et al.* (2004).

General distribution: West Palaeartic?

Distribution in Hungary: Nyírség (Loksa 1991).

***Hypogastrura manubrialis* (Tullberg, 1869)**

Hypogastrura manubrialis (Tullberg): Stach 1929: 280; Traser 1999: 50; *Neogastrura manubrialis* (Tullberg): Stach 1949b: 50, pl. 1.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Balatonfelvidék (Stach 1929, 1949b), Budapest (Stach 1929, 1949b), Mezőföld (Stach 1929, 1949b), Pilis Mts. (Stach 1929, 1949b).

Ecological note: "compost springtail".

***Hypogastrura purpurescens* (Lubbock, 1867)¹**

Hypogastrura purpurascens (sic!) (Lubbock): Stach 1929: 280; Dudich 1932: 48; Traser 1999: 50; *Neogastrura purpurescens* (Lubbock): Stach 1949b: 101, pl. 11; Loksa 1962: 63; Loksa 1991: 270.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Dudich 1932; Traser 1999), Bakony Mts. (Stach 1929, 1949b), Bükk Mts. (Loksa 1962), Nyírség (Loksa 1991).

Ecological note: hemiedaphic, troglophilous.

¹ *Hypogastrura pseudohispanica* mentioned by Loksa (1966 p. 59) from the Villány Mts. and the Mecsek Mts. As Loksa didn't provide any description or illustration, we have to consider it as **nomen nudum**.

***Hypogastrura ripperi* Gisin, 1952**

Hypogastrura ripperi Gisin: Traser 1999: 50.

General distribution: Europe, North America.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Ecological note: "compost springtail".

***Hypogastrura sahlbergi* (Reuter, 1895)**

Hypogastrura sahlbergi (Reuter): Traser 1999: 50.

General distribution: Europe, North America.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Ecological note: mostly hygrophilous.

***Hypogastrura socialis* (Uzel, 1890)**

Hypogastrura socialis (Uzel): Szent-Ivány 1940a: 427; Traser 1999: 50; Traser 2002a: 261; Traser *et al.* 2006: 72.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Fertő-Hanság (Traser *et al.* 2006), Kőszeg Mts. (Szent-Ivány 1940a), Sopron Mts. (Traser 2002a).

Ecological note: mostly gregarious in early spring.

***Hypogastrura tullbergi* (Schäffer, 1900)**

?*Hypogastrura* (*Hypogastrura*) *tullbergi* (Schäffer): Dunger 1975: 14.

Remarks: According to Fjellberg (1998: 26) it is „a true Arctic species” and „records of “tullbergi” from Continental Europe refer to other species”.

General distribution: Holarctic, circumpolar.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

***Hypogastrura vernalis* (Carl, 1901)**

Hypogastrura vernalis (Carl): Stach 1929: 280; Loksa 1960: 48; Loksa 1978a: 53; Loksa 1991: 270; Farkas *et al.* 1998: 57; Traser 2002a: 261; Traser 2002c: 47; Traser & Horváth-Szováti 2006: 332; Traser *et al.*

2006: 72; *Hypogastrura* (*Hypogastrura*) *vernalis* (Carl): Loksa 1983: 71; Loksa 1987: 78; *Neogastrura vernalis* (Carl): Stach 1949b: 66, pl. 3 figs 1-11.

General distribution: Palaearctic.

Distribution in Hungary: Balatonfelvidék (Loksa 1960), Budapest (Stach 1929, 1949b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Hortobágy (Loksa 1983), Kiskunság (Loksa 1987; Traser 2002c; Traser & Horváth-Szováti 2006), Mezőföld (Stach 1949b), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998).

Ecological note: mostly in meadows.

***Hypogastrura viatica* (Tullberg, 1872)**

Hypogastrura viatica (Tullberg): Dudich 1929: 42; Stach 1929: 279; Loksa 1956b: 211; *Neogastrura viatica* (Tullberg): Stach 1949b: 89, pls. 3, 9.

General distribution: cosmopolitan.

Distribution in Hungary: Buda Mts. (Dudich 1929; Stach 1929, 1949b; Loksa 1956b), Mezőföld (Stach 1949b).

Ecological note: mostly on coastal regions.

Mesogastrura Bonet, 1930

***Mesogastrura anthrohungarica* Loksa, 1959**

Mesogastrura anthrohungarica Loksa, 1959b: 78, figs 8-15.

General distribution: Hungary.

Distribution in Hungary: Cserhát (Loksa 1959b).

***Mesogastrura libyca* (Caroli, 1914)**

Mesachorutes libycus Caroli: Loksa 1966: 378.

General distribution: Europe, Africa, Ecuador.

Distribution in Hungary: Mecsek Mts. (Loksa 1966).

Ecological note: coprophilous, guanophilous.

***Mesogastrura tiliophila* (Loksa & Rubio, 1966)**

Mesachorutes tiliophilus Loksa & Rubio: Loksa & Rubio 1966a: 140, figs 11-16.

Remark: *Species dubia* according to Thibaud *et al.* (2004: 128).

General distribution: Hungary.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

***Microgastrura* Stach, 1922**

***Microgastrura duodecimoculata* Stach, 1922**

Microgastrura duodecimoculata Stach: Loksa 1966: 379; Dunger 1975: 16; Loksa 1978a: 55; Loksa 1978b: 95; Traser 1999: 51.

General distribution: Europe, Caucasus.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Pilis Mts. (Loksa 1966), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

***Schoettella* Schäffer, 1896**

***Schoettella ununguiculata* (Tullberg, 1869)**

Schöttella (sic!) *ununguiculata* (Tullberg): Stach 1929: 280; *Schoettella ununguiculata* (Tullberg): Stach 1949b: 181, pl. 19; Traser 2002a: 261; Traser 2002c: 47; *Hypogastrura unguiculata* (sic!) Tullberg: Loksa 1966: 378; *Hypogastrura ununguiculata* Tullberg: Loksa 1991: 270; *Hypogastrura* (*Schoettella*) *ununguiculata* (Tullberg): Dunger 1975: 15; Loksa 1978a: 53; Loksa 1978b: 94; Loksa 1983: 71; Loksa 1987: 78.

General distribution: Holarctic.

Distribution in Hungary: Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Dunger 1975), Buda Mts. (Stach 1929, 1949b; Loksa 1966), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Loksa 1987; Traser 2002c), Mezőföld (Stach 1929, 1949b), Nyírség (Loksa 1991), Sopron Mts. (Traser 2002a), Vértes Mts. (Loksa 1966).

Ecological note: hemiedaphic in forests and meadows.

***Willemia* Börner, 1901**

***Willemia anophthalma* Börner, 1901**

Willemia anophthalma Börner: Loksa 1962: 63; Loksa 1966: 378; Dunger 1975: 16; Loksa 1977: 210; Loksa

1978b: 94; Traser 1999: 51; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002c: 47; Traser & Horváth-Szováti 2006: 332.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1962, 1966, 1977), Cserhát (Loksa 1978b), Gerecse Mts. (Loksa 1966), Keszthely Mts. (Loksa 1966), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Pilis Mts. (Loksa 1966), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966).

Ecological note: euedaphic.

***Willemia denisi* Mills, 1932**

Willemia denisi Mills: Traser 2002c: 47; Traser & Horváth-Szováti 2006: 332.

General distribution: Nearctic and Palaearctic to the Far East.

Distribution in Hungary: Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006).

Ecological note: in soil and litter.

***Willemia intermedia* Mills, 1934**

Willemia intermedia Mills: Traser 1997: 59; Traser 2002a: 261; Traser 2002c: 47; Traser & Horváth-Szováti 2006: 332.

General distribution: Holarctic.

Distribution in Hungary: Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Szigetköz (Traser 1997, 2002a).

Ecological note: euedaphic, interstitial.

***Willemia scandinavica* Stach, 1949**

Willemia scandinavica Stach: Dunger 1975: 16; Traser 1999: 51; Traser 2002a: 261; Traser 2002c: 47; Traser & Horváth-Szováti 2006: 332.

General distribution: Europe, North America.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Kis-

kunság (Traser 2002c; Traser & Horváth-Szováti 2006), Moson Plain (Traser 2002a).

Ecological note: euedaphic, troglophilous.

***Willemia virae* Kaprus, 1997**

Willemia virae Kaprus: Traser 2006: 35; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72.

General distribution: East and Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Kiskunság (Traser & Horváth-Szováti 2006).

Ecological note: euedaphic, troglophilous.

Xenylla Tullberg, 1869

***Xenylla boernerii* Axelson, 1905**

Xenylla boernerii Axelson: Loksa & Rubio 1966a: 140; Dunger 1975: 15; Loksa 1978a: 55; Loksa 1983: 71; Loksa 1991: 270; Varga & Oldal 1998: 86; Traser 1999: 51; Traser 2002b: 159; Traser *et al.* 2006: 72.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a; Traser 2002b), Börzsöny Mts. (Dunger 1975; Traser 2002b), Bükk Mts. (Traser 2002b), Bükk Mts. (Varga & Oldal 1998), Dráva Plain (Loksa 1978a; Traser 2002b), Fertő-Hanság (Traser *et al.* 2006), Hortobágy (Loksa 1983; Traser 2002b), Nyírség (Loksa 1991; Traser 2002b).

Ecological note: corticophilous, in moss.

***Xenylla brevicauda* Tullberg, 1869**

Xenylla brevicauda Tullberg: Vellay 1900: 21; Stach 1929: 281; Loksa 1966: 378; Traser 1994: 100; Traser 1995: 44; Traser 1999: 51; Traser 2002a: 261; Traser *et al.* 2006: 72.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966), Fertő-Hanság (Traser *et al.* 2006), Gerecse Mts. (Loksa 1966), Keszthely Mts. (Loksa 1966), Kiskunság (Vellay 1900; Stach 1929), Mecsek Mts. (Loksa 1966), Őrség (Traser 1995), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 1994, 2002a), Vértes Mts. (Loksa

1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: in litter.

***Xenylla brevisimilis* Stach, 1949**

Xenylla brevisimilis Stach: Dunger 1975: 15; Loksa 1977: 210; Traser 1999: 51; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002c: 47.

General distribution: Europe, North Africa, Canarian Island.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1977), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c, 2002c).

Ecological note: in litter and moss.

***Xenylla corticalis* Börner, 1901**

Xenylla corticalis Börner: Loksa 1978a: 55, figs 1-4; Loksa 1983: 72; Traser 1995: 44; Traser 1997: 61; Traser 1999: 51; Traser 2002a: 261; Traser 2002c: 47; Traser & Horváth-Szováti 2006: 332.

General distribution: Europe

Distribution in Hungary: Aggtelek Karst (Traser 1999), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Őrség (Traser 1995), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997).

Ecological note: corticophilous.

***Xenylla grisea* Axelson, 1900**

Xenylla grisea Axelson: Loksa 1966: 378; Loksa & Rubio 1966a: 140.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Loksa 1966), Bakony Mts. (Loksa & Rubio 1966a), Bükk Mts. (Loksa 1966).

Ecological note: in litter and on bark.

***Xenylla maritima* Tullberg, 1869**

Xenylla maritima Tullberg: Stach 1929: 281; Stach 1949b: 227, pl. 23; Loksa 1966: 378; Dunger 1975: 15; Loksa 1977: 210; Loksa 1978a: 55; Loksa 1983: 72; Hornung 1986: 138; Loksa 1987: 79; Loksa 1991: 270; Varga 1991: 85; Varga 1992: 172; Varga & Vargha 1992: 315; Varga & Oldal 1998: 86; Traser 1999: 51; Traser 2002a: 261; Traser 2002c: 47; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72;

Xenilla (sic!) *maritima* Tullberg: Farkas *et al.* 1998: 57.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966, 1977; Varga 1991, 1992; Varga & Vargha 1992; Varga & Oldal 1998), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Hornung 1986; Loksa 1987; Traser 2002c; Traser & Horváth-Szováti 2006), Mecsek Mts. (Loksa 1966), Mezőföld (Stach 1929, 1949b), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Szigetköz (Traser 2002a), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: xerophilous.

***Xenylla tullbergi* Börner, 1903**

Xenylla biroi Stach: Stach 1926a: 81; Stach 1929: 281; Stach 1949b: 211; Loksa 1966: 378; *Xenylla tullbergi* Börner: Loksa & Rubio 1966a: 140; Loksa 1978a: 55; Traser 2002a: 261.

General distribution: Europe.

Distribution in Hungary: Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a), Börzsöny Mts. (Loksa 1966), Buda Mts. (Stach 1926a, 1929), Budapest (Stach 1949b), Dráva Plain (Loksa 1978a), Szigetköz (Traser 2002a).

Ecological note: colline, montane.

***Xenylla welchi* Folsom, 1916**

Xenylla welchi Folsom: Traser 1999: 51.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Ecological note: detritophilous, gregarious.

***Xenyllogastrura* Denis, 1932**

***Xenyllogastrura octoculata* (Steiner, 1955)**

Xenyllogastrura octoculata (Steiner): Traser 2002c: 47; Traser & Horváth-Szováti 2006: 333.

General distribution: Central Europe, Mediterranean.

Distribution in Hungary: Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006).

Ecological note: hemiedaphic, psammophilous.

Family: **Neanuridae**

Subfamily: **Frieseinae**

Friesea Dalla Torre, 1895

***Friesea afurcata* (Denis, 1926)**

Friesea afurcata (Denis): Loksa 1983: 72; Traser & Horváth-Szováti 2006: 333.

General distribution: Europe, Lebanon.

Distribution in Hungary: Hortobágy (Loksa 1983), Kiskunság (Traser & Horváth-Szováti 2006).

Ecological note: hygrophilous.

***Friesea albida* Stach, 1949**

Friesea decipiens Steiner: Dunger 1975: 16.

General distribution: Central Europe, Pyrenean Mts.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

***Friesea claviseta* Axelson, 1900**

Friesea claviseta Axelson: Stach 1929: 281; Dunger 1975: 16; Loksa 1978a: 55; Traser 2002a: 261; Traser 2006: 35; *Friesea* cf. *claviseta* Axelson: Traser 1997: 61.

General distribution: Holarctic.

Distribution in Hungary: Balatonfelvidék (Stach 1929), Börzsöny Mts. (Dunger 1975), Dráva Plain (Loksa 1978a), Gerecse Mts. (Traser 2006), Szigetköz (Traser 1997, 2002a).

Ecological note: corticophilous.

***Friesea denisi* Kseneman, 1936**

Friesea denisi Kseneman: Loksa 1956a: 391; Traser 1999: 51.

General distribution: Europe, Alpine-Carpathian.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bükk Mts. (Loksa 1956a).

Ecological note: in mountainous habitats.

***Friesea geminioculata* Loksa, 1964**

Friesea (Friesea) geminioculata Loksa: Loksa 1964: 85, figs 9-15; *Friesea geminioculata* Loksa: Loksa 1966: 379.

General distribution: Hungary.

Distribution in Hungary: Bükk Mts. (Loksa 1964, 1966).

***Friesea laszloi* Palacios-Vargas & Traser, 1996**

Friesea laszloi Palacios-Vargas & Traser: Traser 1999: 52.

General distribution: Hungary and the Caucasus Mts.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Ecological note: xerothermophilic.

***Friesea mirabilis* (Tullberg, 1871)**

Friesea mirabilis (Tullberg): Stach 1929: 281; Stach 1949b: 287, pl. 28; Loksa 1960: 49; Paclt 1960: 156; Loksa 1966: 378; Loksa & Rubio 1966a: 140; Dunger 1975: 16; Loksa 1978a: 55; Loksa 1978b: 94; Loksa 1980: 110; Traser 1980: 20, fig. 2b; Traser 1981: 135; Loksa 1983: 72; Loksa 1987: 79; Loksa 1991: 270; Farkas 1995: 46; Farkas 1996: 287; Farkas 1997: 58; Farkas & Szathmáry 1997: 39; Traser 1997: 61; Farkas *et al.* 1998: 57; Traser 2002a: 262; Traser & Salló 2004: 230.

General distribution: Holarctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995, 1997), Bakony Mts. (Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Stach 1929, 1949b; Loksa 1960; Paclt 1960; Farkas 1995, 1997; Farkas & Szathmáry 1997), Börzsöny Mts. (Dunger 1975), Buda Mts. (Loksa 1966), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Gerecse Mts. (Loksa 1966), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Loksa 1987), Kőszeg Mts. (Traser & Salló 2004), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts. (Loksa 1966).

Ecological note: probably predatory species.

***Friesea stachi* Kseneman, 1936**

Friesea stachi Kseneman: Varga 1992: 172; Varga & Oldal 1998: 86.

General distribution: Eastern Europe, Carpathian Mts.

Distribution in Hungary: Bükk Mts. (Varga 1992; Varga & Oldal 1998).

***Friesea truncata* Cassagnau, 1958**

Friesea truncata Cassagnau: Traser 1999: 52; Traser 2002a: 262; Traser 2002c: 48; Traser 2003: 155; Traser 2006: 35; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 72.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Szigetköz (Traser 2002a).

Subfamily: **Morulinae**

***Morulina* Börner, 1906**

***Morulina verrucosa* (Börner, 1903)**

Morulina verrucosa (Börner): Stach 1951: 17, pl. 1: fig. 1, pl. 2, pl.3: figs 1-4.

General distribution: Central Europe.

Distribution in Hungary: Sokoróalja (Stach 1951).

Subfamily: **Neanurinae**

***Albanura* Deharveng, 1982**

***Albanura dudichi* (Loksa, 1967)**

Neanura dudichi Loksa, 1967: 289, figs 1-3. cf *Albanura dudichi* (Loksa): Traser 1999: 52.

General distribution: Carpathian.

Distribution in Hungary: Aggtelek Karst (Loksa 1967; Traser 1999).

Ecological note: silvicolous, troglophilous.

***Bilobella Caroli*, 1912**

***Bilobella aurantiaca* (Caroli, 1910)**

Achorutes aurantiacus Caroli: Stach 1929: 283; Stach 1930: 58, fig. 14/4; *Bilobella aurantiaca* (Caroli): Stach 1951: 88, pl. 16: fig. 3; *Neanura (Lathriopyga) aurantiaca* Caroli: Loksa & Rubio 1966a: 142; *Neanura aurantiaca* Caroli: Loksa 1978a: 55; *Bilobella aurantiaca* (Caroli): Traser 1995: 44; Traser 2002a: 262; Traser & Salló 2004: 230.

General distribution: Central and Southern Europe.

Distribution in Hungary: Bakony Mts. (Stach 1929, 1930, 1951; Loksa & Rubio 1966a), Dráva Plain (Loksa 1978a), Kőszeg Mts. (Traser & Salló 2004), Őrség (Traser 1995), Sopron Mts. (Traser 2002a).

***Bilobella braunerae* Deharveng, 1981**

Bilobella braunerae Deharveng: Traser 2002a: 262.

General distribution: Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Sopron Mts. (Traser 2002a).

Ecological note: silvicolous.

***Bilobella excolorata* (Loksa & Rubio, 1966)**

Neanura excolorata Loksa & Rubio: Loksa & Rubio 1966a: 142, figs 17-20.

General distribution: Hungary.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

***Deutonura Cassagnau*, 1979**

***Deutonura albella* (Stach, 1920)**

Deutonura albella (Stach): Traser & Salló 2004: 230; Traser 2006: 35.

General distribution: Central and Southern Europe.

Distribution in Hungary: Gerecse Mts. (Traser 2006), Kőszeg Mts. (Traser & Salló 2004).

***Deutonura benzi* Traser, Thibaud & Najt, 1993**

Deutonura benzi Traser, Thibaud & Najt: Traser *et al.* 1993: 222, figs 3-5; Traser 1994: 100; Traser 1995: 44; Traser 2002a: 262; Traser & Salló 2004: 230.

General distribution: Central Europe.

Distribution in Hungary: Kőszeg Mts. (Traser & Salló 2004), Őrség (Traser 1995), Sopron Mts. (Traser *et al.* 1993; Traser 1994, 2002a).

Ecological note: silvicolous.

***Deutonura conjuncta* (Stach, 1926)**

Achorutes conjunctus Stach: Stach 1929: 283; *Lathriopyga conjuncta* (Stach): Stach 1951: 73, pl. 1: fig. 2, pl. 13; *Lathriopyga* (sic!) *conjuncta* (Stach): Dunger 1975: 18; *Deutonura conjuncta* (Stach): Traser 1995: 44; Traser 1997: 61; Traser 1999: 52; Traser 2002a: 262; Traser 2003: 155; Traser 2006: 35; Traser & Horváth-Szováti 2006: 333; *Neanura conjuncta* Stach: Loksa 1966: 379; Loksa 1978b: 95; Traser 1981: 133; Loksa 1983: 72; Farkas 1995: 46; Farkas 1997: 56; Farkas *et al.* 1998: 57; *Neanura (Lathriopyga) conjuncta* (Stach): Loksa & Rubio 1966a: 142; Traser 1980: 20.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999; Loksa 1966), around the Lake Balaton (Farkas 1995, 1997), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Farkas 1995, 1997), Börzsöny Mts. (Dunger 1975; Loksa 1966), Buda Mts. (Stach 1929, 1951; Loksa 1966), Cserhát (Stach 1929, 1951; Loksa 1978b), Fertő-Hanság (Traser 2002a, 2003), Gerecse Mts. (Traser 2006), Hortobágy (Loksa 1983), Kiskunság (Traser & Horváth-Szováti 2006), Mezőföld (Stach 1951), Őrség (Traser 1995), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a, 1981), Szigetköz (Traser 1997, 2002a), Vértes Mts. (Loksa 1966), Visegrád Mts. (Loksa 1966).

***Deutonura phlegraea* (Caroli, 1912)**

Achorutes phlegraeus Caroli: Stach 1929: 283; Stach 1930: 57, figs 17/2-3.; *Deutonura phlegraea* (Caroli): Traser 1995: 44; Traser 1999: 52; Traser 2002a: 262; Traser & Horváth-Szováti 2006: 333.

General distribution: Central and Southern Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Kiskunság (Traser & Horváth-Szováti 2006), Mátra Mts. (Stach 1929, 1930), Őrség (Traser 1995), Szigetköz (Traser 2002a).

***Deutonura stachi* (Gisin, 1952)**

Neanura stachi Gisin: Loksa 1966: 379; Varga & Vargha 1992: 315; *Neanura stachi* Templeton (sic!): Varga 1992: 172; Varga & Oldal 1998: 86; *Deutonura cf. stachi* (Gisin): Traser 1999: 52.

General distribution: Eastern Europe, Carpathian Mts.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bükk Mts. (Loksa 1966; Varga 1992; Varga & Vargha 1992; Varga & Oldal 1998).

Endonura Cassagnau, 1979

***Endonura tetrophthalma* (Stach, 1929)**

Achorutes tetrophthalmus Stach: Stach 1929: 282; *Biloba tetrophthalma* (Stach) f. *principalis*: Stach 1951: 52, pl. 8; *Neanura tetrophthalma* (Stach): Loksa 1966: 379; Loksa 1977: 210; Traser 1980: 19, figs 1a-b; Traser 1981: 133; Loksa 1991: 270; *Neanura tetrophthalma tetrophthalma* (Stach): Dunger 1975: 17.

General distribution: Europe: East Carpathian Mts.

Distribution in Hungary: Bakony Mts. (Traser 1980), Balatonfelvidék (Stach 1929, 1951), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1977), Keszthely Mts. (Loksa 1966), Nyírség (Loksa 1991), Sopron Mts. (Traser 1981).

Neanura MacGillivray, 1893

***Neanura alba* von Törne, 1956**

Neanura parva (Stach): Dunger 1975: 17 (partim); *Neanura alba* von Törne: Traser 1995: 44.

Remark: The data of *Neanura parva* (Stach) reported by Dunger (1975) included *Neanura alba* as well.

General distribution: Central Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Őrség (Traser 1995).

Ecological note: in mountainous habitats.

***Neanura muscorum* (Templeton, 1835)**

Anura muscorum Templeton: Tömösváry 1884a: 50; *Achorutes muscorum* Templeton: Stach 1929: 282; Dudich 1932: 48; Szent-Ivány 1940a: 428; *Biloba muscorum* (Templeton): Stach 1951: 41, pl. 4; *Neanura muscorum* (Templeton): Vellay 1900: 21; Kovács 1953a: 183; Loksa 1956a: 391; Loksa 1956b: 205; Loksa 1962: 68; Loksa 1966: 379; Dunger 1975: 17;

Loksa 1977: 210; Loksa 1978a: 55; Loksa 1978b: 95; Loksa 1980: 110; Loksa 1983: 72; Loksa 1987: 79; Loksa 1991: 270; Varga 1991: 85; Varga 1992: 172; Varga & Vargha 1992: 315; Traser 1995: 44; Varga & Oldal 1998: 86; Traser 1999: 52; Traser & Csóka 2000: 77; Traser & Csóka 2001: 233; Traser 2002a: 262; Traser 2002c: 48; Traser 2003: 155; Traser & Salló 2004: 230; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 72; *Neanura (Neanura) muscorum* (Templeton): Loksa & Rubio 1966a: 142.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Dudich 1932; Stach 1951; Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1956b, 1966), Bükk Mts. (Loksa 1956a, 1962, 1966, 1977; Varga 1991, 1992; Varga & Vargha 1992; Varga & Oldal 1998), Cserhát (Stach 1929, 1951; Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Vellay 1900; Stach 1929; Loksa 1987; Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a; Traser & Salló 2004), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Nyírség (Kovács 1953a; Loksa 1991), Őrség (Traser 1995), Pilis Mts. (Stach 1929, 1951), Sopron Mts. (Traser 2002a), Vác-Pest Danube Valley (Tömösváry 1884a; Vellay 1900; Stach 1929), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966).

***Neanura parva* (Stach, 1951)**

Biloba parva Stach: Stach 1951: 48, pl. 5; *Neanura parva* (Stach): Loksa 1966: 379; Dunger 1975: 17 (partim); Varga & Oldal 1998: 86; Traser 1999: 52.

Remark: The data of *Neanura parva* (Stach) reported by Dunger (1975) included *Neanura alba* von Törne as well.

General distribution: Eastern Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Varga & Oldal 1998), Cserhát (Stach 1951), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa

1966), Mt. Somló (Loksa 1966), Pilis Mts. (Loksa 1966), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

***Neanura weigneri* (Stach, 1922)**

Neanura weigneri Stach: Kovács 1953a: 183; Loksa 1991: 26.

General distribution: Central and Southern Europe (Albania, Hungary).

Distribution in Hungary: Nyírség (Kovács 1953a; Loksa 1991).

***Pumilinura* Cassagnau, 1979**

***Pumilinura loksai* (Dunger, 1974)**

Neanura loksai Dunger: Dunger 1974: 10, figs 5d-g, 6a-b; Dunger 1975: 17; *Pumilinura loksai* (Dunger): Traser 1999: 52; Traser & Salló 2004: 230.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1974, 1975), Kőszeg Mts. (Traser & Salló 2004).

***Thaumanura* Börner, 1932**

***Thaumanura carolii* (Stach, 1920)**

Achorutes carolii Stach: Dudich 1932: 48; *Thaumanura carolii* (Stach): Stach 1951: 61, pl. 1: fig. 4, pl. 12; Traser 1999: 52; Traser 2002a: 262; *Neanura caroli* (sic!) (Stach): Loksa 1991: 270.

General distribution: Eastern Europe.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Stach 1951; Traser 1999), Börzsöny Mts. (Stach 1951), Nyírség (Loksa 1991), Pilis Mts. (Stach 1951), Sokoróalja (Stach 1951), Sopron Mts. (Traser 2002a).

Ecological note: silvicolous.

***Thaumanura oniscoides* (Latzel, 1917)**

Achorutes oniscoides Latzel: Stach 1929: 283; Szent-Ivány 1940a: 428; Szent-Ivány 1941: 21; *Thaumanura oniscoides* (Latzel): Traser 2002a: 262.

General distribution: Central Europe.

Distribution in Hungary: Börzsöny Mts. (Stach 1929), Kőszeg Mts. (Szent-Ivány 1940a,

1941), Mátra Mts. (Szent-Ivány 1940a, 1941), Pilis Mts. (Stach 1929), Sopron Mts. (Traser 2002a).

Ecological note: silvicolous.

Subfamily: **Pseudachorutinae**

***Anurida* Laboulbène, 1865**

***Anurida ellipsoides* Stach, 1949**

Anurida ellipsoides Stach: Loksa 1978b: 95; Traser 2002a: 261.

General distribution: Eastern Europe.

Distribution in Hungary: Cserhát (Loksa 1978b), Sopron Mts. (Traser 2002a).

***Anurida granulata* Agrell, 1943**

Anurida granulata Agrell: Dunger 1975: 17; Traser 2002a: 261; *Micranurida granulata* (Agrell): Traser 2002a: 261.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2002a), Sopron Mts. (Traser 2002a).

Ecological note: arctoalpine.

***Anurida tullbergi* Schött, 1891**

Anurida tullbergi Schött: Stach 1929: 282; Stach 1949a: 22, pl. 2: figs 1-10; Farkas 1995: 46; Traser 1997: 61; Farkas *et al.* 1998: 57; Traser 2002a: 261.

General distribution: Holarctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Balatonfelvidék (Stach 1929, 1949a), Fertő-Hanság (Traser 2002a), Somogy Hills (Farkas *et al.* 1998), Szigetköz (Traser 1997, 2002a).

Ecological note: hygrophilous, mostly littoral.

***Anurida uniformis* Gisin, 1953**

Anurida uniformis Gisin: Traser 2002a: 261.

General distribution: Palaearctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

Micranurida Börner, 1901

Micranurida cf. anophthalmica Stach, 1949

Micranurida cf. anophthalmica Stach: Traser 1980: 20.

General distribution: Central Europe, Carpathian Mts.

Distribution in Hungary: Bakony Mts. (Traser 1980).

Micranurida forsslundi Gisin, 1949

Micranurida cf. forsslundi Gisin: Traser 1980: 22; *Micranurida forsslundi* Gisin: Traser 2002a: 261; Traser 2006: 35.

General distribution: Europe, Siberia.

Distribution in Hungary: Bakony Mts. (Traser 1980), Gerecse Mts. (Traser 2006), Sopron Mts. (Traser 2002a).

Micranurida cf. meridionalis Cassagnau, 1952

Micranurida cf. meridionalis (Cassagnau): Traser 2002a: 261.

General distribution: Mediterranean Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

Micranurida pygmaea Börner, 1901

Anurida pygmaea (Börner): Loksa & Rubio 1966a: 142; Loksa 1977: 210; Loksa 1978a: 55; Loksa 1980: 110; Traser 1997: 61; Traser & Csóka 2000: 77; Traser & Csóka 2001: 237; Traser 2002c: 48; *Micranurida pygmaea* Börner: Dunger 1975: 17; Traser 2002a: 261; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 72.

General distribution: Holarctic.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1977), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Mátra Mts. (Loksa 1980), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997).

Ecological note: acidophilous.

Micranurida sensillata (Gisin, 1953)

Anurida endroedii Dunger: Dunger 1974: 6, figs 3a-e, 5a-c; Dunger 1975: 17.

General distribution: Palaearctic including Canary Islands.

Distribution in Hungary: Börzsöny Mts. (Dunger 1974, 1975).

Pratanurida Rusek, 1973

Pratanurida cassagnai Rusek, 1973

Pratanurida cassagnai Rusek: Traser & Horváth-Szováti 2006: 333.

General distribution: Palaearctic.

Distribution in Hungary: Kiskunság (Traser & Horváth-Szováti 2006).

Pseudachorutella Stach, 1949

Pseudachorutella asigillata (Börner, 1901)

Pseudachorutella asigillata (Börner): Dunger 1975: 17; Traser 1999: 52.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975).

Pseudachorutella clavata (Börner, 1901)

Pseudachorutes (Pseudachorutella) clavatus (Börner): Loksa & Rubio 1966a: 142;

Remark: According to Gama (1964) the species is a junior synonym of *Pseudachorutella asigillata* (Börner), but it is a valid, separate taxon in our opinion.

General distribution: Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

Pseudachorutes Tullberg, 1871

Pseudachorutes corticicolus (Schäffer, 1897)

Pseudachorutes corticola (sic!) (Schäffer): Stach 1929: 282; Loksa 1977: 210; Loksa 1978b: 95; Loksa 1978a: 55; Loksa 1980: 110; Loksa 1983: 72; Loksa 1991: 270; Farkas 1995: 46; Farkas 1997: 56; Farkas & Szathmáry 1997: 39; *Pseudachorutes corticicolus* (Schäffer): Traser 1999: 52; *Pseudachorutes corticola* (sic!) (Schäffer): Farkas 1996: 287; Farkas 1997: 58.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995, 1997), Balatonfelvidék (Stach 1929; Farkas 1995, 1997; Farkas & Szathmáry 1997), Bükk Mts. (Loksa 1977), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Mátra Mts. (Loksa 1980), Nyírség (Loksa 1991).

Ecological note: corticophilous.

***Pseudachorutes dubius* Krausbauer, 1898**

Pseudachorutes dubius Krausbauer: Stach 1929: 281; Stach 1949a: 101, pl. 12, pl. 13: figs 1-5; Kovács 1953a: 183; Dunger 1975: 17; Loksa 1978a: 55; Loksa 1983: 72; Loksa 1987: 79; Loksa 1991: 270; Traser 1995: 44; Traser 1999: 52; Traser 2002a: 261; Traser 2002c: 48; *Pseudachorutes (Pseudachorutes) dubius* Krausbauer: Loksa & Rubio 1966a: 142.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Balatonfelvidék (Stach 1929), Börzsöny Mts. (Dunger 1975), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kiskunság (Loksa 1987; Traser 2002c), Mezőföld (Stach 1949a), Nyírség (Kovács 1953a; Loksa 1991), Őrség (Traser 1995), Sopron Mts. (Traser 2002a).

***Pseudachorutes parvulus* Börner, 1901**

Pseudachorutes parvulus Börner: Loksa 1966: 379; Dunger 1975: 16; Loksa 1983: 72; Loksa 1987: 79; Traser 1997: 61; Traser 1999: 52; Traser & Csóka 2000: 77; Traser & Csóka 2001: 237; Traser 2002a: 261; *Pseudachorutes (Pseudachorutes) parvulus* Börner: Loksa & Rubio 1966a: 142; *Pseudachorutes cf. parvulus* Börner: Traser 2002c: 48; Traser 2006: 35.

General distribution: Palaearctic, Japan.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Dunger 1975), Buda Mts. (Loksa 1966), Fertő-Hanság (Traser 2002a), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Loksa 1987; Traser & Csóka 2000, 2001; Traser 2002c), Mecsek Mts. (Loksa 1966), Sop-

ron Mts. (Traser 2002a), Szigetköz (Traser 1997, 2002a), Villány Mts (Loksa 1966).

***Pseudachorutes pratensis* Rusek, 1973**

Pseudachorutes pratensis Rusek: Traser & Horváth-Szováti 2006: 333.

General distribution: Europe.

Distribution in Hungary: Kiskunság (Traser & Horváth-Szováti 2006).

***Pseudachorutes subcrassus* Tullberg, 1871**

Pseudachorutes subcrassus Tullberg: Traser 1980: 20; Traser 1981: 133; Traser 1997: 61; Traser 1999: 52; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 261; Traser 2002c: 48; *Pseudachorutes (sic!) subcrassus* Tullberg, 1871: Traser 2002b: 159.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Traser 1980), Bükk Mts. (Traser 2002b), Fertő-Hanság (Traser 2002a), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c), Sopron Mts. (Traser 1981, 2002a), Szigetköz (Traser 1997, 2002b), Vas-Sopron Plain (Traser 1981).

Subfamily: **Odontellidae**

***Axenyllodes* Stach, 1949**

***Axenyllodes ukrainus* Thibaud & Taraschuk, 1997**

Axenyllodes ukrainus Thibaud & Taraschuk: Traser 2002a: 262.

General distribution: Eastern Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

***Pseudostachia* Arlé, 1968**

***Pseudostachia populosa* (Selga, 1963)**

Pseudostachia populosa (Selga): Traser & Horváth-Szováti 2006: 333.

General distribution: Palaearctic.

Distribution in Hungary: Kiskunság (Traser & Horváth-Szováti 2006).

***Superodontella* Stach, 1949**

***Superodontella empodialis* (Stach, 1934)**

Odontella empodialis Stach: Loksa 1966: 379; Dunger 1975: 16; Traser 1999: 51.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Mecsek Mts. (Loksa 1966).

***Superodontella lamellifera* (Axelson, 1903)**

Odontella lamellifera Axelson: Loksa 1956b: 211; Loksa 1961b: 224; Loksa & Rubio 1966a: 142; Traser 1997: 61; *Superodontella lamellifera* (Axelson): Traser 2002a: 262.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Loksa 1961b), Bakony Mts. (Loksa & Rubio 1966a), Buda Mts. (Loksa 1956b), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997, 2002a).

***Superodontella pseudolamellifera* (Stach, 1949)**

Odontella pseudolamellifera Stach: Loksa 1966: 379; Loksa 1978b: 95; *Odontella pseodolamerrifera* (sic!) Stach: Traser 1999: 51.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Cserhát (Loksa 1978b), Pilis Mts. (Loksa 1966).

***Superodontella* cf. *sensillata* (Deharveng & Izarra, 1979)**

Superodontella cf. *sensillata* Deharveng & Izarra: Traser 2002a: 262.

General distribution: Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

***Superodontella* cf. *stachi* (Denis, 1947)**

Odontella cf. *stachi* Denis: Traser 1999: 51.

General distribution: Europe

Distribution in Hungary: Aggtelek Karst (Traser 1999).

***Xenyllodes* Axelson, 1903**

***Xenyllodes armatus* Axelson, 1903**

Xenyllodes armatus Axelson: Traser 1999: 51; Traser 2002a: 262; Traser 2003: 155.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Fertő-Hanság (Traser 2002a), Fertő-Hanság (Traser 2003).

Family: **Onychiuridae**

Subfamily: **Onychiurinae**

***Deharvengiurus* Weiner, 1996**

***Deharvengiurus denisi* (Stach, 1934)**

Onychiurus (*Onychiurus*) *denisi* Stach: Loksa & Rubio 1966a: 151; *Onychiurus* (*Paronychiurus*) *denisi* Stach: Dunger 1975: 18.

General distribution: Eastern Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975).

Ecological note: in caves too.

***Deharvengiurus microchaetosus* (Loksa, 1959)**

Onychiurus microchaetosus Loksa: Loksa 1959b: 75, figs 16-19.

General distribution: Hungary.

Distribution in Hungary: Cserhát (Loksa 1959b).

***Deharvengiurus xerophilus* (Loksa, 1964)**

Onychiurus (*Onychiurus*) *xerophilus* Loksa: Loksa 1964: 86, figs 16-23; *Onychiurus xerophilus* Loksa: Loksa 1966: 380.

General distribution: Hungary.

Distribution in Hungary: Mecsek Mts. (Loksa 1964, 1966).

***Deuteraphorura* Absolon, 1901**

***Deuteraphorura fimetaria* (Linnaeus, 1766)**

Onychiurus fimetarius (auct.) Stach: Stach 1934: 164,

pl. 33; Stach 1954: 173, pl. 24; Loksa 1962: 75, figs 17-22; *Onychiurus fimetarius* Linnaeus: Stach 1929: 285; Gebhardt 1934: 139; Kovács 1953b: 90; Kovács 1954: 97; Loksa 1961b: 224; *Onychiurus subterraneus* Stach: Stach 1929: 285.

Remark: Species inquirenda according to Gisin (1960).

General distribution: West Palaearctic.

Distribution in Hungary: Aggtelek Karst (Kovács 1953b, 1954; Loksa 1961b), Buda Mts. (Stach 1929), Budapest (Stach 1954), Bükk Mts. (Stach 1929, Loksa 1962), Mecsek Mts. (Gebhardt 1934; Stach 1934, 1954).

***Deuteraphorura imperfecta* (Denis, 1938)**

Onychiurus imperfectus Denis: Loksa 1977: 210.

General distribution: Central Europe.

Distribution in Hungary: Bükk Mts. (Loksa 1977).

Ecological note: in caves too.

***Deuteraphorura silesiaca* (Dunger, 1977)**

Onychiurus silesiacus Dunger: Traser 1994: 100; Traser & Thibaud 1999: 106; *Deuteraphorura silesiaca* (Dunger): Traser 2002a: 263.

General distribution: Eastern Europe.

Distribution in Hungary: Sopron Mts. (Traser 1994, 2002a), Vas-Sopron Plain (Traser & Thibaud 1999).

Ecological note: silvicolous, montane.

***Deuteraphorura silvaria* (Gisin, 1952)**

Onychiurus (Onychiurus) silvarius Gisin: Dunger 1975: 19; *Onychiurus silvarius* Gisin: Loksa 1978b: 95; *Deuteraphorura silvaria* (Gisin): Traser 2002a: 263; Traser 2006: 34.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Cserhát (Loksa 1978b), Gerecse Mts. (Traser 2006), Sopron Mts. (Traser 2002a).

Ecological note: troglophilous.

***Deuteraphorura variabilis* (Stach, 1954)**

Onychiurus variabilis Stach: Loksa 1966: 381; Loksa 1983: 73; Traser 1999: 53.

General distribution: Central and Eastern Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Hortobágy (Loksa 1983), Mecsek Mts. (Loksa 1966).

***Heteraphorura* Bagnall, 1948**

***Heteraphorura variotuberculata* (Stach, 1934)**

Onychiurus (Hymenaphorura) terricola Kos: Dunger 1975: 18; *Onychiurus terricola* Kos: Traser 1995: 44; *Heteraphorura terricola* (Kos): Traser 1999: 53.

General distribution: Eastern Europe, Carpathian Mts.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Órség (Traser 1995).

Ecological note: in caves too.

***Hymenaphorura* Bagnall, 1948**

***Hymenaphorura dentifera* (Stach, 1934)**

Hymenaphorura creatricis Pomorski: Traser & Salló 2004: 230.

Remark: Species inquirenda according to Gisin (1960).

General distribution: West Palaearctic.

Distribution in Hungary: Kőszeg Mts. (Traser & Salló 2004).

***Hymenaphorura pseudosibirica* (Stach, 1954)**

Onychiurus pseudosibiricus Stach: Stach 1954: 31.

General distribution: Hungary.

Distribution in Hungary: Aggtelek Karst (Stach 1954).

Ecological note: troglophilous.

***Hymenaphorura sibirica* (Tullberg, 1876)**

Onychiurus sibiricus (Tullberg): Stach 1929: 284; Dudich 1932: 48; Gebhardt 1933: 39; Stach 1934: 138, pls 27-28; Stach 1954: 96, pl. 6; Loksa 1978b: 95; *Onychiurus (Protaphorura) sibiricus* (Tullberg): Loksa & Rubio 1966a: 146; *Onychiurus (Hymenaphorura) sibiricus* (Tullberg): Dunger 1975: 18; *Hymenaphorura sibiricus* (Tullberg): Traser 1999: 53.

General distribution: Northern Europe, Siberia.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Stach 1934; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Stach 1929, 1954; Dunger 1975), Cserhát (Loksa 1978b), Mecsek Mts. (Gebhardt 1933; Stach 1934, 1954).

Kalaphorura Absolon, 1901

***Kalaphorura burmeisteri* (Lubbock, 1873)**

Onychiurus (*Kalaphorura*) *burmeisteri* Lubbock: Kovács 1953a: 183 (partim?); *Kalaphorura burmeisteri* Lubbock: Loksa 1959b: 70 (partim?); Loksa 1991: 271.

Remark: According to Dunger (1975) the earlier Hungarian data of *Kalaphorura burmeisteri* could include *Kalaphorura paradoxa* (Schäffer, 1900) as well.

General distribution: Europe.

Distribution in Hungary: Cserhát (Loksa 1959b), Nyírség (Kovács 1953a; Loksa 1991).

Ecological note: in caves too.

***Kalaphorura paradoxa* (Schäffer, 1900)**

Onychiurus (*Kalaphorura*) *paradoxus* (Schäffer): Dunger 1975: 18; *Kalaphorura paradoxa* (Schäffer): Traser 1999: 53; Traser & Thibaud 1999: 106; Traser 2002a: 262; *Kalaphorura paradoxa* var. *clavipila* (Stach): Traser 1999: 53; *Onychiurus burmeisteri* Lubbock: Loksa 1966: 380.

Remark: Loksa's „*Onychiurus burmeisteri*” data were corrected by (Traser 1999).

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999; Loksa 1966), Börzsöny Mts. (Dunger 1975), Vas-Sopron Plain (Traser & Thibaud 1999; Traser 2002a).

Ecological note: in caves too.

Micraphorura Bagnall, 1949

***Micraphorura absoloni* (Börner, 1901)**

Onychiurus affinis Ågren: Stach 1954: 85, pl. 2; *Onychiurus absoloni* Börner: Loksa 1966: 380; Loksa 1991: 271; *Onychiurus* (*Olygaphorura*) *absoloni* (Börner): Dunger 1975: 18; Loksa 1978a: 56; *Mic-*

raphorura absoloni (Börner): Traser 1999: 53; Traser 2002a: 262; Traser 2003: 155.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Buda Mts. (Loksa 1966), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Nyírség (Loksa 1991), Pilis Mts. (Stach 1954; Loksa 1966), Sopron Mts. (Traser 2002a), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966).

Ecological note: detritophilous.

Oligaphorura Bagnall, 1949

***Oligaphorura groenlandica* (Tullberg, 1876)**

Onychiurus groenlandicus (Tullberg): Stach 1929: 284.

General distribution: Holarctic, circumpolar.

Distribution in Hungary: Pilis Mts. (Stach 1929).

Onychiuroides Bagnall, 1948

***Onychiuroides granulosus* (Stach, 1930)**

Onychiurus granulosus Stach: Stach 1929: 285; Stach 1934: 193, pl. 39; Stach 1954: 146, pl. 17; Loksa 1966: 380; Varga 1992: 172; Varga & Oldal 1998: 86; *Onychiuroides granulosus* (Stach): Traser 1999: 53; Traser 2002a: 263; Traser & Salló 2004: 230.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Stach 1929, 1934, 1954), Bükk Mts. (Loksa 1966; Varga 1992; Varga & Oldal 1998), Kőszeg Mts. (Traser & Salló 2004), Sopron Mts. (Traser 2002a).

Ecological note: troglophilous.

***Onychiuroides pseudogranulosus* (Gisin, 1951)**

Onychiurus pseudogranulosus Gisin: Loksa 1966: 380; Loksa 1977: 207; Loksa 1991: 272; Traser 1994: 102; *Onychiurus* (*Onychiurus*) *pseudogranulosus* Gisin: Loksa & Rubio 1966a: 150; *Onychiurus* cf. *pseudogranulosus* Gisin: Traser 1981: 135; *Onychiuroides pseudogranulosus* Gisin: Traser 1995: 44; Traser 1999: 53; Traser 2002a: 263.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Loksa 1966), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966, 1977), Nyírség (Loksa 1991), Órség (Traser 1995), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 1994, 2002a), Vas-Sopron Plain (Traser 1981), Visegrád Mts. (Loksa 1966).

***Onychiuroides subgranulosus* (da Gama, 1964)**

Onychiurus (*Paronychiurus*) *subgranulosus* Gama: Dunger 1975: 18.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

***Onychiurus* Gervais, 1841**

***Onychiurus ambulans* (Linnaeus, 1758)**

?*Lipura ambulans* Linnaeus: Tömösváry 1884a: 50; ?*Aphorura ambulans* Linnaeus: Vellay 1900: 21.

Remark: All data published before description of *Onychiurus circulans* Gisin, 1952 are dubious.

General distribution: Europe.

Distribution in Hungary: Budapest (Tömösváry 1884a; Vellay 1900), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900).

Ecological note: troglophilous.

***Onychiurus circulans* Gisin, 1952**

Onychiurus (*Onychiurus*) *circulans* Gisin: Loksa 1964: 94, figs 45-50; *Onychiurus circulans* Gisin: Loksa 1966: 380; Loksa 1977: 210.

Remark: According to Pomorsky (1998) the species is a junior synonym of *Onychiurus ambulans* (Linnaeus), but in our opinion it is a valid, separate taxon.

General distribution: Europe.

Distribution in Hungary: Bükk Mts. (Loksa 1977), Gerecse Mts. (Loksa 1964, 1966), Mecsek Mts. (Loksa 1964, 1966).

***Onychiurus pseudinermis* Börner, 1903**

Onychiurus pseudinermis Börner: Paclt 1960: 156.

General distribution: Eastern Europe.

Distribution in Hungary: Mecsek Mts. (Paclt 1960).

Ecological note: silvicolous.

***Onychiurus rectospinatus* Stach, 1922**

Onychiurus rectospinatus Stach: Loksa 1961b: 224; Traser 1999: 54; Traser 2002a: 263.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1961b; Traser 1999), Moson Plain (Traser 2002a).

Ecological note: troglophilous.

***Onychiurus stillicidii* (Schiodte 1849)**

Lipura stillicidii Schiodte: Tömösváry 1884a: 50; *Anurophorus stillicidii* Schiodte: Vellay 1900: 21.

General distribution: Eastern and Southern Europe.

Distribution in Hungary: Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900).

Ecological note: troglophilous.

***Orthonychiurus* Stach, 1954**

***Orthonychiurus* cf. *pseudostachianus* (Gisin, 1956)**

Onychiurus cf. *pseudostachianus* (Gisin): Traser 2002a: 263.

Remark: The differences from the species *Orthonychiurus stachianus* (Bagnall 1939) must be re-evaluated (Pomorski 1998: 182).

General distribution: Western Palaearctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

***Orthonychiurus rectopapillatus* (Stach, 1933)**

Onychiurus rectopapillatus Stach: Traser 1999: 53.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

***Orthonychiurus schoenviszkyi* (Loksa, 1967)**

Onychiurus (*Onychiurus*) *schoenviszkyi* Loksa: Loksa 1967: 292, figs 14-17; *Onychiurus schoenviszkyi* Lok-

sa: Bajomi 1969: 243; *Onychiurus schoeviszki* (sic!) Loksa: Traser 1999: 49.

General distribution: Hungary.

Distribution in Hungary: Aggtelek Karst (Loksa 1967; Bajomi 1969; Traser 1999).

Protaphorura Absolon, 1901

***Protaphorura armata* (Tullberg, 1869)**

Onychiurus armatus (Tullberg): Stach 1929: 284; Dudich 1932: 48; Stach 1934: 122, pl. 25; Szent-Ivány 1940a: 428; Kovács 1953b: 90; Stach 1954: 123, pl. 12; Loksa 1956a: 391; Loksa 1956b: 203; Paclt 1960: 156; Loksa 1962: 63; Loksa 1966: 380; Loksa 1977: 206; Traser 1980: 20, fig. 3; Traser 1981: 133; Hornung 1986: 138; Loksa 1987: 79; Loksa 1991: 272; Varga & Vargha 1992: 315; Farkas 1996: 287; Farkas 1997: 58; Farkas & Szathmáry 1997: 39; Traser 1997: 61; Traser 2002a: 268; *Onychiurus armata* (sic!) Tullberg: Kovács 1954: 97; *Onychorus* (sic!) *armatus* Tullberg: Loksa 1961b: 224; *Onychiurus (Protaphorura) armatus* (Tullberg): Dunger 1975: 18; Loksa & Rubio 1966a: 146; Loksa 1978a: 56; *Protaphorura armatus* (sic!) (Tullberg): Traser 1999: 53; Traser 2002a: 262; Traser 2006: 35; *Protaphorura armata* (Tullberg): Traser 2002c: 48; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Stach 1934; Kovács 1953b, 1954; Stach 1954; Loksa 1961b, 1966; Traser 1999), Bakony Mts. (Stach 1929; Loksa 1966; Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Stach 1929; Loksa 1966; Farkas & Szathmáry 1997), Börzsöny Mts. (Stach 1929; Loksa 1966; Dunger 1975), Buda Mts. (Stach 1929, 1934, 1954; Loksa 1956b, 1966), Budapest (Stach 1929), Bükk Mts. (Loksa 1956a, 1962, 1966, 1977; Varga & Vargha 1992), Dráva Plain (Loksa 1978a), Fertő-Hanság (Paclt 1960; Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Keszthely Mts. (Loksa 1966), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Hornung 1986; Loksa 1987; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mecsek Mts. (Stach 1934, 1954; Paclt 1960; Loksa 1966), Mezőföld (Stach 1929, 1954), Moson Plain (Traser 2002a), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Pilis Mts. (Stach 1929; Loksa 1966), Sopron Mts. (Traser 1981,

2002a), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: euedaphic.

***Protaphorura aurantiaca* (Ridley, 1880)**

Onychiurus latus Gisin: Loksa 1977: 210; Loksa 1978b: 95; *Protaphorura latus* (Gisin): Traser 1999: 53; *Protaphorura aurantiaca* (Ridley): Traser 2002a: 262.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bükk Mts. (Loksa 1977), Cserhát (Loksa 1978b), Fertő-Hanság (Traser 2002a), Sopron Mts. (Traser 2002a).

***Protaphorura bicampata* (Gisin, 1956)**

Onychiurus cf. bicampatus Gisin: Traser 1995: 44; *Protaphorura bicampata* (Gisin): Traser 2003: 155.

General distribution: Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2003), Órség (Traser 1995).

***Protaphorura campata* (Gisin, 1952)**

Onychiurus campatus Gisin: Loksa 1991: 271; Varga 1992: 172; Farkas 1995: 46; Farkas *et al.* 1998: 57; Varga & Oldal 1998: 86; *Protaphorura campatus* (sic!) (Gisin): Traser 1999: 53.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995), Bükk Mts. (Varga 1992; Varga & Oldal 1998), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998).

***Protaphorura cancellata* (Gisin, 1956)**

Onychiurus (Protaphorura) cancellatus Gisin: Loksa 1978a: 56; *Onychiurus cancellatus* Gisin: Loksa 1983: 73; Traser 1997: 61; *Protaphorura cancellatus* (sic!) (Gisin): Traser 1999: 53; Traser 2002a: 262; *Protaphorura cancellata* (Gisin): Traser 2006: 35.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Gerecse Mts. (Traser 2006),

Hortobágy (Loksa 1983), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997).

***Protaphorura dudichi* (Loksa & Rubio, 1966)**

Onychiurus (*Protaphorura*) *dudichi* Loksa & Rubio: Loksa & Rubio 1966a: 148, figs 41-48.

General distribution: Hungary.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

***Protaphorura fimata* (Gisin, 1952)**

Onychiurus (*Protaphorura*) *fimatus* Gisin: Loksa 1964: 93, figs 42-44; Loksa & Rubio 1966a: 146; *Onychiurus fimatus* Gisin: Loksa 1966: 380.

General distribution: Europe.

Distribution in Hungary: Bakony Mts. (Loksa 1964, 1966; Loksa & Rubio 1966a), Balatonfelvidék (Loksa 1966), Buda Mts. (Loksa 1964, 1966), Gerecse Mts. (Loksa 1964, 1966), Keszthely Mts. (Loksa 1964, 1966), Mecsek Mts. (Loksa 1964, 1966), Mt. Somló (Loksa 1966), Vértes Mts. (Loksa 1964, 1966), Villány Mts (Loksa 1964, 1966).

***Protaphorura gisini* (Haybach, 1960)**

Protaphorura gisini (Haybach): Traser 2002c: 48; Traser & Horváth-Szováti 2006: 332.

General distribution: Central Europe.

Distribution in Hungary: Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006).

***Protaphorura illaborata* (Gisin, 1952)**

Protaphorura illaborata (Gisin): Traser 2002a: 262.

General distribution: Central Europe, Alps.

Distribution in Hungary: Sopron Mts. (Traser 2002a).

***Protaphorura kadici* (Loksa, 1967)**

Onychiurus (*Protaphorura*) *kadici* Loksa: Loksa 1967: 290, figs 4-13; *Onychiurus* (*Protaphorura*) *kadici* var. *geminiocellatus* Loksa: Loksa 1967: 292; *Onychiurus kadici* Loksa: Traser 1999: 49.

General distribution: Hungary.

Distribution in Hungary: Aggtelek Karst (Loksa 1967; Traser 1999).

***Protaphorura latosimilis* (Loksa & Rubio, 1966)**

Onychiurus (*Protaphorura*) *latosimilis* Loksa & Rubio: Loksa & Rubio 1966a: 149, figs 49-56.

General distribution: Hungary.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

***Protaphorura metapulvinata* (Loksa, 1964)**

Onychiurus (*Protaphorura*) *pulvinatus metapulvinatus* Loksa: Loksa 1964: 91, figs 34-37; *Onychiurus pulvinatus metapulvinatus* Loksa: Loksa 1966: 380; *Onychiurus pulvinatus* Gisin: Loksa 1966: 90.

General distribution: Hungary.

Distribution in Hungary: Keszthely Mts. (Loksa 1964, 1966), Mecsek Mts. (Loksa 1964, 1966), Villány Mts (Loksa 1964, 1966).

***Protaphorura nemorata* (Gisin, 1952)**

Protaphorura nemorata (Gisin): Traser 2002a: 262.

General distribution: Western Europe.

Distribution in Hungary: Sopron Mts. (Traser 2002a).

***Protaphorura octopunctata* (Tullberg, 1876)**

Onychiurus octopunctatus (Tullberg): Loksa 1983: 73; *Protaphorura* cf. *octopunctatus* (Tullberg): Traser 1999: 53.

General distribution: Europe, Siberia.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Hortobágy (Loksa 1983).

***Protaphorura procampata* (Gisin, 1956)**

Protaphorura procampatus (sic!) (Gisin): Traser 2002a: 262; *Onychiurus* (*Protaphorura*) *procampatus* Gisin: Loksa & Rubio 1966a: 146, figs 21-28.

General distribution: Palaearctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Bakony Mts. (Loksa & Rubio 1966a).

***Protaphorura prolata* (Gisin, 1956)**

Protaphorura prolatus (sic!) (Gisin): Traser 2002a: 262; Traser & Salló 2004: 230.

General distribution: Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Kőszeg Mts. (Traser & Salló 2004).

Ecological note: troglophilous.

***Protaphorura pseudostyriaca* (Loksa, 1964)**

Onychiurus (Protaphorura) pseudostyriacus Loksa: Loksa 1964: 88, figs 24-33; *Onychiurus pseudostyriacus* Loksa: Loksa 1966: 381.

General distribution: Hungary.

Distribution in Hungary: Buda Mts. (Loksa 1964, 1966), Pilis Mts. (Loksa 1964, 1966).

***Protaphorura serbica* (Loksa & Bogojevic, 1967)**

Protaphorura serbica (Loksa & Bogojevic): Traser 2002c: 48; Traser & Horváth–Szováti 2004: 59; Traser & Horváth–Szováti 2006: 332.

General distribution: Central Europe.

Distribution in Hungary: Kiskunság (Traser 2002c; Traser & Horváth–Szováti 2004, 2006).

Ecological note: xerothermophilic.

***Protaphorura subarmata* (Gisin, 1957)**

Protaphorura subarmatus (sic!) (Gisin): Traser 1999: 53; Traser 2002a: 262; *Protaphorura subarmata* (Gisin): Traser 2006: 35.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Fertő-Hanság (Traser 2002a), Gerecse Mts. (Traser 2006), Szigetköz (Traser 2002a).

***Protaphorura subcancellata* (Gisin, 1963)**

Onychiurus (Protaphorura) subcancellatus Gisin: Loksa 1964: 92, figs 38-41; Loksa & Rubio 1966a: 146; *Onychiurus subcancellatus* Gisin: Loksa 1966: 380; Csuták 1977: 68; Loksa 1978b: 95; Loksa 1980: 110.

General distribution: Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Cserhát (Csuták 1977; Loksa 1978b), Gerecse Mts. (Loksa 1964, 1966), Mátra Mts. (Loksa 1980), Vértes Mts. (Loksa 1964, 1966).

***Protaphorura sublata* (Gisin, 1957)**

Protaphorura sublata (Gisin): Traser 2002a: 263; *Onychiurus (Protaphorura) sublatus* Gisin: Loksa &

Rubio 1966a: 146, 35-40; *Onychiurus sublatus* Gisin: Traser 1994: 100; Traser 1995: 44.

General distribution: Central Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Fertő-Hanság (Traser 2002a), Órség (Traser 1995), Sopron Mts. (Traser 1994, 2002a).

***Protaphorura subnemorata* (Gisin, 1957)**

Onychiurus subnemoratus Gisin: Traser 1994: 100; Traser 1995: 44; *Protaphorura subnemorata* (Gisin): Traser 2002a: 263; *Protaphorura subnemoratus* (sic!) (Gisin): Traser & Salló 2004: 230.

General distribution: Central Europe.

Distribution in Hungary: Kőszeg Mts. (Traser & Salló 2004), Órség (Traser 1995), Sopron Mts. (Traser 1994, 2002a).

Ecological note: in forests and bogs.

***Protaphorura tricampata* (Gisin, 1956)**

Onychiurus (Protaphorura) tricampatus Gisin: Loksa & Rubio 1966a: 146, figs. 29-34; *Onychiurus tricampatus* Gisin: Bajomi 1969: 243; *Protaphorura tricampata* (Gisin): Traser 2002a: 263.

General distribution: Eastern Europe.

Distribution in Hungary: Aggtelek Karst (Bajomi 1969), Bakony Mts. (Loksa & Rubio 1966a), Vas-Sopron Plain (Traser 2002a).

***Supraphorura* Stach, 1954**

***Supraphorura furcifera* (Börner, 1901)**

Supraphorura furcifera (Börner): Traser 1999: 53; Traser 2002a: 262; Traser *et al.* 2006: 72.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Fertő-Hanság (Traser *et al.* 2006), Szigetköz (Traser 2002a).

Subfamily: **Tetrodontophorinae**

***Tetrodontophora* Reuter, 1882**

***Tetrodontophora bielanensis* (Waga, 1842)**

Tetrodontophora bielanensis (Waga): Stach 1929: 283; Traser 1999: 52; Kontschán *et al.* 2003: 108.

General distribution: Central Europe, Balkan Peninsula.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Traser 1999), Zemplén Mts. (Kontschán *et al.* 2003).

Ecological note: in montane habitats.

Family: **Tullbergiidae**

Subfamily: **Tullbergiinae**

***Doutnacia* Rusek, 1974**

***Doutnacia mols* Fjellberg, 1998**

Doutnacia mols Fjellberg: Traser 2002b: 160; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 332.

General distribution: Central Europe.

Distribution in Hungary: Bükk Mts. (Traser 2002b), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006).

Ecological note: xerophilous.

***Doutnacia xerophila* Rusek, 1974**

Doutnacia xerophila Rusek: Traser 1997: 59; Traser & Weiner 1999: 112; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 263; Traser 2002c: 48; Traser 2006: 35; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72.

General distribution: Central and Southern Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Szigetköz (Traser 1997; Traser & Weiner 1999).

Ecological note: xerophilous.

***Jevania* Rusek, 1978**

***Jevania weinerae* Rusek, 1978**

Jevania weinerae Rusek: Traser 2006: 35, figs 1-3.

General distribution: Eastern Europe.

Distribution in Hungary: Gerecse Mts. (Traser 2006).

Ecological note: silvicolous.

***Mesaphorura* Börner, 1901**

***Mesaphorura betschii* Rusek, 1979**

Mesaphorura betschii Rusek: Traser 1997: 59; Traser 2002a: 263.

General distribution: Western Europe.

Distribution in Hungary: Szigetköz (Traser 1997, 2002a).

Ecological note: silvicolous.

***Mesaphorura critica* Ellis, 1976**

Mesaphorura critica Ellis: Christian & Thibaud 1988: 233; Traser 1999: 54; Traser & Weiner 1999: 112; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 263; Traser 2002b: 160; Traser 2002c: 48; Traser 2003: 155; Traser & Horváth-Szováti 2004: 60; Traser 2006: 35; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bükk Mts. (Traser 2002b), Dráva Plain (Christian & Thibaud 1988), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002b, 2002c; Traser & Horváth-Szováti 2004, 2006), Mezőföld (Christian & Thibaud 1988), Sopron Mts. (Traser 2002b), Szigetköz (Traser & Weiner 1999; Traser 2002a).

Ecological note: xerothermophilic.

***Mesaphorura delamarei* Weiner, 1991**

Mesaphorura delamarei Weiner: Traser 2003: 155.

General distribution: Eastern Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2003).

Ecological note: detritivorous.

***Mesaphorura hylophila* Rusek, 1982**

Mesaphorura hylophila Rusek: Traser 2002a: 263; Traser 2006: 35; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72.

General distribution: Palaearctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Kiskunság (Traser & Horváth-Szováti 2006), Sopron Mts. (Traser 2002a).

Ecological note: eurytopic.

***Mesaphorura italica* (Rusek, 1971)**

Mesaphorura italica (Rusek): Traser 2002a: 263.

General distribution: Palaearctic, Iraq.

Distribution in Hungary: Sopron Mts. (Traser 2002a).

Ecological note: eurytopic.

***Mesaphorura krausbaueri* Börner, 1901**

Tullbergia krausbaueri (Börner): Loksa 1956a: 391; Loksa 1956b: 203; Loksa 1961b: 224; Loksa 1962: 73; Loksa 1966: 381; Loksa 1977: 207; Loksa 1978a: 56; Loksa 1978b: 95; Loksa 1980: 110; Traser 1980: 20; Traser 1981: 133; Loksa 1987: 79; Loksa 1991: 273; *Tullbergia (Tullbergia) krausbaueri* (Börner): Loksa & Rubio 1966a: 151; *Tullbergia (Mesaphorura) krausbaueri* Börner: Dunger 1975: 19; *Metaphorura* (sic!) *krausbaueri* Börner: Traser 1994: 102; *Mesaphorura krausbaueri* Börner: Traser 1997: 61; Traser 1999: 54; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 263; Traser 2002a: 263; Traser 2002c: 48; Traser 2002c: 48; Traser 2002c: 48; Traser 2003: 155; Traser 2006: 35; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Loksa 1961b; Traser 1999), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1956b, 1966), Bükk Mts. (Loksa 1956a, 1962, 1966, 1977), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Keszthely Mts. (Loksa 1966), Kiskunság (Loksa 1987; Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Nyírség (Loksa 1991), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 1981, 1994), Szigetköz (Traser 1997, 2002a), Vas-Sopron Plain (Traser 1981, 1981), Vértes Mts. (Loksa 1966), Vilány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: eurytopic.

***Mesaphorura macrochaeta* Rusek, 1976**

Mesaphorura macrochaeta Rusek: Traser 1997: 61; Christian & Thibaud 1988: 233; Christian & Thibaud 1988: 233; Traser 1999: 54; Traser & Weiner 1999: 112; Traser & Csóka 2000: 77; Traser & Csóka 2001: 237; Traser 2002a: 263; Traser 2002c: 48; Traser 2003: 155; Traser & Horváth-Szováti 2004: 58; Traser 2006:

35; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Dráva Plain (Christian & Thibaud 1988), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2004, 2006), Mezőföld (Christian & Thibaud 1988), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997; Traser & Weiner 1999).

Ecological note: eurytopic.

***Mesaphorura redondoi* Jordana & Arbea, 1994**

Mesaphorura redondoi Arbea & Jordana (sic!): Traser 1997: 59; Traser 2002c: 48.

Remarks: Jordana *et al.* (1997) considered this taxon as a subspecies of *Mesaphorura isochoeta* Arbea & Jordana, 1990, endemic of the Iberian Peninsula. However, this status is questionable in the light of the Hungarian occurrences.

General distribution: ?Europe.

Distribution in Hungary: Kiskunság (Traser 2002c), Szigetköz (Traser 1997).

***Mesaphorura rudolfi* Rusek, 1987**

Mesaphorura rudolfi Rusek: Traser 2002a: 263.

General distribution: Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

***Mesaphorura sylvatica* (Rusek, 1971)**

Tullbergia (Mesaphorura) sylvatica Rusek: Dunger 1975: 19; *Mesaphorura sylvatica* (Rusek): Traser 1999: 54; Traser 2002a: 263; Traser 2006: 35.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Gerecse Mts. (Traser 2006), Szigetköz (Traser 2002a).

***Mesaphorura tenuisensillata* Rusek, 1974**

Mesaphorura tenuisensillata Rusek: Traser 1997: 59; Traser 2002a: 263.

General distribution: Palaearctic.

Distribution in Hungary: Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997).

***Mesaphorura yosii* (Rusek, 1967)**

Mesaphorura yosii (Rusek): Traser 1997: 59; Traser 2002a: 263.

General distribution: cosmopolitan.

Distribution in Hungary: Szigetköz (Traser 1997, 2002a).

***Metaphorura* Bagnall, 1936**

***Metaphorura affinis* (Börner, 1902)**

Tullbergia affinis Börner: Loksa 1966: 381; Loksa 1983: 73; Varga & Oldal 1998: 86; *Metaphorura affinis* (Börner): Traser 1999: 54; Traser & Weiner 1999: 112; Traser 2002a: 263; Traser 2002c: 48; Traser 2006: 35; Traser & Horváth-Szováti 2006: 332; Traser *et al.* 2006: 72.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966; Varga & Oldal 1998), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Pilis Mts. (Loksa 1966), Szigetköz (Traser & Weiner 1999), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: xerothermophilic.

***Metaphorura riozoi* Castaño-Meneses, Palacios Vargas & Traser, 2000**

Metaphorura riozoi Castaño-Meneses, Palacios Vargas & Traser: Castaño-Meneses *et al.* 2000: 1263, figs 1-13; Traser 2002a: 263.

General distribution: Central Europe.

Distribution in Hungary: Fertő-Hanság (Castaño-Meneses *et al.* 2000; Traser 2002a).

***Neonaphorura* Bagnall, 1935**

***Neonaphorura loksai* Traser & Thibaud, 1999**

Neonaphorura loksai Traser & Thibaud: Traser & Thibaud 1999: 105, figs 1-8; Traser 2002a: 263.

General distribution: Hungary.

Distribution in Hungary: Vas-Sopron Plain (Traser & Thibaud 1999; Traser 2002a).

Ecological note: silvicolous, mesophilic.

***Neotullbergia* Bagnall, 1935**

***Neotullbergia ramicuspis* (Gisin, 1953)**

Neotullbergia ramicuspis (Gisin): Traser & Weiner 1999: 112; Traser 2002a: 263.

General distribution: Western Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Szigetköz (Traser & Weiner 1999).

Ecological note: xerothermophilic.

***Paratullbergia* Womersley, 1930**

***Paratullbergia callipygos* (Börner, 1902)**

Paratullbergia callipygos (Börner): Traser & Thibaud 1999: 106; Traser 2002a: 263.

General distribution: Holarctic.

Distribution in Hungary: Sopron Mts. (Traser 2002a), Vas-Sopron Plain (Traser & Thibaud 1999).

Ecological note: silvicolous.

***Paratullbergia macdougalli* Bagnall, 1936**

Paratullbergia macdougalli Bagnall: Traser 2002a: 263; Traser 2003: 155.

General distribution: Palaearctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a, 2003).

***Scaphaphorura* Petersen, 1965**

***Scaphaphorura arenaria* (Petersen, 1965)**

Scaphaphorura arenaria (Petersen): Traser 2002c: 48.

General distribution: Palaearctic.

Distribution in Hungary: Kiskunság (Traser 2002c).

Ecological note: arenicol, in sand dunes.

***Stenaphorurella* Lucianez & Simon, 1992**

***Stenaphorurella lubbocki* (Bagnall, 1935)**

Stenaphorurella lubbocki (Bagnall): Traser 1999: 54; Traser 2002a: 263.

General distribution: Western Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Sopron Mts. (Traser 2002a).

***Stenaphorurella metaparisi* Traser & Weiner, 1999**

Stenaphorurella metaparisi Traser & Weiner: Traser & Weiner 1999: 109, figs 1-5; Traser 2002a: 263.

General distribution: Hungary.

Distribution in Hungary: Szigetköz (Traser & Weiner 1999; Traser 2002a).

***Stenaphorurella quadrispina* (Börner, 1901)**

Tullbergia quadrispina Börner: Loksa 1966: 381; Loksa 1978b: 95; Farkas 1995: 46; Farkas *et al.* 1998: 57; *Tullbergia (Stenaphorura) quadrispina* Börner: Loksa & Rubio 1966a: 151; Dunger 1975: 19; *Stenaphorurella quadrispina* (Börner): Traser 1999: 54; Traser & Weiner 1999: 112; Traser 2002a: 263.

General distribution: Mediterranean.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), around the Lake Balaton (Farkas 1995), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1966), Cserhát (Loksa 1978b), Fertő-Hanság (Traser 2002a), Gerecse Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Szigetköz (Traser & Weiner 1999).

Family: **Poduridae**

***Podura* Linnaeus, 1758**

***Podura aquatica* Linnaeus, 1758**

?*Podura aquatica* Linnaeus: Herman 1865: 485; *Podura aquatica* Linnaeus: Tömösváry 1884a: 51; Horváth 1888: 164; Vellay 1900: 21; Stach 1929: 279; Szent-Ivány 1938: 91; Szent-Ivány 1940a: 427; Dudich 1947: 370, fig. 1; Kovács 1953a: 183; Dunger 1975: 14; Loksa 1978a: 53; Loksa 1980: 110; Loksa 1983:

71; Loksa 1987: 78; Loksa 1991: 270; Farkas 1995: 46; Farkas 1996: 287; Farkas & Szathmáry 1997: 39; Farkas 1997: 58; Traser 1997: 62; Farkas *et al.* 1998: 57; Traser 2002a: 266.

General distribution: Holarctic.

Distribution in Hungary: Balatonfelvidék (Stach 1929; Szent-Ivány 1938, 1940a; Farkas 1995, 1997; Farkas & Szathmáry 1997), Borsodi-Mezőség (Szent-Ivány 1938), Borsodi-Mezőség (Szent-Ivány 1940a), Börzsöny Mts. (Dunger 1975), Buda Mts. (Dudich 1947), Budapest (Tömösváry 1884a; Vellay 1900; Stach 1929; Szent-Ivány 1938, 1940a), Bükk Mts. (Herman 1865), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Szent-Ivány 1938, 1940a; Loksa 1987), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Loksa 1980), Nyírség (Horváth 1888; Kovács 1953a; Loksa 1991), Pilis Mts. (Stach 1929; Szent-Ivány 1938, 1940a), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997), Vác-Pest Duna Valley (Vellay 1900; Stach 1929; Szent-Ivány 1938, 1940a).

Ecological note: hygrophilous.

Suborder: **ENTOMOBRYOMORPHA**

Family: **Cyphoderidae**

***Cyphoderus* Nicolet, 1842**

***Cyphoderus albinus* Nicolet, 1842**

Beckia albinus (Nicolet): Tömösváry 1884a: 51; *Beckia argentea* (Lubbock): Tömösváry 1884a: 51; *Cyphoderus argenteus* Lubbock: Vellay 1900: 21; *Cyphoderus albinus* Nicolet: Stach 1929: 294; Loksa 1966: 385; Dunger 1975: 24; Loksa 1978a: 61; Loksa 1983: 75; Hornung 1986: 138; Loksa 1987: 79; Traser 1999: 57; Traser 2002a: 266; Traser 2002c: 49; Traser & Horváth-Szováti 2006: 334; Traser *et al.* 2006: 73.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Traser 1999), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Dunger 1975), Buda Mts. (Loksa 1966), Budapest (Tömösváry 1884a; Vellay 1900; Stach 1929), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts.

(Loksa 1966), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Vellay 1900; Stach 1929; Hornung 1986; Loksa 1987; Traser 2002c; Traser & Horváth-Szováti 2006), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Pilis Mts. (Loksa 1966), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966).

Ecological note: myrmecophilous.

***Cyphoderus bidenticulatus* Parona, 1888**

Cyphoderus bidenticulatus Parona: Paclt 1960: 157; Traser 1997: 62; Traser 2002a: 266; Traser 2002c: 49; Traser & Horváth-Szováti 2006: 334.

General distribution: Mediterranean.

Distribution in Hungary: Balatonfelvidék (Paclt 1960), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Moson Plain (Traser 2002a), Szigetköz (Traser 1997).

Ecological note: thermophilic.

***Cyphoderus reuteri* Loksa, 1978**

Cyphoderus reuteri Loksa: Loksa 1978a: 61, figs 9-11.

General distribution: Central Europe.

Distribution in Hungary: Dráva Plain (Loksa 1978a).

Family: **Entomobryidae**

Subfamily: **Entomobryinae**

***Coecobrya Yosii*, 1956**

***Coecobrya magyari* (Chen, Wang & Christiansen, 2002)**

Sinella (*Coecobrya*) *magyari* Chen, Wang & Christiansen: Chen *et al.* 2002: 43, figs 1-18.

General distribution: Hungary.

Distribution in Hungary: Gödöllő (Chen *et al.* 2002).

Ecological note: in the soil of indoor plants.

***Coecobrya tenebricosa* Folsom, 1902**

Sinella coeca Schött: Stach 1929: 300; Geyer & Mann 1940: 371; Loksa 1960: 49; Traser 1981: 134; Traser 2002a: 265; *Sinella höfti* Schäffer: Paclt 1960: 157.

General distribution: cosmopolitan.

Distribution in Hungary: Balatonfelvidék (Stach 1929; Geyer & Mann 1940; Loksa 1960; Paclt 1960), Fertő-Hanság (Traser 2002a), Vas-Sopron Plain (Traser 1981).

***Entomobrya Rondani*, 1861**

***Entomobrya albanica* Stach, 1922**

Entomobrya albanica Stach: Stach 1963: 77.

Remark: *Species inquirenda* according to Gisin (1960).

General distribution: Southeastern Europe.

Distribution in Hungary: Mezőföld (Stach 1963).

***Entomobrya albocincta* (Templeton, 1835)**

Degeeria cincta Lubbock: Tömösváry 1884a: 52; *Degeeria cincta* Lubbock var. *nigrocincta* Tömösváry: Tömösváry 1884a: 52; *Entomobrya albocincta* Templeton (sic!): Vellay 1900: 20; Vellay 1900: 20; Vellay 1900: 20; Stach 1929: 304; Stach 1929: 304; Stach 1929: 304; *Entomobrya albocincta* var. *nigrocincta* Tömösváry: Vellay 1900: 20; Stach 1929: 304.

General distribution: Western Europe.

Distribution in Hungary: Budapest (Tömösváry 1884a; Vellay 1900; Stach 1929), Gödöllő Hills (Tömösváry 1884a; Vellay 1900; Stach 1929), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929).

Ecological note: in mulder.

***Entomobrya arborea* (Tullberg, 1871)**

Entomobrya arborea (Tullberg): Stach 1929: 304; Stach 1963: 47.

General distribution: Europe.

Distribution in Hungary: Mezőföld (Stach 1929; Stach 1963).

Ecological note: thermophilic, on barks and in mulder.

***Entomobrya atrocincta* Schött, 1897**

Entomobrya nigrocincta Denis: Stach 1929: 301; *Entomobrya atrocincta* Schött: Stach 1963: 72.

General distribution: cosmopolitan.

Distribution in Hungary: Mezőföld (Stach 1929, 1963).

Ecological note: thermophilic.

***Entomobrya corticalis* (Nicolet, 1842)**

Entomobrya corticalis (Nicolet): Szent-Ivány 1940a: 431; Loksa & Rubio 1966a: 152; Loksa 1978b: 95; Traser 1995: 45; Traser 2002a: 265; Traser 2003: 155; Traser & Salló 2004: 230; Traser *et al.* 2006: 73.

General distribution: Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Cserhát (Loksa 1978b), Fertő-Hanság (Traser 2003; Traser *et al.* 2006), Kőszeg Mts. (Szent-Ivány 1940a; Traser & Salló 2004), Őrség (Traser 1995), Sopron Mts. (Traser 2002a).

Ecological note: corticophilous.

***Entomobrya dorsalis* Uzel, 1891**

Entomobrya dorsalis Uzel: Vellay 1900: 20; Stach 1929: 304; Szent-Ivány 1940a: 431; Stach 1963: 99; *Eutomobrya puncteola* Uzel: Stach 1929: 304; Szent-Ivány 1940a: 431; Loksa 1978a: 60; Traser 1994: 100; Traser 1999: 56.

General distribution: Eastern Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Cserhát (Stach 1929, 1963), Dráva Plain (Loksa 1978a) Kőszeg Mts. (Szent-Ivány 1940a), Mezőföld (Stach 1929; Szent-Ivány 1940a), Nyírség (Vellay 1900), Sopron Mts. (Traser 1994).

Ecological note: atmobiont, corticophilous.

***Entomobrya handschini* Stach, 1922**

Entomobrya handschini Stach: Stach 1929: 301; Szent-Ivány 1941: 22; Stach 1963: 50; Loksa & Rubio 1966a: 152; Dunger 1975: 21; Loksa 1983: 74; Loksa 1987: 79; Farkas *et al.* 1998: 57; Traser 1999: 56; Dombos 2001: 2043; Traser *et al.* 2006: 73; *Entomobrya handschini* ab. *aethiopella* Stach: Stach 1929: 302; *Entomobrya handschini* (sic!) Stach: Farkas 1995: 46.

General distribution: Europe, Asia Minor.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Buda Mts. (Stach 1929; Szent-Ivány 1941), Fertő-Hanság (Traser *et al.*

2006), Hortobágy (Loksa 1983), Kiskunság (Loksa 1987), Mezőföld (Stach 1929, 1963; Dombos 2001), Somogy Hills (Farkas *et al.* 1998).

Ecological note: xerothermophilic.

***Entomobrya lanuginosa* (Nicolet, 1841)**

Degeeria lanuginosa Nicolet: Tömösváry 1884a: 52; 52; 52; *Entomobrya lanuginosa* (Nicolet): Vellay 1900: 20; Stach 1929: 303; Traser 1980: 20; Traser 1981: 133; Loksa 1983: 73; Farkas 1995: 46; Traser 1995: 45; Farkas 1996: 287; Farkas 1997: 58; Farkas *et al.* 1998: 57; Traser 1999: 56; Traser 2002a: 265; Traser 2002c: 48; Traser 2003: 155; Traser & Horváth-Szováti 2006: 333; Traser 2006: 36; *Entomobrya lanuginose* (sic!) (Nicolet): Dombos 2001: 2040.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995), Bakony Mts. (Traser 1980), Fertő-Hanság (Traser 2002a, 2003), Gerecse Mts. (Traser 2006), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Mecsek Mts. (Tömösváry 1884a; Vellay 1900; Stach 1929), Mezőföld (Dombos 2001), Őrség (Traser 1995), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981, 2002a), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929), Vas-Sopron Plain (Traser 1981).

Ecological note: on meadows.

***Entomobrya marginata* (Tullberg, 1871)**

?*Entomobrya maritima* Reuter: Vellay 1900: 21; *Entomobrya marginata* Tullberg: Vellay 1900: 21; Szent-Ivány 1940a: 431; Stach 1929: 300; Stach 1963: 60; Loksa 1978b: 95; Loksa 1980: 111; Loksa 1983: 74; Loksa 1991: 272; Farkas 1995: 46; Farkas 1997: 56; Farkas *et al.* 1998: 57; Traser 1999: 56; Traser 2002a: 265.

Remark: Vellay's data (Vellay 1900) were criticised by Stach (1929).

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Balatonfelvidék (Stach 1929, 1963; Farkas 1995, 1997), Budapest (Stach 1929, 1963), Cserhát (Loksa 1978b), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kiskunság (Vellay 1900; Stach 1929), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Loksa 1980), Mező-

föld (Stach 1929), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998).

Ecological note: xerophilous, corticophilous.

***Entomobrya multifasciata* (Tullberg, 1871)**

Entomobrya multifasciata (Tullberg): Vellay 1900: 21; Stach 1963: 34; Loksa 1966: 382; Loksa & Rubio 1966a: 152; Dunger 1975: 21; Loksa 1978a: 60; Loksa 1978b: 95; Loksa 1980: 111; Loksa 1983: 74; Loksa 1987: 79; Varga 1992: 172; Varga & Vargha 1992: 315; Farkas *et al.* 1998: 57; Varga & Oldal 1998: 86; Traser 1999: 56; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 265; Traser 2002b: 160; Traser 2002c: 48; Traser 2003: 155; Traser & Horváth-Szováti 2004: 58; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 73; *Entomobrya nicoleti* var. *multifasciata* (Tullberg): Stach 1929: 301.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a; Traser 2002b), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966; Varga 1992; Varga & Vargha 1992; Varga & Oldal 1998; Traser 2002b), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a; Traser 2002b), Fertő-Hanság (Traser 2003; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966), Hortobágy (Loksa 1983; Traser 2002b), Keszthely Mts. (Loksa 1966), Kiskunság (Vellay 1900; Loksa 1987; Traser & Csóka 2000, 2001; Traser 2002b, 2002c; Traser & Horváth-Szováti 2004, 2006), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Mezőföld (Stach 1929, 1963), Mt. Somló (Loksa 1966), Nyírség (Traser 2002b), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a), Szigetköz (Traser 2002a), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: xerothermophilic.

***Entomobrya muscorum* (Nicolet, 1842)**

Degeeria muscorum Nicolet: Tömösváry 1884a: 52; *Entomobrya intermedia* Brook: Vellay 1900: 20; *Entomobrya intermedia* var. *elongata* Brook: Vellay 1900: 20; *Entomobrya muscorum* (Nicolet): Vellay 1900: 21; Stach 1929: 303; Szent-Ivány 1940a: 430; Szent-Ivány 1940b: 119; Szent-Ivány 1941: 21; Loksa 1956b: 227; Paclt 1960: 157; Stach 1963: 95; Loksa 1966: 383; Loksa & Rubio 1966a: 152; Dunger 1975: 21; Loksa 1978b: 95; Loksa 1980: 111; Varga 1991:

85; Varga & Vargha 1992: 315; Traser 1995: 45; Traser 1999: 56; Traser 2002a: 265; Traser 2003: 155; Traser & Salló 2004: 230; *Entomobrya muscorum* var. *elongata* (Brook): Stach 1929: 303; *Entomobrya muscorum* f. *elongata* Brook: Szent-Ivány 1940a: 430; Szent-Ivány 1941: 21.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Buda Mts. (Stach 1929; Loksa 1956b), Budapest (Szent-Ivány 1940a, 1940b, 1941; Stach 1963), Bükk Mts. (Varga 1991; Varga & Vargha 1992), Cserhát (Szent-Ivány 1941), Cserhát (Loksa 1978b), Fertő-Hanság (Paclt 1960; Traser 2002a, 2003), Gerecse Mts. (Loksa 1966), Kiskunság (Vellay 1900; Stach 1929), Kőszeg Mts. (Szent-Ivány 1940a, 1940b, 1941; Traser & Salló 2004), Mátra Mts. (Szent-Ivány 1940b, 1941; Loksa 1980), Mezőföld (Stach 1963), Órség (Traser 1995), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1963), Visegrád Mts. (Stach 1929).

Ecological note: in dense vegetation.

***Entomobrya nicoleti* (Lubbock, 1868)**

Entomobrya nicoleti var. *muscorum* (Tullberg): Stach 1929: 301; *Entomobrya nicoleti* var. *fasciata* Stach: Stach 1929: 301; *Entomobrya nicoleti* var. *obscura* (Tullberg): Stach 1929: 301.

General distribution: Europe.

Distribution in Hungary: Buda Mts. (Stach 1929), Mezőföld (Stach 1929).

***Entomobrya nigriventris* Stach, 1930**

Entomobrya nigriventris Stach: Stach 1929: 302; Stach 1963: 41; Hornung 1986: 138; Loksa 1987: 79; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 73.

General distribution: Europe.

Distribution in Hungary: Fertő-Hanság (Traser *et al.* 2006), Kiskunság (Hornung 1986; Loksa 1987; Traser 2002c; Traser & Horváth-Szováti 2006), Mezőföld (Stach 1929, 1963).

Ecological note: xerothermophilic.

***Entomobrya nivalis* (Linnaeus, 1758)**

Degeeria nivalis Linnaeus: Tömösváry 1884a: 52; 52; *Entomobrya nivalis* (Linnaeus): Vellay 1900: 21; Stach 1929: 301; Szent-Ivány 1940a: 431; Stach 1963: 27; Loksa & Rubio 1966a: 152; Dunger 1975: 21; Loksa

1991: 272; Varga 1992: 172; Varga & Vargha 1992: 315; Traser 1995: 45; Varga & Oldal 1998: 86; Traser 1999: 56; Traser 2002a: 265; Traser & Salló 2004: 230; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 73; *Entomobrya nivalis* var. *immaculata* Schäfer: Stach 1929: 301; *Entomobrya nivalis* Nicolet (sic!): Loksa 1956b: 207.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Buda Mts. (Stach 1929; Loksa 1956b), Budapest (Tömösváry 1884a; Vellay 1900; Stach 1929, 1963), Bükk Mts. (Varga 1992; Varga & Vargha 1992; Varga & Oldal 1998), Fertő-Hanság (Traser *et al.* 2006), Gödöllő Hills (Tömösváry 1884a; Vellay 1900; Stach 1929), Kiskunság (Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a; Traser & Salló 2004), Mátra Mts. (Stach 1929), Mezőföld (Stach 1929), Nyírség (Loksa 1991), Őrség (Traser 1995), Szigetköz (Traser 2002a).

Ecological note: atmobiont.

***Entomobrya pazaristei* Denis, 1933**

Entomobrya pazaristei Denis: Loksa & Rubio 1966a: 152.

General distribution: Balkan Peninsula.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

Ecological note: troglophilous.

***Entomobrya quinquelineata* Börner, 1901**

Entomobrya quinquelineata Börner: Stach 1929: 302; Loksa 1956a: 413; Stach 1963: 57; Loksa 1966: 383; Loksa 1978a: 60; Loksa 1983: 74; Hornung 1986: 138; Loksa 1987: 79; Traser 1995: 45; Traser 1997: 62; Traser 1999: 56; Traser 2002a: 265; Traser 2003: 155; *Entomobrya quinquelineata* f. *alineata*: Traser 2002a: 265; *Entomobrya quinquelineata* f. *trilineata*: Traser 2002a: 265.

General distribution: Mediterranean.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bükk Mts. (Loksa 1956a), Cserhát (Stach 1929, 1963), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003), Hortobágy (Loksa 1983), Kiskunság (Hornung 1986; Loksa 1987), Mezőföld (Stach 1929, 1963), Őrség (Tra-

ser 1995), Pilis Mts. (Loksa 1966), Szigetköz (Traser 1997, 2002a), Villány Mts (Loksa 1966).

Ecological note: xerothermophilic.

***Entomobrya schoetti* Stach, 1922**

Entomobrya schötti (sic!) ab. *pigmentata* Stach: Szent-Ivány 1941: 22.

General distribution: Eastern Europe.

Distribution in Hungary: Tétény Plateau (Szent-Ivány 1941).

Ecological note: xerothermophilic.

***Entomobrya spectabilis* Reuter, 1890**

Entomobrya spectabilis Reuter: Loksa 1978a: 60.

General distribution: Northern and Central Europe.

Distribution in Hungary: Dráva Plain (Loksa 1978a).

Ecological note: synanthropic.

***Entomobrya superba* (Reuter, 1876)**

Calistella superba Reuter: Vellay 1900: 21; *Entomobrya superba* (Reuter): Stach 1929: 304; Szent-Ivány 1940a: 430.

General distribution: Europe.

Distribution in Hungary: Kőszeg Mts. (Szent-Ivány 1940a), Nyírség (Vellay 1900; Stach 1929; Szent-Ivány 1940a).

Ecological note: atmobiont.

***Entomobrya violaceolineata* Stach, 1963**

Entomobrya violaceolineata Stach: Traser & Horváth-Szováti 2006: 333.

General distribution: Eastern Europe.

Distribution in Hungary: Kiskunság (Traser & Horváth-Szováti 2006).

Ecological note: in litter.

***Entomobryoides* Maynard, 1951**

***Entomobryoides purpurascens* (Packard, 1872)**

Entomobrya purpurascens (Packard): Loksa 1966: 383; Loksa & Rubio 1966a: 152.

General distribution: Europe, North America.

Distribution in Hungary: Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a), Balatonfelvidék (Loksa 1966), Buda Mts. (Loksa 1966), Gerecse Mts. (Loksa 1966), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966).

***Entomobryoides myrmecophilus* (Reuter, 1886)**

Sinella myrmecophila Reuter: Szent-Ivány 1940a: 430; *Entomobryoides mayrmecophilus* (sic!) (Reuter): Traser 1999: 55; *Entomobryoides myrmecophila* (sic!) (Reuter): Traser & Csóka 2000: 77; Traser & Csóka 2001: 233; *Entomobryoides myrmecophilus* (Reuter): Traser 2002c: 48.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c), Kőszeg Mts. (Szent-Ivány 1940a).

Ecological note: myrmecophilous.

Subfamily: **Lepidocyrtinae**

***Lepidocyrtus* Bourlet, 1839**

***Lepidocyrtus arrabonicus* Traser, 2000**

Lepidocyrtus arrabonicus Traser: Traser 2000: 65, figs 1-14; Traser 2002a: 265; Traser 2002c: 48; Traser 2003: 156; Traser & Horváth-Szováti 2006: 333.

General distribution: Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2000, 2002a, 2003), Kiskunság (Traser & Horváth-Szováti 2006; Traser 2002c), Moson Plain (Traser 2000).

Ecological note: mesophilic.

***Lepidocyrtus* cf. *pallidus* Reuter, 1890**

Lepidocyrtus cf. *pallidus* Reuter 1890: Dunger 1975: 22.

General distribution: Europe, North America.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

***Lepidocyrtus curvicollis* (Bourlet, 1839)**

Lepidocyrtus curvicollis Bourlet: Tömösváry 1884a: 53; Vellay 1900: 21; Stach 1929: 298; Dudich 1932: 49; Gebhardt 1934: 140; Loksa 1960: 49; Paclt 1960: 156; Loksa 1961a: 257; Loksa 1962: 63; Loksa 1966:

384; Loksa & Rubio 1966a: 152; Loksa 1977: 211; Loksa 1978a: 61; Loksa 1980: 111; Loksa 1983: 74; Loksa 1991: 273; Farkas 1995: 46; Farkas 1996: 287; Farkas 1997: 58; Farkas & Szathmáry 1997: 39; Traser 1999: 56; *Lepidocyrtus curvicollis* (sic!) Bourlet: Dombos 2001: 2040.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Dudich 1932; Gebhardt 1934; Loksa 1966; Traser 1999), around the Lake Balaton (Farkas 1995), Bakony Mts. (Loksa & Rubio 1966a), Balatonfelvidék (Stach 1929; Gebhardt 1934; Loksa 1960, 1961a; Farkas & Szathmáry 1997), Börzsöny Mts. (Loksa 1966), Buda Mts. (Loksa 1966), Budapest (Tömösváry 1884a; Vellay 1900; Stach 1929; Gebhardt 1934), Bükk Mts. (Loksa 1962, 1966, 1977), Dráva Plain (Loksa 1978a), Gerecse Mts. (Loksa 1966), Gödöllő Hills (Tömösváry 1884a; Vellay 1900; Stach 1929), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Vellay 1900; Stach 1929; Gebhardt 1934), Mátra Mts. (Loksa 1980), Mecsek Mts. (Stach 1929; Gebhardt 1934; Paclt 1960), Mezőföld (Stach 1929; Gebhardt 1934; Dombos 2001), Nyírség (Vellay 1900; Stach 1929; Loksa 1991), Pilis Mts. (Loksa 1966), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929; Gebhardt 1934), Visegrád Mts. (Loksa 1966), Zemplén Mts. (Tömösváry 1884a; Vellay 1900; Stach 1929).

Ecological note: edaphic, troglophilous.

***Lepidocyrtus cyaneus* Tullberg, 1871**

Lepidocyrtus purpureus Lubbock: Vellay 1900: 21; *Lepidocyrtus assimilis* Reuter: Vellay 1900: 21; *Lepidocyrtus cyaneus* Tullberg: Stach 1929: 297; Szent-Ivány 1940a: 432; Szent-Ivány 1941: 22; Kovács 1953a: 184; Loksa 1956a: 411; Loksa 1966: 384; Loksa & Rubio 1966a: 152; Loksa 1978a: 61; Loksa 1978b: 95; Loksa 1980: 111; Traser 1981: 135; Loksa 1983: 74; Hornung 1986: 138; Loksa 1987: 79; Loksa 1991: 273; Traser 1997: 62; Farkas *et al.* 1998: 57; Traser 1999: 56; Dombos 2001: 2040; Traser 2002a: 265; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 73; Traser 2006: 36; *Lepidocyrtus cyaneus* var. *assimilis* Reuter: Stach 1929: 298.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a), Börzsöny Mts. (Loksa 1966), Buda Mts. (Loksa 1966), Budapest

(Stach 1929), Bükk Mts. (Loksa 1956a, 1966), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Kiskunság (Vellay 1900; Stach 1929; Hornung 1986; Loksa 1987; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Loksa 1980), Mezőföld (Stach 1929; Dombos 2001), Nyírség (Vellay 1900; Stach 1929; Kovács 1953a; Loksa 1991), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997, 2002a), Tétény Plateau (Szent-Ivány 1941), Vas-Sopron Plain (Traser 1981), Visegrád Mts. (Loksa 1966).

***Lepidocyrtus* cf. *instratus* Handschin, 1924**

Lepidocyrtus cf. *instratus* Handschin: Traser 1980: 20.

General distribution: Central Europe.

Distribution in Hungary: Bakony Mts. (Traser 1980).

Ecological note: alpine.

***Lepidocyrtus lanuginosus* (Gmelin, 1788)**

Lepidocyrtus pusillus Linnaeus: Vellay 1900: 21; *Lepidocyrtus rivularis* Bourlet: Stach 1929: 297; *Lepidocyrtus rivularis* var. *albicans* Reuter: Stach 1929: 297; *Lepidocyrtus lanuginosus* (Gmelin): Stach 1929: 297; Szent-Ivány 1940a: 433; Loksa 1956a: 391; Loksa 1956b: 203; Paclt 1960: 157; Loksa 1966: 384; Loksa & Rubio 1966a: 152; Dunger 1975: 22; Loksa 1978a: 60; Loksa 1980: 111; Traser 1980: 20; Traser 1981: 133; Loksa 1983: 74; Loksa 1991: 273; Farkas 1995: 46; Traser 1995: 45; Farkas 1996: 287; Farkas 1997: 56; Farkas & Szathmáry 1997: 39; Farkas *et al.* 1998: 57; Traser 1999: 56; Dombos 2001: 2040; Traser 2002a: 265; Traser 2002c: 48; Traser 2006: 36; Traser *et al.* 2006: 73; Traser & Horváth-Szováti 2006: 334; *Lepidocyrtus lanuginosus* f. *albicans* Reuter: Szent-Ivány 1940a: 433; *Lepidocyrtus lanuginosus* f. *fucata* Uzel: Szent-Ivány 1940a: 433; *Lepidocyrtus* cf. *lanuginosus* (Gmelin): Loksa 1961b: 224; Traser 1981: 133.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), around the Lake Balaton (Farkas 1995, 1997), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a; Traser 1980), Balaton-felvidék (Stach 1929; Loksa 1966; Farkas 1995, 1997; Farkas & Szathmáry 1997), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1956b, 1966), Budapest (Stach 1929), Bükk Mts.

(Loksa 1956a, 1966), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Vellay 1900; Stach 1929; Szent-Ivány 1940a; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Loksa 1980), Mecsek Mts. (Paclt 1960; Loksa 1966), Mezőföld (Stach 1929; Dombos 2001), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Őrség (Traser 1995), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts. (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: mesophilic.

***Lepidocyrtus lignorum* (Fabricius, 1793)**

Lepidocyrtus lignorum (Fabricius): Vellay 1900: 21; Tömösváry 1882: 124; Dunger 1975: 22; Loksa 1977: 209; Loksa 1978a: 61; Loksa 1978b: 95; Loksa 1991: 273; Traser 1995: 45; Traser 1997: 62; Traser 1999: 56; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 265; Traser 2002b: 160; Traser 2002c: 48; Traser & Salló 2004: 230; Traser 2006: 36; Traser *et al.* 2006: 73.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1977; Traser 2002b), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c), Kőszeg Mts. (Traser & Salló 2004), Nyírség (Loksa 1991), Őrség (Traser 1995), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997, 2002a), Zemplén Mts. (Tömösváry 1882; Vellay 1900).

***Lepidocyrtus nigrescens* Szeptycki, 1967**

Lepidocyrtus nigrescens Szeptycki: Dunger 1975: 22; Traser 1999: 57; Traser & Horváth-Szováti 2006: 333.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Kiskunság (Traser & Horváth-Szováti 2006).

Ecological note: xerothermophilic.

***Lepidocyrtus paradoxus* Uzel, 1890**

Lepidocyrtus paradoxus Uzel: Stach 1929: 298; Szent-Ivány 1940a: 432; Szent-Ivány 1941: 22; Loksa 1978a: 61; Traser 1981: 133; Farkas 1995: 46; Traser 1995: 45; Farkas 1997: 56; Traser 1997: 62; Farkas *et al.* 1998: 57; Traser 1999: 57; Traser 2000: 68; Dombos 2001: 2040; Traser 2002a: 265; Traser 2002c: 48; Traser 2003: 156; Traser & Horváth-Szováti 2006: 334; Traser *et al.* 2006: 73.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995, 1997), Balatonfelvidék (Farkas 1995, 1997), Buda Mts. (Stach 1929), Dráva Plain (Loksa 1978a), Fertő-Hanság (Szent-Ivány 1941; Traser 2000, 2002a, 2003; Traser *et al.* 2006), Kiskunság (Stach 1929; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mezőföld (Stach 1929; Dombos 2001), Őrség (Traser 1995), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981, 2002a), Szekszárd Hills (Stach 1929), Szigetköz (Traser 1997), Zala Hills (Stach 1929).

Ecological note: mostly in open habitats.

***Lepidocyrtus peisonis* Traser & Christian, 1992**

Lepidocyrtus peisonis Traser & Christian: Traser & Christian 1992: 119, figs 1-6; Traser 2000: 68; Traser 2002a: 265; Traser 2003: 156; Traser *et al.* 2006: 73.

General distribution: Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser & Christian 1992; Traser 2000, 2002a, 2003; Traser *et al.* 2006).

Ecological note: hygrophilous.

***Lepidocyrtus ruber* Schött, 1902**

Lepidocyrtus ruber var. *albidus* Stach: Stach 1929: 297; *Lepidocyrtus ruber* Schött: Loksa 1978a: 61; Traser 1980: 20; Farkas 1995: 46; Traser 1995: 45; Traser 2002a: 265.

General distribution: Europe.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Bakony Mts. (Traser 1980), Balatonfelvidék (Stach 1929), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Őrség (Traser 1995), Sopron Mts. (Traser 2002a).

***Lepidocyrtus serbicus* Denis, 1933**

Lepidocyrtus serbicus Denis: Dunger 1975: 22.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

***Lepidocyrtus* cf. *tellecheae* Arbea & Jordana, 1989**

Lepidocyrtus cf. *tellecheae* Arbea & Jordana: Traser & Horváth-Szováti 2004: 59; Traser & Horváth-Szováti 2006: 334.

General distribution: Europe.

Distribution in Hungary: Kiskunság (Traser & Horváth-Szováti 2004, 2006).

***Lepidocyrtus violaceus* (Geoffroy, 1762)**

Lepidocyrtus violaceus Lubbock: Dunger 1975: 22; Traser 2002a: 265; Traser 2006: 36; *Lepidocyrtus violaceus* (Fourcroy (sic!)): Traser 1995: 45; Traser 1999: 57; Traser *et al.* 2006: 73.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Őrség (Traser 1995), Sopron Mts. (Traser 2002a).

***Lepidocyrtus* cf. *weidneri* Hüther, 1971**

Lepidocyrtus cf. *weidneri* Hüther: Traser 2003: 156.

General distribution: Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2003).

***Pseudosinella* Schäffer, 1897**

***Pseudosinella aggtelekiensis* (Stach, 1929)**

Lepidocyrtus (*Pseudosinella*) *aggtelekiensis* Stach: Stach 1929: 296; *Lepidocyrtus aggtelekiensis* Stach: Dudich 1930: 70; Dudich 1932: 49; Kovács 1953b: 90; Kovács 1954: 97; Traser 1999: 49; *Pseudosinella aggtelekiensis* Stach: Loksa 1961b: 224; Traser 1999: 57.

General distribution: Central-Europe.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Dudich 1930, 1932; Kovács 1953b, 1954; Loksa 1961b; Traser 1999).

Ecological note: troglophilous.

***Pseudosinella alba* (Packard, 1873)**

Pseudosinella alba (Packard): Szent-Ivány 1940a: 433; Loksa 1956a: 391; Loksa 1956b: 203; Loksa 1961a: 257, figs 25-27; Loksa 1962: 63; Loksa 1966: 384; Loksa & Rubio 1966a: 152; Dunger 1975: 23; Loksa 1977: 211; Loksa 1978b: 95; Traser 1981: 133; Traser 1997: 62; Loksa 1991: 273; Traser 1995: 45; Traser 1999: 57; Traser 2002a: 265; Traser 2003: 156; Traser & Horváth-Szováti 2004: 59; Traser 2006: 36; Traser & Horváth-Szováti 2006: 334; Traser *et al.* 2006: 73.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a), Balatonfelvidék (Loksa 1961a, 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1956b, 1966), Bükk Mts. (Loksa 1956a, 1962, 1966, 1977), Cserhát (Loksa 1978b), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Keszthely Mts. (Loksa 1966), Kiskunság (Traser & Horváth-Szováti 2004, 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Órség (Traser 1995), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 1981, 2002a), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: edaphic.

***Pseudosinella argentea* Loksa, 1961**

Pseudosinella argentea Loksa: Loksa 1961a: 262, figs 28-29.

General distribution: Central Europe.

Distribution in Hungary: Balatonfelvidék (Loksa 1961a).

***Pseudosinella decipiens* Denis, 1924**

Pseudosinella decipiens Denis: Loksa 1966: 384; Loksa & Rubio 1966a: 152; Traser 2002a: 265; Traser 2002c: 48.

General distribution: Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Buda Mts. (Loksa 1966), Gerecse Mts. (Loksa 1966), Kiskunság (Traser 2002c), Moson Plain (Traser 2002a).

***Pseudosinella duodecimpunctata* Denis, 1931**

Pseudosinella duodecimpunctata Denis: Loksa 1978a: 61.

General distribution: Europe.

Distribution in Hungary: Dráva Plain (Loksa 1978a).

***Pseudosinella* cf. *fallax* (Börner, 1903)**

Pseudosinella cf. *fallax* Börner, 1903: Traser 1999: 57.

General distribution: Southern Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Ecological note: in montane habitats.

***Pseudosinella horaki* Rusek, 1985**

Pseudosinella horaki Rusek, 1985: Traser 1999: 57; Traser 2002a: 266.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Moson Plain (Traser 2002a), Sopron Mts. (Traser 2002a).

***Pseudosinella immaculata* (Lie-Pettersen, 1896)**

Pseudosinella immaculata (Lie-Pettersen): Loksa 1956a: 395; Loksa 1966: 384; *Pseudosinella imparipunctata* Gisin (sic!): Loksa 1966: 384; Farkas 1995: 46; Traser 1999: 57; Traser 2002a: 266.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), around the Lake Balaton (Farkas 1995), Bükk Mts. (Loksa 1956a), Fertő-Hanság (Traser 2002a), Mecsek Mts. (Loksa 1966).

***Pseudosinella ksenemani* Gisin, 1944**

Pseudosinella ksenemani Gisin: Dunger 1975: 23; Loksa 1978a: 61.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Dráva Plain (Loksa 1978a).

***Pseudosinella octopunctata* Börner, 1901**

Lepidocyrtus (*Pseudosinella*) *octopunctatus* Börner: Stach 1929: 296; *Pseudosinella octopunctata* Börner:

Paclt 1960: 157; Dunger 1975: 23; Loksa 1956b: 203; Loksa 1977: 211; Loksa 1978a: 61; Traser 1980: 20; Traser *et al.* 2006: 73.

General distribution: Holarctic.

Distribution in Hungary: Bakony Mts. (Traser 1980), Balatonfelvidék (Paclt 1960), Börzsöny Mts. (Dunger 1975), Buda Mts. (Loksa 1956b), Bükk Mts. (Loksa 1977), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser *et al.* 2006), Mezőföld (Stach 1929).

***Pseudosinella petterseni* Börner, 1901**

Pseudosinella petterseni Börner: Loksa 1966: 385; Dunger 1975: 23; Loksa 1977: 211; Loksa 1978b: 95.

General distribution: cosmopolitan.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1977), Cserhát (Loksa 1978b), Mecsek Mts. (Loksa 1966), Villány Mts (Loksa 1966).

***Pseudosinella sexoculata* Schött, 1902**

Pseudosinella sexoculata Schött: Loksa 1966: 385; Traser & Horváth-Szováti 2006: 334; Traser 2002a: 266; Traser 2002c: 48.

General distribution: Holarctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Kiskunság (Traser & Horváth-Szováti 2006; Traser 2002c), Mecsek Mts. (Loksa 1966), Villány Mts (Loksa 1966).

***Pseudosinella wahlgreni* (Börner, 1907)**

Pseudosinella wahlgreni (Börner): Loksa 1966: 385; Dunger 1975: 23; Loksa 1977: 209; Traser 1980: 20; Loksa 1980: 111; Traser 1981: 133; Loksa 1991: 273; Farkas 1995: 46; Traser 1995: 45; Farkas *et al.* 1998: 57; Loksa & Rubio 1966a: 152; Loksa 1978a: 61; Loksa 1978b: 95.

General distribution: Europe, North Africa.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Bakony Mts. (Traser 1980; Loksa & Rubio 1966a), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966, 1977), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Gerecse Mts. (Loksa 1966), Keszthely Mts. (Loksa 1966), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Nyírség (Loksa 1991), Őrség (Traser

1995), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

***Pseudosinella zygophora* (Schille, 1908)**

Lepidocyrtus zygophorus Schille: Dudich 1932: 49; *Pseudosinella zygophorus* (Schille): Traser 1999: 57.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Traser 1999).

Seira Lubbock, 1869

***Seira dollfusi* (Carl, 1899)**

Pseudosira dollfusi Carl (sic!): Stach 1929: 299; *Lepidocyrtus dollfussi* Carl (sic!): Szent-Ivány 1941: 22, fig. 1.

General distribution: Western Europe.

Distribution in Hungary: Buda Mts. (Stach 1929; Szent-Ivány 1941).

***Seira domestica* (Nicolet, 1842)**

Seira domestica (Nicolet): Loksa 1966: 384; Traser 2002a: 265; *Seirra* (sic!) *domestica* (Nicolet): Dombos 2001: 2043.

General distribution: Europe.

Distribution in Hungary: Bükk Mts. (Loksa 1966), Fertő-Hanság (Traser 2002a), Mezőföld (Dombos 2001).

Ecological note: synanthropic.

***Seira pallidipes* Reuter, 1895**

Sira pallidipes Reuter (sic!): Reuter 1895a: 114; Stach 1929: 299; *Seira pallidipes* Reuter: Vellay 1900: 21; Loksa 1983: 74; Loksa 1987: 79; *Seira pallipes* (sic!) Reuter: Hornung 1986: 138.

General distribution: Eastern Europe.

Distribution in Hungary: Kiskunság (Reuter 1895a; Vellay 1900; Stach 1929; Loksa 1983; Hornung 1986; Loksa 1987).

Ecological note: in open habitats.

***Seira pillichii* Stach, 1930**

Pseudosira pillichii Stach (sic!): Stach 1929: 299; Loksa 1959c: 389.

General distribution: Central Europe.

Distribution in Hungary: Mezőföld (Stach 1929; Loksa 1959c).

***Seira stachi* Loksa, 1990**

Seira stachi Loksa: Loksa 1991: 274, figs 3a-d.

General distribution: Central Europe.

Distribution in Hungary: Nyírség (Loksa 1991).

***Willowsia Shoebotam*, 1917**

***Willowsia buski* (Lubbock, 1871)**

Seira buskii (sic!) Lubbock: Vellay 1900: 21; *Sira buski* Lubbock: Stach 1929: 299; Szent-Ivány 1940a: 432; *Willowsia buski* (Lubbock): Loksa 1978a: 60; Traser 1999: 56; Traser 2002a: 265; Traser 2003: 156; Traser & Horváth-Szováti 2006: 334.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Cserhát (Stach 1929; Szent-Ivány 1940a), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003), Kiskunság (Vellay 1900; Stach 1929; Szent-Ivány 1940a; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mezőföld (Stach 1929; Szent-Ivány 1940a), Sopron Mts. (Traser 2002a), "bank of the River Bodrog" (Szent-Ivány 1940a).

Ecological note: synanthrop, corticophilous.

***Willowsia nigromaculata* (Lubbock, 1873)**

Sira platani ab. *nigromaculata* (Lubbock): Stach 1929: 299; *Sira platani* f. *nigromaculata* Lubbock: Szent-Ivány 1940a: 432; Kovács 1953a: 184; Loksa 1991: 26; *Willowsia nigromaculata* (Lubbock): Loksa & Rubio 1966a: 152.

General distribution: Holarctic.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Kőszeg Mts. (Szent-Ivány 1940a, 1941), Mezőföld (Stach 1929; Szent-Ivány 1941), Nyírség (Kovács 1953a; Loksa 1991).

Ecological note: corticophilous.

***Willowsia platani* (Nicolet, 1842)**

Sira platani ab. *corticalis* (Carl): Stach 1929: 300; *Willowsia platani* (Nicolet): Traser 2002a: 265.

General distribution: Europe.

Distribution in Hungary: Buda Mts. (Stach 1929), Mezőföld (Stach 1929), Sopron Mts. (Traser 2002a).

Ecological note: corticophilous.

Subfamily: **Orchesellinae**

Heteromurus Wankel, 1860

***Heteromurus major* (Moniez, 1889)**

Heteromurus major (Moniez): Stach 1929: 294; Loksa 1966: 384; Dunger 1975: 23; Loksa 1983: 74; Farkas 1995: 46; Traser 1999: 56; Traser 2002a: 265; Traser 2006: 36; Traser *et al.* 2006: 73.

General distribution: Central and Southern Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), around the Lake Balaton (Farkas 1995), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1966), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Mezőföld (Stach 1929), Mt. Somló (Loksa 1966), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: thermophilic.

***Heteromurus nitidus* (Templeton, 1835)**

Templetonia nitida Templeton: Vellay 1900: 21; *Heteromurus nitidus* (Templeton): Stach 1929: 294; Gebhardt 1934: 139; Szent-Ivány 1941: 23, figs 2-3; Loksa 1959b: 70; Paclt 1960: 157; Loksa 1961a: 262, fig. 30; Loksa 1961b: 224; Loksa 1962: 63; Loksa 1966: 384; Dunger 1975: 23; Loksa 1977: 211; Loksa 1978a: 61; Loksa 1978b: 95; Traser 1981: 135; Loksa 1983: 74; Loksa 1991: 273; Farkas 1995: 46; Traser 1995: 45; Farkas 1996: 287; Traser 1997: 62; Farkas 1997: 58; Farkas *et al.* 1998: 57; Traser 1999: 56; Traser 2003: 156; Traser 2006: 36; Traser *et al.* 2006: 73; *Heteromurus nitidus* Absolon (sic!): Gebhardt 1933: 38; *Heteromurus nitidus* var. *margaritarius* (Wankel): Stach 1929: 295; *Heteromurus nitidus* var. *margaritaria* (sic!) (Wankel): Dudich 1932: 49; *Heteromurus nitidus* var. *margaritarius* Absolon (sic!): Gebhardt 1934: 139; *Heteromurus nitidus* f. *margaritaria* Wankel: Paclt 1960: 157; *Heteromurus nitidus* var. *margaritaria* Wankel: Loksa & Rubio 1966a: 154; *Heteromurus nitidus* var. *ocellata* Stach: Gebhardt 1934: 139; *Heteromurus nitidus* var. *paucidentatus* Stach: Stach 1929: 295; Dudich 1932: 49; Gebhardt

1934: 139; Szent-Ivány 1940b: 120; Szent-Ivány 1941: 23; *Heteromurus nitidus* var. *principalis* Stach: Gebhardt 1934: 139; *Heteromurus nitidus* f. *quadriocellata* (sic!) Kseneman: Paclt 1960: 157; *Heteromurus nitidus* var. *quadrioculata* Ksenaman: Traser 2002a: 265.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Dudich 1932; Gebhardt 1934; Loksa 1961b; Traser 1999), around the Lake Balaton (Farkas 1995), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a), Balatonfelvidék (Paclt 1960; Loksa 1961a, 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Stach 1929; Gebhardt 1934; Szent-Ivány 1941; Loksa 1966), Bükk Mts. (Loksa 1962, 1977), Cserhát (Loksa 1959b, 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Vellay 1900; Stach 1929), Mecsek Mts. (Stach 1929; Gebhardt 1933; Gebhardt 1934; Szent-Ivány 1940b, 1941; Paclt 1960; Loksa 1966), Nyírség (Loksa 1991), Órség (Traser 1995), Pilis Mts. (Stach 1929; Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: edaphic, troglophilous.

***Heteromurus sexoculatus* Brown, 1926**

Heteromurus sexoculatus Brown: Loksa 1983: 74, figs 7-13.

General distribution: Asia Minor.

Distribution in Hungary: Hortobágy (Loksa 1983).

Orchesella Templeton, 1835

***Orchesella albofasciata* Stach, 1960**

Orchesella albofasciata Stach: Traser & Csóka 2000: 78; Traser & Csóka 2001: 233; Dombos 2001: 2040; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333.

General distribution: Europe.

Distribution in Hungary: Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c; Traser & Hor-

váth-Szováti 2006), Mezőföld (Dombos 2001).

Ecological note: xerothermophilic.

***Orchesella alticola* Uzel, 1891**

Orchesella alticola Uzel: Loksa 1966: 383; Traser 1999: 56.

General distribution: Western and Central Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999).

Ecological note: in montane habitats.

***Orchesella balcanica* Stach, 1960**

Orchesella balcanica Stach: Loksa 1966: 383.

General distribution: Southern and Eastern Europe.

Distribution in Hungary: Mecsek Mts. (Loksa 1966), Villány Mts (Loksa 1966).

Ecological note: in montane habitats.

***Orchesella bifasciata* Nicolet, 1842**

Orchesella bifasciata Nicolet: Vellay 1900: 20; Stach 1929: 306; Szent-Ivány 1938: 92; Szent-Ivány 1940a: 433; Loksa 1956b: 205; Paclt 1960: 157; Loksa & Rubio 1966a: 152; Dunger 1975: 22; Loksa 1978a: 60; Loksa 1978b: 95; Hornung 1986: 138; Loksa 1991: 272; Traser 1999: 56; Traser & Csóka 2000: 78; Traser & Csóka 2001: 237; Traser 2002c: 48; Traser *et al.* 2006: 73; *Orchesella bifasciata* f. *intermedia* Ågren: Szent-Ivány 1940a: 433; Szent-Ivány 1941: 23, figs 4-5.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Balatonfelvidék (Paclt 1960), Börzsöny Mts. (Dunger 1975), Buda Mts. (Loksa 1956b), Csehát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser *et al.* 2006), Kiskunság (Vellay 1900; Stach 1929; Szent-Ivány 1938, 1940a; Hornung 1986; Traser & Csóka 2000, 2001; Traser 2002c), Kőszeg Mts. (Szent-Ivány 1940a, 1941), Mátra Mts. (Szent-Ivány 1938, 1941), Nyírség (Loksa 1991).

Ecological note: planar to montane.

***Orchesella bulgarica* Stach, 1960**

Orchesella bulgarica Stach: Loksa 1966: 383; Dunger 1975: 22.

General distribution: Europe, Balkan Peninsula

Distribution in Hungary: Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Dunger 1975), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966).

Ecological note: in montane habitats.

***Orchesella cincta* (Linnaeus, 1758)**

Orchesella cincta (Linnaeus): Tömösváry 1882: 123; Tömösváry 1884a: 54; Vellay 1900: 20; Szent-Ivány 1940a: 434; Loksa 1956a: 413; Stach 1960: 119, pl. 21: figs 1-4; Loksa 1966: 383; Dunger 1975: 22; Loksa 1977: 211; Loksa 1978a: 60; Loksa 1980: 111; Loksa 1983: 74; Hornung 1986: 138; Loksa 1987: 79; Loksa 1991: 272; Varga 1991: 85; Varga & Vargha 1992: 315; Varga 1992: 172; Farkas 1995: 46; Traser 1997: 62; Varga & Oldal 1998: 86; Traser & Csóka 2000: 78; Traser 2000: 68; Traser & Csóka 2001: 237; Dombos 2001: 2040; Varga *et al.* 2002a: 105; Traser 2002a: 265; Traser 2002c: 48; Varga & Naár 2002: 115; Varga *et al.* 2002b: 526; Traser 2003: 155; Traser 2006: 36; Traser *et al.* 2006: 73; Traser & Horváth-Szováti 2006: 333; *Orchesella cincta* var. *vaga* Linnaeus: Vellay 1900: 20; Stach 1929: 306; *Orchesella cincta* f. *vaga* Linnaeus: Loksa 1966: 383; *Orchesella cincta* var. *unifasciata* (Nicolet): Stach 1929: 306; *Orchesella cincta* ab. *unifasciata* Nicolet: Szent-Ivány 1941: 24; *Orchesella cincta* (Nicolet (sic!)): Farkas *et al.* 1998: 57.

General distribution: Holarctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Börzsöny Mts. (Dunger 1975), Buda Mts. (Stach 1929), Budapest (Tömösváry 1884a; Vellay 1900; Stach 1929), Bükk Mts. (Loksa 1956a, 1966, 1977; Varga 1991, 1992; Varga & Vargha 1992; Varga & Oldal 1998; Varga *et al.* 2002a, 2002b; Varga & Naár 2002), Dráva Plain (Loksa 1978a), Fertő-Hanság (Szent-Ivány 1941; Traser 2000, 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Gödöllő Hills (Tömösváry 1884a; Vellay 1900; Stach 1929), Hortobágy (Loksa 1983), Kiskunság (Vellay 1900; Stach 1929; Hornung 1986; Loksa 1987; Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Loksa 1980),

Mecsek Mts. (Tömösváry 1884a; Vellay 1900; Stach 1929), Mezőföld (Stach 1929; Stach 1960; Dombos 2001), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998), Szigetköz (Traser 1997), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929), Zemplén Mts. (Tömösváry 1882; Vellay 1900; Stach 1929).

***Orchesella flavescens* (Bourlet, 1839)**

Orchesella rufescens Linnaeus (sic!): Tömösváry 1884a: 54; *Orchesella rufescens* Wulfen (sic!): Vellay 1900: 20; *Orchesella rufescens* (Bourlet) (sic!): Stach 1929: 305; *Orchesella flavescens* var. *melanocephala* (Nicolet): Stach 1929: 305; *Orchesella flavescens* var. *pallida* Reuter: Stach 1929: 305; Kovács 1953a: 183; Loksa 1991: 26; *Orchesella flavescens* var. *quinquelineata* Stach: Stach 1929: 305; *Orchesella flavescens* f. *melanocephala* Nicolet: Szent-Ivány 1938: 92; *Orchesella flavescens* f. *melanocephala* Nicolet: Szent-Ivány 1940a: 434; *Orchesella flavescens* f. *pallida* Reuter: Szent-Ivány 1940a: 434; *Orchesella flavescens* (Bourlet): Szent-Ivány 1940a: 434; Loksa 1956b: 205; Stach 1960: 36, pl. 5: figs 1-6; Loksa & Rubio 1966a: 152; Loksa 1966: 383; Dunger 1975: 21; Loksa 1978a: 60; Loksa 1978b: 95; Loksa 1983: 74; Loksa 1991: 272; Farkas 1995: 46; Traser 1995: 45; Farkas 1996: 287; Farkas 1997: 56; Farkas & Szathmáry 1997: 39; Farkas 1997: 58; Farkas *et al.* 1998: 57; Traser 1999: 56; Traser 2002a: 265; Traser 2003: 156; Traser & Horváth-Szováti 2006: 333; *Orchesella* cf. *flavescens* (Bourlet): Traser 1981: 134.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Balatonfelvidék (Stach 1929; Farkas 1995, 1997; Farkas & Szathmáry 1997, 1997), Börzsöny Mts. (Stach 1929; Dunger 1975), Buda Mts. (Loksa 1956b), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Szent-Ivány 1938), Mezőföld (Stach 1929, 1960), Nyírség (Stach 1929; Kovács 1953a; Loksa 1991), Őrség (Traser 1995), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a), Szekszárd Hills (Stach 1929), Szigetköz (Traser 2002a), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929), Vas-Sopron Plain (Traser 1981).

***Orchesella hungarica* Stach, 1929**

Orchesella hungarica Stach: Stach 1929: 306; Loksa 1959c: 389; Stach 1960: 102, pl. 17: figs 2-3; Loksa 1966: 383.

General distribution: Europe.

Distribution in Hungary: Mecsek Mts. (Loksa 1966), Mezőföld (Stach 1929; Loksa 1959c; Stach 1960), Villány Mts (Loksa 1966).

***Orchesella multifasciata* (Stscherbakow, 1898)**

Orchesella multifasciata (Stscherbakow): Stach 1929: 306; Stach 1960: 92, pl. 14: figs 1-4; Loksa & Rubio 1966a: 152; Dunger 1975: 22; Loksa 1978a: 60; Traser 1980: 20; Loksa 1983: 74; Traser 1999: 56; Dombos 2001: 2040; Traser 2002a: 265; Traser & Horváth-Szováti 2006: 333; Traser 2006: 36.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a; Traser 1980), Börzsöny Mts. (Dunger 1975), Dráva Plain (Loksa 1978a), Gerecse Mts. (Traser 2006), Hortobágy (Loksa 1983), Kiskunság (Traser & Horváth-Szováti 2006), Mecsek Mts. (Stach 1929, 1960), Mezőföld (Stach 1929, 1960; Dombos 2001), Moson Plain (Traser 2002a), Szigetköz (Traser 2002a).

Ecological note: silvicolous, xerothermophil.

***Orchesella orientalis* Stach, 1960**

Orchesella orientalis Stach: Loksa 1991: 274, figs 2a-d.

General distribution: Eastern Europe.

Distribution in Hungary: Nyírség (Loksa 1991).

***Orchesella pannonica* Stach, 1960**

Orchesella pannonica Stach: Stach 1960: 59, pl. 9: figs 4-5.

General distribution: Central Europe.

Distribution in Hungary: Buda Mts. (Stach 1960).

Ecological note: xerothermophilic.

***Orchesella pulchra* Stscherbakow, 1898**

Orchesella pulchra Stach (sic!): Stach 1960: 68, pl. 12: figs 1, 4.

General distribution: Eastern Europe.

Distribution in Hungary: Balatonfelvidék (Stach 1960).

***Orchesella quinquefasciata* (Bourlet, 1841)**

Orchesella quinquefasciata Bourlet: Loksa 1966: 383.

General distribution: Central Europe.

Distribution in Hungary: Bakony Mts. (Loksa 1966), Gerecse Mts. (Loksa 1966).

***Orchesella spectabilis* Tullberg, 1871**

Orchesella spectabilis Tullberg: Vellay 1900: 20; Stach 1929: 305; Szent-Ivány 1940a: 434; Szent-Ivány 1941: 24, figs 6-7; Stach 1960: 50, pl. 8: figs 3-4; Loksa 1966: 383; Loksa 1977: 211; Loksa 1983: 74; Loksa 1991: 272; Traser 1997: 62; Traser 1999: 56; Traser 2002a: 265; *Orchesella spectabilis* var. *pallida* Tullberg: Stach 1929: 305.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Buda Mts. (Stach 1929, 1960), Bükk Mts. (Loksa 1977), Cserehát (Szent-Ivány 1941), Fertő-Hanság (Traser 2002a), Gerecse Mts. (Loksa 1966), Hortobágy (Loksa 1983), Kiskunság (Vellay 1900; Stach 1929), Kőszeg Mts. (Szent-Ivány 1940a), Nyírség (Vellay 1900; Stach 1929; Loksa 1991), Szigetköz (Traser 1997, 2002a).

Ecological note: xerothermophilic.

***Orchesella villosa* (Geoffroy, 1762)**

Orchesella villosa (Geoffroy): Tömösváry 1882: 124; Tömösváry 1884a: 54; Stach 1929: 306; Loksa 1966: 384; Loksa 1978b: 95; *Orchesella villosa* Linnaeus (sic!): Vellay 1900: 20; *Orchesella multifasciata* (sic!) Geoffroy: Loksa 1966: 384.

General distribution: Europe, North-America.

Distribution in Hungary: Aggtelek Karst (Loksa 1966), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966), Buda Mts. (Loksa 1966), Budapest (Tömösváry 1884a; Stach 1929; Vellay 1900), Bükk Mts. (Loksa 1966), Cserehát (Loksa 1978b), Gerecse Mts. (Loksa 1966), Gödöllő Hills (Tömösváry 1884a; Stach 1929; Vellay 1900), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Tömösváry 1884a; Vellay 1900; Stach 1929; Loksa 1966), Mt. Somló (Loksa 1966), Pilis Mts. (Loksa 1966), Vác-

Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966), Zemplén Mts. (Tömösváry 1882; Vellay 1900; Stach 1929).

***Orchesella xerothermica* Stach, 1960**

Orchesella xerothermica Stach: Traser 1999: 56; Traser 2002a: 265; Traser *et al.* 2006: 73.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Fertő-Hanság (Traser *et al.* 2006), Szigetköz (Traser 2002a).

Ecological note: xerothermophilic.

Family: **Isotomidae**

Agrenia Börner, 1906

***Agrenia bidenticulata* (Tullberg, 1876)**

Agrenia bidenticulata (Tullberg): Traser 1999: 55.

General distribution: Arctoalpine.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Anurophorus Nicolet, 1842

***Anurophorus atlanticus* Fjellberg, 1974**

Anurophorus atlanticus Fjellberg: Traser 2002a: 264.

General distribution: Eastern Europe.

Distribution in Hungary: Sopron Mts. (Traser 2002a).

***Anurophorus cuspidatus* Stach, 1947**

Anurophorus cuspidatus Stach: Loksa 1966: 381; Loksa & Rubio 1966a: 151; Traser 1999: 54.

General distribution: Southern and Eastern Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a).

Ecological note: in montane habitats.

***Anurophorus laricis* Nicolet, 1842**

Anurophorus laricis Nicolet: Stach 1929: 287; Loksa 1966: 381; Loksa 1980: 110; Traser 1995: 45; Traser 1999: 54; Traser 2002a: 264.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Budapest (Stach 1929), Cserhát (Stach 1929), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Őrség (Traser 1995), Sopron Mts. (Traser 2002a), Villány Mts (Loksa 1966).

Ecological note: mostly corticolous.

***Anurophorus pseudolaricis* Loksa, 1978**

Anurophorus pseudolaricis Loksa: Loksa 1978a: 56, figs 5-8.

General distribution: Hungary.

Distribution in Hungary: Dráva Plain (Loksa 1978a).

***Appendisotoma* Stach, 1947**

***Appendisotoma franzi* (Haybach, 1962)**

Proisotoma cf. *fanzi* Haybach: Traser 1980: 20; *Proisotoma franzi* Haybach: Traser *et al.* 1993: 224; Traser & Csóka 2000: 77; Traser & Csóka 2001: 237; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333.

General distribution: Central-Europe.

Distribution in Hungary: Bakony Mts. (Traser 1980), Kiskunság (Traser *et al.* 1993; Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006).

Ecological note: xerothermophilic.

***Appendisotoma juliannae* Traser, Thibaud & Najt, 1993**

Appendisotoma juliannae Traser, Thibaud & Najt: Traser *et al.* 1993: 221, figs 1-2; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333.

General distribution: Eastern Europe (Hungary, Poland).

Distribution in Hungary: Kiskunság (Traser *et al.* 1993; Traser 2002c; Traser & Horváth-Szováti 2006).

Ecological note: silvicolous.

Ballistura Börner, 1906

Ballistura hankoi (Stach, 1929)

Proisotoma hankoi Stach: Stach 1929: 288; Stach 1947: 196, pl. 23: figs 6-7; Traser 1999: 55.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Balatonfelvidék (Stach 1929, 1947).

Ecological note: hygrophilous.

Ballistura schoetti (Dalla Torre, 1895)

Proisotoma schoetti (Dalla Torre): Traser 2002a: 264.

General distribution: cosmopolitan.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

Ecological note: hygrophilous.

Coloburella Latzel, 1918

Coloburella reticulata Latzel, 1918

Coloburella reticulata Latzel, 1918: Loksa 1991: 272.

General distribution: Central and Southern Europe.

Distribution in Hungary: Nyírség (Loksa 1991).

Ecological note: silvicolous, in mulder.

Coloburella cf. vandeli Cassagnau & Delamare, 1951

Coloburella cf. vandeli Cassagnau & Delamare: Traser 1999: 54.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Ecological note: silvicolous.

Coloburella zangherii (Denis, 1924)

Coloburella zangherii (Denis): Loksa & Rubio 1966a: 151; Loksa 1978a: 56.

General distribution: Southern and Central Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Dráva Plain (Loksa 1978a).

Ecological note: silvicolous.

Cryptopygus Willem, 1901

Cryptopygus bipunctatus (Axelson, 1903)

Isotomina bipunctata Axelson: Loksa & Rubio 1966a: 152; Loksa 1966: 382; Loksa 1977: 210; Loksa 1991: 272; *Cryptopygus bipunctatus* (Axelson): Dunger 1975: 20; Traser 1999: 55; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002c: 48; Traser & Horváth–Szováti 2004: 60; Traser & Horváth–Szováti 2006: 333; Traser *et al.* 2006: 72; *Isotomia bipunctata* (Axelson): Loksa 1978a: 57; Traser 1980: 20; Traser 1981: 133; Farkas *et al.* 1998: 57.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a; Loksa 1966; Traser 1980), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966, 1977), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser *et al.* 2006), Gerecse Mts. (Loksa 1966), Keszthely Mts. (Loksa 1966), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth–Szováti 2004, 2006), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: xerotolerant.

Cryptopygus exilis (Gisin, 1960)

Cryptopygus exilis (Gisin): Traser 2002a: 264.

General distribution: Holarctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

Ecological note: mostly on meadows.

Cryptopygus cf. orientalis (Stach, 1947)

Cryptopygus cf. orientalis (Stach): Traser 2002c: 48; Traser & Horváth–Szováti 2006: 333.

General distribution: Europe.

Distribution in Hungary: Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006).

Ecological note: xerothermophilic.

***Cryptopygus ponticus* (Stach, 1947)**

Isotomina pontica Stach: Stach 1947: 267, pl. 32: figs 6-9; *Cryptopygus pontica* (sic!) (Stach): Traser 2002a: 264.

General distribution: Palaearctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Mezőföld (Stach 1947).

Ecological note: in xerotherm, ruderal habitats.

***Cryptopygus thermophilus* (Axelson, 1900)**

Proistoma (Isotomina) thermophila (Axelson): Stach 1929: 287; *Isotomia thermophila* (Axelson) (sic!): Loksa 1978a: 60; *Isotomina thermophila* (Axelson): Traser 1981: 135; Loksa 1983: 73; *Cryptopygus thermophilus* (Axelson): Traser 1997: 61; Traser 2002a: 264; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333.

General distribution: cosmopolitan.

Distribution in Hungary: Balatonfelvidék (Stach 1929), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Mezőföld (Stach 1929), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981).

Ecological note: nitrophilous, sometimes interstitial.

Desoria Nicolet, 1841

***Desoria fennica* (Reuter, 1895)**

Isotoma fennica (Reuter): Stach 1929: 290; Loksa 1977: 210; Traser 2002a: 264; Traser & Salló 2004: 230; *Isotoma (Desoria) fennica* (Reuter): Traser 1999: 55.

General distribution: Europe, North America.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bükk Mts. (Loksa 1977), Fertő-Hanság (Traser 2002a), Kőszeg Mts. (Traser & Salló 2004), Mezőföld (Stach 1929).

Ecological note: mostly winter active.

***Desoria neglecta* (Schäffer, 1900)**

Isotoma olivacea var. *neglecta* Schäffer: Szent-Ivány 1940a: 429.

General distribution: Holarctic.

Distribution in Hungary: Kőszeg Mts. (Szent-Ivány 1940a).

Ecological note: hygrophilous.

***Desoria nivea* (Schäffer, 1896)**

Isotoma albella Pack: Stach 1929: 290; Stach 1947: 407, pl. 44.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Stach 1929, 1947).

Ecological note: corticophilous.

***Desoria olivacea* (Tullberg, 1871)**

Isotoma olivacea (Tullberg): Stach 1929: 290; Stach 1947: 396, pl. 43; Loksa & Rubio 1966a: 152; Dunger 1975: 21; Loksa 1978a: 60; Loksa 1980: 110; Loksa 1983: 73; Loksa 1991: 272; Traser 1994: 102; Farkas 1995: 46; Farkas *et al.* 1998: 57; Traser & Salló 2004: 230.

General distribution: Europe.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Stach 1929, 1947; Dunger 1975), Budapest (Stach 1947), Dráva Plain (Loksa 1978a), Hortobágy (Loksa 1983), Kőszeg Mts. (Traser & Salló 2004), Mátra Mts. (Loksa 1980), Nyírség (Loksa 1991), Pilis Mts. (Stach 1929, 1947), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1994).

Ecological note: hygrophilous, winter active.

***Desoria propinqua* (Axelson, 1902)**

Spinisotoma pectinata Stach: Stach 1926b: 581, pl. 16; Stach 1929: 290; Stach 1947: 347, pl. 38; *Isotoma propinqua* Axelson: Dunger 1975: 21; Traser 2002a: 264; *Isotoma propinqua* var. *hexaspina* Axelson: Traser 1999: 55; *Desoria propinqua* (Axelson): Traser & Horváth-Szováti 2006: 333.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Stach 1929, 1947), Börzsöny Mts. (Stach 1926b, 1929; Dunger 1975), Fertő-Hanság (Traser 2002a), Kiskunság (Traser & Horváth-Szováti 2006).

Ecological note: litter dwelling.

***Desoria tigrina* Nicolet, 1842**

Isotoma grisea Lubbock: Tömösváry 1884a: 55; Vellay 1900: 20; *Isotoma olivacea* var. *grisea* (Lubbock): Stach 1929: 290; *Isotoma tigrina* Tullberg: Traser 1999: 55.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Balatonfelvidék (Stach 1929), Budapest (Stach 1929), Pilis Mts. (Stach 1929), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929).

Ecological note: nitrophilous.

***Desoria violacea* (Tullberg, 1877)**

Isotoma violacea Tullberg: Loksa & Rubio 1966a: 152; Loksa 1978a: 60; Loksa 1991: 272; *Isotoma* cf. *violacea* Tullberg: Traser 1999: 55.

General distribution: Europe, Asia.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Dráva Plain (Loksa 1978a), Nyírség (Loksa 1991).

Ecological note: eurytopic.

***Folsomia* Willem, 1902**

***Folsomia antricola* Loksa, 1959**

Folsomia antricola Loksa: Loksa 1959a: 37, figs 1a-f; Loksa 1961b: 224; Bajomi 1969: 242; *Folsomia antricola* (sic!) Loksa: Traser 1999: 54.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1959a, 1961b; Bajomi 1969; Traser 1999).

Ecological note: troglophilous.

***Folsomia* cf. *brevifurca* (Bagnall, 1949)**

Folsomia cf. *brevifurca* Bagnall: Traser 1997: 62.

Remark: *Species inquirenda* according to Potapow (2001: 186).

General distribution: ?Palaeartic.

Distribution in Hungary: Szigetköz (Traser 1997).

***Folsomia candida* Willem, 1902**

Folsomia candida Willem: Stach 1947: 178, pl. 19; Loksa 1960: 49; Paclt 1960: 156; Loksa 1961a: 262, figs 18-24; Loksa 1962: 63; Loksa 1991: 272; Farkas 1995: 46; Farkas 1996: 287; Farkas & Szathmáry 1997: 39; Farkas 1997: 56; Farkas *et al.* 1998: 57; Traser 1999: 54; Traser 2002a: 264; ?*Folsomia fimetaria* (Linnaeus): Stach 1929: 287; Geyer & Mann 1940: 371; *Folsomia litsteri* Bagnall: Loksa & Rubio 1966a: 151, fig. 57.

Remarks: Data of Stach (1929) and Geyer & Mann (1940) were corrected by Loksa (1960: 49). According to Potapow (2001) *Folsomia litsteri* is a juvenile form of *Folsomia candida*.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995, 1997), Bakony Mts. (Loksa & Rubio 1966a), Balatonfelvidék (Stach 1947; Loksa 1960; Paclt 1960; Loksa 1961a; Farkas 1995, 1997; Farkas & Szathmáry 1997; Stach 1929), Bükk Mts. (Loksa 1962), Kis-Balaton (Farkas 1996, 1997), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a), Szigetköz (Traser 2002a).

Ecological notes: parthenogenetic, "flower pot springtail".

***Folsomia fimetaria* (Linnaeus, 1758)**

Folsomia fimetaria (Linnaeus): Dudich 1932: 48; Kovács 1953b: 90; Kovács 1954: 97; Loksa 1956a: 393; Traser 1999: 54; Traser 2002a: 264; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Kovács 1953b, 1954; Traser 1999), Bükk Mts. (Loksa 1956a), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Sopron Mts. (Traser 2002a).

Ecological note: in ruderal, nitrophilous habitats.

***Folsomia gebhardti* Loksa, 1964**

Folsomia gebhardti Loksa: Loksa 1964: 95, figs 51-57; Loksa 1966: 381.

General distribution: Central Europe (Hungary, Serbia).

Distribution in Hungary: Mecsek Mts. (Loksa 1964, 1966), Villány Mts (Loksa 1964, 1966).

Ecological note: in xerotherm forests.

***Folsomia kerni* Gisin, 1948**

Folsomia kerni Gisin: Loksa & Rubio 1966a: 151, fig. 58; Loksa 1978a: 57; Loksa 1978b: 95.

General distribution: Central Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a).

Ecological note: in ruderal habitats.

***Folsomia lawrencei* Rusek, 1984**

Folsomia lawrencei Rusek: Traser 2002a: 264.

General distribution: Europe.

Distribution in Hungary: Sopron Mts. (Traser 2002a).

Ecological note: silvicolous.

***Folsomia manolachei* Bagnall, 1939**

Folsomia nana Gisin: Loksa 1966: 382; Loksa 1978b: 95; Loksa 1978a: 57; Traser 1980: 20; Loksa 1980: 110; Traser 1981: 133; Loksa 1983: 73; Traser 1994: 102; Farkas 1995: 46; Traser 1995: 45; Farkas 1996: 287; Traser 1997: 62; Farkas & Szathmáry 1997: 39; Farkas 1997: 58; Farkas 1997: 56; Farkas *et al.* 1998: 57; *Folsomia quadrioculata* (Tullberg): Dunger 1975: 19 (partim); *Folsomia manolachei* Bagnall: Traser 1999: 54; Traser 2002c: 48; Traser 2002a: 264; Traser *et al.* 2006: 72; Traser & Horváth-Szováti 2006: 333; Traser 2006: 36.

Remark: The data of *Folsomia quadrioculata* (Tullberg) reported by Dunger (1975) included „*Folsomia nana* Gisin” as well.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995, 1997), Bakony Mts. (Traser 1980), Balatonfelvidék (Farkas 1995, 1997; Farkas & Szathmáry 1997), Börzsöny Mts. (Dunger 1975), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskunság

(Traser 2002c; Traser & Horváth-Szováti 2006), Mátra Mts. (Loksa 1980), Órség (Traser 1995), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981, 1994, 2002a), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981, 1981), Vértes Mts. (Loksa 1966).

Ecological note: eurytopic.

***Folsomia penicula* Bagnall, 1939**

Folsomia multiseta Stach: Loksa 1959a: 41, figs 2a-h; Loksa 1966: 381; Loksa & Rubio 1966a: 151; Bajomi 1969: 242; Dunger 1975: 19; Loksa 1978a: 57; Loksa 1978b: 95; Traser 1980: 20, fig. 4; Varga 1991: 85; Loksa 1991: 272; Varga 1992: 172; Varga & Vargha 1992: 315; Farkas 1995: 46; Farkas 1997: 56; Varga & Oldal 1998: 86; *Folsomia penicula* Bagnall: Traser 1994: 102; Traser 1995: 45; Traser 1999: 55; Traser 2002a: 264; Traser *et al.* 2006: 72; Traser 2006: 36.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Bajomi 1969; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Farkas 1995, 1997), Börzsöny Mts. (Loksa 1966; Dunger 1975), Bükk Mts. (Loksa 1966; Varga 1991, 1992; Varga & Vargha 1992; Varga & Oldal 1998), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Nyírség (Loksa 1991), Órség (Traser 1995), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 1994, 2002a), Visegrád Mts. (Loksa 1966), Zala Hills (Loksa 1959a).

Ecological note: silvicolous, mesophilic.

***Folsomia quadrioculata* (Tullberg, 1871)**

Folsomia quadrioculata (Tullberg): Szent-Ivány 1938: 92; Szent-Ivány 1940a: 428; Loksa 1956a: 391; Loksa 1956b: 203; Loksa 1962: 73; Loksa & Rubio 1966a: 151; Loksa 1966: 382; Dunger 1975: 19 (partim); Loksa 1977: 207; Csuták 1977: 68; Loksa 1983: 73; Loksa 1991: 272; Traser 1994: 102; Traser 1997: 62; Traser 1999: 55; Traser 2002a: 264; Traser 2003: 155; Traser & Horváth-Szováti 2006: 333; Traser 2006: 36; Traser *et al.* 2006: 72.

Remark: The data of *Folsomia quadrioculata* (Tullberg) reported by Dunger (1975) included „*Folsomia nana* Gisin” as well.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a; Loksa 1966), Balatonfelvidék (Lok-

sa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1956b, 1966), Bükk Mts. (Loksa 1956a, 1962, 1966, 1977), Cserhát (Csuták 1977), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Szent-Ivány 1938, 1940a), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 1994, 2002a), Szigetköz (Traser 1997), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: eurytopic.

***Folsomides* Stach, 1922**

***Folsomides angularis* (Axelson, 1905)**

Folsomides angularis (Axelson): Loksa 1966: 303; Loksa & Rubio 1966a: 152.

General distribution: Holarctic.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Bükk Mts. (Loksa 1966).

Ecological note: xerothermophilic.

***Folsomides parvulus* Stach, 1922**

Folsomides parvulus Stach: Dunger 1975: 20; Traser 1999: 55; Traser 2002a: 264; Traser 2006: 36; *Proisotoma parvula* Stach: Loksa 1991: 272.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2002a), Gerecse Mts. (Traser 2006), Nyírség (Loksa 1991).

Ecological note: xerophilous.

***Folsomides portucalensis* da Gama, 1961:**

Folsomides portucalensis da Gama: Traser 2002c: 48; Traser & Horváth-Szováti 2004: 60; Traser & Horváth-Szováti 2006: 333.

General distribution: Europe, Siberia.

Distribution in Hungary: Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2004, 2006).

Ecological note: xerothermophilic.

***Folsomides semiparvulus* Fjellberg, 1993**

Folsomides semiparvulus Fjellberg: Traser 2002a: 264.

General distribution: Canary Island, Mexico.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

***Hydroisotoma* Stach, 1947**

***Hydroisotoma schaefferi* (Krausbauer, 1898)**

Hydroisotoma schaefferi (Krausbauer): Traser 2002a: 264.

General distribution: Holarctic.

Distribution in Hungary: Sopron Mts. (Traser 2002a).

Ecological note: neustonic, along streams.

***Isotoma* Bourlet, 1839**

***Isotoma anglicana* Lubbock, 1862**

Isotoma anglicana Lubbock: Traser 2002a: 264; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333.

General distribution: Northern and Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Kiskunság (, 2002c; Traser & Horváth-Szováti 2006).

Ecological note: eurytopic, on open habitats.

***Isotoma* cf. *intermedia* Schött, 1902**

Isotoma (*Desoria*) cf. *intermedia* Schött: Traser 1999: 55.

Remark: *Species inquirenda* according to Potapow (2001).

General distribution: West Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

***Isotoma riparia* (Nicolet, 1842)**

Isotoma riparia (Nicolet): Traser *et al.* 2006: 72.

General distribution: Northern and Central Europe.

Distribution in Hungary: Fertő-Hanság (Traser *et al.* 2006).

Ecological note: hygrophilous, mostly at springs.

***Isotoma viridis* Bourlet, 1839**

Isotoma viridis ab. *annulata* (Nicolet): Stach 1929: 291; *Isotoma viridis* ab. *violacea* (Lie-Pettersen): Stach 1929: 291; *Isotoma viridis* Bourlet: Stach 1929: 290; Szent-Ivány 1940a: 429; Stach 1947: 422, pl. 46: figs 6-14; Loksa 1966: 382; Dunger 1975: 20; Loksa 1978a: 60; Loksa 1983: 73; Loksa 1991: 272; Farkas 1995: 46; Traser 1997: 62; Farkas *et al.* 1998: 57; Traser 1999: 55; Traser 2000: 68; Dombos 2001: 2041; Traser 2002a: 264; Traser 2002c: 48; Traser 2003: 155; Traser & Horváth-Szováti 2004: 60; Traser *et al.* 2006: 72; Traser & Horváth-Szováti 2006: 333; *Isotoma viridis* f. *pallida* Nicolet: Szent-Ivány 1940a: 429.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995), Balatonfelvidék (Stach 1929, 1947), Börzsöny Mts. (Loksa 1966; Dunger 1975), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2000, 2002a, 2003; Traser *et al.* 2006), Hortobágy (Loksa 1983), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2004, 2006), Kőszeg Mts. (Szent-Ivány 1940a; Loksa 1966), Mezőföld (Stach 1929, 1947; Dombos 2001), Nyírség (Loksa 1991), Pilis Mts. (Stach 1929, 1947), Somogy Hills (Farkas *et al.* 1998), Szigetköz (Traser 1997), Visegrád Mts. (Loksa 1966).

Ecological note: eurytopic, on open habitats.

Isotomiella Bagnall, 1939

***Isotomiella minor* (Schäffer, 1896)**

Isotomiella minor Schäffer: Loksa 1956a: 391; Loksa 1956b: 203; Loksa & Rubio 1966a: 151; Loksa 1966: 382; Bajomi 1969: 242; Dunger 1975: 20; Loksa 1977: 209; Loksa 1978b: 95; Loksa 1978a: 57; Traser 1980: 20; Loksa 1980: 110; Traser 1981: 133; Loksa 1983: 73; Loksa 1987: 79; Loksa 1991: 272; Varga & Vargha 1992: 315; Traser 1994: 102; Farkas 1995: 46; Traser 1995: 45; Traser 1997: 62; Farkas *et al.* 1998: 57; Traser 1999: 55; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 264; Traser 2002b: 160; Traser 2002c: 48; Traser 2003: 155; Traser & Salló 2004: 230; Traser 2006: 35; Traser & Horváth-Szováti 2006: 333; Traser *et al.* 2006: 72.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Bajomi 1969; Traser 1999), around the Lake Balaton (Farkas 1995), Bakony Mts. (Loksa

1966; Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1956b, 1966), Bükk Mts. (Loksa 1956a, 1966, 1977; Varga & Vargha 1992; Traser 2002b), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Loksa 1987; Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Traser & Salló 2004), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Órség (Traser 1995), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981, 1994, 2002a), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts. (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: parthenogenetic, eurytopic.

***Isotomiella paraminor* Gisin, 1942**

Isotomiella paraminor Gisin: Loksa 1966: 382; Traser 1980: 20.

General distribution: Europe.

Distribution in Hungary: Bakony Mts. (Traser 1980), Bükk Mts. (Loksa 1966).

Ecological note: montane, silvicolous.

Isotomodes Linnaniemi, 1907

***Isotomodes productus* (Axelson, 1906)**

Isotomodes productus (Axelson): Loksa 1966: 382; Dunger 1975: 19; Traser 1981: 133; Traser 1997: 62; Traser 1999: 54; Traser 2002a: 264; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1966), Fertő-Hanság (Traser 2002a), Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006), Mecsek Mts. (Loksa 1966), Sopron Mts. (Traser 1981), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981).

Ecological note: xerothermophilic.

***Isotomodes sexsetosus* da Gama, 1963**

Isotomodes sexsetosus da Gama: Dunger 1975: 20; Traser 2002b: 160; Traser & Horváth-Szováti 2006: 333; Traser 2006: 35.

General distribution: Central Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975; Traser 2002b), Bükk Mts. (Traser 2002b), Gerecse Mts. (Traser 2006), Kiskunság (Traser & Horváth-Szováti 2006).

Ecological note: xerothermophilic.

***Isotomodes trisetosus* Denis, 1923**

Isotomodes trisetosus Denis: Loksa 1966: 382.

General distribution: From Indonesia to the Palaearctic.

Distribution in Hungary: Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966), Buda Mts. (Loksa 1966), Gerecse Mts. (Loksa 1966), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Pilis Mts. (Loksa 1966), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: xerothermophilic.

Isotomurus Börner, 1903

***Isotomurus balteatus* (Reuter, 1876)**

Isotomurus palustris var. *balteata* (Reuter): Stach 1929: 292.

General distribution: Europe.

Distribution in Hungary: Balatonfelvidék (Stach 1929).

Ecological note: hygrophilous.

***Isotomurus fucicolus* Reuter, 1891**

Isotomurus palustris var. *fucicola* (Reuter): Stach 1929: 292.

General distribution: Europe.

Distribution in Hungary: Balatonfelvidék (Stach 1929).

Ecological note: litter dwelling.

***Isotomurus maculatus* (Schäffer, 1896)**

Isotomurus palustris var. *maculata* Schäffer: Stach 1929: 292.

General distribution: Europe.

Distribution in Hungary: Mezőföld (Stach 1929).

Ecological note: in gardens and flower pots.

***Isotomurus palustris* (Müller, 1776)**

Isotoma palustris Müller: Tömösváry 1884a: 55; Vellay 1900: 20; *Isotomurus palustris* (Müller): Stach 1929: 291; Szent-Ivány 1940a: 429; Stach 1947: 452, pl. 48; Kovács 1953a: 183; Paclt 1960: 157; Dunger 1975: 21; Loksa 1978b: 95; Loksa 1978a: 60; Loksa 1980: 110; Loksa 1983: 73; Hornung 1986: 138; Loksa 1987: 79; Loksa 1991: 272; Farkas 1995: 46; Farkas 1995: 46; Farkas 1996: 287; Farkas 1997: 56; Farkas & Szathmáry 1997: 39; Farkas 1997: 58; Farkas *et al.* 1998: 57; Traser 2000: 68; Traser 2002a: 264; *Isotomurus cf. palustris* (Müller): Traser *et al.* 2006: 72.

General distribution: Holarctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995; Farkas 1997), Balatonfelvidék (Stach 1929; Farkas 1995, 1997; Farkas & Szathmáry 1997), Börzsöny Mts. (Dunger 1975), Budapest (Stach 1929), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2000, 2002a; Traser *et al.* 2006), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Stach 1929, 1947; Paclt 1960; Hornung 1986; Loksa 1987), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Loksa 1980), Mezőföld (Stach 1929, 1947), Nyírség (Stach 1929; Kovács 1953a; Loksa 1991), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929).

Ecological note: hygrophilous.

***Isotomurus plumosus* Bagnall, 1940**

Isotomurus plumosus (sic!) Bagnall: Dunger 1975: 21; Loksa 1983: 73; Traser 1997: 62; *Isotomurus plumosus* Bagnall: Traser 2002a: 264.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Szigetköz (Traser 1997).

Ecological note: hygrophilous, mostly at early spring.

***Isotomurus prasinus* (Reuter, 1891)**

Isotomurus palustris var. *prasina* Reuter: Stach 1929: 292; *Isotoma palustris* f. *prasina* Reuter: Szent-Ivány 1940a: 429; 1940b: 119; *Isotomurus prasinus* (Reuter): Traser et al. 2006: 72.

General distribution: Siberia.

Distribution in Hungary: Balatonfelvidék (Stach 1929; Szent-Ivány 1940a, 1940b), Fertő-Hanság (Traser et al. 2006), Kőszeg Mts. (Szent-Ivány 1940a, 1940b).

Ecological note: hygrophilous.

***Isotomurus stuxbergi* (Tullberg, 1876)**

Isotomurus ciliatus Stach: Stach 1947: 476, pl. 53.

General distribution: Eastern Europe.

Distribution in Hungary: Balatonfelvidék (Stach 1947).

Ecological note: neustonic, along streams.

***Micranurophorus* Bernard, 1977**

***Micranurophorus* cf. *musci* Bernard, 1977**

Micranurophorus cf. *schalleri* Christian: Traser & Horváth-Szováti 2006: 333; Traser 2002c: 48.

General distribution: Europe, North America.

Distribution in Hungary: Kiskunság (Traser 2002c; Traser & Horváth-Szováti 2006).

Ecological note: psammophilous species.

***Pachyotoma* Bagnall, 1949**

***Pachyotoma crassicauda* (Tullberg, 1871)**

Isotoma crassicauda Tullberg: Vellay 1900: 20; *Proisotoma crassicauda* (Tullberg): Stach 1929: 289; Paclt 1960: 156; Farkas 1995: 46; Farkas 1996: 287; Farkas 1997: 58; Farkas et al. 1998: 57; *Ballistura crassicauda* (Tullberg): Stach 1947: 242, pl. 28; *Pachyotoma crassicauda* (Tullberg): Loksa 1978a: 57; Traser 2002a: 264; Traser et al. 2006: 72.

General distribution: Palaearctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Balatonfelvidék (Stach 1929,

1947), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser et al. 2006), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Vellay 1900; Stach 1929, 1947; Paclt 1960), Somogy Hills (Farkas et al. 1998).

Ecological note: neustonic.

***Pachyotoma granulata* (Stach, 1947)**

Proisotoma granulosa Stach (sic!): Loksa 1956a: 415.

General distribution: Eastern Europe.

Distribution in Hungary: Bükk Mts. (Loksa 1956a).

Ecological note: mostly in lichens.

***Parisotoma* Bagnall, 1940**

***Parisotoma notabilis* (Schäffer, 1896)**

Isotoma notabilis Schäffer: Stach 1929: 291; Dudich 1932: 48; Stach 1947: 374, pl. 40; Loksa 1956a: 391; Loksa 1956b: 203; Loksa 1962: 63; Loksa 1966: 382; Loksa & Rubio 1966a: 152; Bajomi 1969: 242; Dunger 1975: 20; Loksa 1977: 209; Loksa 1978b: 95; Loksa 1978a: 60; Loksa 1980: 110; Traser 1980: 20, fig. 2a; Traser 1981: 133; Loksa 1983: 73; Loksa 1987: 79; Loksa 1991: 272; Varga 1991: 85; Traser 1994: 102; Traser 1995: 45; Farkas 1995: 46; Traser 1997: 62; Farkas 1997: 56; Farkas et al. 1998: 57; Traser 1999: 55; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; *Parisotoma notabilis* (Schäffer): Traser 2002c: 48; Traser 2002a: 264; Traser 2003: 155; Traser & Salló 2004: 230; Traser 2006: 36; Traser & Horváth-Szováti 2006: 333; Traser et al. 2006: 72.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Loksa 1966; Bajomi 1969; Traser 1999), around the Lake Balaton (Farkas 1995, 1997), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Stach 1929, 1947; Loksa 1966; Farkas 1995, 1997), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1956b, 1966), Bükk Mts. (Loksa 1956a, 1962, 1966, 1977; Varga 1991), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003; Traser et al. 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Loksa 1987; Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Traser & Salló

2004), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Mezőföld (Stach 1929, 1947), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Őrség (Traser 1995), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981, 1994, 2002a), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981; Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts. (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: eurytopic, very common.

Proisotoma Börner, 1901

***Proisotoma brevidens* Stach, 1947**

Proisotoma brevidens Stach: Dunger 1975: 20; Traser 2002a: 264.

General distribution: Eastern Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Szigetköz (Traser 2002a).

Ecological note: mostly in mulder.

***Proisotoma minima* (Absolon, 1901)**

Proisotoma minima (Absolon): Loksa 1978a: 57; Traser 1999: 55; Traser 2002a: 264; Traser & Horváth-Szováti 2006: 333.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Kiskunság (Traser & Horváth-Szováti 2006).

Ecological note: eurytopic.

***Proisotoma minuta* (Tullberg, 1871)**

Proisotoma minuta (Tullberg): Szent-Ivány 1940a: 428; Loksa & Rubio 1966a: 152; Dunger 1975: 20; Loksa 1978b: 95; Loksa 1978a: 57; Traser 1980: 20; Traser 1981: 134; Loksa 1987: 79; Farkas 1995: 46; Farkas 1996: 287; Traser 1997: 62; Farkas 1997: 56; Farkas *et al.* 1998: 57; Traser 1999: 55; Traser 2002a: 264; Traser 2002c: 48; Traser & Horváth-Szováti 2006: 333.

General distribution: cosmopolitan.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995, 1997), Bakony Mts. (Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Farkas 1995, 1997), Börzsöny Mts. (Dunger 1975), Cserhát (Loksa

1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Loksa 1987; Traser 2002c; Traser & Horváth-Szováti 2006), Kőszeg Mts. (Szent-Ivány 1940a), Somogy Hills (Farkas *et al.* 1998), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981).

Ecological note: thermophilic, frequently in compost.

***Proisotoma ripicola* Linnaniemi, 1912**

Proisotoma ripicola Linnaniemi: Stach 1929: 288.

General distribution: Europe.

Distribution in Hungary: Balatonfelvidék (Stach 1929).

Ecological note: psammophilous species.

***Proisotoma subminuta* Denis, 1931**

Proisotoma subminuta Denis: Loksa 1980: 108, figs 2d-e.

General distribution: Holarctic.

Distribution in Hungary: Mátra Mts. (Loksa 1980).

Ecological note: mostly in compost.

***Pseudanurophorus* Stach, 1922**

***Pseudanurophorus boernerii* Stach, 1922**

Pseudanurophorus boernerii (Stach): Traser 2002a: 264.

General distribution: Eastern Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

Ecological note: soil dwelling species.

***Pseudisotoma* Handschin, 1924**

***Pseudisotoma sensibilis* (Tullberg, 1876)**

Isotoma (*Pseudisotoma*) *sensibilis* (Tullberg): Dunger 1975: 20; *Pseudisotoma sensibilis* (Tullberg): Traser 1999: 55.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975).

Ecological note: corticophilous.

Subisotoma Stach, 1947

Subisotoma pusilla (Schäffer, 1900)

Folsomides pusillus (Schäffer): Loksa & Rubio 1966a: 151; *Proisotoma pusilla* (Schäffer): Dunger 1975: 20; Loksa 1991: 272; *Subisotoma pusilla* (Schäffer): Traser 1999: 55.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Nyírség (Loksa 1991).

Ecological note: bryophilous, silvicolous.

Tetracanthella Schött, 1891

Tetracanthella franzi Cassagnau, 1959

Tetracanthella franzi Cassagnau: Loksa 1980: 110; Traser 1995: 45.

General distribution: Europe, Alps.

Distribution in Hungary: Mátra Mts. (Loksa 1980), Órség (Traser 1995).

Ecological note: in litter and moss.

Tetracanthella hystrix Cassagnau, 1959

Tetracanthella hystrix Cassagnau: Dunger 1975: 19.

General distribution: Eastern Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

Ecological note: rare species.

Tetracanthella pilosa Schött, 1891

Tetracanthella pilosa Schött: Stach 1929: 286; Loksa 1966: 381; Loksa & Rubio 1966a: 151.

General distribution: Eastern Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Budapest (Stach 1929), Bükk Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Villány Mts (Loksa 1966).

Ecological note: bryophilous, silvicolous.

Tetracanthella stachi Cassagnau, 1959

Tetracanthella stachi Cassagnau: Traser 1994: 102; Traser 2002a: 264.

General distribution: Central Europe.

Distribution in Hungary: Sopron Mts. (Traser 1994; Traser 2002a).

Ecological note: in montane habitats

Tetracanthella wahlgreni Axelson, 1907

Tetracanthella wahlgreni Axelson: Stach 1929: 286; Szent-Ivány 1940a: 428; Stach 1947: 42, pl. 2: figs 1-6; Loksa 1956a: 395; *Tetracanthella* cf. *wahlgreni* Linnaniemi (sic!): Traser 1999: 54.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Buda Mts. (Stach 1929; Szent-Ivány 1940a; Stach 1947), Bükk Mts. (Loksa 1956a), Kőszeg Mts. (Szent-Ivány 1940a).

Ecological note: in xerophilous moss and lichen.

Vertagopus Börner, 1906

Vertagopus arboreus (Linnaeus, 1758)

Isotoma (Vertagopus) arborea (Linnaeus): Stach 1929: 289; Dunger 1975: 20; *Vertagopus arborea* (sic!) (Linnaeus): Stach 1947: 338, pl. 37: figs 9-11; Traser 2002a: 264.

General distribution: Holarctic.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Cserhát (Stach 1929, 1947), Vas-Sopron Plain (Traser 2002a).

Ecological note: corticophilous.

Vertagopus cinereus (Nicolet, 1841)

Isotoma cinerea Nicolet: Tömösváry 1884a: 55; Vellay 1900: 20; Loksa & Rubio 1966a: 152; *Isotoma (Vertagopus) cinerea* (Nicolet): Stach 1929: 289; Dunger 1975: 20; *Vertagopus cinerea* (sic!) (Nicolet): Traser 1999: 54; *Vertagopus cinereus* (Nicolet): Traser 2002a: 264.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Budapest (Tömösváry 1884a; Vellay 1900; Stach 1929), Fertő-Hanság (Traser 2002a), Sopron Mts. (Traser 2002a), Szigetköz (Traser 2002a).

Ecological note: corticophilous.

***Vertagopus westerlundi* (Reuter, 1898)**

Vertagopus westerlundi (Reuter): Traser 1999: 54.

General distribution: Arctoalpine.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

Ecological note: bryophilous species.

Family: **Oncopoduridae**

***Oncopodura* Carl & Lebedinsky, 1905**

***Oncopodura crassicornis* Shoebottom, 1911**

Oncopodura crassicornis Shoebottom: Loksa 1956a: 391; Loksa 1962: 63; Loksa 1966: 385; Bajomi 1969: 242; Dunger 1975: 24; Loksa 1977: 211; Loksa 1978b: 95; Traser 1995: 46; Traser 1999: 57; Traser 2002a: 266; Traser 2006: 36; Traser *et al.* 2006: 73.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Bajomi 1969; Traser 1999), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966; Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1956a, 1962, 1966, 1977), Cserhát (Loksa 1978b), Fertő-Hanság (Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Őrség (Traser 1995), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 2002a), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: edaphic, troglphilous.

***Oncopodura egerszoegensis* Loksa, 1961**

Oncopodura egerszoegensis Loksa: Loksa 1961b: 224, figs 9-16.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1961b).

Ecological note: troglphilous.

Family: **Tomoceridae**

***Pogonognathellus* Paclt, 1944**

***Pogonognathellus flavescens* (Tullberg, 1871)**

Tomocerus plumbeus Linnaeus: Tömösváry 1882: 124; Tömösváry 1884a: 56; Vellay 1900: 21; *Tomocerus* (*Pogonognathus* (sic!)) *flavescens* Tullberg: Stach

1929: 293; Szent-Ivány 1940a: 435; Kovács 1953a: 183; Loksa 1991: 273; *Tomocerus* (*Pogonognathellus*) *flavescens* (Tullb.): Paclt 1960: 157; Loksa & Rubio 1966a: 154; Loksa 1978a: 61; Traser 1999: 57; *Tomocerus flavescens* Tullberg: Szent-Ivány 1941: 24; Loksa 1966: 385; Loksa 1977: 211; Loksa 1978b: 95; Loksa 1980: 111; Loksa 1991: 273; Traser 1997: 62; *Tomocerus flavescens* Lubbock (sic!): Tóth 1942: 398; *Pogonognathellus flavescens* (Tullberg 1871): Dunger 1975: 23; Traser 2002a: 266; Traser 2003: 156; *Tomocerus* cf. *flavescens* Tullberg: Traser 1981: 135.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999; Loksa 1966), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Tömösváry 1884a; Vellay 1900; Stach 1929; Dunger 1975), Buda Mts. (Stach 1929; Loksa 1966), Budapest (Tömösváry 1884a; Vellay 1900; Stach 1929), Bükk Mts. (Loksa 1966, 1977), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003), Gerecse Mts. (Loksa 1966), Gödöllő Hills (Tömösváry 1884a; Vellay 1900; Stach 1929), Keszthely Mts. (Loksa 1966), Kiskunság (Vellay 1900; Stach 1929), Kőszeg Mts. (Szent-Ivány 1940a; Tóth 1942), Mátra Mts. (Stach 1929; Szent-Ivány 1941; Loksa 1980), Mecsek Mts. (Tömösváry 1884a; Vellay 1900; Stach 1929; Paclt 1960; Loksa 1966), Mezőföld (Stach 1929), Nyírség (Stach 1929; Kovács 1953a; Loksa 1991), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997, 2002a), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929), Vas-Sopron Plain (Traser 1981), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966), Zala Hills (Stach 1929), Zemplén Mts. (Tömösváry 1882; Vellay 1900; Stach 1929).

Ecological note: hygrophilous, troglphilous.

***Pogonognathellus longicornis* (Müller, 1776)**

Tomocerus (*Pogonognathus* (sic!)) *longicornis* (Müller): Stach 1929: 293; Szent-Ivány 1938: 92; Szent-Ivány 1940a: 435; *Tomocerus longicornis* Tullberg (sic!): Tóth 1942: 398; *Tomocerus* (*Pogonognathellus*) *longicornis* (Müller): Paclt 1960: 157; *Tomocerus longicornis* (Müller): Traser 1980: 22; Traser 1981: 133; Loksa 1983: 75; Loksa 1991: 273; Farkas 1995: 46; Farkas 1996: 287; Farkas & Szathmáry 1997: 39; Farkas 1997: 58; Traser 2002a: 268; Varga & Naár 2002: 115; Varga *et al.* 2002b: 526; *Tomocerus* (*Pogonognathellus*) *longicornis* (Müller): Traser 1999: 57; *Tomocerus* (sic!) *longicornis* Müller: Varga 1992: 172; Varga & Oldal 1998: 86.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995, 1997), Bakony Mts. (Traser 1980), Balatonfelvidék (Farkas 1995, 1997; Farkas & Szathmáry 1997), Bükk Mts. (Varga 1992; Varga & Oldal 1998; Varga & Naár 2002; Varga *et al.* 2002b), Fertő-Hanság (Paclt 1960; Traser 2002a), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kőszeg Mts. (Szent-Ivány 1940a; Tóth 1942), Mátra Mts. (Szent-Ivány 1938), Mecsek Mts. (Stach 1929), Nyírség (Loksa 1991), Pilis Mts. (Stach 1929), Sopron Mts. (Traser 1981), Vas-Sopron Plain (Traser 1981), Zselic (Paclt 1960).

Ecological note: silvicolous.

***Tomocerina Yosii*, 1955**

***Tomocerina minuta* (Tullberg, 1876)**

Tomocerus minutus Tullberg: Szent-Ivány 1940a: 435; Dunger 1975: 24; Traser 1995: 46; *Tomocerus (Tomocerus)* cf. *minutus* (Tullberg): Traser 1999: 57; *Tomocerus* cf. *minutus* (Tullberg): Traser 2002a: 266.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Börzsöny Mts. (Dunger 1975), Kőszeg Mts. (Szent-Ivány 1940a), Órség (Traser 1995), Sopron Mts. (Traser 2002a).

***Tomocerus Nicolet*, 1842**

***Tomocerus baudoti* Denis, 1932**

Tomocerus (Tomocerus) baudoti Denis: Loksa 1978a: 61; *Tomocerus baudoti* Denis: Loksa 1991: 273; Traser 1995: 46; Traser 2002a: 266; Traser & Salló 2004: 230; *Tomocerus* cf. *baudoti* (Denis): Traser *et al.* 2006: 73.

General distribution: Europe.

Distribution in Hungary: Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser *et al.* 2006), Kőszeg Mts. (Traser & Salló 2004), Nyírség (Loksa 1991), Órség (Traser 1995), Sopron Mts. (Traser 2002a).

***Tomocerus minor* (Lubbock, 1862)**

Tomocerus minor (Lubbock): Stach 1929: 293; Dudich 1932: 49; Szent-Ivány 1940a: 434; Loksa 1962: 68; Dunger 1975: 24; Traser 1980: 20; Loksa 1991: 273; Traser 1994: 100; Traser 1995: 46; Farkas *et al.* 1998:

57; Traser 2002a: 266; Traser 2003: 156; Traser & Salló 2004: 230; Traser *et al.* 2006: 73; *Tomocerus minor* Tullberg (sic!): Loksa 1956a: 409; *Tomocerus (Tomocerus) minor* (Lubbock): Loksa & Rubio 1966a: 154; Loksa 1978a: 61; Traser 1999: 57.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Dudich 1932; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a; Traser 1980), Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1962, 1956a), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Kőszeg Mts. (Szent-Ivány 1940a; Traser & Salló 2004), Nyírség (Loksa 1991), Órség (Traser 1995), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1994, 2002a).

Ecological note: hygrophilous, troglphilous.

***Tomocerus vulgaris* (Tullberg, 1871)**

Tomocerus niger Bourlet: Vellay 1900: 21; *Tomocerus vulgaris* (Tullberg): Stach 1929: 292; Dudich 1932: 49; Szent-Ivány 1940a: 435; Kovács 1953a: 183; Loksa 1959b: 70; Loksa 1962: 73; Dunger 1975: 24; Loksa 1978b: 95; Loksa 1983: 75; Loksa 1991: 273; Varga & Vargha 1992: 315; Farkas 1996: 287; Traser 1997: 62; Farkas & Szathmáry 1997: 39; Farkas 1997: 58; Traser 2002a: 266; Traser 2002c: 48; *Tomoceris* (sic!) *vulgaris* (Tullberg): Farkas 1995: 46; Farkas *et al.* 1998: 57; *Tomocerus (Tomocerus) vulgaris* (Tullberg): Traser 1999: 57.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Traser 1999), around the Lake Balaton (Farkas 1995), Balatonfelvidék (Farkas & Szathmáry 1997), Börzsöny Mts. (Dunger 1975), Budapest (Stach 1929), Bükk Mts. (Loksa 1962; Varga & Vargha 1992), Cserhát (Loksa 1959b, 1978b), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskun-ság (Vellay 1900; Stach 1929; Traser 2002c), Kőszeg Mts. (Szent-Ivány 1940a), Mezőföld (Stach 1929), Nyírség (Vellay 1900; Stach 1929; Kovács 1953a; Loksa 1991), Somogy Hills (Farkas *et al.* 1998), Szerencs Hills (Stach 1929), Szigetköz (Traser 1997, 2002a).

Suborder: NEELIPLEONA

Family: Neelidae

Megalothorax Willem, 1900

Megalothorax incertus Börner, 1903

Neelus (*Megalothorax*) *incertus* Börner: Loksa & Rubio 1966a: 154; *Megalothorax incertus* Börner: Dunger 1975: 24; Traser 1999: 58; Traser 2002a: 266.

General distribution: Holarctic, Australia.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2002a).

Ecological note: euedaphic, troglophilous.

Megalothorax minimus Willem, 1900

Megalothorax minimus Willem: Loksa 1956b: 207; Loksa 1956a: 391; Loksa 1961b: 228; Loksa 1962: 68; Dunger 1975: 24; Traser 1981: 133; Traser 1994: 102; Traser 1995: 46; Traser 1997: 62; Traser 1999: 58; Traser 2002a: 267; Traser 2003: 156; Traser & Salló 2004: 230; Traser & Horváth-Szováti 2006: 334; Traser *et al.* 2006: 73; Traser 2006: 37; *Neelus* (*Megalothorax*) *minimus* Willem: Loksa & Rubio 1966a: 154; Loksa 1978b: 95; Traser 1980: 20; *Neelus minimus* Willem: Loksa 1966: 385; Loksa 1977: 211; Farkas *et al.* 1998: 57.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1961b, 1966; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a; Loksa 1966; Traser 1980), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Dunger 1975; Loksa 1966), Buda Mts. (Loksa 1956b, 1966), Bükk Mts. (Loksa 1956a, 1962, 1966, 1977), Cserhát (Loksa 1978b), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Keszthely Mts. (Loksa 1966), Kiskunság (Traser & Horváth-Szováti 2006), Kőszeg Mts. (Traser & Salló 2004), Mecsek Mts. (Loksa 1966), Őrség (Traser 1995), Pilis Mts. (Loksa 1966), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 1981, 1994, 2002a), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

Ecological note: euedaphic, troglophilous.

Neelides Caroli, 1912

Neelides minutus (Folsom, 1901)

Neelides minutus (Folsom): Loksa 1959b: 70; Loksa 1960: 49; Loksa 1961a: 257; Traser 2002a: 266; Traser 2003: 156; Traser *et al.* 2006: 73.

General distribution: Holarctic, South Australia.

Distribution in Hungary: Balatonfelvidék (Loksa 1960, 1961a), Cserhát (Loksa 1959b), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Sopron Mts. (Traser 2002a).

Neelus Folsom, 1896

Neelus murinus Folsom, 1896

Neelus murinus Folsom: Gebhardt 1934: 140.

General distribution: Holarctic, Central America, India, Australia.

Distribution in Hungary: Mecsek Mts. (Gebhardt 1934).

Ecological note: edaphic, troglophilous.

Suborder: SYMPHYPLEONA

Family: Bourletiellidae

Bourletiella Banks, 1899

Bourletiella (Bourletiella) arvalis (Fitch, 1863)

Smynthurus (sic!) *luteus* Lubbock: Tömösváry 1883: 36; Tömösváry 1884a: 57; Vellay 1900: 20; *Bourletiella lutea* (Lubbock): Stach 1929: 308; *Bourletiella arvalis* (Fitch): Stach 1956: 143; *Bourletiella lutea* Lubbock: Varga 1991: 85; Traser 1995: 47.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Tömösváry 1883; Vellay 1900; Stach 1929), Borsod Depression (Vellay 1900; Stach 1929), Budapest (Tömösváry 1883, 1884a; Vellay 1900; Stach 1929), Bükk Mts. (Varga 1991), Cserhát (Stach 1929, 1956), Gödöllő Hills (Tömösváry 1883, 1884a; Vellay 1900; Stach 1929), Kiskunság (Stach 1929, 1956), Maros-Körös Region (Tömösváry 1883; Vellay 1900; Stach 1929), Mátraalja (Tömösváry 1883; Vellay 1900; Stach 1929), Mecsek Mts. (Tömösváry 1883; Vellay 1900; Stach 1929), Őrség (Traser 1995), Sajó Valley (Tömösváry 1883), Vác-Pest Duna Valley (Tö-

mösváry 1883, 1884a; Vellay 1900; Stach 1929), Visegrád Mts. (Vellay 1900; Stach 1929), Zemplén Mts. (Vellay 1900; Stach 1929).

Ecological note: on open habitats.

***Bourletiella (Bourletiella) hortensis* (Fitch, 1863)**

Bourletiella hortensis (Fitch): Stach 1956: 149; Loksa 1983: 76; Loksa 1987: 80; Traser 1997: 62; Traser 2002a: 268.

General distribution: Holarctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kiskunság (Stach 1956; Loksa 1987), Szigetköz (Traser 1997).

***Bourletiella (Bourletiella) viridescens* Stach, 1920**

Bourletiella viridescens (Stach): Traser 2002a: 268.

General distribution: Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Szigetköz (Traser 2002a).

Ecological note: in open dry habitats.

Deuterominthurus Börner, 1901

***Deuterominthurus bicinctus* Koch, 1840**

Deuterominthurus bicinctus Koch: Szent-Ivány 1940a: 436; Traser 1995: 47; Traser 2002a: 268; Traser *et al.* 2006: 73; *Bourletiella bicinctus* (sic!) (Koch): Loksa & Rubio 1966a: 156; *Deuterominthurus bicinctus* var. *flava* Gisin: Dunger 1975: 25; *Bourletiella bicincta* (Koch): Loksa 1991: 273; *Deuterominthurus flava* Gisin: Traser 1995: 47; Traser 1997: 62.

General distribution: Palaearctis, Australia.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Kőszeg Mts. (Szent-Ivány 1940a), Nyírség (Loksa 1991), Őrség (Traser 1995), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997).

Ecological note: mostly in forests.

***Deuterominthurus flavus* (Gisin, 1946)**

Bourletiella flava Gisin: Loksa & Rubio 1966a: 156.

General distribution: Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

Ecological note: xerotolerant.

***Deduterominthurus fenyési* Stach, 1920**

Deuterominthurus fenyési Stach: Stach 1926a: 82; Stach 1929: 310; *Deuterominthurus pallipes* (Bourlet): Traser 2002a: 268.

General distribution: Holarctic.

Distribution in Hungary: Cserhát (Stach 1926a, 1929), Fertő-Hanság (Traser 2002a).

Ecological note: in dry grass habitats.

***Deuterominthurus pallipes* (Bourlet, 1843)**

Bourletiella pallipes Bourlet: Loksa 1966: 386; Loksa & Rubio 1966a: 156.

General distribution: Holarctic.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Vértes Mts. (Loksa 1966).

***Deuterominthurus repandus* Ågren, 1903**

Deuterominthurus repandus (Ågren): Szent-Ivány 1940a: 436; Dunger 1975: 25; Traser 1995: 47; Dombos 2001: 2041; *Deuterominthurus pallipes* f. *repandus* (Ågren): Traser 2002a: 268.

General distribution: cosmopolitan.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2002a), Kőszeg Mts. (Szent-Ivány 1940a), Mezőföld (Dombos 2001), Őrség (Traser 1995).

***Deuterominthurus sulphureus* (Koch, 1840)**

Deuterominthurus sulphureus (Koch): Traser 2002a: 268.

General distribution: Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Szigetköz (Traser 2002a).

***Fasciosminthurus* Gisin, 1960**

***Fasciosminthurus circumfasciatus* (Stach, 1956)**

Fasciosminthurus cf. *circumfasciatus* (Stach): Dunger 1975: 26; *Bourletiella (Fasciosminthurus) circumfasciata* (Stach): Loksa 1978a: 62.

General distribution: Europe, Central Asia.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Dráva Plain (Loksa 1978a).

***Fasciosminthurus strigatus* (Stach, 1922)**

Fasciosminthurus strigatus strigatus (Stach): Traser 2002b: 160; *Fasciosminthurus strigatus* (Stach): Traser & Horváth-Szováti 2006: 334; Traser *et al.* 2006: 73.

General distribution: Central Europe.

Distribution in Hungary: Börzsöny Mts. (Traser 2002b), Bükk Mts. (Traser 2002b), Fertő-Hanság (Traser *et al.* 2006), Kiskunság (Traser & Horváth-Szováti 2006).

***Fasciosminthurus virgulatus* (Skorikow, 1899)**

Fasciosminthurus virgulatus (Skorikow): Traser 2002a: 268.

General distribution: Southern and Eastern Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

***Heterosminthurus* Stach, 1955**

***Heterosminthurus bilineatus* (Bourlet, 1842)**

Heterosminthurus bilineatus (Bourlet): Traser 1995: 47; Traser 2002a: 268; Traser 2003: 156; Traser *et al.* 2006: 73.

General distribution: Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Örség (Traser 1995).

***Heterosminthurus chaetocephalus* Hüther, 1971**

Heterosminthurus chaetocephalus Hüther, 1971: Bretfeld 1999: 262; *Heterosminthurus* sp.: Traser 1995: 47.

General distribution: Palearctic.

Distribution in Hungary: Örség (Traser 1995).

***Heterosminthurus insignis* (Reuter, 1876)**

Heterosminthurus insignis (Reuter): Dunger 1975: 25; Traser 1995: 47; *Bourletiella* (*Heterosminthurus*) *insignis* (Reuter): Loksa 1978a: 62; *Bourletiella insignis* (Reuter): Loksa 1980: 111; Loksa 1991: 273; Farkas 1995: 46; Farkas *et al.* 1998: 57.

General distribution: Palaearctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Börzsöny Mts. (Dunger 1975), Dráva Plain (Loksa 1978a), Mátra Mts. (Loksa 1980), Nyírség (Loksa 1991), Örség (Traser 1995), Somogy Hills (Farkas *et al.* 1998).

Ecological note: hygrophilous.

***Heterosminthurus linnaniemii* (Stach, 1920)**

Heterosminthurus linnaniemii (Stach): Traser 1995: 47; Traser 2002a: 268.

General distribution: Europe, East Palaearctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Örség (Traser 1995).

***Heterosminthurus novemlineatus* (Tullberg, 1871)**

Deuterosminthurus novemlineatus (Tullberg): Stach 1929: 309; *Heterosminthurus novemlineatus* (Tullberg): Stach 1956: 193, pl. 24; Traser 2002a: 268; *Bourletiella* (*Heterosminthurus*) *novemlineata* (Tullberg): Loksa 1978a: 62; *Bourletiella novemlineata* (Tullberg): Loksa 1987: 80; Varga & Vargha 1992: 315.

General distribution: Europe, Russia.

Distribution in Hungary: Balatonfelvidék (Stach 1929, 1956), Bükk Mts. (Varga & Vargha 1992), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Kiskunság (Loksa 1987).

Ecological note: hygrophilous.

Family: **Dicyrtomidae**

***Dicyrtoma* Bourlet, 1842**

***Dicyrtoma fusca* (Lubbock, 1873)**

Dicyrtoma fusca (Lucas) (sic!): Szent-Ivány 1940a: 436; Dunger 1975: 26; Loksa 1983: 77; Loksa 1991: 274; Farkas 1995: 46; Farkas 1996: 287; Farkas 1997: 58; Farkas & Szathmáry 1997: 39; Farkas *et al.* 1998: 57; *Dicyrtoma fusca* (Lubbock): Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 267; Traser 2002c: 49; Traser *et al.* 2006: 73.

General distribution: Holarctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Balatonfelvidék (Farkas & Szathmáry 1997), Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Hortobágy (Loksa 1983), Kis-Balaton (Farkas

1996, 1997), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c), Kőszeg Mts. (Szent-Ivány 1940a), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998).

***Dicyrtomina* Börner, 1903**

***Dicyrtomina ornata* (Nicolet, 1842)**

Dicyrtoma ornata (Nicolet): Loksa & Rubio 1966a: 156; Loksa 1978b: 95; Farkas 1995: 46; Farkas 1996: 287; Farkas 1997: 58; Farkas *et al.* 1998: 57.

General distribution: West Palaearctic.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Balatonfelvidék (Farkas 1995, 1997), Cserhát (Loksa 1978b), Kis-Balaton (Farkas 1996, 1997), Somogy Hills (Farkas *et al.* 1998).

***Dicyrtomina minuta* (Fabricius, 1783)**

Dicyrtomina minuta (Fabricius): Traser 1997: 62; Traser 2002a: 267; Traser & Salló 2004: 230.

General distribution: Holarctic.

Distribution in Hungary: Fertő-Hanság (Traser 2002a), Kőszeg Mts. (Traser & Salló 2004), Szigetköz (Traser 1997).

Ecological note: planar to montane.

***Dicyrtomina saundersi* (Lubbock, 1862)**

Dicyrtomina saundersi (Lubbock): Traser 2002a: 267.

General distribution: Western Europe.

Distribution in Hungary: Szigetköz (Traser 2002a).

***Ptenothrix* Börner, 1906**

***Ptenothrix atra* (Linnaeus, 1758)**

Ptenothrix atra (Linnaeus): Szent-Ivány 1941: 25; Traser 1999: 58; Traser 2003: 156; *Dicyrtoma atra* (Linnaeus): Loksa 1991: 274; Traser 2002a: 267.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Fertő-Hanság (Traser 2003, 2002a), Mátra Mts. (Szent-Ivány 1941), Nyírség (Loksa 1991).

Ecological note: silvicolous.

***Ptenothrix ciliata* Stach, 1957**

Dicyrtoma ciliata Stach: Loksa 1983: 77, figs 14-18.

General distribution: Central Europe.

Distribution in Hungary: Hortobágy (Loksa 1983).

***Ptenothrix leucostrigata* Stach, 1957**

Ptenothrix cf. leucostrigata Stach: Dunger 1975: 26; *Dicyrtoma leucostrigata* (Stach): Loksa 1980: 109, figs 3a-e.

General distribution: Eastern Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Mátra Mts. (Loksa 1980).

***Ptenothrix setosa* (Krausbauer, 1898)**

Dicyrtoma setosa (Krausbauer): Loksa 1978a: 63.

General distribution: Central Europe.

Distribution in Hungary: Dráva Plain (Loksa 1978a).

Family: **Arrhopalitidae**

***Arrhopalites* Börner, 1906**

***Arrhopalites aggtelekiensis* Stach, 1929**

Arrhopalites pygmaeus aggtelekiensis Stach: Stach 1929: 308; Dudich 1930: 70; Dudich 1932: 49; Gebhardt 1934: 140; *Arrhopalites aggtelekiensis* Stach: Stach 1945: 19, pl. 4; Stach 1956: 66; Traser 1999: 58.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Stach 1929; Dudich 1930, 1932; Gebhardt 1934; Stach 1945, 1956; Traser 1999).

Ecological note: troglophilous.

***Arrhopalites bifidus* Stach, 1945**

Arrhopalites bifidus Stach: Loksa 1962: 63; Loksa 1961b: 226, figs 17-22.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1961b), Bükk Mts. (Loksa 1962).

Ecological note: troglophilous.

***Arrhopalites buekkensis* Loksa, 1969**

Arrhopalites aggtelekiensis buekkensis Loksa: Loksa 1969a: 359, figs 17-27.

General distribution: Central Europe.

Distribution in Hungary: Bükk Mts. (Loksa 1969a).

***Arrhopalites caecus* (Tullberg, 1871)**

Arrhopalites caecus (Tullberg): Stach 1945: 9, pl. 1; Stach 1956: 73, pl. 9; Loksa 1956a: 395; Loksa 1962: 73; Traser 1997: 62; Traser 2002a: 267; *Arrhopalites coecus* (sic!) (Tullberg): Loksa 1956b: 203.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Stach 1945, 1956), Buda Mts. (Loksa 1956b), Bükk Mts. (Loksa 1956a, 1962), Fertő-Hanság (Traser 2002a), Szigetköz (Traser 1997).

Ecological note: edaphic.

***Arrhopalites* cf. *cochlearifer* Gisin, 1947**

Arrhopalites cf. *cochlearifer* Gisin: Traser 2002a: 267.

General distribution: Western Europe.

Distribution in Hungary: Sopron Mts. (Traser 2002a).

***Arrhopalites dudichi* Loksa & Rubio, 1966**

Arrhopalites cochlearifer dudichi Loksa & Rubio: Loksa & Rubio 1966a: 154, figs 59-65.

General distribution: Central Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

***Arrhopalites hungaricus* Loksa, 1967**

Arrhopalites hungaricus Loksa: Loksa 1967: 294, figs 18-26; Traser 1999: 58.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Loksa 1967; Traser 1999).

***Arrhopalites infrasecondarius* Loksa & Rubio, 1966**

Arrhopalites infrasecondarius Loksa & Rubio: Loksa & Rubio 1966a: 154, figs 65-71.

General distribution: Central Europe.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a).

***Arrhopalites intermedius* Loksa, 1969**

Arrhopalites hungaricus intermedius Loksa: Bajomi 1969: 242; Loksa 1969a: 357, figs 1-16.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Bajomi 1969; Loksa 1969a).

***Arrhopalites loczyi* Loksa, 1960**

Arrhopalites coecus (sic!) f. *loczyi* Loksa: Loksa 1961a: 264, figs 31-34.

General distribution: Europe.

Distribution in Hungary: Balatonfelvidék (Loksa 1961a).

***Arrhopalites ornatus* Stach, 1945**

Arrhopalites ornatus Stach: Dunger 1975: 25.

General distribution: Southern Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

***Arrhopalites principalis* Stach, 1945**

Arrhopalites principalis Stach: Loksa 1991: 276.

General distribution: Holarctic.

Distribution in Hungary: Nyírség (Loksa 1991).

***Arrhopalites pygmaeus* (Wankel, 1860)**

Arrhopalites pygmaeus (Wankel): Stach 1929: 307; Dudich 1932: 49; Gebhardt 1934: 140; Stach 1945: 30, pl. 8; Stach 1956: 78, pl. 10, 11; Loksa 1959b: 70; Paclt 1960: 156; Loksa 1960: 49; Loksa 1961b: 226, figs 23-28; Loksa & Rubio 1966a: 154; Traser 1999: 58; *Arrhopalytes* (sic!) *pygmaeus* Absolon (sic!): Gebhardt 1933: 38; *Arrhopalites binoculatus* Börner: Loksa 1956a: 391.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Dudich 1932; Loksa 1961b; Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Balatonfelvidék (Loksa 1960), Bükk Mts. (Loksa 1956a), Cserhát (Loksa 1959b), Mecsek Mts. (Stach 1929; Geb-

hardt 1934; Stach 1945, 1956; Paclt 1960; Gebhardt 1933).

***Arrhopalites secundarius* Gisin, 1958**

Arrhopalites secundarius Gisin: Loksa 1978a: 62.

General distribution: Palaearctic.

Distribution in Hungary: Dráva Plain (Loksa 1978a).

***Arrhopalites sericus* Gisin, 1947**

Arrhopalites sericus Gisin: Loksa 1978b: 95; Traser 1980: 20; Traser 1995: 46.

General distribution: Palaearctic.

Distribution in Hungary: Bakony Mts. (Traser 1980), Cserhát (Loksa 1978b), Órség (Traser 1995).

***Arrhopalites terricola* Gisin, 1958**

Arrhopalites terricola Gisin: Loksa 1966: 385; Loksa 1978b: 95; Loksa 1978a: 62; Traser 1999: 58; Traser 2002a: 267.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa 1966), Balatonfelvidék (Loksa 1966), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1966, 1977), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Keszthely Mts. (Loksa 1966), Mecsek Mts. (Loksa 1966), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 2002a), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966).

***Arrhopalites thermophilus* Loksa, 1964**

Arrhopalites thermophilus Loksa: Loksa 1964: 96, figs 58-65; Loksa 1964: 96, figs 58-65; Dunger 1975: 25; *Arrhopalites thermophila* (sic!) Loksa: Loksa 1966: 386.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Loksa 1964, 1966; Dunger 1975), Pilis Mts. (Loksa 1964).

***Arrhopalites ulehlovae* Rusek, 1970**

Arrhopalites ulehlovae Rusek: Traser 2002a: 267.

General distribution: Eastern Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

Family: **Katiannidae**

***Gisinianus* Betsch, 1977**

***Gisinianus flammeolus* (Gisin, 1957)**

Gisinianus flammeolus (Gisin): Traser 1999: 58.

General distribution: Central Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999).

***Sminthurinus* Börner, 1901**

***Sminthurinus aureus* (Lubbock, 1862)**

Sminthurinus aureus var. *ochropus* (Reuter): Stach 1929: 308; Loksa 1978a: 62; *Sminthurinus aureus* (Lubbock): Stach 1956: 118, pl. 16: figs 4-11; Loksa 1966: 386; Dunger 1975: 25; Loksa 1978b: 95; Loksa 1978a: 62; Loksa 1983: 76; Varga 1992: 172; Varga & Vargha 1992: 315; Traser 1997: 62; Traser 1999: 58; Traser & Csóka 2000: 78; Dombos 2001: 2041; Traser & Csóka 2001: 233; Traser 2002a: 267; Traser 2002c: 49; Traser 2006: 36; Traser & Horváth-Szováti 2006: 334; Traser *et al.* 2006: 73; *Sminthurinus* cf. *aureus* (Lubbock): Traser 1980: 20; *Sminthurinus aureus* var. *atrata* Börner: Traser 2002a: 267.

General distribution: Palaearctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Traser 1980), Börzsöny Mts. (Dunger 1975), Buda Mts. (Stach 1956; Loksa 1966), Budapest (Stach 1929), Bükk Mts. (Loksa 1966; Varga 1992; Varga & Vargha 1992), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Hortobágy (Loksa 1983), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Mezőföld (Dombos 2001), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997).

Ecological note: eurytopic.

***Sminthurinus bimaculatus* Axelson, 1902**

Sminthurinus bimaculatus (Axelson): Dunger 1975: 25; Loksa 1977: 211; Loksa 1978b: 95; Loksa 1983: 76; Hornung 1986: 138; Loksa 1987: 80; Loksa 1991:

273; Traser 2002a: 267; Traser 2003: 156; Traser & Salló 2004: 230.

General distribution: Palaearctic.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Bükk Mts. (Loksa 1977), Cserhát (Loksa 1978b), Fertő-Hanság (Traser 2002a, 2003), Hortobágy (Loksa 1983), Kiskunság (Hornung 1986; Loksa 1987), Kőszeg Mts. (Traser & Salló 2004), Nyírség (Loksa 1991).

***Sminthurinus elegans* (Fitch, 1863)**

Sminthurinus aureus var. *quadri-lineatus* (Tullberg): Stach 1929: 308; *Sminthurinus elegans* (Fitch): Stach 1956: 124, pl. 16: fig. 1; Loksa & Rubio 1966a: 156; Loksa 1966: 386; Loksa 1978a: 62; Loksa 1978b: 95; Traser 1980: 20; Traser 1981: 133; Loksa 1983: 76; Loksa 1987: 80; Traser 1995: 46; Traser 1997: 62; Traser 1999: 58; Traser 2002a: 267; Traser 2006: 36; Traser *et al.* 2006: 73.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Loksa 1966; Traser 1999), Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a; Traser 1980), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Loksa 1966), Buda Mts. (Stach 1929, 1956; Loksa 1966), Cserhát (Stach 1929; Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a; Traser *et al.* 2006), Gerecse Mts. (Loksa 1966; Traser 2006), Hortobágy (Loksa 1983), Keszthely Mts. (Loksa 1966), Kiskunság (Loksa 1987), Mecsek Mts. (Loksa 1966), Mezőföld (Stach 1929, 1956), Mt. Somló (Loksa 1966), Őrség (Traser 1995), Pilis Mts. (Loksa 1966), Sopron Mts. (Traser 1981, 2002a), Szigetköz (Traser 1997), Vas-Sopron Plain (Traser 1981), Vértes Mts. (Loksa 1966), Villány Mts (Loksa 1966), Visegrád Mts. (Loksa 1966).

***Sminthurinus igniceps* (Reuter, 1881)**

Sminthurinus igniceps (Reuter): Loksa 1991: 273.

General distribution: Europe, Japan.

Distribution in Hungary: Nyírség (Loksa 1991).

***Sminthurinus niger* (Lubbock, 1867)**

Sminthurinus niger (Lubbock): Loksa 1978a: 62; Loksa 1978b: 95; Loksa 1987: 80; Loksa 1991: 273; *Sminthurinus cf. niger* (Lubbock): Traser 1980: 20.

General distribution: Palaearctic.

Distribution in Hungary: Bakony Mts. (Traser 1980), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Kiskunság (Loksa 1987), Nyírség (Loksa 1991).

Ecological note: eurytopic species.

***Stenognathellus* Stach, 1956**

***Stenognathellus denisi* Cassagnau, 1953**

Sminthurinus denisi (Cassagnau): Dunger 1975: 25.

General distribution: Southern and Central Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975).

Family: Sminthurididae

***Sminthurides* Börner, 1900**

***Sminthurides aquaticus* (Bourlet, 1842)**

Sminthurides aquaticus (Bourlet): Stach 1929: 307; Stach 1956: 22, pl. 1, 2: fig. 1, pl. 7: fig. 1; Paclt 1960: 157; Dunger 1975: 25; Loksa 1980: 111; Loksa 1983: 75; Loksa 1987: 80; Loksa 1991: 273; Farkas 1995: 46; Farkas 1996: 287; Traser 1997: 62; Farkas 1997: 56; Farkas & Szathmáry 1997: 39; Farkas 1997: 58; Farkas *et al.* 1998: 57; Traser 2002a: 267; *Sminthurides aquaticus* var. *levanderi* Reuter: Stach 1929: 307; ?*Sminthurides aquaticus* f. *levanderi* Reuter: Kovács 1953a: 184.

General distribution: Holarctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995, 1997), Balatonfelvidék (Stach 1929, 1956; Farkas 1995, 1997; Farkas & Szathmáry 1997), Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Stach 1929, 1956; Paclt 1960; Loksa 1987), Mát-ra Mts. (Loksa 1980), Nyírség (Kovács 1953a; Loksa 1991), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a), Szigetköz (Traser 1997).

Ecological note: hygrophilous, epineustic.

***Sminthurides cf. parvulus* (Krausbauer, 1898)**

Sminthurides cf. parvulus (Krausbauer): Traser 2002a: 267.

General distribution: Europe.

Distribution in Hungary: Fertő-Hanság (Traser 2002a).

***Sminthurides malmgreni* (Tullberg, 1877)**

Sminthurides malmgreni (Tullberg): Loksa 1991: 273; Farkas 1995: 46; Farkas *et al.* 1998: 57.

General distribution: Holarctic.

Distribution in Hungary: around the Lake Balaton (Farkas 1995), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998).

Ecological note: hygrophilous, epineustic.

***Sminthurides pseudassimilis* Stach, 1956**

Sminthurides pseudassimilis (sic!) Stach: Loksa 1980: 109.

General distribution: Europe, Japan.

Distribution in Hungary: Mátra Mts. (Loksa 1980).

***Sminthurides schoetti* Axelson, 1903**

Sminthurides schoetti (Axelson): Loksa 1978a: 62.

General distribution: Palaearctic.

Distribution in Hungary: Dráva Plain (Loksa 1978a).

***Sminthurides signatus* (Krausbauer, 1898)**

Sminthurides signatus (Krausbauer): Loksa 1991: 273.

General distribution: Palaearctic.

Distribution in Hungary: Nyírség (Loksa 1991).

***Sphaeridia Linnaniemi*, 1912**

***Sphaeridia pumilis* (Krausbauer, 1898)**

Sminthurides pumilis Krausbauer: Loksa 1966: 385; Loksa 1978a: 62; Loksa 1980: 111; Loksa 1991: 273; Farkas 1995: 46; Farkas 1996: 287; Farkas & Szathmáry 1997: 39; Farkas 1997: 58; Farkas *et al.* 1998: 57; *Sphaeridia pumilis* (Krausbauer): Dunger 1975: 25; Loksa 1983: 76; Traser 1999: 58; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 267; Traser 2002c: 49; Traser 2003: 156; Traser 2006: 36; Traser & Horváth-Szováti 2006: 334; Traser *et al.* 2006: 73.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995), Balatonfelvidék (Farkas & Szathmáry 1997), Börzsöny Mts. (Dunger 1975), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a, 2003; Traser *et al.* 2006), Gerecse Mts. (Traser 2006), Hortobágy (Loksa 1983), Kis-Balaton (Farkas 1996, 1997), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c; Traser & Horváth-Szováti 2006), Mátra Mts. (Loksa 1980), Mt. Somló (Loksa 1966), Nyírség (Loksa 1991), Somogy Hills (Farkas *et al.* 1998), Szigetköz (Traser 2002a).

Ecological note: mesophilic.

Family: **Sminthuridae**

Subfamily: **Sminthurinae**

***Allacma Börner*, 1906**

***Allacma fusca* (Linnaeus, 1758)**

Sminthurus (sic!) *fuscus* De Geer (sic!): Tömösváry 1883: 34; *Sminthurus fuscus* Latreille (sic!): Tömösváry 1884a: 57; *Sminthurus* (sic!) *fuscus* (Linnaeus): Vellay 1900: 20; *Allacma fusca* (Linnaeus): Stach 1929: 311; Szent-Ivány 1940a: 436; Stach 1956: 217, pl. 27; Loksa 1956a: 411; Dunger 1975: 26; Loksa 1983: 77; Traser 1999: 58; Traser 2002a: 268; *Sminthurus* (*Sminthurus*) *fuscus* (Linnaeus): Loksa & Rubio 1966a: 156; Loksa 1978a: 63; *Sminthurus fuscus* (Linnaeus): Loksa 1978b: 95; Loksa 1980: 111; Loksa 1991: 274.

General distribution: Holarctic.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Bódva Valley (Tömösváry 1883; Vellay 1900; Stach 1929), Börzsöny Mts. (Dunger 1975), Budapest (Tömösváry 1883, 1884a; Vellay 1900; Stach 1929), Bükk Mts. (Loksa 1956a), Cserhát (Stach 1929, 1956; Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Loksa 1980), Nyírség (Loksa 1991), Vác-Pest Duna Valley (Tömösváry 1883; Vellay 1900; Stach 1929).

Ecological note: silvicolous, corticophilous.

Capraïnea Dallai, 1970

Capraïnea marginata (Schött, 1893)

Sminthurus marginatus Schött: Stach 1929: 310; Stach 1956: 252, pl. 31: figs 1-4; Dunger 1975: 26; Loksa 1983: 76; Loksa 1991: 274; Traser 1995: 46; Traser 1999: 58; *Sminthurus (Sminthurus) marginatus* Schött: Loksa & Rubio 1966a: 156; *Sminthurus marginata* (sic!) Schött: Loksa 1978b: 95; *Capraïnea marginata* (Schött): Traser 2002a: 268.

General distribution: Europe.

Distribution in Hungary: Aggtelek Karst (Traser 1999), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Cserhát (Stach 1929, 1956; Loksa 1978b), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Nyírség (Loksa 1991), Őrség (Traser 1995).

Ecological note: xerothermophilic.

Sminthurus Latreille, 1802

Sminthurus maculatus Tömösváry, 1883

Smynthurus (sic!) *maculatus* Tömösváry: Tömösváry 1883: 36, fig. 1; Tömösváry 1884a: 57; Vellay 1900: 20; *Sminthurus viridis* var. *maculatus* (Tömösváry): Stach 1929: 311; *Sminthurus maculatus* Tömösváry: Stach 1956: 273, pl. 33: figs 6-8; Loksa 1966: 386; Hornung 1986: 138; Varga 1992: 172; Varga & Oldal 1998: 87; Dombos 2001: 2041; Traser 2002c: 49; Traser & Horváth-Szováti 2006: 334; *Sminthurus (Sminthurus) maculatus* Tömösváry: Loksa 1978a: 62.

General distribution: Southern and Central Europe.

Distribution in Hungary: Budapest (Tömösváry 1883, 1884a; Vellay 1900; Stach 1929), Bükk Mts. (Loksa 1966; Varga 1992; Varga & Oldal 1998), Dráva Plain (Loksa 1978a), Kiskunság (Stach 1929, 1956; Hornung 1986; Traser 2002c; Traser & Horváth-Szováti 2006), Mezőföld (Tömösváry 1883; Vellay 1900; Stach 1929; Dombos 2001).

Ecological note: thermophilic.

Sminthurus multipunctatus Schäffer, 1896

Sminthurus multipunctatus ab. *viridipunctatus* Stach: Stach 1929: 311; Szent-Ivány 1940a: 436; *Sminthurus multipunctatus* f. *albopunctatus* Stach: Szent-Ivány 1940a: 436; *Sminthurus multipunctatus* Schäffer: Stach

1956: 262, pl. 32: fig. 1, pl. 33: figs 1-5; Loksa 1987: 80.

General distribution: Palaearctic.

Distribution in Hungary: Cserhát (Stach 1929; Szent-Ivány 1940a; Stach 1956), Kiskunság (Stach 1929; Szent-Ivány 1940a; Stach 1956; Loksa 1987), Kőszeg Mts. (Szent-Ivány 1940a).

Ecological note: xerothermophilic.

Sminthurus nigromaculatus Tullberg, 1871

Sminthurus (Sminthurus) nigromaculatus Tullberg: Loksa & Rubio 1966a: 156; Loksa 1978a: 63; *Sminthurus nigromaculatus* Tullberg: Loksa 1983: 77; Loksa 1991: 274; Traser 2002a: 268.

General distribution: Holarctic.

Distribution in Hungary: Bakony Mts. (Loksa & Rubio 1966a), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Nyírség (Loksa 1991).

Sminthurus viridis (Linnaeus, 1758)

Smynthurus (sic!) *viridis* var. *cinereoviridis* Tullberg: Tömösváry 1883: 38; Vellay 1900: 20; *Smynthurus* (sic!) *viridis* Linnaeus: Tömösváry 1884a: 57; Vellay 1900: 20; *Sminthurus viridis* Linnaeus: Stach 1929: 310; Loksa 1980: 111; Loksa 1983: 76; Loksa 1987: 80; Loksa 1991: 274; Traser 1995: 46; Farkas & Szathmáry 1997: 39; Traser & Csóka 2000: 78; Traser & Csóka 2001: 233; Dombos 2001: 2041; Traser 2002a: 268; Traser 2003: 156; *Sminthurus viridis* var. *cinereoviridis* Tullberg: Stach 1929: 310; Traser 2002a: 268; *Sminthurus viridis* f. *cinereoviridis* Tullberg: Szent-Ivány 1940a: 436.

General distribution: cosmopolitan.

Distribution in Hungary: Balatonfelvidék (Stach 1929; Farkas & Szathmáry 1997), Budapest (Tömösváry 1883; Vellay 1900; Stach 1929; Szent-Ivány 1940a), Fertő-Hanság (Traser 2002a, 2003), Hortobágy (Loksa 1983), Kiskunság (Vellay 1900; Stach 1929; Loksa 1987; Traser & Csóka 2000, 2001), Kőszeg Mts. (Szent-Ivány 1940a), Mátra Mts. (Loksa 1980), Mezőföld (Dombos 2001), Nyírség (Loksa 1991), Őrség (Traser 1995), Szentendre Island (Tömösváry 1883), Vác-Pest Duna Valley (Tömösváry 1884a; Vellay 1900; Stach 1929; Szent-Ivány 1940a).

Ecological note: on open habitats.

***Sminthurus wahlgreni* Stach, 1920**

Sminthurus wahlgreni Stach: Loksa 1966: 386.

General distribution: Eastern and Central Europe.

Distribution in Hungary: Mecsek Mts. (Loksa 1966).

Spatulosminthurus Betsch & Betsch-Pinot, 1984

***Spatulosminthurus flaviceps* (Tullberg, 1871)**

Sminthurus flaviceps ab. *medius* Stach: Stach 1929: 311; *Sminthurus flaviceps* Tullberg: Stach 1956: 256, pl. 30; Loksa 1966: 386; Dunger 1975: 26; Loksa 1977: 211; Loksa 1980: 111; *Sminthurus (Sminthurus) flaviceps* var. *ornata* Uzel: Loksa & Rubio 1966a: 156.

General distribution: Southern and Central Europe.

Distribution in Hungary: Bakony Mts. (Loksa 1966; Loksa & Rubio 1966a), Balatonfelvidék (Loksa 1966), Börzsöny Mts. (Dunger 1975), Buda Mts. (Loksa 1966), Bükk Mts. (Loksa 1977), Cserhát (Stach 1929, 1956), Keszthely Mts. (Loksa 1966), Mátra Mts. (Loksa 1980), Mecsek Mts. (Loksa 1966), Mt. Somló (Loksa 1966), Villány Mts (Loksa 1966).

Lipothrix Börner, 1906

***Lipothrix italica* (Cassagnau, 1968)**

Sphyrotheca italica Cassagnau: Dunger 1975: 26; *Lipothrix italica* (Cassagnau): Traser 2002a: 268; Traser 2003: 156.

General distribution: Europe.

Distribution in Hungary: Börzsöny Mts. (Dunger 1975), Fertő-Hanság (Traser 2003), Sopron Mts. (Traser 2002a).

***Lipothrix lubbocki* (Tullberg, 1872)**

Sphyrotheca lubbocki (Tullberg): Stach 1929: 310; Dunger 1975: 26; *Sphyrotheca lubbocki* var. *maculata* Axelson: Stach 1929: 310; *Sminthurus lubbocki* Tullberg: Kovács 1953a: 184; Loksa 1956b: 203; Loksa 1956a: 395; Loksa 1977: 211; Loksa 1978b: 95; Loksa 1980: 111; Loksa 1983: 76; Loksa 1991: 273; Varga 1991: 85; Farkas 1995: 46; Farkas *et al.* 1998: 57; Varga & Oldal 1998: 87; *Sminthurus (Sphyrotheca) lubbocki* Tullberg: Loksa & Rubio 1966a: 156; Loksa 1978a: 62; *Lipothrix lubbocki* (Tullberg): Traser 1995:

46; Traser 1999: 58; Traser & Csóka 2000: 76; Traser & Csóka 2001: 233; Traser 2002a: 268; Traser 2002c: 49.

General distribution: Europe, North Africa.

Distribution in Hungary: Aggtelek Karst (Traser 1999), around the Lake Balaton (Farkas 1995), Bakony Mts. (Loksa & Rubio 1966a), Börzsöny Mts. (Dunger 1975), Buda Mts. (Stach 1929; Loksa 1956b), Bükk Mts. (Loksa 1956a, 1977; Varga 1991; Varga & Oldal 1998), Cserhát (Loksa 1978b), Dráva Plain (Loksa 1978a), Fertő-Hanság (Traser 2002a), Hortobágy (Loksa 1983), Kiskunság (Traser & Csóka 2000, 2001; Traser 2002c), Mátra Mts. (Loksa 1980), Nyírség (Kovács 1953a; Loksa 1991), Őrség (Traser 1995), Somogy Hills (Farkas *et al.* 1998), Sopron Mts. (Traser 2002a).

DISCUSSION

Our review revealed 414 Collembola species recorded so far from Hungary. It's a rather high number referring to this relatively small area, which can be explained by the geographical situation of the country. Although Hungary is located in the middle of the Carpathian Basin, it is a transitional zone and impacts of the Alpin, Carpathian and Illyric regions are significant as well. Regarding the number of the species, Hungary belongs to the relatively well investigated countries in Europe: Austria: more than 450 (Christian 1987); Poland: 441 (Skarzynski *et al.* 2002), Romania: 388 (Fiera 2007), the Ukraine: 527 (Kaprus *et al.* 2004). However, it has to be mentioned that even in these countries new species are discovered every year and that numerous species occur in neighbouring areas which can be expected from Hungary as well. The fauna of the country isn't entirely discovered, there are several territories of totally uninvestigated springtails fauna in the country yet. Similarly to the case of oribatid mites (Mahunka & Papp 2005), another very diverse group of soil animals, we can highly expect to find even many further species new to the fauna of Hungary in the future.

Acknowledgements. We thank the Hungarian Scientific Research Grant (OTKA No. 72744) for a grant to the first author. The research was supported by the National R&D Programme (contract no.: 3B023-04) as well.

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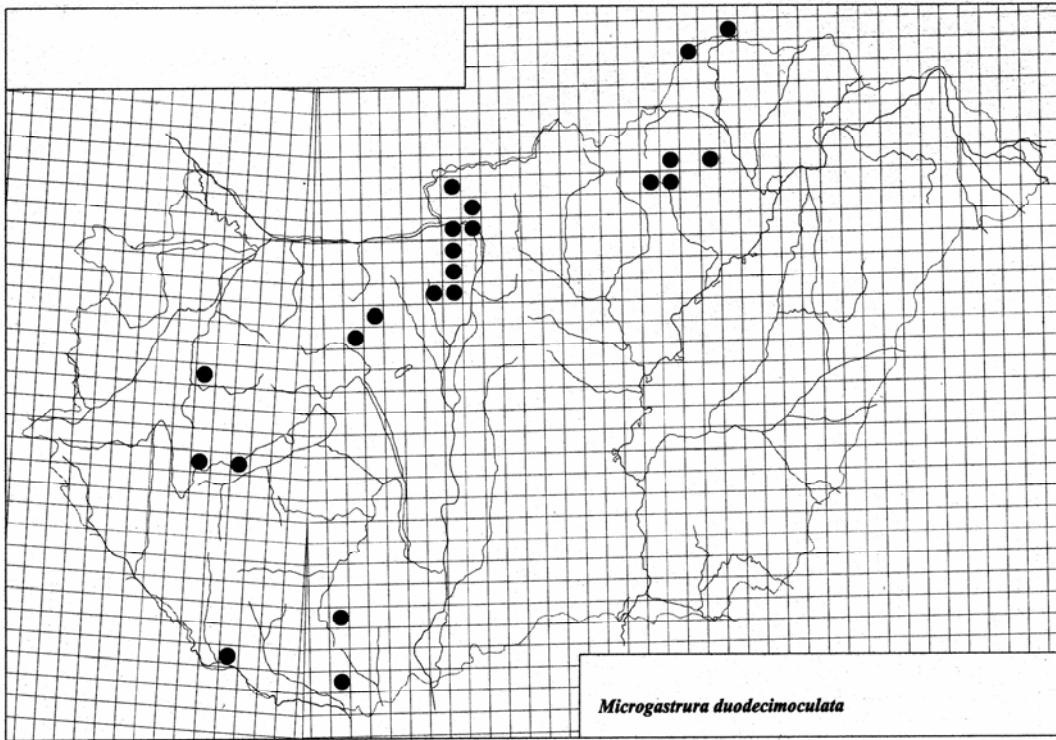
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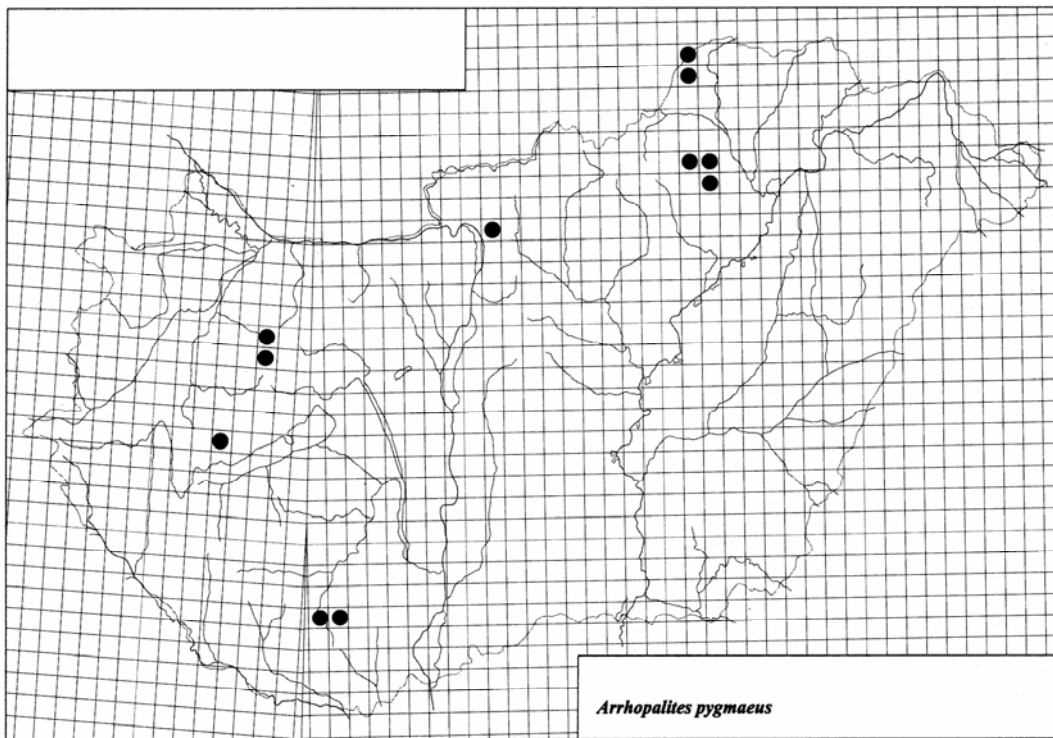
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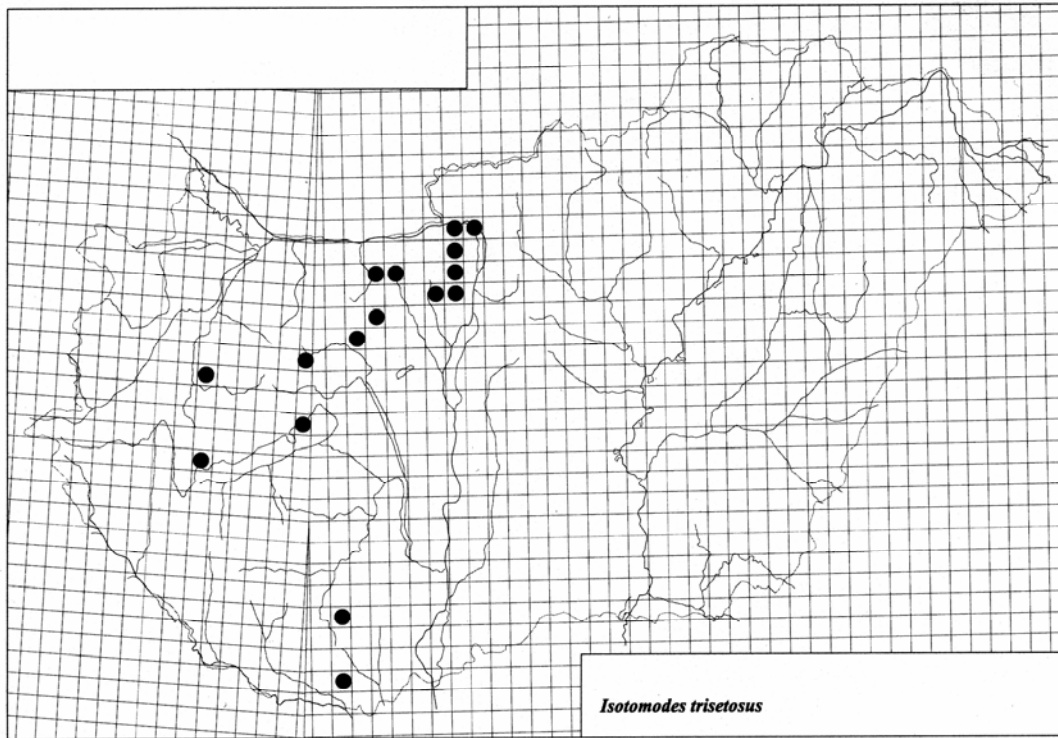


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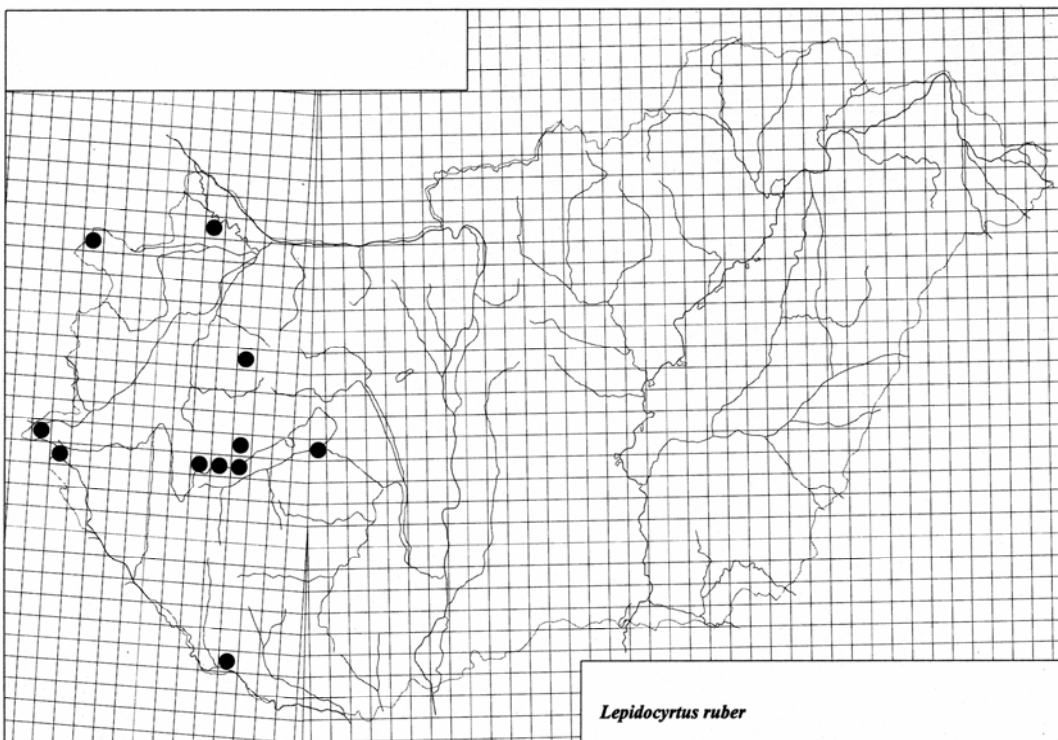


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Plate I. Distribution of *Arrhopalites pygmaeus* and *Microgastrura duodecimoculata* in Hungary.

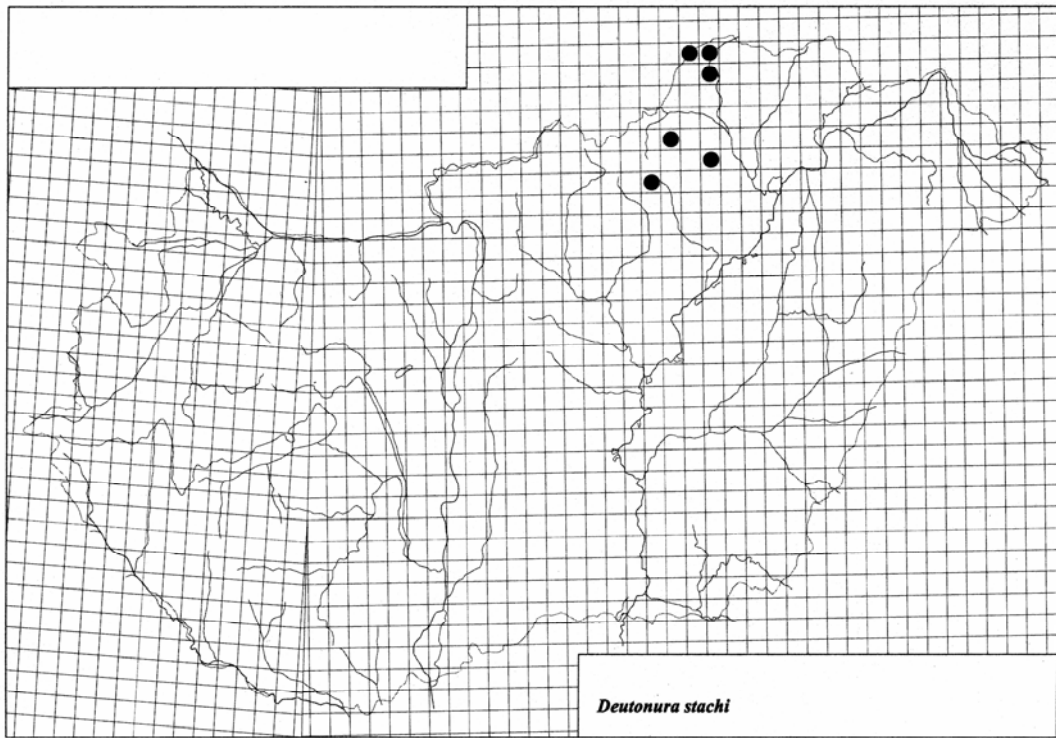


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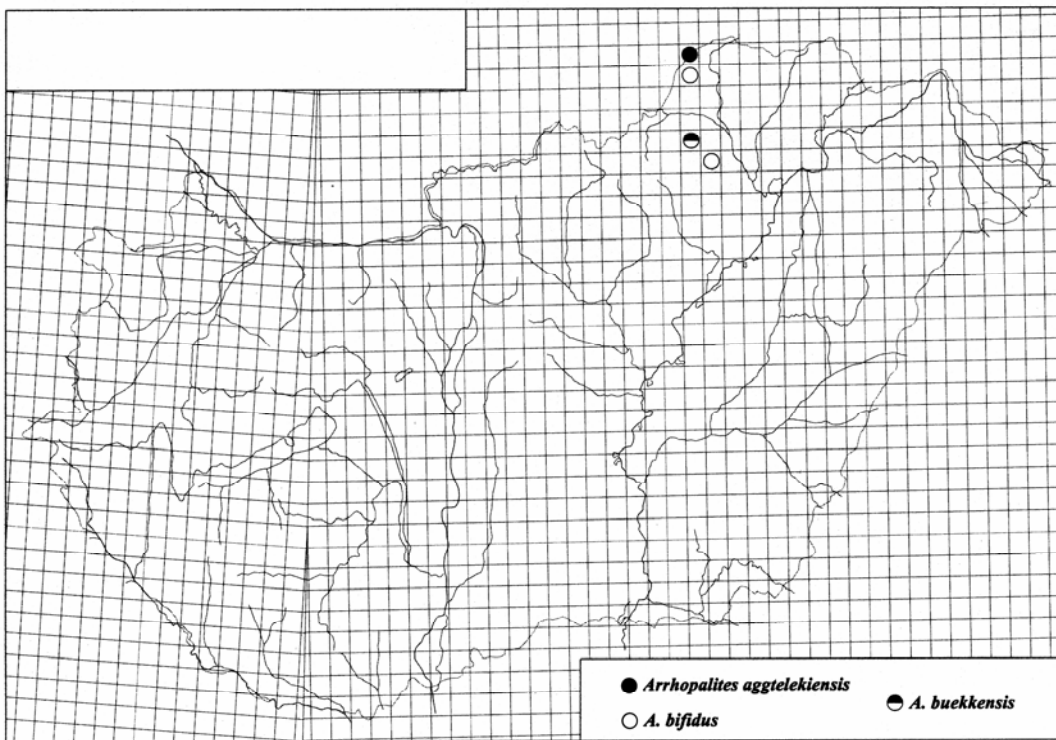


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Plate II. Distribution of *Isotomodes trisetosus* and *Lepidocyrtus ruber* in Hungary.

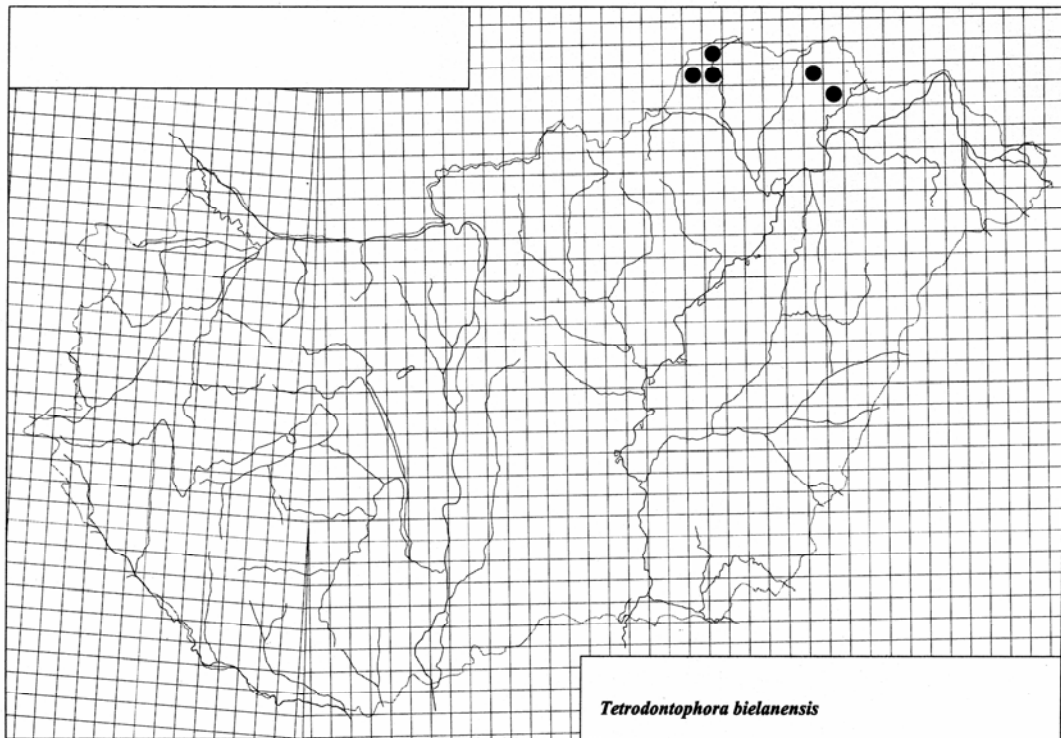


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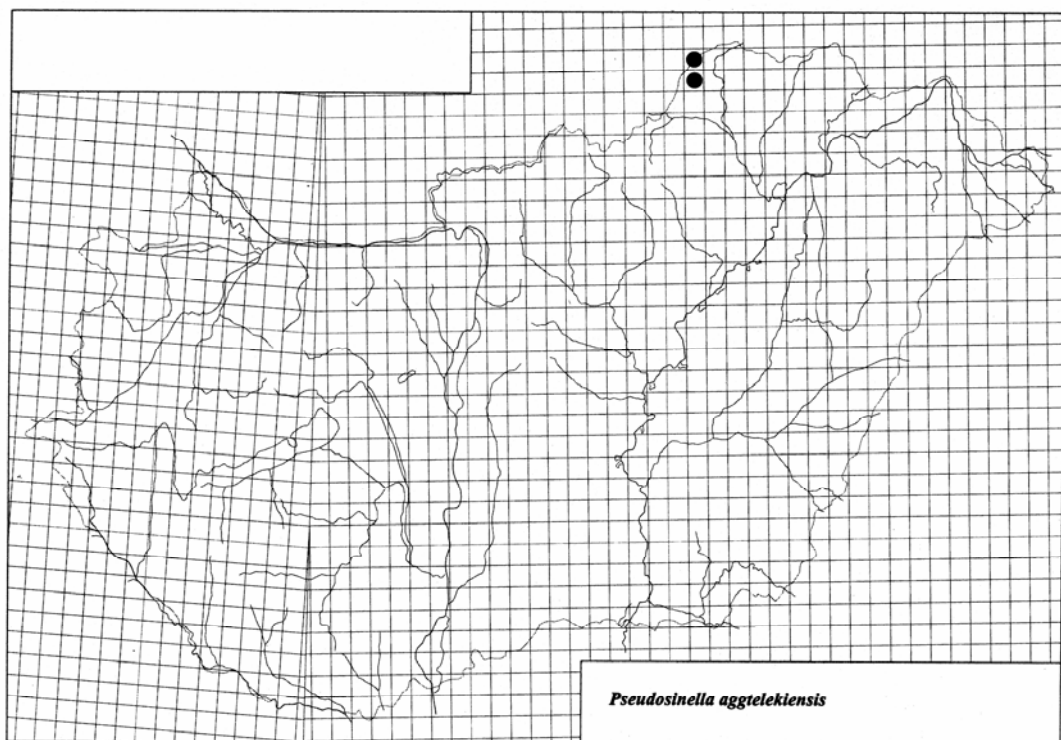


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Plate III. Distribution of *Deutonura stachi*, *Arrhopalites aggtelekiensis*, *A. bifidus* and *A. buekkensis* in Hungary.

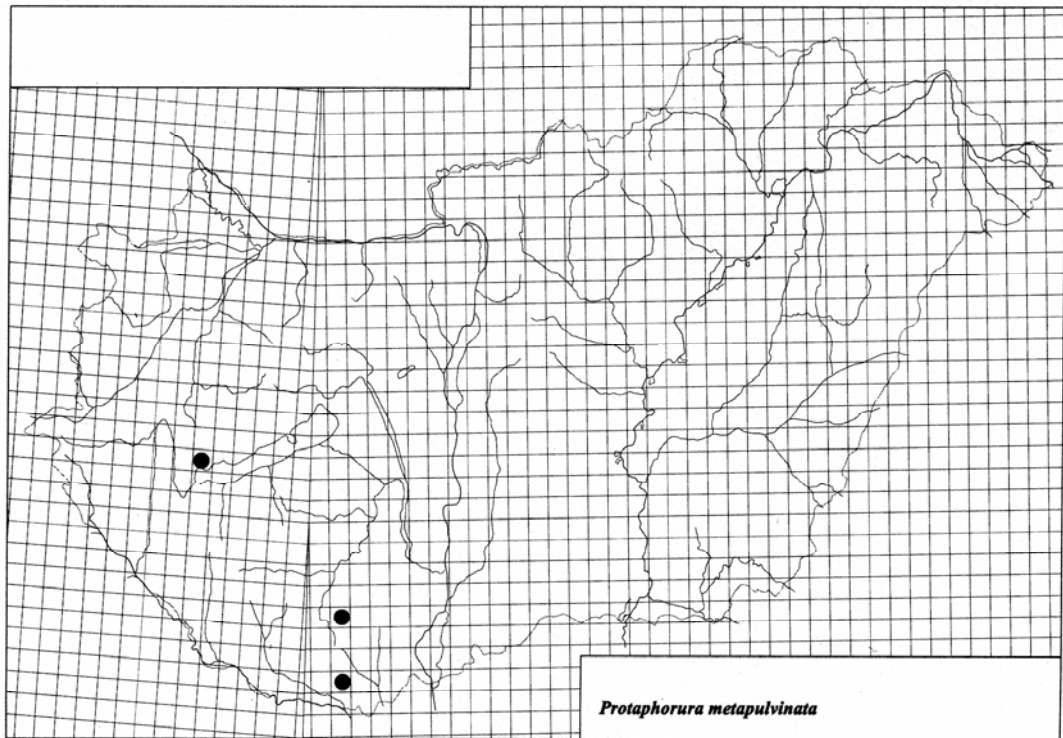


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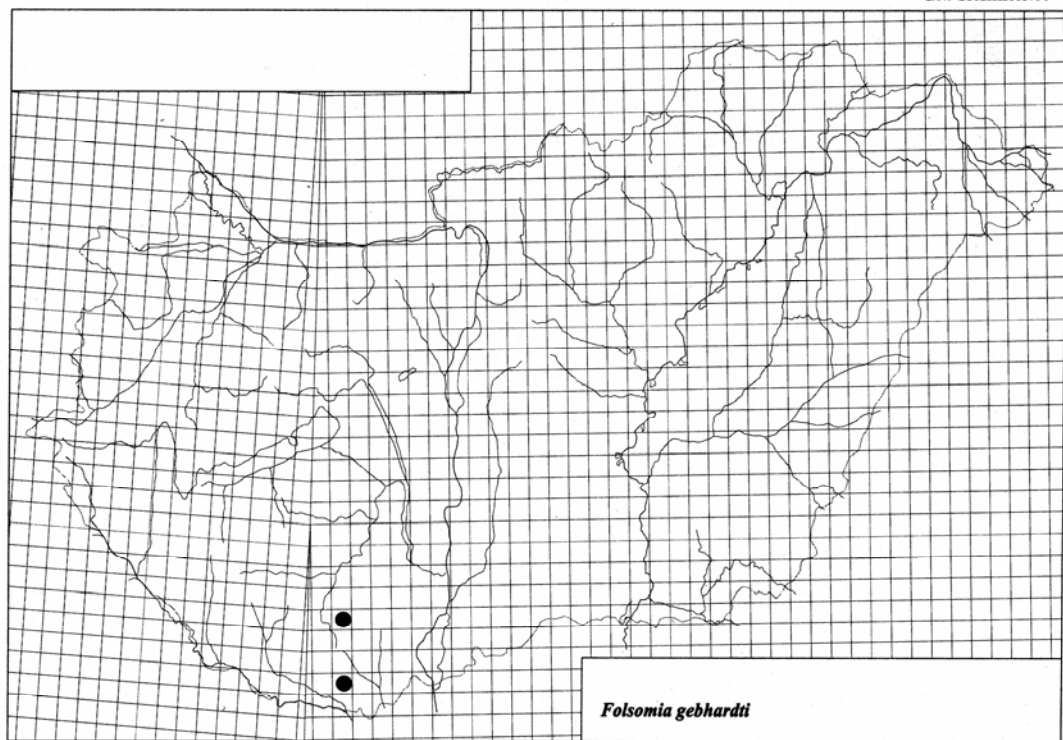


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Plate IV. Distribution of *Tetrodontophora bielensis* and *Pseudosinella aggtekiensis* in Hungary.

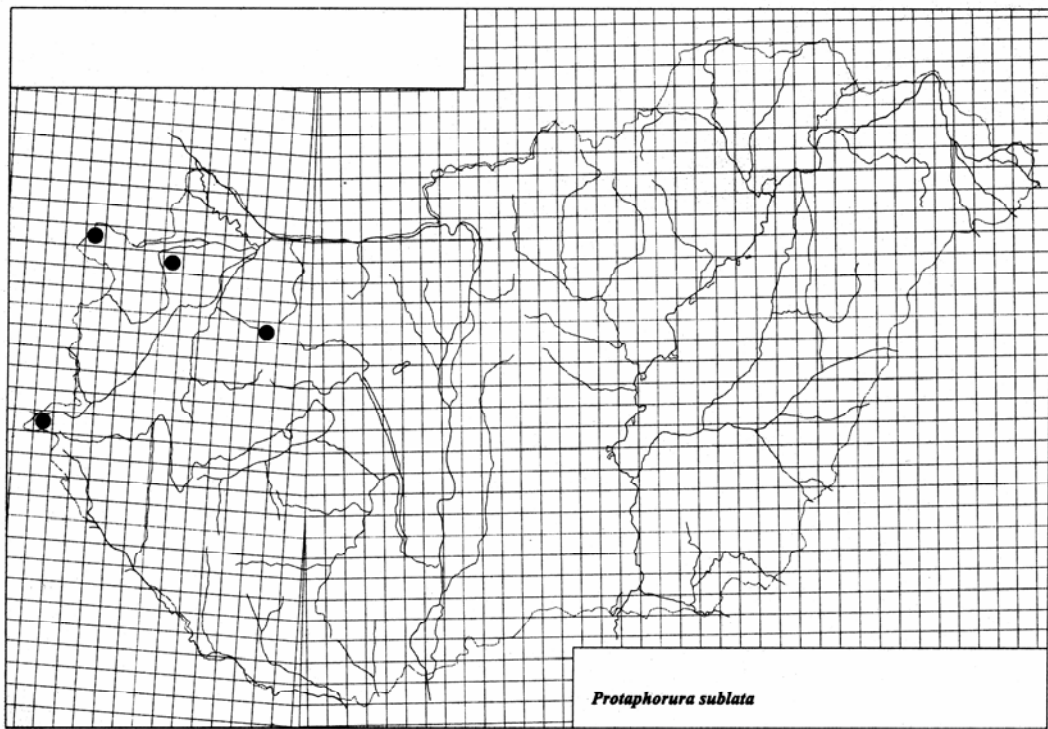


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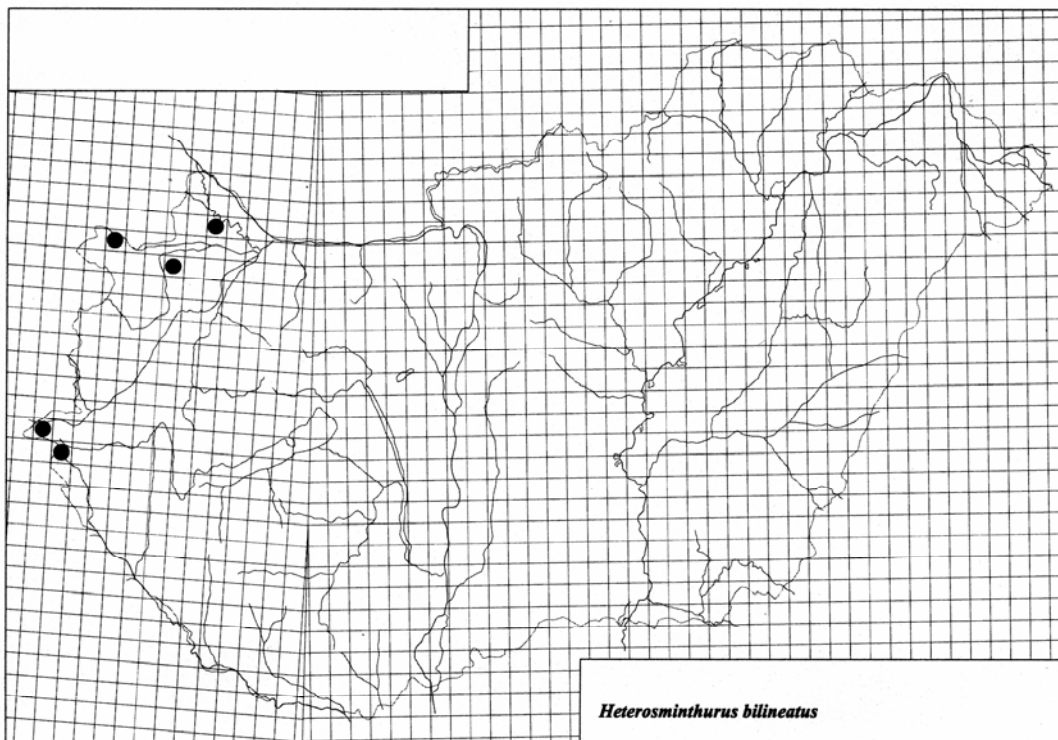


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Plate V. Distribution of *Protaphorura metapulvinata* and *Folsomia gebhardti* in Hungary.

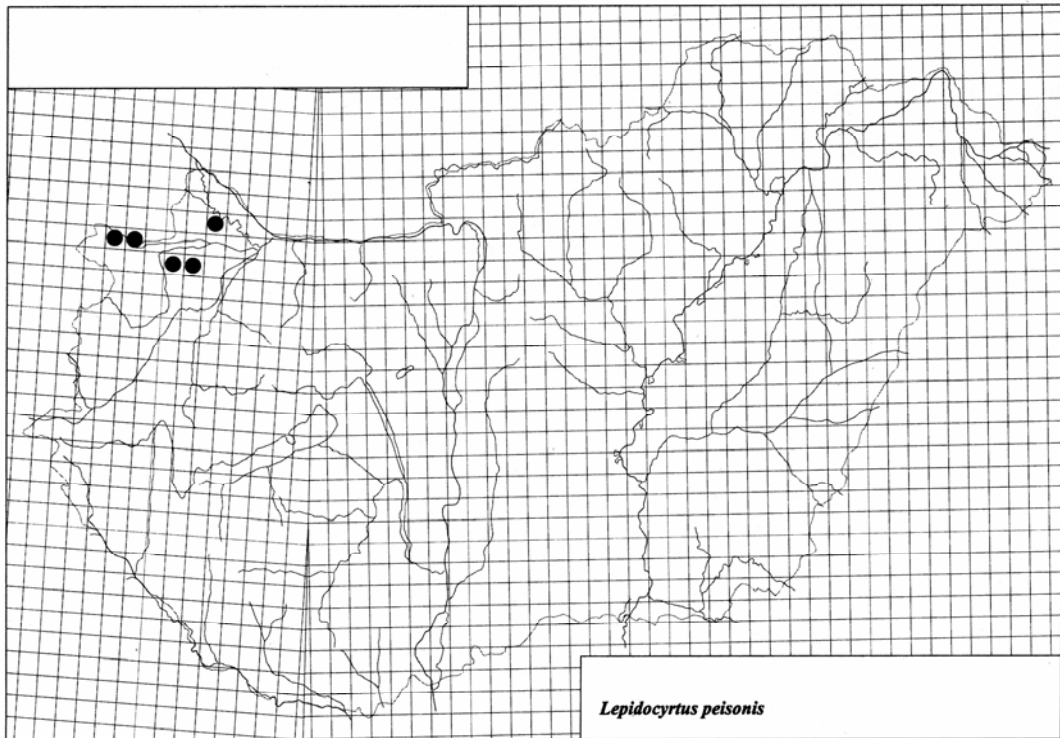


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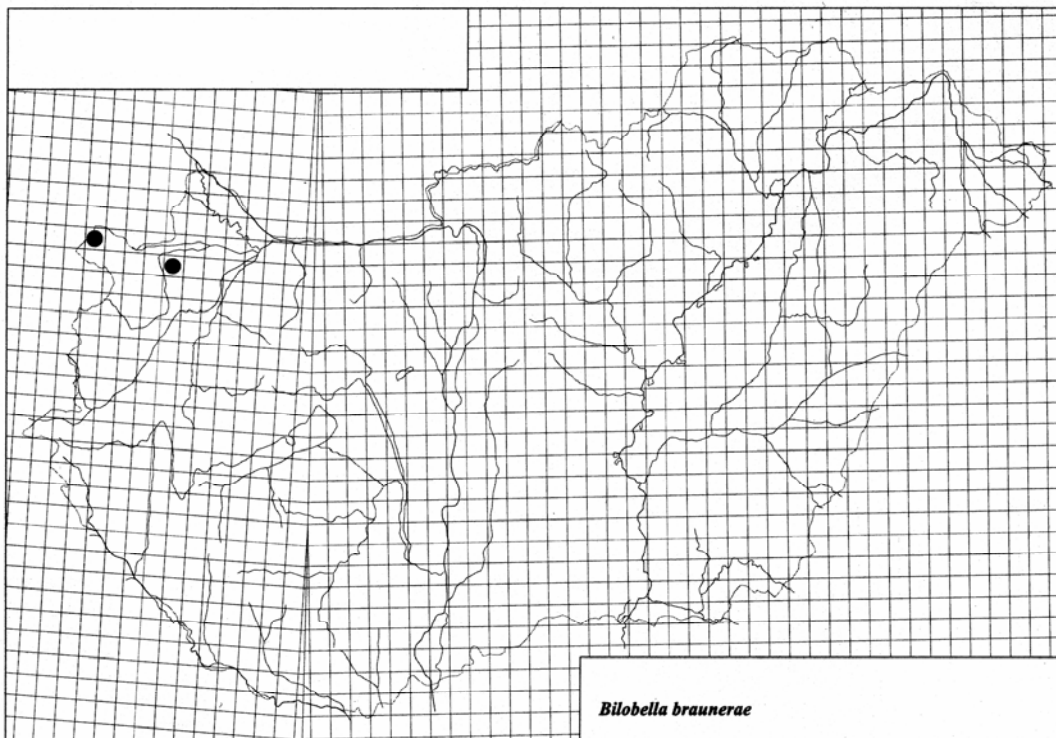


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Plate VI. Distribution of *Protaphorura sublata* and *Heterosminthus bilineatus* in Hungary.

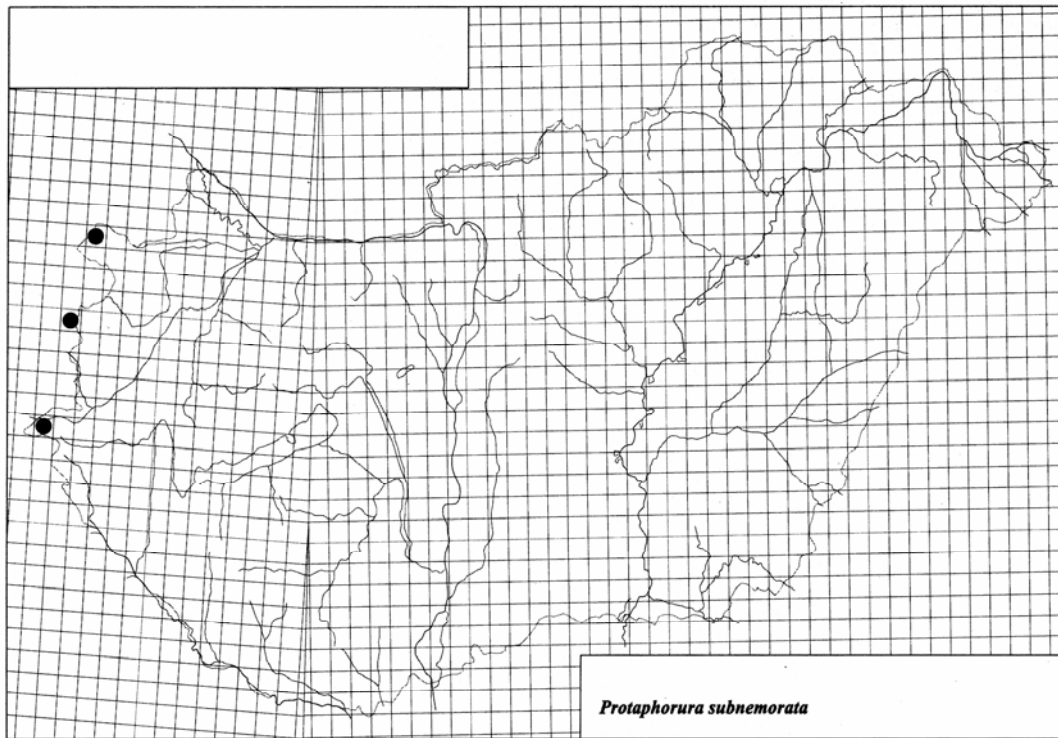


S/N: S102HH005794

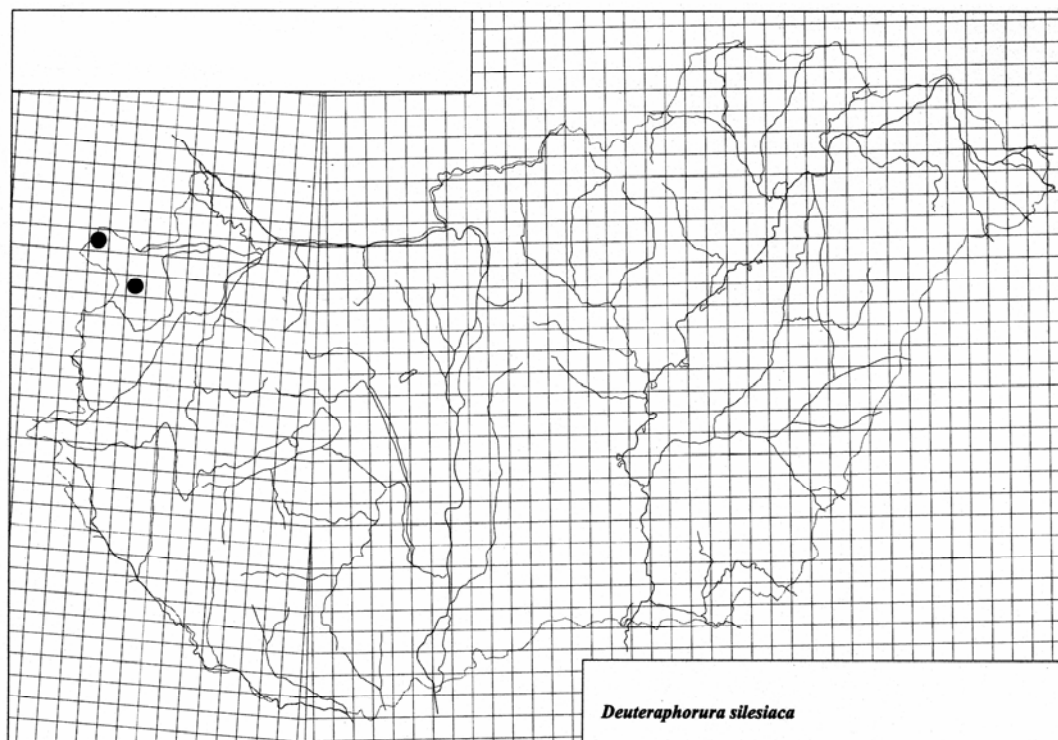


S/N: S102HH005794

Plate VII. Distribution of *Lepidocyrtus peisonis* and *Bilobella braunerae* in Hungary.

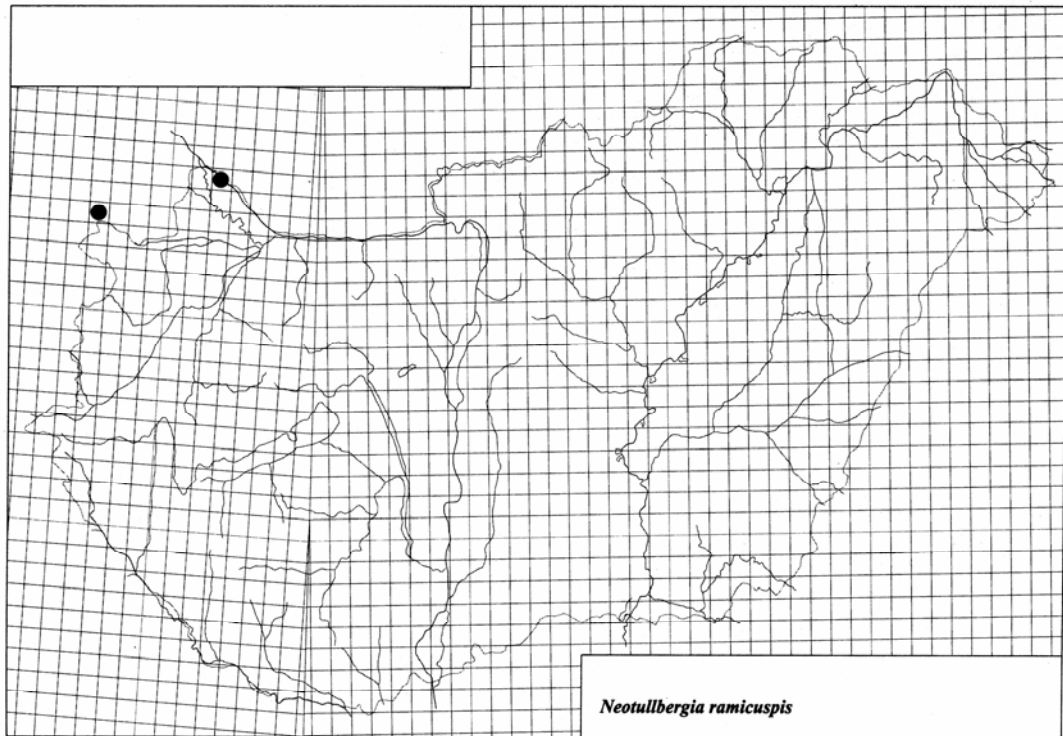


S/N: S102HH005794

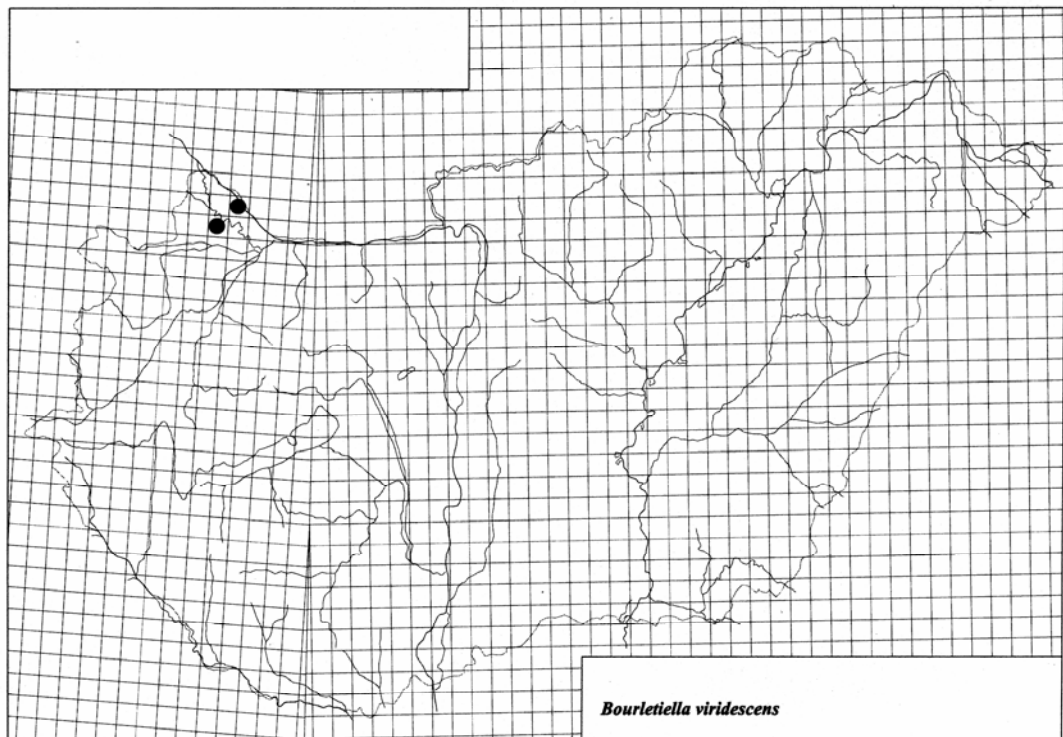


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Plate VIII. Distribution of *Protaphorura subnemorata* and *Deuteraphorura silesiaca* in Hungary.



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Plate IX. Distribution of *Neotullbergia ramicuspis* and *Bourletiella viridescens* in Hungary.

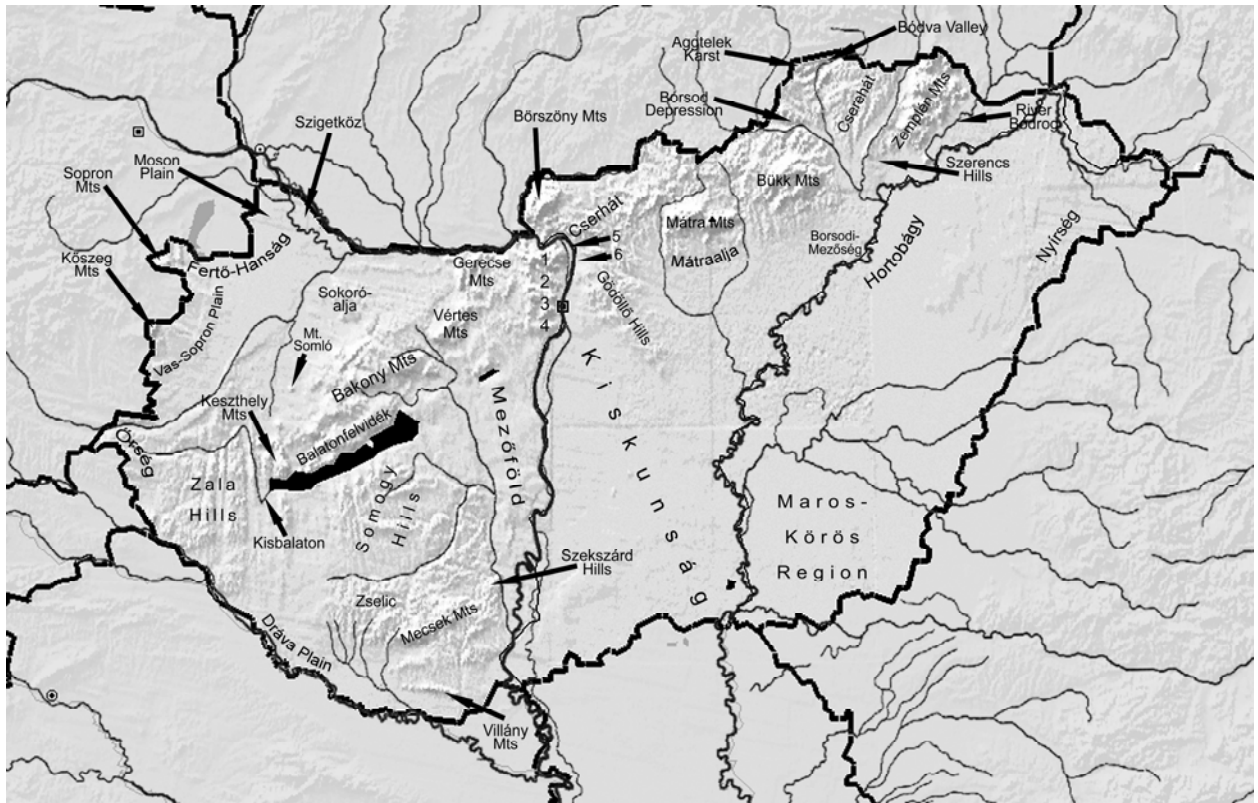


Plate X. Map of Hungary with the geographical units used in the text. 1 = Visegrád Mts., 2 = Pilis Mts., 3 = Buda Mts., 4 = Tétény Plateau, 5 = Szentendre Island, 6 = Vác-Pest Danube Valley