

Check list of the Hungarian Mesostigmatid mites I.–II. Zerconidae and Macrochelidae

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ABSTRACT: Check list of the Hungarian Zerconidae and Macrochelidae are presented. Several new occurrences are given. Four species are new to the fauna of Hungary. With 7 figures.

Introduction

The Hungarian Mesostigmatid mite fauna is more poorly investigated, than the other mite groups of Hungary (e.g. Oribatids (MAHUNKA & MAHUNKA-PAPP, 2004)). Several articles have been published about this group of mites, but no summarizing work has been prepared so far.

The first record of this group was published by KARPELLES (1893), who listed some Mesostigmatid species from Hungary. After that JÁNOS BALOGH, the noted acarologist, gave a lot of data about the occurrences of the Hungarian Mesostigmata (BALOGH 1938a, 1938b). Later several acarologist investigated the Hungarian fauna. MOLNOS (1981–1982), MRČIAK (1972), AMBROS (1981–1982, 1993) published several data about the Gamasid mites from small mammals. Data about the free-living Mesostigmata are published by SELLNICK (1958), VINCZE (1965), ERŐSS & MAHUNKA (1971), KANDIL (1983), KOMLOVSZKY (1987). After 2002 Kontschán gave several new data of the Mesostigmatid mites (KONTSCHÁN 2003, 2004, 2005, 2006, SALMANE & KONTSCHÁN 2005, 2006).

The main aims of these papers were the following: summarize the data of Mesostigmatid mites and publish new data of the occurrences.

Material and methods

The collected mites are stored in alcohol, and deposited in Collections of Soil Zoology of the Hungarian Natural History Museum. For the identifications I used books of MASAN (2003), MASAN & FENDA (2004), KARG (1993) and BREGETOVA (1977).

I, Zerconidae

History

The Zerconidae fauna of Hungary is poorly-investigated as well. SELLNICK (1958) described numerous species from Hungary, but the first summarising work was made by VINCZE (1965), who mentioned 16 species from different part of Hungary (one of them was new to the science). Though some of the Hungarian national parks had been investigated from this point of view, only six species (KANDIL 1981) were listed from Hortobágyi National Park. Later KONTSCHÁN (2004) published the first record of one Zerconid species from Szigetköz (NW-Hungary),

SALMANE AND KONTSCHÁN (2005, 2006) gave several occurrences of several Zerconid species in Hungary. After that KONTSCHÁN (2006) mentioned several data to the fauna of county Komárom-Esztergom (NW Hungary). The all (published and new) records are given in Fig 1.

List of the taxa:

ZERCONIDAE G. CANESTRINI, 1891

PROZERCON Sellnick, 1943

Prozercon carsticus Halaskova, 1963: **Previous data:** Mátra, Remete-Mts (VINCZE, 1965), Mátra, Remete-Mts (KARG 1993). **New data:** Budakeszi, Vadaspark, from soil, 28.05.2003. leg Kontschán, J. **Distribution:** Central-Europe.

Prozercon fimbriatus (C. L. Koch, 1839): **Previous data:** Mecsek, Dunazúg Mts, Mátra, Bükk, Aggtelek, Tihany, Mikosdpuszta, Budai Mts (VINCZE, 1965) Eger-valley, Dunazúg Mts, Mátra, Bükk, Tihany, Szelicepuszta, Mikosapuszta (KARG 1993), Vértes (KONTSCHÁN, 2006). **New data:** Kőszeg, Hármaspatak, from litter, 19.08.2005. leg. Kontschán, J., Kőszeg, Hármaspatak, from moss, 19.08.2005. leg Nédli, J., Velem, beech forest, from litter, 09.04.2004. leg. Csuzdi, Cs., Szentmargitfalva, from litter, 09.04.2004. leg. Csuzdi, Cs., Vértes, Vértesszentkereszt, from litter, 21.06.2005. leg. Kontschán, J., Vértes, Várgesztes, near a stream, from litter, 22.05.2005. leg. Kontschán, J., Vértes, Várgesztes, near a stream, from litter, 22.05.2005. leg. Kárpáthegyi, P., Vértes, Gánt, Fáni völgy, 20.05.2005. leg. Kontschán, J., Vértes, Vértessomló, from litter, 08.08.2002. leg. Kontschán, J., Zemplén, Regéc, Istvánkút, from moss, 04.04.2004. leg. Horváth, E., Zemplén, Regéc, csaponta-forrás, from moss, 04.04.2004. leg. Horváth, E., Bőszénfa, Ropoly, oak forest, from moss, 11.06.2004. leg. S. Mahunka-L. Mahunka-Papp. **Distribution:** Europe.

Prozercon kochi Sellnick, 1943: **Previous data:** Tákos (VINCZE, 1965), Csarodai swamp (KARG 1993), Zempén Mts (Salmane & Kontschán, 2005). **New data:** Zemplén, Regéc, Solymos-hegy, from moss, 04.04.2004. leg. Horváth, E. **Distribution:** Europe.

Prozercon traegardhi (HALBERT, 1923): **Previous data:** Székesfehérvár, Viszlópuszta, Hárs Mts, Nadap, Remete Mts (VINCZE 1965), Hárs Mts, Remete Mts, Nadap, Meleg valley, Viszlópuszta, Székesfehérvár (KARG, 1993), Bakony, Vértes, Mecsek (SALMANE & KONTSCHÁN, 2006). **New data:** Kisszentadorján, from litter, 12.05.2005. leg. Csuzdi, Cs., Vértes, Gánt, Fáni völgy, 20.05.2005. leg. Kontschán, J.

PARAZERCON Tragardh, 1931

Parazercon radiatus (BERLESE, 1910): **New data:** Zemplén, Regéc, Istvánkút, from moss, 04.04.2004. leg. Horváth, E. **Distribution:** Europe. **Remarks:** This is the first record in Hungary.

Parazercon sarekensis Willmann, 1939: **Previous data:** Balaton-felvidék (SALMANE & KONTSCHÁN, 2006). **Distribution:** Palearctic.

ZERCON C. L. Koch, 1836

Zercon andrei Sellnick, 1958: **Previous data:** Mátra Mts, Nadap, Székesfehérvár (VINCZE, 1965; KARG, 1993). **Distribution:** Europe.

Zercon arcuatus Tragardh, 1931: **Previous data:** Mátra (KARG, 1993). **Distribution:** Europe.

Zercon athiasi Vincze, 1965: **Previous data:** Zebegény, Budapest (VINCZE, 1965). **Distribution:** Hungary.

Zercon austriacus (SELLNICK, 1959): **Previous data:** Viszlópuszta (VINCZE, 1965; KARG, 1993). **New data:** Regéc, Csapontai forrás, 04.04.2004. leg. Horváth E. **Distribution:** Central-Europe.

Zercon baloghi Sellnick, 1958: **Previous data:** Sátor Mts, Aggtelek (VINCZE, 1965; KARG, 1993). **Distribution:** Hungary and Slovakia.

Zercon berlessei Sellnick, 1958: **Previous data:** Mátra, Aggtelek, Bükk, Tihany (VINCZE, 1965), Pilis (KONTSCHÁN, 2006). **Distribution:** Europe.

Zercon curiosa Tragardh, 1910: **Previous data:** Csóványos (VINCZE, 1965). **Distribution:** Europe.

Zercon guensis Mihelcic, 1962: **Previous data:** Vértes (KONTSCHÁN, 2006). **Distribution:** Germany, Poland, Check Republic, Austria, Slovakia, Ukraine and Bulgaria.

Zercon joduthae Sellnick, 1944: **Previous data:** Szigetköz (KONTSCHÁN, 2004).

Zercon hungaricus Sellnick, 1958: **Previous data:** Visegrád, Vértes, Mátra, Bükk, Budai Mts, Tihany, Sukoró, Keszthelyi Mts, Zamárdi, Viszlópuszta (VINCZE 1965, KARG 1993), Bársonyos, (KONTSCHÁN, 2006), Vértes, Mecsek (SALMANE & KONTSCHÁN, 2006). **New data:** Gerecse, Tarján, from moss, 01.11.2005. leg. Kontschán J., Gerecse,

Tatabánya, Turul, from soil and litter 19.07.2005. leg. Kontschán, J. Vértes, Gánt, Fáni völgy, from moss, 20.05.2005. leg. Kontschán, J., Vértesomlói, from litter, 08.08.2002. leg. Kontschán, J., Vértes, Várgesztes, near a stream, from litter, 22.05.2005. leg. Kárpáthegyi, P., Vértes, Csókakő, from litter, 05.06.2002. leg. Kontschán, J., Bakony, Bakonybél, 16.06.2005. leg. Kontschán, J., Bakony, Pénzesgyőr, Nagy Som-hegy, 16.06.2005. leg. Kontschán, J., Bakony, Fehérvárcsurgó, 26.06.2002. leg. Kontschán, J., Mecsek, Pécs, Misina, from soil and litter, 15.05.2005. leg. Kontschán, J. **Distribution:** Poland, Czech Republic, Austria, Slovakia, Ukraine, Romania and Bulgaria.

Zercon latissimus Sellnick, 1944: **Previous data:** Eger-valley, Mecsek (VINCZE, 1965; KARG, 1993). **Distribution:** South-Europe.

Zercon montigenus Blaszk, 1972 (Fig. 2): **New data:** Velem, beech forest, from litter, 09.04.2004. leg. Csuzdi, Cs. **Distribution:** Poland and Slovakia. **Remarks:** This is the first record of Hungary.

Zercon peltatus C. L. Koch, 1836: **Previous data:** Bükk, Dunazúg Mts, Vértes, Aggtelek, Sátor Mts, Gyula (VINCZE, 1965; KARG, 1993), Vértes (KONTSCHÁN, 2006), Bakony, Balaton-felvidék, Vértes, Mecsek (SALMANE & KONTSCHÁN, 2006). **New data:** Vértes, Vérteszentkereszt, from litter, 21.06.2005. leg. Kontschán, J., Mátra, from soil, 19.05.2005. leg. Fehér, Z., Vértes, Várgesztes, near a stream, from litter, 22.05.2005. leg. Kárpáthegyi, P., Vértes, Gánt, Fáni völgy, 20.05.2005. leg. Kontschán, J., Bakony, Bakonybél, 16.06.2005. leg. Kontschán, J., Bakony, Bakonybél, 16.06.2005. leg. Kontschán, J., Szabolcsbáka, from soil, 20.07.2005. leg. Csuzdi, Cs., Szigetbecse, from litter, 14.11.2001. leg. Merkl, O. Bószénfa, Ropoly, oak forest, from moss, 11.06.2004. leg. S. Mahunka– L. Mahunka-Papp, Budakeszi, Vadaspark, from soil, 28.05.2003. leg. Kontschán, J., Tatárszentgyörgy, from soil, 02.06.2005. leg. Kontschán, J. **Distribution:** Europe.

Zercon ratsbonensis Sellnick, 1944: **Previous data:** Pilisszentkereszt (VINCZE, 1965; KARG, 1993). **Distribution:** Central-Europe.

Zercon spatulatus (C. L. Koch, 1839): **Previous data:** Mátra Mts, Pilis Mts, Budai Mts (KARG, 1993), Szigetköz (SALMANE & KONTSCHÁN, 2005), Pilis (KONTSCHÁN 2006), Szigetköz (SALMANE & KONTSCHÁN, 2005), Bakony, Balaton-felvidék, Mecsek (SALMANE & KONTSCHÁN, 2006). **New data:** Velem, beech forest, from litter, 09.04.2004. leg. Csuzdi, Cs., Gerecse, Tatabánya, Turul, from soil and litter 19.07.2005. leg. Kontschán, J. **Distribution:** Europe.

Zercon vacuus (C. L. Koch, 1839): **Previous data:** Eger-valley, Vértes (VINCZE, 1965; KARG, 1993), Vértes (KONTSCHÁN, 2006). **New data:** Vértes, Gánt, Fáni völgy, 20.05.2005. leg. Kontschán, J. **Distribution:** Europe.

Zercon triangularis (C. L. Koch, 1836): **Previous data:** Sátor Mts, Keszthelyi Mts, Mikosdpuszta (VINCZE, 1965; KARG, 1993). **New data:** Kőszeg, Hármaspatak, from litter, 19.08.2005. leg. Kontschán, J., Kőszeg, Hármaspatak, from moss, 19.08.2005. leg. Nédli, J., Kisszentadorján, from litter, 12.05.2005. leg. Csuzdi, Cs., Szentmargitfalva, from litter, 09.04.2004. leg. Csuzdi, Cs., Kerkabarnabás, Cserhegy, oak forest, from litter, 09.04.2004. leg. Csuzdi, Cs., Bakony, Pénzesgyőr, Nagy Som-hegy, 16.06.2005. leg. Kontschán, J. **Distribution:** Europe.

II. Macrochelidae

History

The Hungarian Macrochelidae fauna is poorly known too. Up till now only few data have been published about the Macrochelid fauna of Hungary. ERŐSS & MAHUNKA (1971) listed Macrochelidae species from dung substrate; later KANDILL (1981) published 14 species in Hortobágy National Park. AMBROS (1996) found three species in Bükk National Park. In 2005 SALMANE & KONTSCHÁN listed six Macrochelid species from several part of Hungary and in 2006 they mentioned additional four Macrochelidae species (Salmane & Kontschán 2005, 2006). KONTSCHÁN (2005) published eight species from Hungary; four of them were new to the fauna of Hungary. The all (published and new) records are given in Fig 3.

List of the taxa

MACROCHELIDAE VITZTHUM, 1930

NEOPODOCINUM Oudemans, 1902

Neopodocinum meridionalis (SELLNICK, 1931) (Figs 4–5): **New data:** Gerecse, Tatabánya, from *Geotrupes* sp., 19.07.2005., leg. Kontschán J. **Distribution:** Central-Europe. **Remarks:** This is the first record of this species from Hungary.

MACROCHELES Latreille, 1829

Macrocheles americana (Berlese, 1888): **Previous data:** Hortobágy (KANDIL 1983). **Distribution:** Europe.

Macrocheles carinatus (C. L. KOCH, 1839): **New records:** Vértes, Várgesztes, near a stream, from litter, 22.05.2005. leg. Kárpáthegyi, P. **Distribution:** Europe. **Remarks:** This is the first record of this species in Hungary.

Macrocheles decoloratus (C. L. KOCH, 1839): **Previous data:** Hortobágy (KANDIL, 1983). **Distribution:** Europe.

Macrocheles fimicola Filippini & Pegazzano, 1960: **Previous data:** Hortobágy (KANDIL, 1983). **Distribution:** Europe and North-Africa.

Macrocheles glaber (J. MÜLLER, 1860): **Previous data:** Bükki National Park (AMBROS, 1996) Visegrádi Mts (KONTSCHÁN 2005). **Distribution:** Europe, North-America, Australia and Asia.

Macrocheles insignitus (BERLESE, 1918): **Previous data:** Hortobágy (KANDIL, 1983), Hungary (ERÖSS & MAHUNKA, 1971). **Distribution:** Europe and Russia.

Macrocheles moneronicus (BREGETOVA & KOROLEVA, 1960): **Previous data:** Hortobágy (KANDIL, 1983). **Distribution:** Far-east and Russia, Hungary.

Macrocheles nataliae (BREGETOVA & KOROLEVA, 1960): **Previous data:** Hortobágy (KANDIL, 1983), Hungary (ERÖSS & MAHUNKA 1971). **Distribution:** Germany and Russia.

Macrocheles matrius matrius (HULL, 1925): **Previous data:** Bükk Mts (AMBROS, 1996) Tihany (SALMANE & KONTSCHÁN, 2005), Hungary (ERÖSS & MAHUNKA, 1971). **New record:** Bakony, Bakonybél, 16.06.2005. leg. Kontschán, J. **Distribution:** Europe, Asia.

Macrocheles merdarius (BERLESE, 1889): **Previous data:** Hungary (ERÖSS & MAHUNKA, 1971). **Distribution:** Europe.

Macrocheles montanus (WILLMANN, 1951): **Previous data:** Hortobágyi National Park (KANDIL, 1981), Bükk National Park (AMBROS, 1996), Zempléni Mts and Paks (SALMANE & KONTSCHÁN, 2005), Mecsek (SALMANE & KONTSCHÁN, 2006), Bataapáti (SALMANE & KONTSCHÁN, 2006), Villányi Mts (KONTSCHÁN, 2005). **New records:** Vértes, Várgesztes, near a stream, from litter, 22.05.2005. leg. Kontschán, J., Vértes, Várgesztes, near a stream, from litter, 22.05.2005. leg. Kárpáthegyi, P., Budapest, 12 dist. Virág völgy, 05.10.2002. leg. leg. Merkl, O., Szigetbecse, , from litter, 14.11.2001. leg. Merkl, O., Nagyréce, oak forest, from litter, 06.10.2005. leg Merkl, O.-Grabant, A. **Distribution:** Europe, and Asia.

Macrocheles muscaedomesticae (SCOPOLI, 1772): **Previous data:** Hortobágy (KANDIL, 1983), Mecsek (SALMANE & KONTSCHÁN, 2006), Hungary (ERÖSS & MAHUNKA, 1971). **Distribution:** Palaearctic, America.

Macrocheles pavlovski Bregetova & Koroleva, 1960: **Previous data:** Hungary (ERÖSS & MAHUNKA, 1971). **Distribution:** Europe.

Macrocheles penicilliger (BERLESE, 1904): **Previous data:** Hortobágy (KANDIL, 1983) Tihany (SALMANE & KONTSCHÁN, 2005) Mecsek, Vértes (SALMANE & KONTSCHÁN, 2006). **New records:** Szigetköz, Lipót, from soil and litter, 14.05.2003. leg. Kontschán, J. **Distribution:** Europe.

Macrocheles perglaber Filippini & Pegazzano, 1962: **Previous data:** Hungary (ERÖSS & MAHUNKA, 1971). **Distribution:** Europe.

Macrocheles plumiventris Hull, 1925: **Previous data:** Hungary (ERÖSS & MAHUNKA, 1971). **Distribution:** Europe.

Macrocheles punctillatus (WILLMANN, 1939): **Previous data:** Hungary (ERÖSS & MAHUNKA, 1971). **Distribution:** Europe.

Macrocheles punctoscutatus (EVANS & BROWING, 1956): **Previous data:** Hortobágy (KANDIL, 1983). **Distribution:** Europe.

Macrocheles robustulus (BERLESE, 1904): **Previous data:** Hortobágy (KANDIL 1983). **Distribution:** Europe and Siberia.

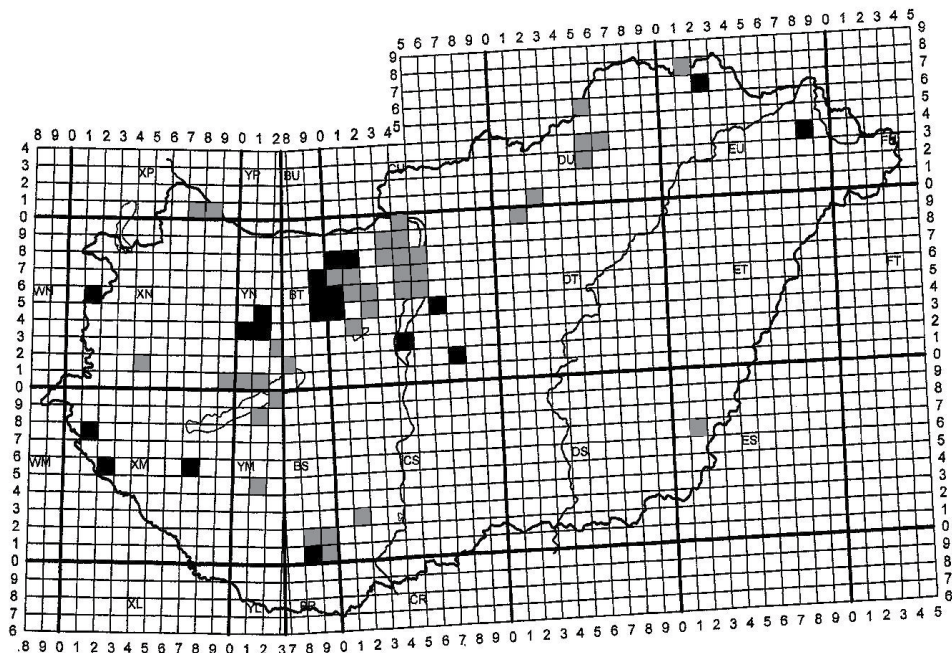
Macrocheles rotundiscutis Bregetova & Koroleva, 1960 : **Previous data:** Hortobágyi National Park (KANDIL, 1981) Tihany, Szársomlyó NCA (KONTSCHÁN, 2005). **Distribution:** Europe and USA.

Macrocheles superbus Hull, 1918: **Previous data:** Mecsek (SALMANE & KONTSCHÁN, 2006). **Distribution:** Great Britain, Kuril Islands.

Macrocheles tardus (C. L. KOCH, 1841): **Previous data:** Oroszlány, Majk (SALMANE & KONTSCHÁN, 2005). **New records:** Kőszeg, from moss, 29.05.1980., leg. S. Mahunka–L. Mahunka-Papp, Nagyréce, oak forest, from litter, 06.10.2005. leg Merkl, O.- Grabant, A., Tatárszentgyörgy, from soil, 02.06.2005. leg. Kontschán, J., 0040013, Szigetköz, Lipót, from soil and litter, 14.05.2003. leg. Kontschán, J., Villány, Szársomlyó NCA, from decomposed tree, 02.06.2000. leg. S. Mahunka–L. Mahunka-Papp. **Distribution:** Europe.

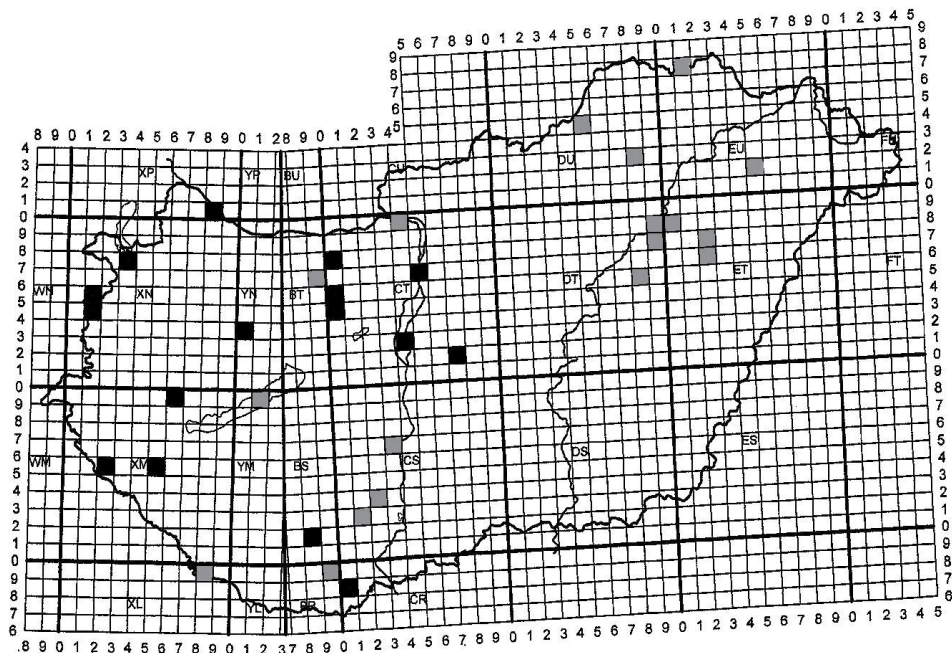
Macrocheles vagabundus (BERLESE, 1889): **Previous data:** Hungary (ERÖSS & MAHUNKA, 1971). **Distribution:** Europe.

Macrocheles vernalis (BERLESE, 1892): **Previous data:** Hortobágy (KANDIL 1983). **Distribution:** Europe.



Scale 1:224

Fig .1 Occurrences of Zerconidae species in Hungary (gray: known data, black: new data).



Scale 1:224

Fig. 2 Occurrences of Macrochelidae species in Hungary (gray: known data, black: new data).

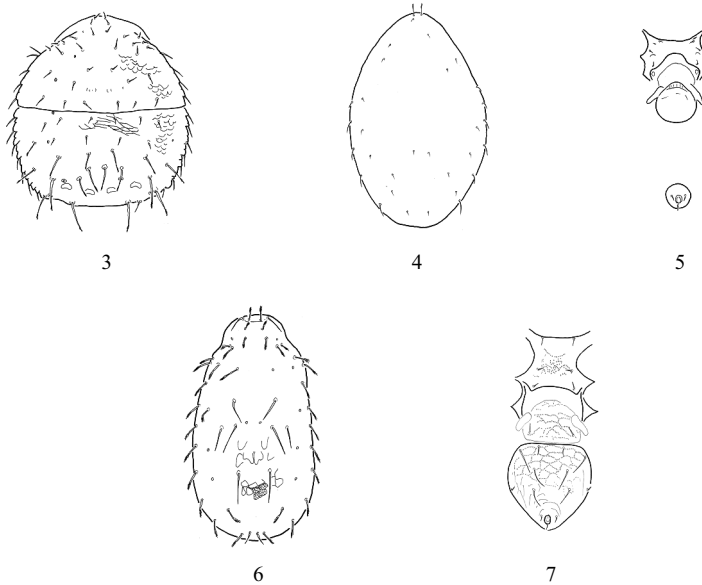


Fig. 3–7. New species to the fauna of Hungary:
 3: dorsal view of *Zercon montigenus* Blaszak, 1972;
 4: dorsal view - , 5: ventral view of *Neopodocinum meridionalis* (Sellnick, 1931);
 6: dorsal view - , 7: ventral view of *Geholaspis berleseae* Valle, 1953.

GLYPHOLASPIS Filippini & Pegazzano, 1960

Glypholaspis confusa (FOÁ, 1900): **Previous data:** Szekszárd (KONTSCHÁN 2005). **Distribution:** Europe, Asia, Australia, New Zeland and Argentina.

GEHOLASPIS Berlese, 1918

Geholaspis berleseae Valle, 1953 (Figs 6–7): **New records:** Velem, beech forest, from litter, 09.04.2004. leg. Csuzdi, Cs., Szentmargitfalva, from litter, 09.04.2004. leg. Csuzdi, Cs. **Distribution:** Central- and South-Europe

Remarks: This is the first record of this species in Hungary.

Geholaspis hortorum (Berlese, 1904): **Previous data:** Villányi Mts (KONTSCHÁN, 2005). **New records:** Szigetbecse, from litter, 14.02.2001. leg. Merkl, O. **Distribution:** Europe.

Geholaspis longispinosus (KRAMER, 1876): **Previous data:** Barcs (Kontschán 2005) Vértes (SALMANE & KONTSCHÁN 2005). **New records:** Nagyrécsce, oak forest, from litter, 06.10.2005. leg. Merkl, O.–Grabant, A., Vidosnyaszőlős, Vadlánylik cave, from soil, 28.06.2005. leg. Horváth, E., Szarud, Darúhát, 06.09.2005. leg. Horváth, E., Nagyrécsce, oak forest, from litter, 06.10.2005. leg. Merkl, O.- Grabant, A., Kőszeg, Hörmann forrás, from pine litter, 19.08.2005. leg. Nedli, J., Mecsek, Magyarhertelend, from litter, 04.05.2005. leg. Kontschán, J., Budapest, 12 dist. Virág völgy, 05.10.2002. leg. leg. Merkl, O., Szigetbecse, , from litter, 14.02.2001. leg. Merkl, O., Regéc, Csapontai forrás, 04.04.2004. leg. Horváth E. **Distribution:** Europe and New Zeland.

Geholaspis mandibularis (Berlese, 1904): **Previous data:** Zemplén Mts (SALMANE & KONTSCHÁN, 2005). **New records:** Vértes, Gánt, Fáni völgy, 20.05.2005. leg. Kontschán, J., Velem, beech forest, from litter, 09.04.2004. leg. Csuzdi, Cs., Velem, beech forest, from litter, 09.04.2004. leg. Csuzdi, Cs. **Distribution:** Europe.

HOLOSTASPELLA Berlese, 1903

Holostaspella exornata Filippini et Pegazzano, 1967: **Previous data:** Vértes (SALMANE & KONTSCHÁN, 2005). **Distribution:** Europe .

Holostaspella ornata Berlese, 1904: **Previous data:** Nyíregyháza (KONTSCHÁN 2005). **Distribution:** Europe and Asia.

PACHYSEIUS Berlese, 1910

Pachyseius humeralis (BERLESE, 1910): **Previous data:** Hortobágy (KANDIL, 1983). **Distribution:** Europe.

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