

Uropodina (Acari: Mesostigmata) fauna of Aggteleki National Park (NE Hungary)

JENŐ KONTSCHÁN

ABSTRACT: 27 Uropodina species were listed from the Aggteleki National Park. 3 (*Uropoda fumicola*, *U. erlangensis*, *Polyaspinus schweitzeri*) of them are new to the fauna of Hungary. With 3 figures.

Introduction

The Uropodina fauna of Hungary is poorly known. 77 species (KONTSCHÁN 2002a) have been known since the Uropodina mites of Hungary were first mentioned of (KARPELLES 1893). BALOGH (1937, 1938) published several data about the Hungarian Uropodina fauna in the first part of the XX century. Several data were given about the nature conservation areas of Hungary (HIRSCHMANN 1981, 1992, WISNIEWSKI 1996, KONTSCHÁN 2002b).

The Uropodina fauna of Aggteleki National Park is absolutely unknown, so it was important to collect faunistical data from this national park.

Material and methods

The Pedozoological Collection of the Hungarian Natural History Museum has a lot of soil samples from the Aggteleki National Park, the mites from this material were identified. The specimens are deposited in alcohol in the Pedozoological Collection of the Hungarian Natural History Museum. The system and the names of the species are according to WISNIEWSKI (1993).

Results

27 species are listed from the Aggteleki National Park. 3 of them (*Uropoda fumicola*, *U. erlangensis*, *Polyaspinus schweitzeri*,) are new to the Hungarian Uropodina fauna.

List of species

Trachytidae

Trachytes aegrota (C. L. Koch, 1841) – Jósvalő, Bibic töbör, 1973.04.09. leg. Mahunka S.–Mahunka-Papp L.; Aggtelek, karst, 1963.08.08. leg. Mahunka S.; Aggtelek, from soil and moss, 1987.09.1. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Mogyorós kút, from litter, 1988.01.19. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, from litter, 1987.11.22. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, near a spring, from litter, 1988.07.03. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Égeszög, from moss, 1988.09.05. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Szélcepesztza, from moss, 1987.06.15. leg. Mahunka S. – Mahunka-Papp L.;

Trachytes baloghi Hirschmann & Zirngiebl-Nicol, 1969 – Aggtelek, Égerszög, Simon völgy, from litter, 1987.09.01. leg. Mahunka S. – Mahunka-Papp L.; Jósavfő, from oak litter, 1973.06.08. leg. Mahunka S. – Mahunka-Papp L.;

Polyaspinidae

Polyaspinus schweitzeri (Hutu, 1976) – Szögliget, from decomposed tree, 1988.10.19. leg. Mahunka S. – Mahunka-Papp L.;

Trematuridae

Trichouropoda ovalis (C. L. Koch, 1839) – Aggtelek, Dobos polje, from litter, 1988.01.19. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Mogyorós kút, from litter, 1988.01.19. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Szelencepuszta, from feces of cow, 1988.04.04. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Szuhavölgy, from litter, 1989.08.21. leg. Bankovics A. Perkupa, Telkes völgy, 1989.03.22. leg. Merkl O.; Aggtelek, Szuhafő, Pince völgy, 1989.08.21. leg. Bankovics A.; Aggtelek, valley of Kecő patak, from litter, 1987.09.01. leg. Mahunka S. – Mahunka-Papp L.;

Trichouropoda querceti Hirschmann, 1972 – Szögliget, near the Kecskés forrás, from litter, 1989.08.23. leg. Sziráki Gy.; Aggtelek, Szuhafő, Pince völgy, 1989.08.21. leg. Bankovics A.; Aggtelek, Ménes völgy, 1989.03.21. leg. Merkl O.;

Trichouropoda obscura (C. L. Koch, 1836) – Aggtelek, Ménes völgy, 1989.03.21. leg. Merkl O.;

Trichouropoda orbicularis (C. L. Koch, 1839) – Aggtelek, Szelencepuszta, from feces of cows, 1988.04.04. leg. Mahunka S.–Mahunka-Papp L.; Aggtelek, Égerszög, from feces of cows, 1987.09.04. leg. Mahunka S.–Mahunka-Papp L.;

Trichouropoda elegans (Kramer, 1882) – Szögliget, from moss, 1987.06.16. leg. Mahunka S.–Mahunka-Papp L.;

Trichouropoda polyctenaphila Wisniewski & Hirschmann, 1986 – Jósavfő, from nest of ant, 1988.07.03. leg. Mahunka S. – Mahunka-Papp L.;

Urodinychidae

Dinychus perforatus Kramer, 1882 – Aggtelek, Márton völgy, from litter, 1988.07.03. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, near a spring, from litter, 1988.07.03. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Szuhavölgy, from litter, 1989.08.21. leg. Bankovics A.; Aggtelek, Szuhafő, Pince völgy, 1989.08.21. leg. Bankovics A.; Aggtelek, Ménes völgy, 1989.03.21. leg. Merkl O.; Aggtelek, from moss, 1987.09.22. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, valley of Kecő patak, from litter, 1987.09.01. leg. Mahunka S. – Mahunka-Papp L.

Dinychus arcuatus (Trärgardh, 1943) – Aggtelek, Martony, from moss, 1988.07.03. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Dobos polje, from litter, 1988.01.19. leg. Mahunka S. – Mahunka-Papp L.; Szögliget, near the Kecskés forrás, from litter, 1989.08.23. leg. Sziráki Gy.; Aggtelek, from moss, 1987.09.22. leg. Mahunka S. – Mahunka-Papp L.;

Dinychus inermis (C. L. Koch, 1841) – Szögliget, from nest of ant, 1987.06.16. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Mész hegy, from moss, 1988.01.19. leg. Mahunka S. – Mahunka-Papp L.;

Urodiaspis shcherbakae (Hirschmann, 1972) – 1370, Aggtelek, Haragistya, from litter, 1990.11.16. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Trizs, from litter and soil, 1987.09.05. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Szelcepuszta, from litter, 1990.04.25. leg. Merkl O.; Szögliget, near the Kecskés forrás, from litter, 1989.08.23. leg. Sziráki Gy.;

Urodiaspis stammeri Hirschmann & Zirngiebl-Nicol, 1969 – Aggtelek, Szelcepuszta, from moss and soil, 1997.06.18. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Trizs, from litter and soil, 1987.09.05. leg. Mahunka S. – Mahunka-Papp L.; Égerszög, Simon völgy, from litter, 1987.09.01. leg. Mahunka S. – Mahunka-Papp L.;

Urodiaspis tecta (Kramer, 1876) – Szögliget, near the Kecskés forrás, from litter, 1989.08.23. leg. Sziráki Gy.; Aggtelek, Szuhavölgy, from litter, 1989.08.21. leg. Bankovics A.; Aggtelek, from litter, 1987.11.22. leg. Mahunka S. – Mahunka-Papp L.;

Urobovella obovata Can. & Berlese, 1884 – Szögliget, from nest of ant, 1987.06.16. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Szélcsepuszta, from moss, 1987.06.15. leg. Mahunka S. – Mahunka-Papp L.;

Urobovella pulchella (Berlese, 1904) – Aggtelek, Égerszög, from moss, 1988.09.05. leg. Mahunka S. – Mahunka-Papp L.;

Urobovella sp. – Aggtelek, Égerszög, from feces of cows, 1987.09.04. leg. Mahunka S. – Mahunka-Papp L.;

Trachyuropodidae

- Trachyuropoda excavata* (Wasmann, 1899) – Aggtelek, from a nest of ant, 1978.07.02. leg. Mahunka S.;
Trachyuropoda riccardiana (Leonardi, 1895) – Aggtelek, from a nest of ant, 1978.07.02. leg. Mahunka S.;
Oplitis minutissima (Berlese, 1903) – Jósvalő, Tohonya völgy, from soil, 1989.08.21. leg. Bankovics A.;
Aggtelek, Szelcepuszta, from moss and soil, 1987.06.18. leg. Mahunka S. – Mahunka-Papp L.;

Uropodidae

- Uropoda splendida* Kramer, 1882 – Aggtelek, near a spring, from litter, 1988.07.03. leg. Mahunka S. – Mahunka-Papp L.; Szögliget, near the Kecskés forrás, from litter, 1989.08.23. leg. Sziráki Gy.; Aggtelek, Szuhafő, Pince völgy, 1989.08.21. leg. Bankovics A.; Égerszög, Simon völgy, from litter, 1987.09.01. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Szelcepuszta, from litter, 1990.04.25. leg. Merkl O.;
- Uropoda fumicola* (Schweitzer, 1961) – Aggtelek, Szelencepuszta, from feces of cows, 1988.04.04. leg. Mahunka S. – Mahunka-Papp L.;
- Uropoda soproniensis* Wisniewski & Hirschmann, 1990 – Aggtelek, Szelencepuszta, from feces of cow, 1988.04.04. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Égerszög, Simon völgy, from litter, 1987.09.01. leg. Mahunka S. – Mahunka-Papp L.;
- Uropoda cassidea* (Hermann, 1804) – Aggtelek, karst, 1963.08.08. leg. Mahunka S.; Aggtelek, Szelcepuszta, from litter, 1990.04.25. leg. Merkl O.; Aggtelek, from litter, 1987.11.22. leg. Mahunka S. – Mahunka-Papp L.;
- Uropoda erlangensis* Hirschmann & Zirnbiegl-Nicol, 1969 – Aggtelek, Haragistya, from litter, 1990.11.16. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Szélcsepuszta, from moss, 1987.06.15. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, near a spring, from litter, 1988.07.03. leg. Mahunka S. – Mahunka-Papp L.; Aggtelek, Égerszög, Simon völgy, from litter, 1987.09.01. leg. Mahunka S. – Mahunka-Papp L.;
- Discourella modesta* (Leonardi, 1899) – Jósvalő, from oak litter, 1973.06.08. leg. Mahunka S. – Mahunka-Papp L.; Jósvalő, Bibic töbör, 1973.04.09. leg. Mahunka S. – Mahunka-Papp L.;

Short description of the new species of the Hungarian fauna

Polyaspinus schweitzeri (Hutu, 1976)

The length of idiosoma is 740–785 μm (female) and 715–780 μm (male). Shape is oblong, the posterior margin rounded. The dorsal shield divided into prae- and postdorsal shield, between these shields 1 pair of setae on a small platelets. Several setae on the small platelets on the marginal region. (Fig. 1.).

The *P. schweitzeri* is known only from Romania, Poland (Wisniewski 1993), Slovakia (Masan 2001) and Ukraine (Kontschán 2003).

Uropoda fumicola (Schweitzer, 1961)

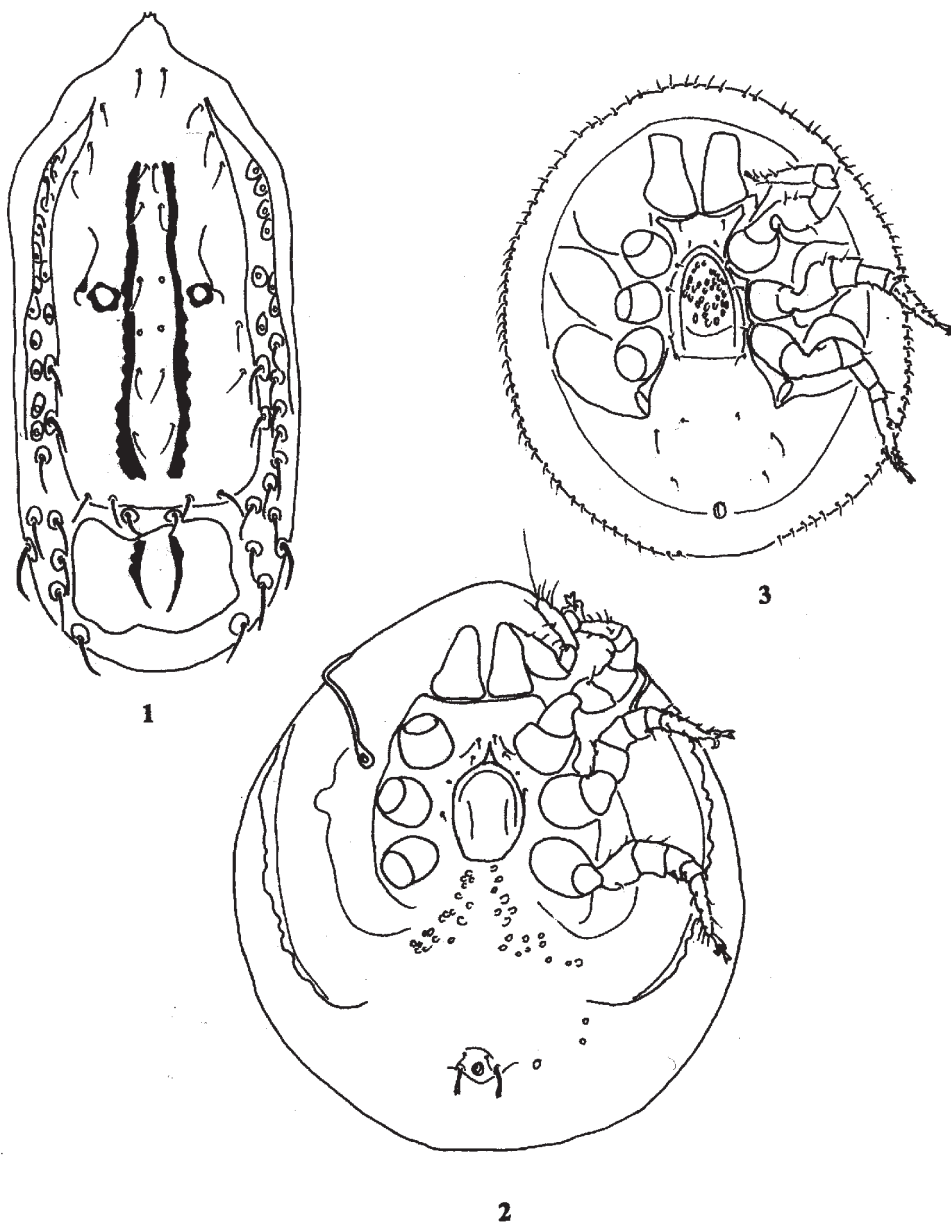
The length of idiosoma is 837–846 μm (female). Shape is oval, the posterior margin rounded. The genital shield oval, the anterior margin with a strong spine. The marginal region with a wide interscutellar membrane. The one pair of the perianal setae short needle-like, the other pairs longer, with fine denticulations (Fig. 2.)

The *U. fumicola* is known only from Switzerland (Wisniewski 1993) and Slovakia (Masan 2001).

Uropoda erlangensis Hirschmann & Zirnbiegl-Nicol, 1969

The length of idiosoma is 525–535 μm (female). Shape is oval, the posterior margin rounded. The genital shield oval, with several rounded ornamentations. One pair of the ventral setae (V6) longer than the other ventral setae. The marginal setae shorter than the ventral setae (Fig. 3.).

The *U. erlangensis* is known Germany, Poland, Czech Republic, Russian (Wisniewski 1993) and Slovakia (Masan 2001).



Figs 1-3. New Uropodina species from Hungary 1: Dorsal aspect of the *Polyaspinus schweitzeri* (Hutu, 1976) species, 2: Ventral aspect of the *Uropoda fumicola* (Schweitzer, 1961) species, 3: Ventral aspect of the *Uropoda erlangensis* Hirschmann & Zimbiogl-Nicol, 1969 species

References

- BALOGH, J. (1937): Magyarország hangyabolyban élő atkáiról I. – *Folia Entomologica Hungarica* 3: 106–109.
- BALOGH, J. (1938): Neue Milben – faunistische Angaben aus dem histor. Ungarn (Uropodina). – *Fragmenta faunistica Hungarica* 1/1: 70–71.
- HIRSCHMANN, W. (1981): The Uropodina fauna of the Hortobágy National Park (Acari). – in. Mahunka, S. (ed): *The fauna of the Hortobágy National Park I*. Akadémiai Kiadó, Budapest, 341–342.
- HIRSCHMANN, W. (1990): Data to the Uropodina (Acari: Mesostigmata) fauna of the Bátorliget Nature Reserves (NE Hungary). – in. Mahunka, S. (ed): *The Bátorliget Nature Reserves – after forty years, 1990* The Hungarian Natural History Museum, Budapest 705–706.
- KARPELLES (1893): Adalékok Magyarország atka-faunájához. *Mathematikai és Természettudományi Közlemények* 25(3): 401–453.
- KONTSCHÁN, J. (2002a): The first record of five *Trachyuropoda* (Acari: Uropodina) species from Hungary – *Opuscula Zoologica Budapest*, 34: 51–53.
- KONTSCHÁN, J. (2002b): The Uropodina (Acari: Mesostigmata) fauna of Fertő-Hanság National Park – in. Mahunka, S. (ed): *The fauna of the Fertő-Hanság National Park*. The Hungarian Natural History Museum, Budapest 195–197.
- KONTSCHÁN, J. (2003): The first record of the genus *Polyaspinus* Berlese, 1916 (Acari: Uropodina) and three new Uropodina species to the fauna of Ukraine *Vestník zoologii* (in press)
- MASAN, P. (2001): Mites of the cohort Uropodina (Acari, Mesostigmata) in Slovenska. – *Annotationes Zoologicae et Botanicae* 223: 1–320.
- WISNIEWSKI, J. (1993): Die Uropodiden der Erde nach Zoogeographischen Regionen und Subregionen geordnet (Mit Angabe der Lande). *Acarologie* 40: 221–291.
- WISNIEWSKI, J. (1996): The Uropodina fauna (Acari) from the Bükk National Park (N. Hungary). – in. Mahunka, S. (ed): *The fauna of the Bükk National Park II*. The Hungarian Natural History Museum, Budapest 485–486.

Jenő KONTSCHÁN
Systematic Zoology Research Group of Hungarian Academy
of Science and Eötvös Loránd University
Department of Zoology of Hungarian Natural History Museum
H-1088 BUDAPEST, Baross st. 13.
kotscha@zoo.zoo.nhmus.hu