

**FIRST RECORD OF ELEVEN UROPODINA SPECIES FROM SLOVENIA
(ACARI: MESOSTIGMATA)**

J. KONTSCHÁN

Systematic Zoology Research Group,
Hungarian Academy of Sciences, Department of Zoology,
Hungarian Natural History Museum
H-1088 Budapest, Baross u. 13. Hungary,
E-mail: kotscha@zool.nhmus.hu

Abstract – Eleven Uropodina species were collected from different parts of Slovenia. Original drawings, scanning micrographs and maps are given.

KEY WORDS: Acari, Mesostigmata, Uropodina, fauna, Slovenia

Izvleček – PRVI PODATKI O ENAJSTIH VRSTAH UROPODINSKIH PRŠIC V SLOVENIJI (ACARI: MESOSTIGMATA)

Enajst vrst podreda Uropodina je bilo najdenih v različnih delih Slovenije. Dodane so izvirne risbe, elektronsko mikroskopske slike in karte.

KLJUČNE BESEDE: Acari, Mesostigmata, Uropodina, favna, Slovenija

Introduction

Uropodina mites live in the soil, moss, leaf litter, nests of ants, birds and small mammals in Europe, but most of the species are inhabitants of the forest soils.

Today we know about more than 340 species in Europe (Błoszyk 1999). Several countries are well investigated (e.g. German, Poland, Romania, Slovakia and Hungary (Wiśniewski 1993, Błoszyk 1999, Mašán 2001, Kontschán 2008), but most of the countries are poorly-studied. Slovenia is one of the hardly known countries of Europe, recently only one species is listed (*Trachytes aegrota* (C. L. Koch, 1841)) (Kontschán 2005).

Material and methods

Specimens were cleared in lactic acid and later stored in alcohol. Drawings were made with a camera lucida. Scanning micrographs were taken in the Hungarian Natural History Museum, Budapest with a HITACHI SN 2600 scanning electron microscope. The specimens examined are deposited in the Collections of Soil Zoology of the Hungarian Natural History Museum, Budapest. Abbreviations: DL: László Dányi, KJ: Jenő Kontschán, MD: Dávid Murányi, SzGy: György Sziráki. Measurements are given in micrometers (μm).

List of species

Trachytidae

Trachytes minima Trägårdh, 1910

New records: E-2461. Slovenia, Triglav NP., Koča pri Peričniku, Triglavška stream (Bistrica), N 46°25.681'E 13° 52.548', 1046m a.s.l., beech forest, leaf litter, 02.08.2008. DL., E-1957. Slovenia, Golnik, 460m a.s.l., mixed beech forest, from moss, 14.04.2006. DL+KJ., E-1953. Slovenia, Gozd Martuljek, beech forest, from soil, 13.04.2006. DL+KJ., E-2470. Slovenia, Goreljek, leaf litter, 02.09.2008. KJ.,

Distribution: Europe.

Trachytes mystacinus Berlese, 1910

New records: E-2461. Slovenia, Triglav NP., Koča pri Peričniku, Triglavška stream (Bistrica), N 46°25.681'E 13° 52.548', 1046m a.s.l., beech forest, leaf litter, 02.08.2008. DL., E-2463. Slovenia, Triglav NP., Koča pri Peričniku, near to the Peričnik waterfall, N 46°26'22.91"E 13°53'37.28", 843m a.s.l., beech forest, leaf litter, 02.08.2008. DL., E-1956. Slovenia, near Zgornje Jezersko, beech forest, from leaf litter, 13.04.2006. DL+KJ., E-1957. Slovenia, Golnik, 460m a.s.l., mixed beech forest, from moss, 14.04.2006. DL+KJ., E-1961. Slovenia, Golnik, 460m a.s.l., mixed beech forest, from leaf litter, 14.04.2006. DL+KJ., E-1951. Slovenia, Potoče, near the river Kokra, from leaf litter, 13.04.2006. DL+KJ., E-1953. Slovenia, Gozd Martuljek, beech forest, from soil, 13.04.2006. DL+KJ.

Distribution: Central-Europe.

Polyaspis patavinus Berlese, 1881

New records: E-2454. Slovenia, Piran, Fiesa, wet meadow in the sea-shore, from decayed wood, 25.06.2008. SzGy.

Distribution: Europe.

Trematuridae

Trichouropoda ovalis (C. L. Koch, 1839)

(Fig. 1)

New records: E-1961. Slovenia, Golnik, 460m a.s.l., mixed beech forest, from leaf litter, 14.04.2006. DL+KJ., E-2461. Slovenia, Triglav NP., Koča pri Peričniku,



Figs 1-2: Scanning micrographs of Uropodina species from Slovenia: 1: ventral view of *Trichouropoda ovalis* (C. L. Koch, 1839); 2: ventral view of *Urodiaspis tecta* (Kramer, 1876).

Triglavska stream (Bistrica), N 46°25,681'E 13° 52,548', 1046m a.s.l., beech forest, leaf litter, 02.08.2008. DL.

Distribution: Europe.

Urodinychidae

Urodiaspis tecta (Kramer, 1876)

(Fig. 2)

New records: E-2468. Slovenia, Ribčev Laz, moss from the beach of lake Bohinj jezero, 03.09.2008. KJ., E-2461. Slovenia, Triglav NP., Koča pri Peričniku, Triglavska stream (Bistrica), N 46°25,681'E 13° 52,548', 1046m a.s.l., beech forest, leaf litter, 02.08.2008. DL.,

E-2470. Slovenia, Goreljek, leaf litter, 02.09.2008. KJ., E-1955. Slovenia, Brezje pri Trziču, 684m a.s.l., beech-pine mixed forest, from soil, 14.04.2006. DL+KJ.

Distribution: Europe.

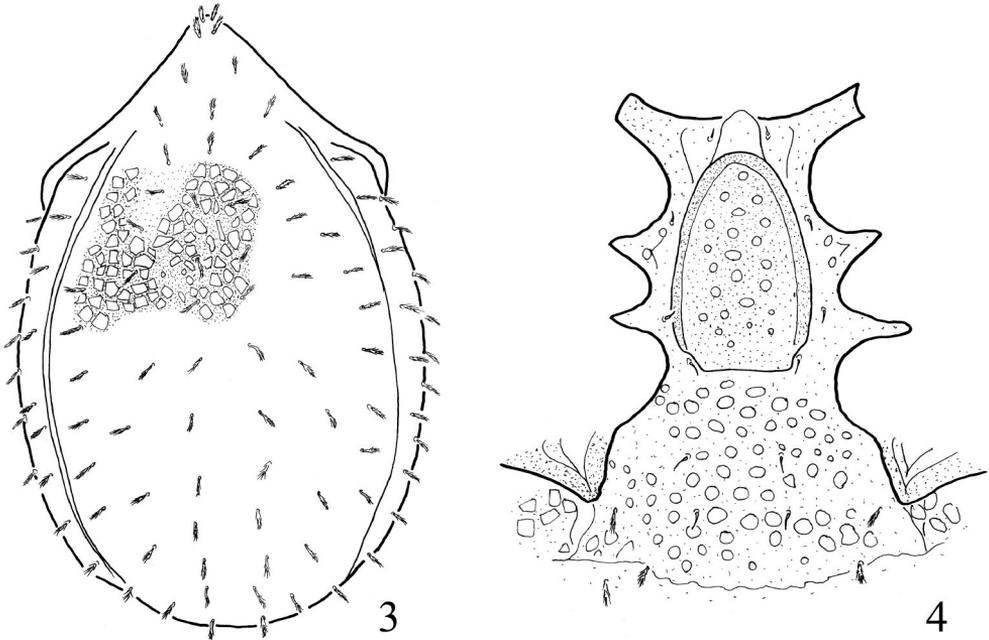
Uroobovella pulchella (Berlese, 1904)

(Figs 3-4)

New records: E-1957. Slovenia, Golnik, 460m a.s.l., mixed beech forest, from moss, 14.04.2006. DL+KJ.

Distribution: Central-Europe.

Dinychus bincheaecarinatus Hirschmann, Wagrowska-Adamczyk & Zirngiebl-Nicol, 1984



Figs 3-4: *Uroobovella pulchella* (Berlese, 1904): 3: dorsal view; 4: sternal region.

New records: E-2457. Slovenia, (Sirex), Slovenske Gorice, Slavšina, beech forest 284m a.s.l., N46°31.996'E15°57.631', 25.06.2008. DL+KJ+MD.

Distribution: Germany, France, Slovakia, Hungary.

Uropodidae

Cilliba cassidea (Hermann, 1804)

(Fig. 5)

New records: E-2466. Slovenia, Ribčev Laz, leaf litter near the lake Bohinjsko jezero, 03.09.2008. KJ., E-2463. Slovenia, Triglav NP., Koča pri Peričniku, near to the Peričnik waterfall, N 46°26'22.91"E 13°53'37.28", 843m a.s.l., beech forest, leaf litter, 02.08.2008. DL., E-1951. Slovenia, Potoče, near the river Kokra from leaf litter, 13.04.2006. DL+KJ.

Distribution: Europe.

Cilliba erlangensis (Hirschmann & Zirnbiegl-Nicol, 1969)

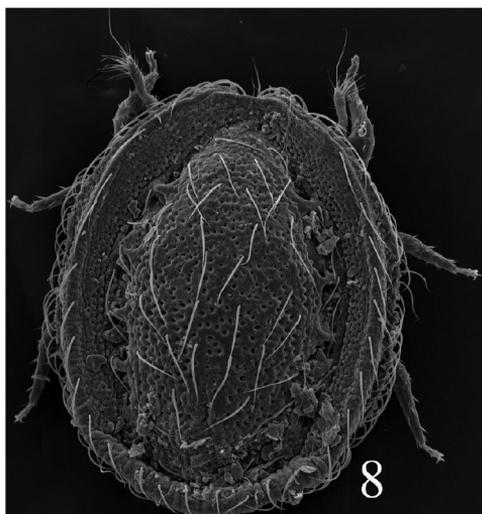
(Fig. 6)

New records: E-1951. Slovenia, Potoče, near the river Kokra from leaf litter, 13.04.2006. DL+KJ.

Distribution: Central-Europe.

Neodiscopoma pulcherrima (Berlese, 1903)

(Fig. 7)



Figs 5-8: Scanning micrographs of Uropodina species from Slovenia: 5: ventral view of *Cilliba cassidea* (Hermann, 1804); 6: ventral view of *Cilliba erlangensis* (Hirschmann & Zirnbiegl-Nicol, 1969); 7: dorsal view of *Neodiscopoma pulcherrima* (Berlese, 1903), 8: dorsal view of *Neodiscopoma splendida* (Kramer, 1882).

New records: E-2466. Slovenia, Ribčev Laz, leaf litter near the lake Bohinjsko jezero, 03.09.2008. KJ., E-2457. Slovenia, (Sirex), Slovenske Gorice, Slavšina, beech forest 284m a.s.l., N46°31.996'E15°57.631', 25.06.2008. DL+KJ+MD., E-2458. Slovenia, (Sirex), Slovenske Gorice, Slavšina, beech forest 284m a.s.l., N46°31.996'E15°57.631', 25.06.2008. DL+KJ+MD., E-2463. Slovenia, Triglav

NP., Koča pri Peričniku, near to the Peričnik waterfall, N 46°26'22.91"E 13°53'37.28", 843m a.s.l., beech forest, leaf litter, 02.08.2008. DL., E-2470. Slovenia, Gorenjski, leaf litter, 02.09.2008. KJ., E-2461. Slovenia, Triglav NP., Koča pri Peričniku, Triglavská stream (Bistrica), N 46°25,681'E 13° 52,548', 1046m a.s.l., beech forest, leaf litter, 02.08.2008. DL., E-1956. Slovenia, near Zgornje Jezersko, beech forest, from leaf litter, 13.04.2006. DL+KJ., E-1953. Slovenia, Gozd Martuljek, beech forest, from soil, 13.04.2006. DL+KJ.

Distribution: Europe.

Neodiscopoma splendida (Kramer, 1882)

(Fig. 8)

New records: E-2463. Slovenia, Triglav NP., Koča pri Peričniku, near to the Peričnik waterfall, N 46°26'22.91"E 13°53'37.28", 843m a.s.l., beech forest, leaf litter, 02.08.2008. DL.

Distribution: Europe.

Discussion

The listed Uropodina species were collected in the Western and Eastern part of Slovenia (Fig. 9). Two of them (*T. minima* and *T. mystacinus*) are typical mountain elements, these are distributed in the Alps, the Carpathians and the Dinarids, and they were collected in Julijske Alpe and Karavanke. Other species also occur in the higher and lower mountains and the plains of Europe. They were found in mentioned two mountain chains (Julijske Alpe and Karavanke). One species (*P. patavinus*) was found near the sea shore and two species (*N. pulcherrima* and *D. bincheaearinatus*) were collected in the plains of Slovenia.

Acknowledgements

This research was supported by the Hungarian Scientific Research Fund (OTKA 72744).

References

- Błoszyk, J.** (1999): Geograficzne i ekologiczne zróżnicowanie zgrupowań roztoczy z kohorty Uropodina (Acari: Mesostigmata) w Polsce. I. Uropodina lasów gradowych (*Carpinus betuli*). Publikacja finansowana przez Uniwersytet im. Adama Mickiewicza w Poznaniu, 245 pp.
- Kontschán, J.** (2005): On some little known and new Uropodina species (Acari: Mesostigmata) from Croatia, Serbia-Montenegro, Slovenia and Macedonia. *Acta zool. Bulg.* 57: 153-160.
- Kontschán, J.** (2008): Magyarország korongatkái (Acari: Mesostigmata: Uropodina). – *Állatt. Közl.* 93(1): 3-15.

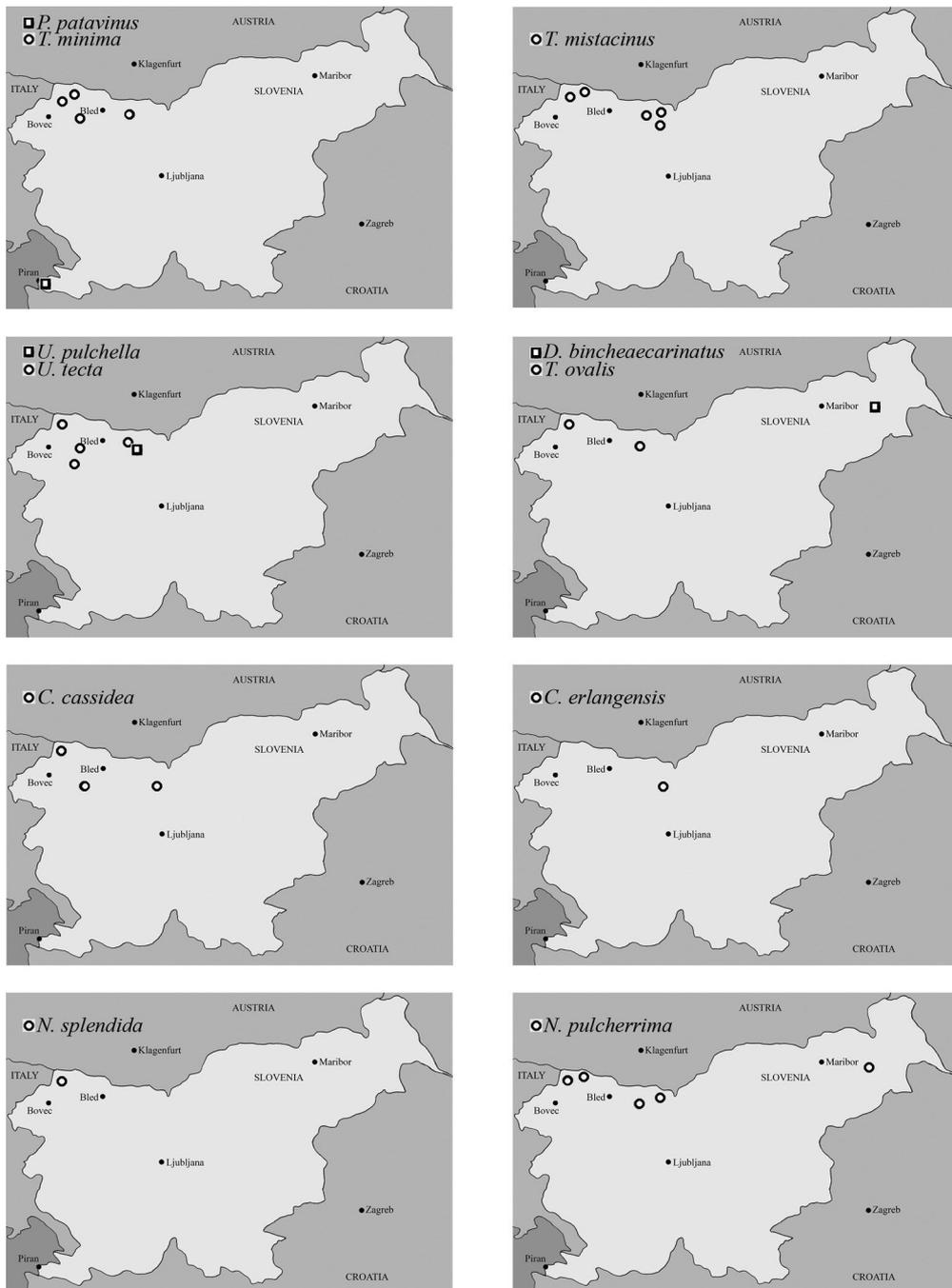


Fig. 9: Occurrences of the collected Uropodina species in Slovenia

- Mašán, P.** (2001): Mites of the cohort Uropodina (Acari, Mesostigmata) in Slovakia. *Annotationes Zoologicae et Botanicae* 223: 1-320.
- Wiśniewski, J.** (1993): Die Uropodiden der Erde nach Zoogeographischen Regionen und Subregionen geordnet (Mit Angabe der Lande). *Acarologie* 40: 221- 291.

Received / Prejeto: 11. 6. 2009