

On Some Little Known and New Uropodina Species (Acari: Mesostigmata) from Croatia, Serbia-Montenegro, Slovenia and Macedonia

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Abstract: Nineteen Uropodina species were collected in several parts of former Yugoslavia (Croatia, Serbia-Montenegro, Slovenia and Macedonia). These are the first records of the species. Three of them (*Trachytes papukiensis*, *Trachytes macedoniensis*, *Uropoda mazsalakiae*) are new to science. With 12 figures.

Key words: Uropodina, Acari, new species, faunistics, Croatia, Serbia-Montenegro, Slovenia and Macedonia

Introduction

The Uropodina fauna of the former Yugoslavia is poorly known. There are only few data from these countries. One species (*Uroobovella reticulata* (WILLMANN, 1941)) was published from Bosnia-Herzegovina, and four species (*Nenteria schusteri* HIRSCHMANN, 1972, *Uroobovella ipidis* (VITZTHUM, 1923), *Deraiphorus adriaticus* HIRSCHMANN, ZIRNGIEBL-NICOL, 1972, *Cyllibula schusteri* HIRSCHMANN, ZIRNGIEBL-NICOL, 1972) were known from Croatia. Two species (*Uropoda copridis* (OUDEMANS, 1916) and *Uroseius willmanni* HIRSCHMANN, ZIRNGIEBL-NICOL, 1969) were mentioned from ex-Yugoslavia (WISNIEWSKI, 1993).

Material and Methods

Samples of soil, litter and moss materials were collected in several parts of former Yugoslavia by several collectors. The specimens are stored in ethyl-alcohol and deposited in the Collections of Soil Zoology of the Hungarian Natural History Museum. The system and name of the species are according to HIRSCHMANN (1993). Seta terminology follows MAHUNKA, ZOMBORI (1985).

List of Localities

Croatia

Cr/1 Bibinje, seaside, from decayed sea-grass, 14.08.2003., leg. J. Kontschán.

Cr/9a Papuk Mts., Kutjevo, side of a stream, from moss, 20.04.2004., leg. J. Kontschán.

Cr/9b Papuk Mts., Kutjevo, side of a stream, from litter, 20.04.2004., leg. J. Kontschán.

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- Cr/11 Papuk Mts., Kutjevo, alder forest, from litter, 20.04.2004., leg. J. Kotschán.
 Cr/12a Papuk Mts., Kokočak, beech forest, from litter, 20.04.2004., leg. J. Kotschán.
 Cr/14 Papuk Mts., Drenovac, beech forest, from litter, 20.04.2004., leg. J. Kotschán.
 Cr/15 Papuk Mts., Drenovac, side of a stream, from litter, 20.04.2004., leg. J. Kotschán.
 Cr/18 Psunj Mts., Strmac, from litter, 21.04.2004., leg. J. Kotschán.
 Cr/19 Papuk Mts., Villic Selo, from moss, 21.04.2004., leg. J. Kotschán.
 Cr/20a Papuk Mts., Novo Zvečevo, side of a stream, from litter, 22.04.2004., leg. J. Kotschán.
 Cr/20b Papuk Mts., Novo Zvečevo, side of a stream, from moss, 22.04.2004., leg. J. Kotschán.

Slovenia

Slo/1 Solčava Logarska dolina, from moss, 13.08.1969., leg. S. Horvatovich.

Serbia-Montenegro

- S-M/2 Fruska Gora, Petrovaradin, from litter, moss and soil, 19.04.2004., leg. J. Kotschán.
 S-M/4 Fruska Gora, Kušedol, near a spring, from litter, 19.04.2004., leg. J. Kotschán.
 S-M/5 Fruska Gora, Vrdnik, beech forest, from litter, 19.04.2004., leg. J. Kotschán.
 S-M/6 Fruska Gora, Čerevič, side of a stream, from litter, 19.04.2004., leg. J. Kotschán.
 S-M/7 Fruska Gora, Grgurevci, from soil and moss, 19.04.2004., leg. J. Kotschán.

Macedonia

- M/006 Prov. Veles, Nežilovo, 1030 m a.s.l. 09.04.2004. leg. Z. P. Erőss, Z. Fehér and A. Hunyadi
 M/016 Prov. Resen, Galičica Mts., beech forest, 1390 m a.s.l., 06.04.2004., leg. Z. P. Erőss, Z. Fehér and A. Hunyadi.
 M/020 Prov. Ohrid, Galičica Mts., beech forest, 1450 m a.s.l., 09.04.2004., leg. Z. P. Erőss, Z. Fehér and A. Hunyadi.
 M/034 Prov. Ohrid, 950 m a.s.l., 09.04.2004., leg. Z. P. Erőss, Z. Fehér and A. Hunyadi.
 M/049 Prov. Gostivar, Mavrovi Anovi, beech forest, 1500 m a.s.l., 09.04.2004., leg. Z. P. Erőss, Z. Fehér and A. Hunyadi.
 M/055 Prov. Gostivar, Gorno Jelovce, Planinarski dom Šarski Vodi, beech forest, 1275 m a.s.l., 09.04.2004., leg. Z. P. Erőss, Z. Fehér and A. Hunyadi.
 M/057 Prov. Tetovo, Popova Šapka 1550 m a.s.l., 09.04.2004., leg. Z. P. Erőss, Z. Fehér and A. Hunyadi.

List of Species

Uropodina KRAMER, 1881

Polyaspidoidea EVANS, 1972

Polyapis patavinus BERLESE, 1881: S-M/6,

Trachytes arcuatus HIRSCHMANN, ZIRNGIEBL-NICOL, 1969: Cr/20a

Trachytes aegrota (C. L. KOCH, 1841): Slo/1, M/057,

Trachytes papukiensis n. sp.: Cr/20b

Trachytes macedoniensis n. sp.: M/055

Uropodoidea EVANS, 1957

Dinychus arcuatus (TRAGÅRDH, 1943): M/016,

Urodiaspis shcherbakae (HIRSCHMANN, 1972): M/20, M/055,
Trichouropoda ovalis (C. L. KOCH, 1839): S-M/2, S-M/4, M/06, M/049
Trichouropoda querceti HIRSCHMANN, 1972: Cr/9a, Cr/11, Cr/19,
Trichouropoda pecinai HIRSCHMANN, WISNIEWSKI, 1986: Cr/15,
Urodiaspis stammeri HIRSCHMANN, ZIRNGIEBL-NICOL, 1969: Cr/12a, S-M/2,
Uropoda splendida KRAMER, 1882: Cr/9b, Cr/11, Cr/14, Cr/15, Cr/20b, Cr/18,
 S-M/2, M/034, M/057
Uropoda pulcherrima (BERLESE, 1903): Cr/12a, Cr/20b,
Uropoda minima KRAMER, 1882: Cr/14,
Uropoda erlagensis HIRSCHMANN, ZIRNGIEBL-NICOL, 1969: S-M/5,
Uropoda cassidea (HERMANN, 1804): S-M/7, Cr/18,
Uropoda hungarica KONTSCHAN, 2004: Cr/14,
Uropoda mazsalakiae n. sp.: Cr/1,
Discourella modesta (LEONARDI, 1899): M/055.

Description of the New Species

Trachytes papukiensis n. sp.

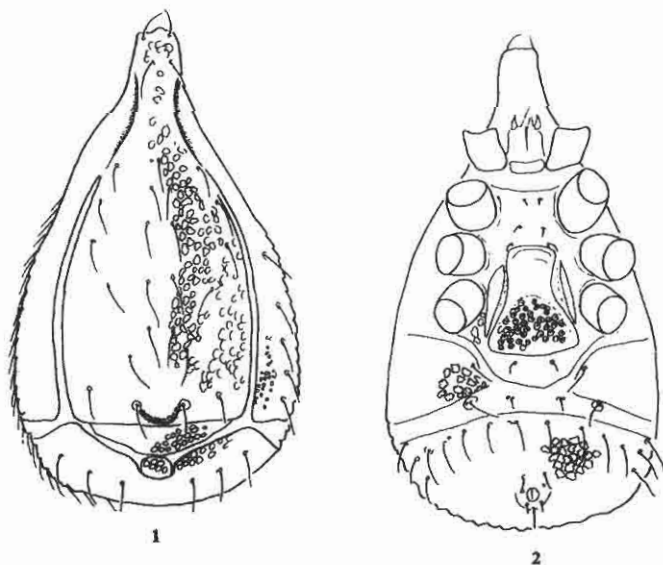
(Figs. 1-2)

Diagnosis: Dorsal and marginal shields with setiform setae and alveolar ornamentation. Genital shield of female liguliform, adgenital platelets wide. Posterior part of genital shield with alveolar ornamentation. Posterior part twice as wide as apical part.

Description: Female. Length of idiosoma 600 μm , width (in the middle of idiosoma) 350 μm . Shape of idiosoma pear-like and oblong.

Male, deuteronymph, protonymph and larva unknown.

Dorsal side (Fig. 1): Marginal, postmarginal and postdorsal shields with several smooth and long setiform setae and with alveolar ornamentation. Dorsal setae long, smooth and setiform and dorsal shield bearing maculate ornamentation. Posterior part of dorsal shield with a well-sclerotized half ring.



Figs. 1-2. *Trachytes papukiensis* n.sp.: 1 - dorsal aspect; 2 - ventral aspect.

Ventral side (Fig. 2.): Sternal, ventroanal and inguinal shields divided, interscutellar membrane between the shields. Sternal setae (St1, St2, St3) short, smooth and filiform, St4 and St5 not clearly visible. One long, smooth and setiform seta localized on inguinal shields. Inguinal and ventroanal shields with maculate ornamentation. Ventroanal shield with several smooth, long and setiform setae. One pair of shorter and one pair of longer smooth and setiform setae on the interscutellar membrane. Longer setae localized on small platelets.

Genital shield of female liguliform and adgenital platelets wide. Anterior part of the genital shield localized between coxae 3. Posterior part of genital shield with alveolar ornamentation. Posterior part twice wider than its apical part.

Gnathosoma: All gnathosoma not clearly visible. Visible part the following: Corniculi horn-like, C1 long, smooth and setiform. Base of tritosternum wide. Chelicerae with a long hyaline processes.

Material examined: Holotype: female, Croatia, Gr/20a, Papuk Mts., Novo Zveuevo, side of a stream, from litter, 22.04.2004., leg. J. Kontschán. Paratype: female: date and locality the same as in holotype.

The material is stored in ethyl-alcohol and deposited in the Collections of Soil Zoology of the Hungarian Natural History Museum.

Etymology: This species is named after the mountains where the specimens were collected.

Remarks: The new species is similar to the species *Trachytes romanica* HUTU, 1983, however *T. papukiensis* differs by the lack of processes on its adgenital platelets.

Trachytes macedoniensis n. sp.

(Figs. 3-5.)

Diagnosis: Dorsal and marginal shields with setiform setae and with alveolar ornamentation. Genital shield of female trapezoid. Posterior part of genital shield with maculate ornamentation.

Description: Female. Length of idiosoma 630-640 µm, width (in the middle of idiosoma) 370-450 µm. Shape of idiosoma pear-like and oblong.

Deuteronymph, protonymph and larva unknown.

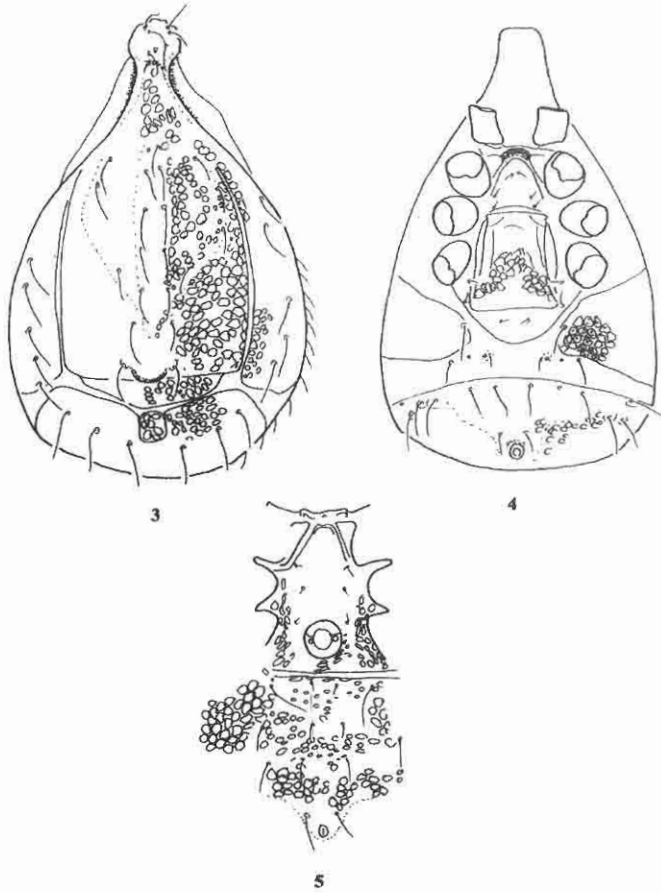
Dorsal side (Fig. 3): Marginal, postmarginal and postdorsal shields with several, smooth and long setiform setae and with alveolar ornamentation. Dorsal setae long, smooth and setiform and dorsal shield bearing maculate ornamentation. Posterior part of dorsal shield with a well-sclerotized half-ring.

Ventral side (Fig. 4): Sternal, ventroanal and inguinal shields divided, interscutellar membrane between the shields. Sternal setae (St1-St5) short, smooth and filiform. St1-St3 localized on the apical part, St4 and St5 are on postero-lateral part of sternal shield. One long, smooth and setiform seta localized on each inguinal shields. Ornamentation of inguinal and ventroanal shields maculate. Ventroanal shield with several smooth, long and setiform setae, and with alveolar ornamentation. One pair of shorter and one pair of longer smooth and setiform setae on the interscutellar membrane.

Genital shield of female trapezoid. Its anterior part of the genital shield localized between coxae 3. Posterior part of genital shield with maculate ornamentation.

Gnathosoma: Not clearly visible (covered by coxae 1).

Male: Length of idiosoma 640-650 µm, width (in the middle of idiosoma) 390-400 µm. Shape of idiosoma pear-like and oblong. Anterior part of sternal shield without ornamentation, posterior part bearing alveolar ornamentation. Genital shield rounded



Figs. 3-5. *Trachytes macedoniensis* n.sp.: 3 - dorsal aspect; 4 - ventral aspect of female; 5 - sternal region of male.

and localized between coxae 4. Sternal setae (St1-St3) short, smooth and setiform. Ventroanal shield fused with inguinal shield and bearing alveolar ornamentation in the central and lateral parts with maculate ornamentation. All setae smooth and setiform, x1 and x2 twice shorter than the other setae (Fig. 5).

Material examined: Holotype: female, Macedonia, M/055 Prov. Gostivar, Gorno Jelovce, Planinarski dom, Šarski Vodi, beech forest, 1275 m a.s.l., 09.04.2004., leg. Z. P. Erőss, Z. Fehér and A. Hunyadi. Paratypes: two males and one female, date and locality the same as holotype.

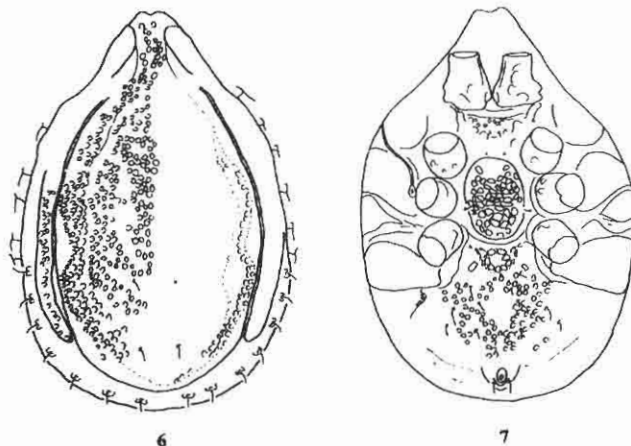
The material is stored in ethyl-alcohol and deposited in the Collections of Soil Zoology of the Hungarian Natural History Museum.

Etymology: This species is named after the country where it was collected.

Uropoda mazsalakiae n. sp.

(Figs. 6-12.)

Diagnosis: Idiosoma oval female genital shield oval and localized between coxae 2 and 4. Caudal setae of dorsal side setiform and placed on small platelets. Marginal shield T-shaped. Dorsal, marginal and ventral shields with alveolar ornamentation.



Figs. 6-7. *Uropoda mazsalakiae* n. sp. female: 6 - dorsal aspect; 7 - ventral aspect.

Description: Female. Length of idiosoma 590 μm , width 350 μm . Shape of idiosoma oval, posterior margin round.

Male, protonymph and larva unknown.

Dorsal side (Fig. 6): All dorsal setae, smooth, short and setiform. Dorsal shield with alveolar ornamentation. Marginal shields short, with alveolar ornamentation. Caudal part of dorsal shield without marginal shield, all caudal setae (seven pairs) placed on small platelets. Interscutellar membrane situated between small platelets. Caudal setae smooth and setiform. All marginal setae T-shaped.

Ventral side (Fig. 7): Sternal setae short, setiform and smooth. Ventral and ventroanal setae smooth, setiform and longer than sternal setae. Apical part of sternal shield and ventral shield with alveolar ornamentation. Shape of peritrema line-like.

Genital shield between coxae 2 and 4, its shape oval and with maculate ornamentation.

Gnathosoma: Not clearly visible (covered by coxae 1).

Deuteronymph: Length of idiosoma 410-420 μm , width 270-310 μm . Shape of idiosoma oval, posterior margin rounded.

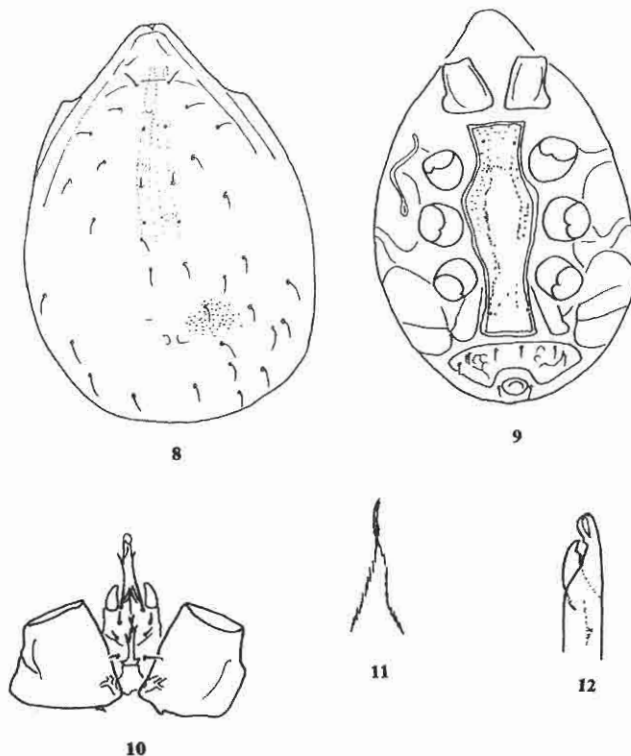
Dorsal side (Fig. 8): All dorsal setae, smooth, short and setiform. Dorsal shield punctuate.

Ventral side (Fig. 9): Sternal setae not visible, sternal shield punctuate on its lateral part, central part without ornamentation. Peritrema S-shaped. Stigma localized opposite to coxae 3. Ventral shield without ornamentation and with three pairs of smooth, short and filiform setae.

Gnathosoma (Fig. 10): Corniculi horn-like, ventral side of gnathosoma with four pairs of coxal setae (C1-C4), all setae smooth and setiform, C1 longer than other coxal setae. Apical part of tritosternum with two branches, branches of margin with some teeth. Margin of epistoma with hairs (Fig. 11). Chelicera shown in Fig. 12.

Material examined: Holotype: female, Croatia, Cr/1, Bibinje, seaside, from decayed sea-grass, 14.08.2003., leg. J. Kontschán. Paratypes: three deuteronymphs, locality and date same as in holotype.

The material is deposited in alcohol in the Collections of Soil Zoology of the



Figs. 8-12. *Uropoda mazsalakiae* n. sp. deuteronymph: 8 - dorsal aspect; 9 - ventral aspect; 10 - gnathosoma; 11 - epistoma; 12 - chelicera.

Hungarian Natural History Museum.

Etymology: This species is dedicated to my girlfriend, Miss Zsuzsanna Molnár (her nickname is Mazsalaki), who always helps me with collecting the material.

Remarks: The new species is very similar to the species *Uropoda maritima* HIRAMATSU, 1977, which occurs in Japan. The important differences are the following: the new species has seven pairs of caudal setae; the species *Uropoda maritima* has eight pairs of caudal setae. The genital shield of female of the new species is oval; the female of the known species has a scutiform genital shield.

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Върху някои малко познати и нови видове Uropodina (Acari: Mesostigmata) от Хърватия, Сърбия-Черна Гора, Словения и Македония

Й. Кончан

(Резюме)

Деветнадесет вида Uropodina са събрани от няколко части на бивша Югославия (Хърватия, Сърбия-Черна Гора, Словения и Македония). Това са първите сведения за видовете. Три от тях (*Trachytes papukiensis*, *Trachytes macedoniensis*, *Uropoda mazsalakiae*) са нови за науката. С 12 фигури.