# THE FIRST RECORD OF THE GENUS *POLYASPINUS* (ACARI, UROPODINA) AND THREE NEW UROPODINA SPECIES TO THE FAUNA OF UKRAINE

#### J. Kontschán

Systematic Research Group of Hungarian Academy of Science and Eötvös Loránd University and Department of Zoology of Hungarian Natural History Museum Baross str., 13, Budapest, 1088 Hungary E-mail: kontscha@zoo.zoo.nhmus.hu

Accepted 5 August 2002

The First Record of the Genus *Polyaspinus* (Acari, Uropodina) and Three New Uropodina Species New to the Fauna of Ukraine. Kontschán J. — The first records of the genus *Polyaspinus* Berlese, 1916 and *Polyaspinus schweitzeri* (Hutu, 1976), *Uroobovella obovata* (Canestrini et Berlese, 1884), *Trachyuropoda formicaria* (Lubbock, 1881) and some complementary records of other species are given from Ukraine. Short descriptions and occurrence of species are given.

Key words: Uropodina, Ukraine, fauna.

**Первое сообщение о роде** *Polyaspinus* (Acari, Uropodina) и находке трех новых видов семейтва Uropodina. Кончан Е. — Впервые в фауне Украины обнаружены клещи рода *Polyaspinus* Berlese, 1916. Приведены краткое описание, рисунки, а также данные о местах находок представителя рода *P. schweitzeri* (Hutu, 1976) и двух других впервые зарегистрированных в Украине видов: *Uroobovella obovata* (Canestrini et Berlese, 1884) и *Trachyuropoda formicaria* (Lubbock, 1881).

Ключевые слова: Uropodina, фауна, Украина.

The Ukrainian Uropodina fauna is poorly known. Altogether only 10 genera with 24 species were found here (Wisniewski, 1993).

The examined material (soil, litter and anthill) was collected in Transcarpathian, Ukraine. Collected mites were deposited in the Soil Zoology Collections of the Hungarian Natural History Museum, Budapest.

## Distribution and short redescriptions of species

## Polyaspinus schweitzeri (Hutu, 1976)

The species and the genus are new to the fauna of Ukraine. Now, 11 *Polyaspinus* species are known in the World, but only 5 species occur in Europe (Masan, Kaluz, 1999). The genus was found in Belgium, Germany, France, UK, Ireland, Austria, Poland, Romania, Sweden, Czech Republic, Slovakia and Hungary.

The *P. schweitzeri* is known only from Romania, Poland (Wisniewski, 1993) and Slovakia (Masan, Kaluz, 1999; Masan 2001).

The length of idiosoma is 740-785 mkm ( $\bigcirc$ ) and 715-780 mkm ( $\bigcirc$ ). The dorsal shield is divided into pre- and postdorsal shield, between these shields there is 1 pair of setae on a small platelets (fig. 1). The male operculum is round, placed between the coxa III and IV (fig. 2).

We found this species together with two other: *Trachytes aegrota* (C. L. Koch, 1841 and *Trichouropoda ovalis* (C. L. Koch, 1839).

This species (\$\sigma\$) was collected in Sirokij Lug, near the Luzsanka Spring, in a beech forest, from moss and litter, 22.05.2002 (leg. D. Murányi).

78 J. Kontschán

## Uroobovella obovata (Canestrini & Berlese, 1884)

Two species of the genus *Uroobovella* Berlese, 1903 are known from Ukraine: *Uroobovella baloghi* Hirschmann & Zirngiebl-Nicol, 1962 and *O. vinicolora* (Vitzhum, 1926) (Wisniewski, 1993).

*U. obovata* occurs in whole Europe. It lives in anthills, nests of birds and mammals (Wisniewski, 1993). The length of idiosoma is 570-630 mkm ( $\circ$ ) and 600-640 mkm ( $\circ$ ). The operculum of female is broad, the peritrema is hook-shaped (fig. 3).

We found this species in a nest of ants (Hymenoptera, Myrmicinae), where it lives together with *Trachyuropoda formicaria* (Lubbock, 1881).

The specimens  $(3 \circ, 2 \circ)$  were collected in Krasznaja, near the Kraszovec Spring, in a mountain grassland, from a nest of ants, 21.05.2002 (leg. D. Murányi).

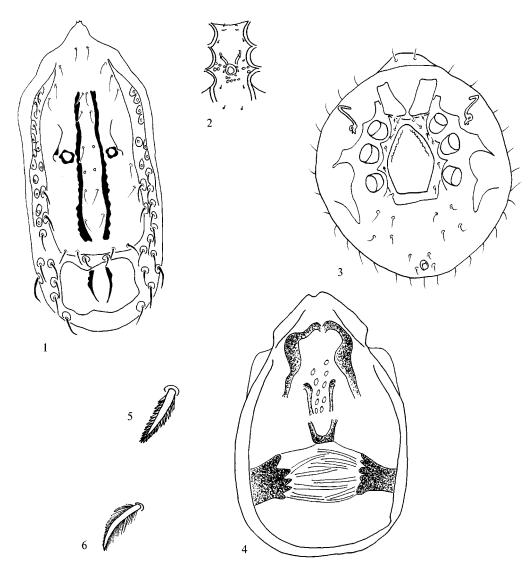


Fig. 1–6. *Polyaspinus schweitzeri*: 1 — dorsal shield of male; 2 — ventral shield of male with operculum; *Uroobovella obovata*: 3 — ventral shield of female; *Trachyuropoda formicaria*: 4 — dorsal shield of male; 5 — dorsal setae; 6 — lateral setae.

Рис. 1—6. *Polyaspinus schweitzeri*: 1 — дорсальный щит самца; 2 — вентральный щит самки с оперкулюмом; *Uroobovella obovata*: 3 — вентральная поверхность идиосомы самки; *Trachyuropoda formicaria*: 4 — дорсальный щит самца; 5 — дорсальная щетинка; 6 — латеральная щетинка.

## Trachyuropoda formicaria (Lubbock, 1881)

The genus *Trachyuropoda* Berlese, 1888 lives only in anthills. *T. kiewensis* Hirschmann, 1976 was known only from Ukraine (Wisniewski, 1993).

The length of idiosoma of the *T. formicaria* is 1030-1085 mkm ( $\bigcirc$ ) and 1020 mkm ( $\circ$ ). Across the dorsal shield there are some 6-8 strong chitin lines (fig. 4) and the dorsal setae are strongly serrated (fig. 5).

This species (o) was collected in Krasznaja, near the Kraszovec Spring, in a mountain grassland, from a nest of an ant, 21.05.2002 (leg. D. Murányi).

### Some other faunistic data on Uropodina from Ukraine

## Trachytidae Trágardh, 1938

*Trachytes aegrota* (C. L. Koch, 1841): Sirokij Lug, near the spring Luzsanka, in a beech forest, from moss and litter, 22.05.2002 (leg. D. Murányi); Ugolyka karst, near the stream Kraszovec, in a beech forest, from litter, 24.05.2002 (leg. D. Murányi). This species occurs in whole Europe, and is very common in most habitats (Wisniewski, Hirschmann, 1993).

*Trachytes irinae* Pecina, 1969: Ugolyka karst, near the stream Kraszovec, in a beech forest, from litter, 24.05.2002 (leg. D. Murányi). This species is known from Czech Republic, Slovakia, Romania, Poland, Austria and Ukraine (Wisniewski, Hirschmann, 1993).

## Trematuridae Berlese, 1916

*Trichouropoda ovalis* (C. L. Koch, 1839): Sirokij Lug, near the spring Luzsanka, in a beech forest, from moss and litter, 22.05.2002 (leg. D. Murányi). This species occurs in whole Europe, and it is very common in most habitats (Wisniewski, Hirschmann, 1993).

## Urodinichidae Berlese, 1917

*Urodiaspis tecta* (Kramer, 1876): Ugolyka karst, near the stream Kraszovec, in a beech forest, from litter, 24.05.2002 (leg. D. Murányi). This species occurs in whole Europe, and it is very common in most habitats (Wisniewski, Hirschmann, 1993).

#### Discussion

Now 27 species (with the three new species) are known from the Ukrainian Uropodina fauna. The number of species in the neighbouring European counties (like: Slovakia, Romania and Hungary) is higher so the number of the Ukrainian Uropodina species will surely grow.

I am grateful to Dr. Sándor Mahunka for providing working facilities, and helping with the preparation techniques. I would like to thank my colleague and friend, Dávid Murányi, for collecting the mites.

Masan P. Mites of the cohort Uropodina (Acari, Mesostigmata) in Slovenska // Ann. Zool. et Botan. — 2001. — 223. — P. 1–320.

Masan P., Kaluz S. Mites of the genus Polyaspis (Mesostigmata, Uropodina) from Slovakia with description of a new species // Biologia. — 1999. — 54. — P. 529—538.

Wisniewski J. Die Uropodiden der Erde nach Zoogeographischen Regionen und Subregionen geordnet (Mit Angabe der Lande) // Acarologie. — 1993. — 40. — P. 221—291.

Wisniewski J., Hirschmann W. Katalog der Gangattungen, Untergattungen, Gruppen und Arten der Uropodiden der Erde (Taxonomie, Literatur, Grösse, Verbreitung, Vorkommen) // Acarologie. — 1993. — 40. — P. 1–220.