Genus	Vol. 19(2): 335-341	Wrocław, 31 VII 2008

New records of the Uropodina mites of Latvia and description of two new species (Acari: Mesostigmata)

Jenõ Kontschán[1] & Ineta Salmane[2]

[1] Systematic Zoology Research Group of Hungarian Academy of Sciences and Eötvös Loránd University, Department of Zoology, Hungarian Natural History Museum, H-1088 Budapest Baross u. 13., Hungary; e-mail: kontscha@zool.nhmus.hu

[2] Institute of Biology, University of Latvia, 3 Miera str., LV-2169, Salaspils, Latvia; e-mail: incis@email.lubi.edu.lv

Abstract. *Uropoda ocellata* and *Oplitis latvica*, new to science, are desribed from Latvia. New faunistic data for eight other species are given, five of them are new to Latvia.

Key words: acarology, taxonomy, faunistics, Acari, Uropodina, new species, new faunistic data, Latvia.

INTRODUCTION

The Uropodina fauna of Latvia is poorly-known. Only 6 species were identified during investigations of pollution effects by pig slurry (Karps et al. 1990) and in some case studies (Eglitis 1954; Kontschán & Salmane 2005).

MATERIALS AND METHODS

The specimens were studied with standard methods. Lactic acid was used to clear the specimens. The drawings were made with camera lucida.

The identified specimens and paratypes of new species are stored in alcohol and deposited in Salmane's Acari collection at the Institute of Biology, University of Latvia (Salaspils, Latvia). The holotypes are stored in alcohol and deposited in the Collections of Soil Zoology of Hungarian Natural History Museum.

All specimens were collected by I. SALMANE.

Measurements are given in micrometers (µm). Distributions are given after BREGETOVA (1977).

DESCRIPTION OF NEW SPECIES

Uropoda ocellata n. sp.

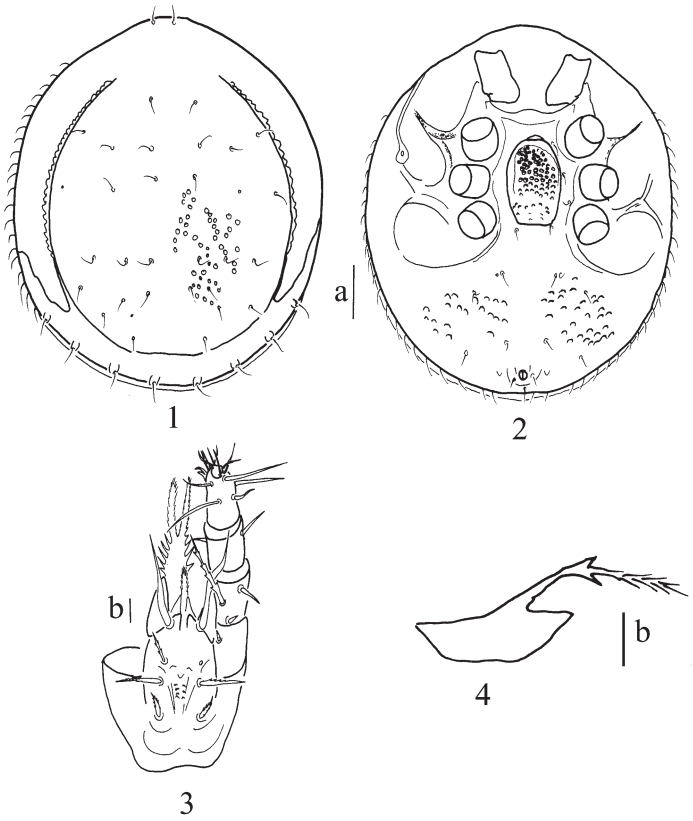
(Figs 1-4)

ETYMOLOGY

The new species is named after its ornamentation of genital shield.

DIAGNOSIS

Marginal shields are not fused. Scalloping between marginal and dorsal shields. Posterior part of dorsal side with 4 pairs of setae on interscuttelar membrane. Dorsal



1-4. *Uropoda ocellata* sp. n., holotype female: 1 - dorsal view, 2 - ventral view, 3 - gnathosoma, 4 - tritosternum (scale bar: a - 100 µm, b - 10 µm)

setae smooth and setiform, dorsal ornamentation alveolar. Genital shield with ocellate ornamentation, ventral shield with alveolar pattern.

Description

Female. Idiosoma oval, 734µm long, 664µm wide (n=3).

Dorsal side (Fig. 1): Surface of dorsal shield with alveolar ornamentation. All dorsal setae smooth and setiform. Scalloping can be found between dorsal and marginal shields, marginal shields fused with dorsal shield on anterior part of dorsal side, marginal shields not fused on posterior part of dorsal side. Marginal setae as long as dorsal setae, ornamentation of marginal shields lacking. Four pairs smooth and setiform setae placed on interscutellar membrane.

Ventral side (Fig. 2): Sternal shield without ornamentation. All sternal setae smooth and setiform. Ventral setae longer than sternal setae, smooth and setiform. Ventral shield with alveolar ornamentation. Adanal setae shorter than ventral setae, smooth and setiform.

Genital shield large, oval, with ocellate ornamentation and small process.

Peritrema erected and stigma situated near coxae 3.

Gnathosoma (Fig. 3): Corniculi horn-like, laciniae short and smooth, h1 setae long, wide and smooth, h2, h3 and h4 with serrated margin, h2 and h4 short, h3 long, but shorter than h1. Labrum with short hairs. Tritosternum with wide base, apical part with two, strong spines and with hairs (Fig. 4). Base of epistoma with serrated margin, apical part with two branches, branches bear short hairs. Chelicerae not clearly visible. Palp with the visible setae is shown in Fig 3.

Male, deuteronymph, protonymph and larva unknown.

Type material

Holotype: Female, Latvia, Ogre District, Ogre, garden, compost, on *Histeridae* sp. (Coleoptera), 06.06.2004. leg. I. Salmane, Paratypes: two females, locality and date same as holotype.

Remarks

The new species belongs to the *orbicularis*-group, the most important character is the ornamentation of genital shield which can not be found in other species of this group.

***Oplitis latvica* n. sp.**

(Figs 5-9)

Etymology

This species is named after the country where the specimens were collected.

Diagnosis

Dorsal shield bears alveolar pattern, all dorsal setae lanceolate. Marginal shield with short, setiform setae. Preanal line and perigenital line present. Perigenital line

undulate. Genital and sternal shields with alveolate ornamentation. Ventral shield with alveolar pattern.

Description

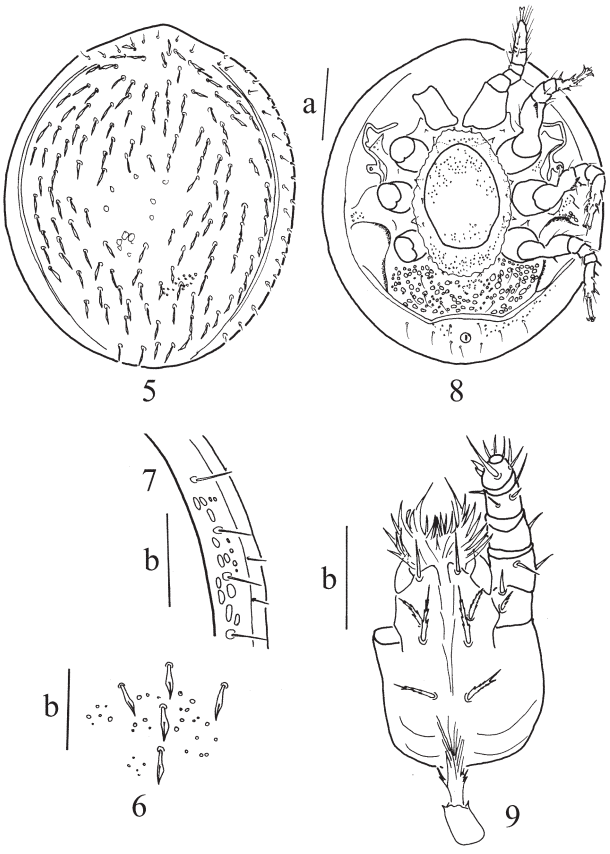
Female. Idiosoma oval, 490–470 µm long, 415–390 µm wide (n=3).

Dorsal side (Fig. 5): Surface of dorsal shield with alveolate ornamentation. All dorsal setae lanceolate (Fig. 6). Marginal and dorsal shields fused on anterior part of dorsal side. Marginal shields with alveolar ornamentation, all marginal setae shorter than dorsal setae, smooth and setiform (Fig. 7).

Ventral side (Fig. 8): Sternal shield alveolate ornamentation. All sternal setae short, smooth and filiform. Ventral setae longer than sternal setae, smooth and setiform. Ventral shield with alveolar ornamentation. Preanal line present. Adanal and anal setae shorter than ventral setae, smooth and setiform.

Genital shield large, oval, with foveolate ornamentation and without process.

Peritrema M-form and stigma situated between coxae 2 and 3.



5-9. *Oplitis latvica* sp. n., holotype female. 5 - dorsal view, 6 - dorsal setae and pattern, 7 - marginal setae and pattern, 8 - ventral view, 9 - gnathosoma (scale bar: a - 100 µm, b - 10 µm)

Gnathosoma (Fig. 9): Corniculi horn-like, laciniae with several long branches, h1 setae long, smooth and setiform, h2, h3 and h4 with serrated margin, h2 and h4 shorter h1 and h3. Tritosternum with narrow base and two spines, apical part with several, long branches. Chelicerae, labrum and epistom not clearly visible. Palp with the visible setae is shown in Fig 9.

Male, deuteronymph and protonymph unknown.

Type material

Holotype: Female, Latvia, Limbaži District, North of Ķurmrags, coastal meadow, dry sandy soil, 15.08.2003., leg. I. Salmane, Paratypes: two females, locality and date same as holotype.

Remarks

This species is similar to the *Oplitis conspicua* (Berlese, 1903), but the new species has only 4 pairs of ventral setae, and the other known species bear more than 4 pairs of ventral setae.

ADDITIONAL FAUNISTIC DATA

Polyaspidoidea Evans
Trachytes aegrota (C. L. Koch)

New data: Limbaži Distr., South of Ķurmrags, coastal pine forest, on *Pleurozium schreberi*, 20.08.2003; Ogre Distr., Ogre, mixed forest, rotting alder wood, 29.06.2003; Madona Distr., Driksnas ezers, *Sphagnum magellanicum,* 21.09.2003; Madona Distr., Driksnas ezers, mosses, 27.08.2004.

Distribution: Europe, Far East.

Trachytes minima Trägardh

First record in Latvia.

New data: Limbaži Distr., Randu meadows, mesophytic meadow, 29.05.2003.

Distribution: North- and Central Europe.

Uropodoidea Evans
Trichouropoda ovalis (C. L. Koch)

New data: Limbaži Distr., South of Ķurmrags, coastal pine forest, *Pleurozium schreberi*, 20.08.2003; Cēsis Distr., Cēsis, *Bjerkandera adusta* (Aphyllophorales, Fungi), 18.06.2004; Valmiera Distr., Mazsalaca, pine forest, *Fomes fomentarius* (Aphyllophorales, Fungi), 15.07.2004; Rīga Distr., Garezers, *Trametes ochracea* (Aphyllophorales, Fungi), 07.06.2004; Ogre Distr., Ogre, *Fomitopsis pinicola* (Aphyllophorales, Fungi), 11.04.2004; Ogre Distr., Ogre, mixed forest, rotting alder wood, 08.05.2003; Ogre Distr., Ogre, garden, on Histeridae sp. (Coleoptera), 11.06.2004.; Alūksne Distr., Zie-

meri, mixed forest, mosses, 09.08.2003; Madona Distr., Driksnas ezers, rotting pine trunk, 21.09.2003; Rīga Distr., Lilaste, Garezers, red rotting pine wood, 27.08.2004; Rīga Distr., Lilaste, Garezers, coastal pine forest, *Stereum hirsutum* (Aphyllophorales, Fungi), 27.08.2004; Rīga Distr., Salaspils, bog, *Trametes hirsuta* (Aphyllophorales, Fungi), 16.05.2004.

Distribution: Europe, Russia.

Uroobovella pulchella (Berlese)

First record in Latvia.

New data: Rīga Distr., Lilaste, leaf litter near Garezers, 07.06.2004.; Ogre Distr., Ogre, mixed forest, rotting alder wood, 29.06.2003; Ogre Distr., Ogre, mixed forest, rotting alder wood, 08.05.2003; Rīga Distr., Lilaste, coastal pine forest, *Stereum hirsutum* (Aphyllophorales, Fungi), 27.08.2004.

Distribution: Europe.

Uropoda orbicularis (Müller)

New data: Rīga Distr., Saulkrasti, leaf litter, 21.05.2004.

Distribution: Europe, Russia.

Oplitis minutissima (Berlese)

First record in Latvia.

New data: Madona Distr., Driksnas ezers, mosses, 27.08.2004; Cēsis Distr., Cēsis, *Bjerkandera adusta* (Aphyllophorales, Fungi), 18.06.2003.

Distribution: Europe.

Oplitis pecinai Hirschmann

First record in Latvia.

New data: Rīga Distr., Lilaste, beech trunks, *Stereum hirsutum* (Aphyllophorales, Fungi), 27.08.2004.

Distribution: Slovakia, Hungary.

Trachyuropoda coccinea (Michael)

First record in Latvia.

New data: Rīga Distr., Lilaste, beech trunks, *Stereum hirsutum* (Aphyllophorales, Fungi), 27.08.2004.

Distribution: Europe, Russia.

REFERENCES

Bregetova, N.G., 1977. [Identification keys for soil inhabiting mites. Mesostigmata.] Nauka, Leningrad, 717 pp. [in Russian]

Eglitis, V., 1954. [Soil fauna of the Latvian SSR]. Publishing House of the Academy of Sciences of Latvian SSR, Rīga, 263 pp. [in Russian]

Karps, A., Lapiņa, I., Melecis, V., Spunģis, V., Šternbergs, M., 1990. [Environmental pollution by pig slurry]. Zinatne, Riga, 237 pp. [in Russian, with English summary]

Kontschán, J., Salmane, I., 2005. Data about the Uropodina Mites (Acari: Mesostigmata) of Latvia. Latvijas Entomologs, **42**: 62–64.