

Neue und interessante Milben
aus dem Genfer Museum XXXIX.¹
Fifth Contribution to the Oribatid Fauna
of Greece (Acari: Oribatida)

by

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With 29 figures

ABSTRACT

New and interesting mites from the Geneva Museum XXXIX. Fifth Contribution to the Oribatid Fauna of Greece (Acari: Oribatida). — The Oribatids from 13 soil samples (collected in 1974, 1976 and 1979) have been studied and 39 species identified of which 10 species are described as new to science and for 1 of them a new genus (*Hauserophthiracarus*) is established in the family Phthiracaridae: *Hauserophthiracarus* (1 sp.); *Steganacarus* (1 sp.); *Oribotritia* (1 sp.); *Liochthonius* (1 sp.); *Brachychochthonius* (1 sp.); *Berlesezetes* (1 sp.); *Microzetes* (1 sp.); *Machuella* (1 sp.); *Oppia* (1 sp.) and *Oribella* (1 sp.).

I have already submitted several papers (MAHUNKA 1977a, 1977b, 1979) on the Oribatids collected by Dr. B. Hauser (Geneva) from the soil and from caves in different parts of Greece. I give now the description of 10 new species and a list of the identified ones. The erection of a new genus *Hauserophthiracarus* gen. n. for a new species in the family Phthiracaridae was also necessary.

Herewith I should like to express my gratitude to Dr. B. Hauser for giving me the opportunity to examine his very valuable material.

¹ XX: Beitrag zur Kenntnis der Oribatiden-Fauna Griechenlands (Acari). *Revue suisse Zool.* 81: 569-590, 1974.

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The examined materials originate from 13 localities of which the list is given hereunder while in the descriptions and in the list of species only the reference letters and the code numbers (log-book of Dr. B. Hauser) are mentioned.

LIST OF LOCALITIES

- Pel-74/4: Péloponnèse: massif Taigetos: forêt de *Abies cephalonica* à l'ouest de Panagia Giatrisa (au-dessus de Kastania), 1030 m, prélèvement de terre, (B¹ à Patras), 8.V.1974.
- The-76/3: Péloponnèse: massif Panachaikon: au-dessus de Kastrition, 1000 m, prélèvement de terre sous *Abies cephalonica* (B à Patras), 12.V.1976.
- The-76/7: Béotie: mont Parnass: prélèvement de terre sous *Juniperus* sp. près de la Station de ski, 1830 m (B à Genève), 13.V.1976.
- The-76/10: Béotie: route de Arachova à Eptalophos: près de la bifurcation de la route pour la Station de ski, prélèvement de terre sous *Abies cephalonica*, 1280 m (B à Genève), 13.V.1976.
- The-76/14: Thessalie: massif Ossa: au-dessus de Ampelakia: prélèvement de terre dans une grotte sans nom près de l'église Profitis Elias, 600 m (B à Genève), 14.V.1976.
- The-76/25: Acarnanie: près de Astakos: prélèvement de terre au pied de *Quercus* sp., 120 m (B à Genève), 16.V.1976.
- The-76/32: Péloponnèse: route de Sparta à Kalamata: sol non calcaire, prélèvement de terre sous *Pinus* sp., 1150 m (B à Genève), 20.V.1976.
- Kar-79/1a: Phocide: monts Vardousia: prélèvement de terre sous *Abies cephalonica* à la limite supérieure de la forêt, près de Profitis Elias, 1470 m, à proximité de Athanassios Diakos (B à Patras), 8.III.1979.
- Kar-79/5a: Phocide: monts Vardousia: Athanassios Diakos: prélèvement de terre sous *Platanus* sp. au bord d'un ruisseau, 1000 m (B à Patras), 8.III.1979.
- Kar-79/7a: Crète: péninsule Faneromeni à l'ouest de Sitia: prélèvement de terre sous des tamaris au bord d'un étang d'eau saumâtre, 5 m (B à Patras), 10.III.1979.
- Kar-79/8-: Karpathos: massif Lastos: prélèvement de terre sous *Pinus brutia* près de la route Aperi-Spoa, 430 m (B à Patras), 12.III.1979.
- Kar-79/9a: Karpathos: massif Lastos: prélèvement de terre sous *Ceratonia siliqua* près de la route Aperi-Spoa, 430 m (B à Patras), 12.III.1979.
- Kar-79/20: Thessalie: massif Ossa: environs de Spilia: grotte « Liparo Tripa » au Mont Kokkino Vrachos, 1030 m, 18.III.1979.

LIST OF IDENTIFIED SPECIES

Aphelacaridae Grandjean, 1954

Aphelacarus acarinus (Berl., 1910)

Locality: Kar-79/9a (16 specimens)

¹ B: extracted by Berless funnel.

Prothoplophoridae Ewing, 1917

Bursoplophora bivaginata (Grandj., 1932)

Locality: The-76/25 (2 specimens)

Hauseroplophora phitosi Mah., 1977

Locality: The-76/25 (1 specimen)

Phthiracaridae Perty, 1841

Hauserophtiracarus oenipontanus sp. n.

Locality: Kar-79/20 (11 specimens)

Steganacarus brevipilus (Berlese, 1923)

Locality: Pel-74/4 (5 specimens)

Steganacarus echinodiscus sp. n.

Locality: Pel-74/4 (6 specimens)

Oribotritiidae Grandjean, 1954

Oribotritia hauseri sp. n.

Locality: Pel-74/4 (17 specimens)

Euphthiracaridae Jacot, 1930

Euphthiracarus intermedius Mah., 1979

Locality: The-76/32 (3 specimens)

Cosmochthoniidae Balogh, 1943

Cosmochthonius emmae Berl., 1910

Locality: The-76/25 (2 specimens)

Haplochthoniidae van der Hammen, 1959

Haplochthonius simplex Willmann, 1930

Locality: The-76/25 (50 specimens)

Brachychthoniidae Balogh, 1943

Brachychochthonius hauserorum Mah., 1979

Locality: Kar-79/8a (5 specimens)

Brachychochthonius variabilis sp. n.

Locality: Kar-79/1a (16 specimens)

Brachychochthonius hungaricus (Balogh, 1943)

Localities: Kar-79/8a (2 specimens); Kar-79/9a (4 specimens)

Brachychochthonius immaculatus Forssl., 1942

Localities: Kar-79/1a (2 specimens); Kar-79/9a (1 specimen)

Liochthonius brevis (Mich., 1888)

Localities: The-76/32 (5 specimens); Kar-79/1a (1 specimen); Kar-79/8a (8 specimens)

Liochthonius horridus Selln., 1928

Locality: The-76/10 (30 specimens)

Liochthonius phitosi sp. n.

Locality: Kar-79/1a (14 specimens)

Liochthonius strenzkei Forssl., 1963

Localities: Kar-79/1a (1 specimen); Kar-79/7a (1 specimen); Kar-79/9a (1 specimen)

Neobrachychthonius magnus Moritz, 1976

Locality: Kar-79/1a (1 specimen)

Synchthonius crenulatus (Jac., 1938)

Locality: The-76/32 (2 specimens)

Synchthonius elegans Forssl., 1957

Locality: The-76/10 (15 specimens)

Lohmanniidae Berlese, 1916

Lohmannia regalis Berl., 1923

Locality: The-76/25 (2 specimens)

Papillacarus aciculatus (Berl., 1905)

Locality: The-76/25 (30 specimens)

Perlohmanniidae Grandjean, 1954

Perlohmannia nasuta Schuster, 1958

Locality: The-76/7 (10 specimens)

Camisiidae Oudemans, 1900

Camisia spinifer (C. L. Koch, 1936)

Locality: The-76/7 (5 specimens)

Liodidae Grandjean, 1954

Platyliodes dodderleini (Berl., 1883)

Localities: Kar-79/5a (9 specimens); Kar-79/9a (10 specimens)

Platyliodes scaliger (C. L. Koch, 1840)

Locality: Kar-79/1a (15 specimens)

Microzetidae Grandjean, 1936

Berlesezetes cuspidatus sp. n.

Locality: The-76/25 (4 specimens)

Microzetes sestasi sp. n.

Localities: The-76/3 (3 specimens); The-76/14 (6 specimens)

Nellacarus hellenicus Mah., 1977

Locality: The-76/3 (2 specimens)

Liacaridae Sellnick, 1928

Adoristes poppei (Oudemans, 1906)

Locality: The-76/32 (20 specimens)

Otocephidae Balogh, 1961

Dolicheremaeus dorni (Balogh, 1937)

Locality: The-76/3 (3 specimens)

Oppiidae Grandjean, 1954

Machuella hellenica sp. n.

Locality: The-76/3 (4 specimens)

Oppia gibber sp. n.

Localities: The-76/3 (3 specimens); The-76/14 (6 specimens)

Caleremaeidae Grandjean, 1965

Caleremaeus monilipes (Mich., 1882)

Locality: Kar-79/5a (1 specimen)

Thyrisomidae Grandjean, 1953

Oribella fujikawae sp. n.

Localities: The-76/14 (20 specimens); Kar-79/5a (2 specimens)

Passalozetidae Grandjean, 1954

Passalozetes hauseri Mah., 1977

Locality: The-76/25 (2 specimens)

Zetomotrichidae Grandjean, 1934*Ghilarovus humeridens* Kriv., 1966

Locality: The-76/14 (10 specimens)

Haplozetidae Grandjean, 1936*Protoribates badensis* Selln., 1928

Locality: Kar-79/5a (1 specimen)

DESCRIPTION OF THE NEW TAXA

Hauserophthiracarus gen. n.

Diagnosis: Phthiracaroid habitus. Lamellar and interlamellar hairs erect. Sensillus long, setiform. Pygidial part of notogaster with strong neotrichy, approximately 30 pairs of notogastral hairs present. 5 pairs of long anoadanal hairs, among them 2 pairs arising on inner margin of anal plates.

Type species: *Hauserophthiracarus oenipontanus* sp. n.

Remarks: on the basis of the erect interlamellar hairs it comes close to *Hoplophthiracarus* Jacot, 1933, however its lamellar hairs are not erect and no neotrichy on notogaster is present.

I dedicate the new taxon to Dr. B. Hauser, Custos of the Arthropoda Collection in the Natural History Museum of Geneva, who has so much furthered the research of soil and troglodytic fauna of Greece.

Hauserophthiracarus oenipontanus sp. n.

Measurements: Length of aspis: 388–495 μ , length of notogaster: 786–1010 μ , height of notogaster: 485–703 μ .

Aspis (Fig. 2.): Rostral hairs short; both pairs of hairs in interbothridial region erect, inner pair bending backwards, much longer and thicker than outer ones, all ciliated. Sensillus setiform, straight, ciliated, without thickening.

Notogaster (Fig. 1): All hairs strong, ciliated, majority of them directed forward. Beside hairs *c*, *d* and *e* no neotrichial hairs, in posterior part of body, beside hairs *h* and *ps* a number of neotrichial hairs present, separation of neotrichial and original hairs impossible.

Anogenital region (Fig. 3): All anal and adanal hairs long. Legs monodactyle.

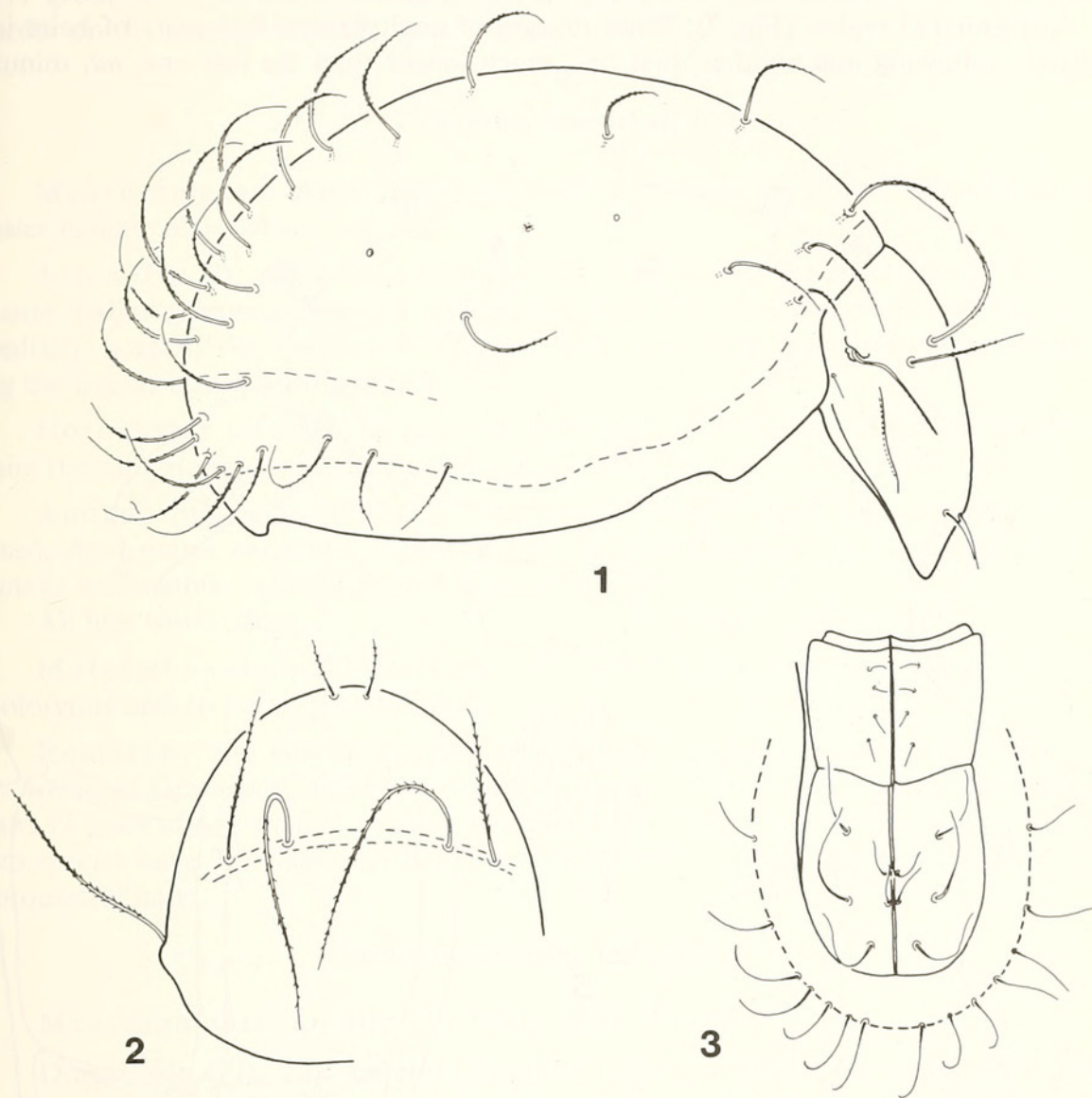
Material examined: Holotypus: Kar-79/20; 10 paratypes: from the same locality. Holotype and 6 paratypes: MHNG ¹, 4 paratypes: HNHM ² (490-PO-79).

¹ Deposited in the Muséum d'Histoire naturelle, Genève.

² Deposited in the Hungarian Natural History Museum, Budapest.

Remarks: The features enumerated in the diagnosis clearly separate the new species from all other Phthiracaroid taxa.

This new species is named after the city of Innsbruck (Oenipons in latin) from where the two Tyrolese biospeologists originate who explored the caves of Kokkino Vracho in the Ossa mountains: Leo Weirather in 1927 and Bernd Hauser half a century later.



FIGS. 1-3.

Hauserophthiracarus oenipontanus sp. n.
1: lateral side; 2: aspis; 3: anogenital region.

***Steganacarus echinodiscus* sp. n.**

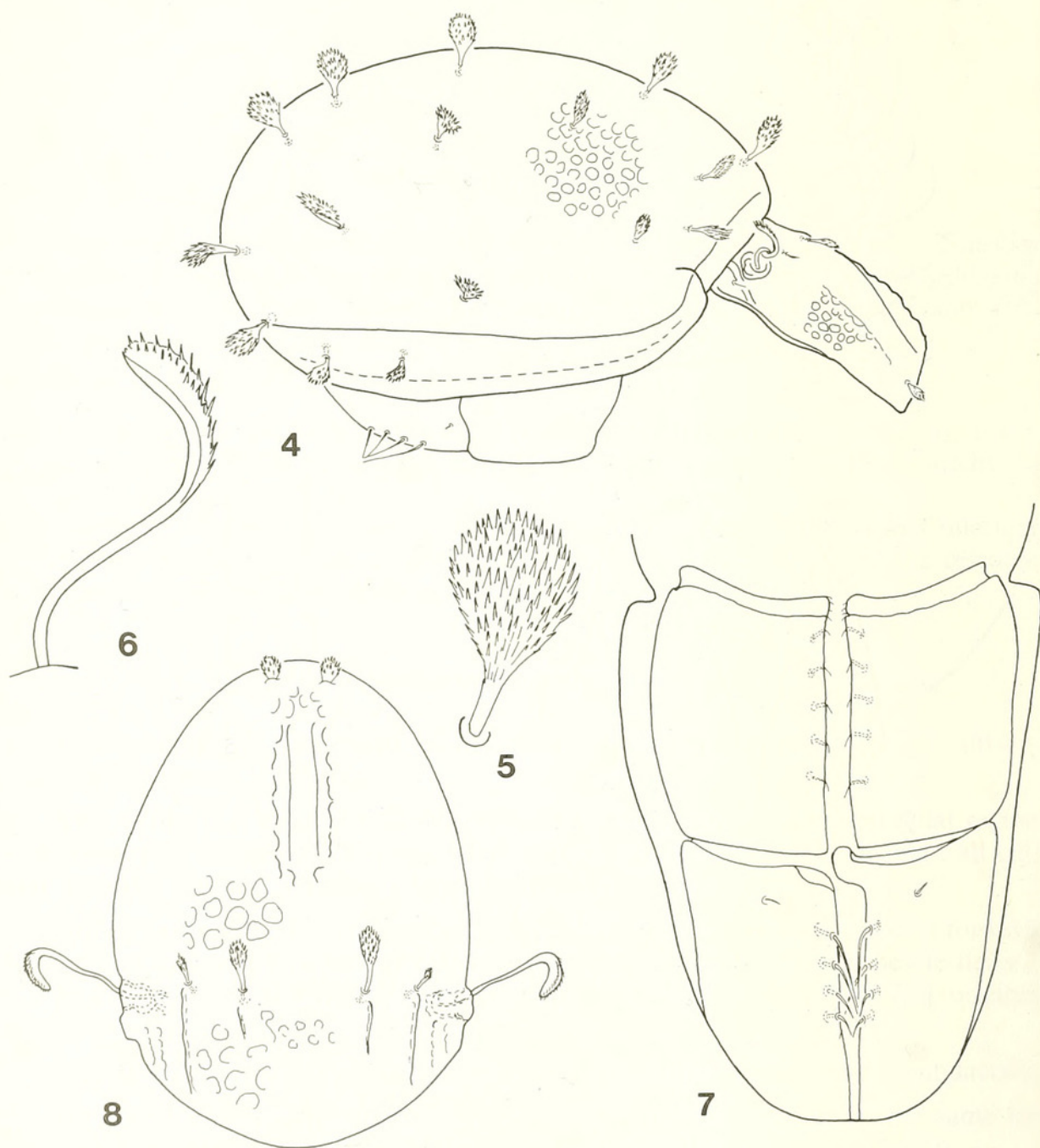
Measurements: Aspis length: 188–252 μ , notogastral length: 320–504 μ , notogastral height: 213–291 μ .

Aspis (Fig. 8): Medially a well separated ridge in lateral view. Surface with a polygonal sculpture, consisting of foveolae. Latter in front large, in basal part smaller and

weaker. Rostral hairs minute but round, lamellar and interlamellar ones clavate, all hairs well aciculated. Sensillus (Fig. 6) very long, thin, curved, its crescentiform distal half ciliated.

Notogaster (Fig. 4): Notogaster with a layer of secretion admixed with soil granules and other matter. Surface with a strong foveolated sculpture. All hairs disciform, dilated, aciculated, their stalk long.

Anogenital region (Fig. 7): Inner margin of anal plate with 4 pairs of hairs immediately following one another, first hair much longer than the last one, ad_1 minute.



FIGS. 4-8.

Steganacarus echinodiscus sp. n.

4: lateral side; 5: seta h_1 ; 6: sensillus; 7: anogenital region; 8: aspis.

All legs with one claw, inner margin with 2 small teeth.

Material examined: Holotypus: Pel-74/4; 5 paratypes from the same sample. Holotypus and 3 paratypes: MHNG; 2 paratypes: HNHM (550-PO-79).

Remarks: Characterized mainly by the dorsal hairs and the relation of the hairs on the anoadanal plate. The new species resembles *Steganacarus platakisi* Mahunka, 1977 group and not the *phyllophorus* group, since this species has not a collar-shaped border on the anterior part of the notogaster.

Oribotritia hauseri sp. n.

Measurements: Aspis length: 390–420 μ , notogaster length: 804–960 μ , notogaster height: 630–720 μ .

Aspis (Fig. 9): Aspis hairs minute, thin, curved, lamellar hairs shorter than one-quarter distance between lamellar and rostral hairs. Sensillus narrow, lanceolate, widest medially, laterally denticulated. Prodorsum with 2 equally thick lateral keels, both reaching the lateral border of the aspis.

Notogaster (Fig. 9): 14 pairs of thin, short, hardly visible curved notogastral hairs present. Hairs c_1 only half as long as distance between c_1 and collar line.

Anogenital region (Fig. 11): Nine pairs of genital hairs (5 bigger and 4 smaller ones). Anal plates narrowed, 1 pair of anal, 3 pairs of adanal hairs present. *Sinus terminalis* well visible, cuticle around it much lighter.

All legs tridactylous.

Material examined: Holotypus: Pel-74/4; 16 paratypes: from the same sample. Holotypus and 10 paratypes: MHNG; 6 paratypes: HNHM (551-PO-79).

Remarks: The new species stands nearest to *Oribotritia berlesei* Michael, 1898, *O. hermanni* Grandjean, 1967 and *O. mollis* Aoki, 1959 owing to its aggenital and anal hairs (2 pairs of aggenital, 1 pair of anal hairs). However *O. mollis* has only 5, the other two species have 7 or 8 genital hairs, but they differ by the length and the form of the notogastral hairs.

Brachychochthonius variabilis sp. n.

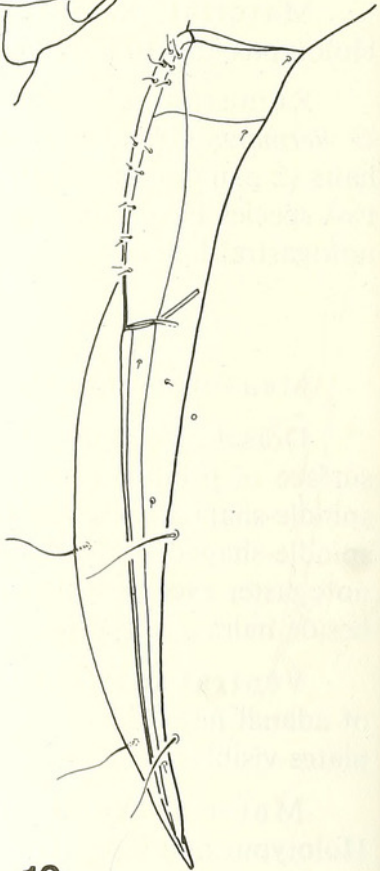
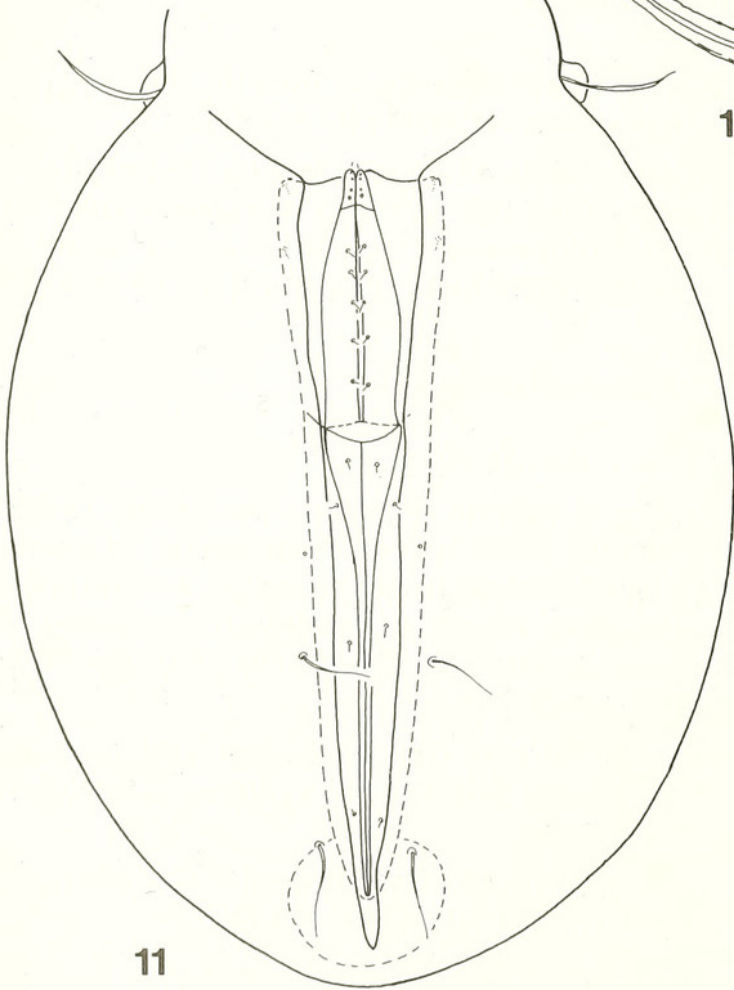
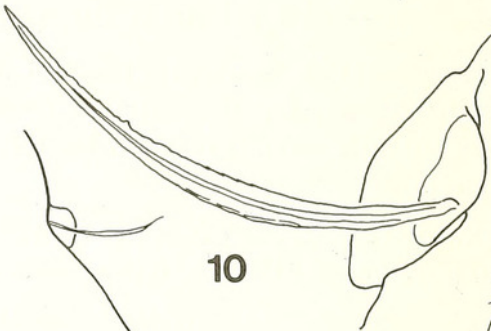
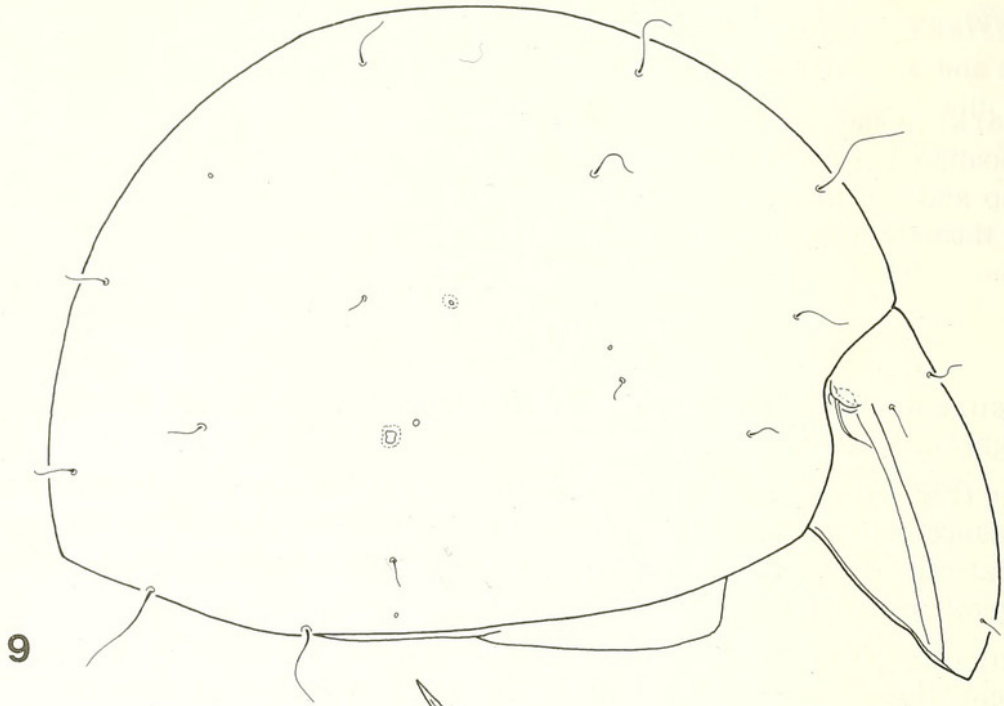
Measurements: Length: 180–189 μ , width: 91–100 μ .

Dorsal side (Fig. 13): Lateral margins of rostrum with some weak teeth. Dorsal surface of prodorsum with a typical sculpture. Hairs of prodorsum weakly thickened, spindle-shaped, well visibly bilaterally ciliated. Notogastral hairs similar, too. Sensillus spindle-shaped, its surface with 6–8 cilia in one row. Medial fields of Na-segment of notogaster excepting first pair of fields fused. Second pair of fields only partly, the fields beside hairs c_1 fused too. Ring laterally open.

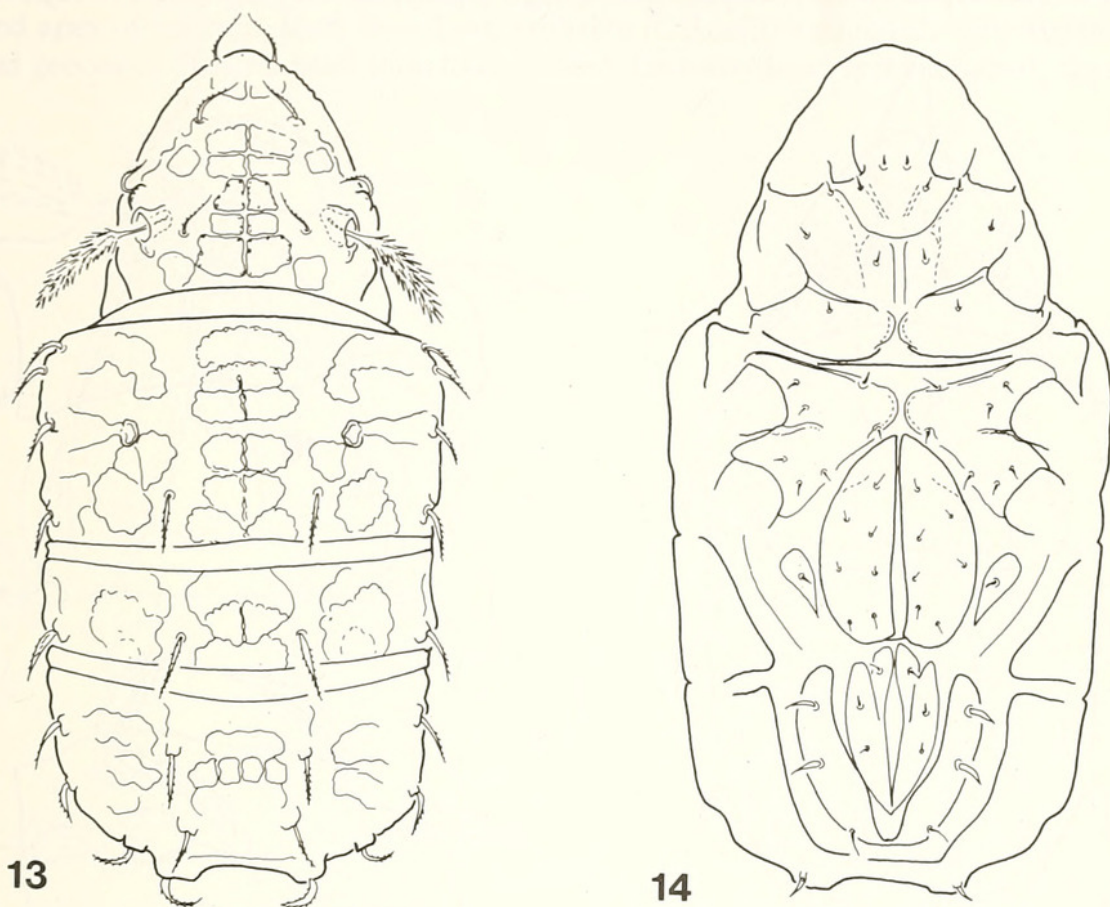
Ventral side (Fig. 14): Highly resembling to basic type of genus, however, two pairs of adanal hairs thickened, especially in their basal part. Only two pairs of suprapleural plates visible.

Material examined: Holotypus: Kar-79/1a; 15 paratypes from the same sample. Holotypus and 9 paratypes: MHNG, 6 paratypes: HNHM (492-PO-79).

Remarks: The taxonomic position and the relation of the new species is problematic, because it has only two well visible pairs of suprapleural plates and the shape



of the epimeres and anoadanal plates is similar to that of the type-species of genus *Brachychthonius* (see MORITZ 1976: p. 260). But the adanal hairs are distinctly broadened; therefore it may be included provisionally into the genus *Brachychochthonius* Jacot, 1938.



FIGS. 13-14.

Brachychochthonius variabilis sp. n.

13: dorsal side; 14: ventral side.

***Liochthonius phitosi* sp. n.**

Measurements: Length: 207-213 μ , width: 106-113 μ .

Dorsal side (Fig. 15): Rostral and especially interlamellar hairs thin, their velum hardly, or not at all ciliated or split. Lamellar and interlamellar hairs much broader, especially latter very long. Head of sensillus broad, cilia long, well separated, in each

FIGS. 9-12.

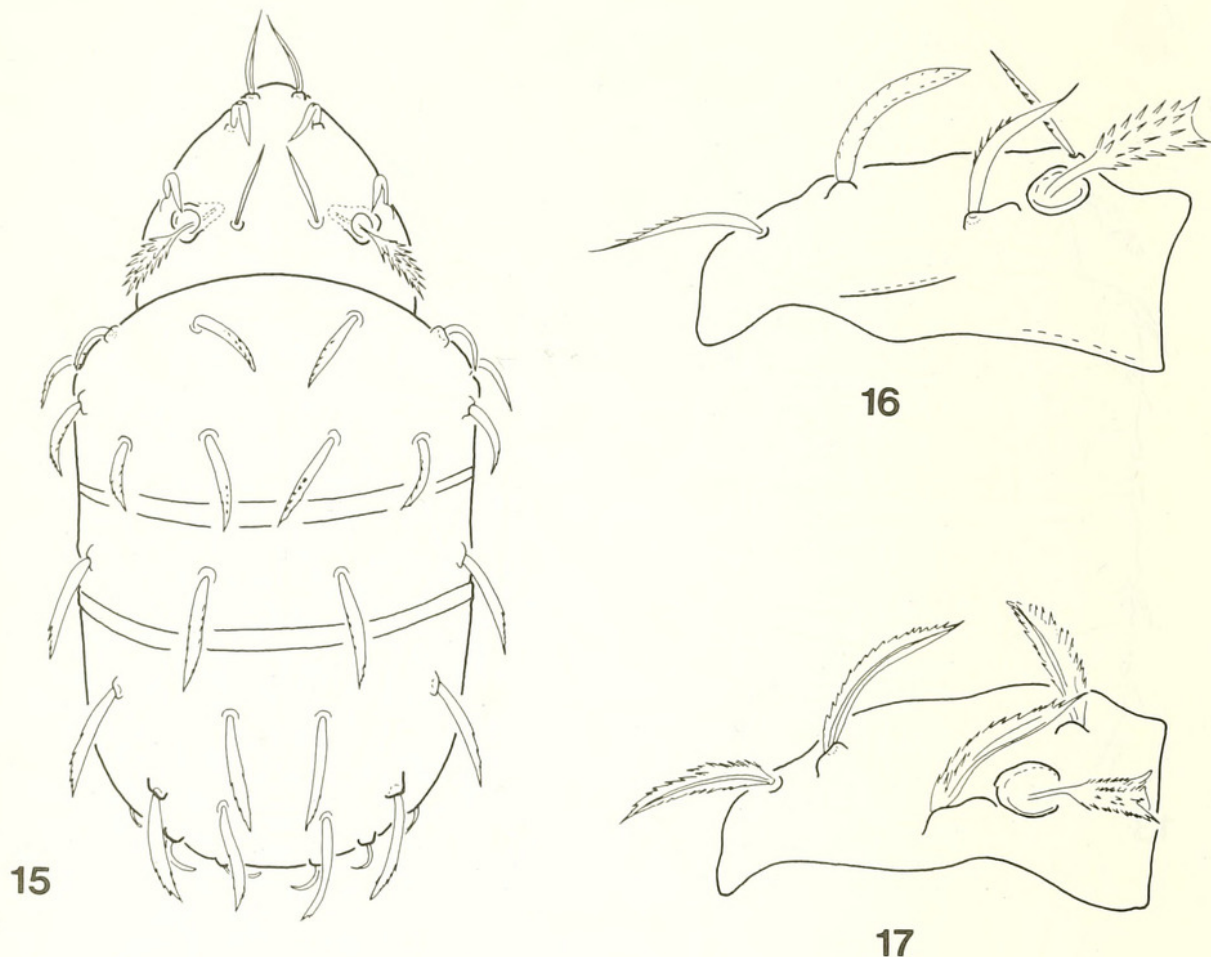
Oribotritia hauseri sp. n.

9: lateral side; 10: sensillus; 11: anogenital region;
12: genital and anal plates from lateral side.

longitudinal row 6-7 present. Hairs of notogaster thin, comparatively short, hardly ciliated. Velum not or hardly visible. Hairs e_1 not reaching insertion point of hairs f_1 .

Ventral side: Similar to that of related species.

Material examined: Holotypus: Kar-79/1a; 13 ex. paratypes: from the same sample. Holotypus and 8 paratypes: MHNG, 5 paratypes: HNHM (491-PO-79).



FIGS. 15-17.

Liochthonius phitosi sp. n. 15: dorsal side; 16: prodorsum from lateral side; Fig. 17: *Liochthonius evansi* (Forssl., 1958); 17: prodorsum from lateral side.

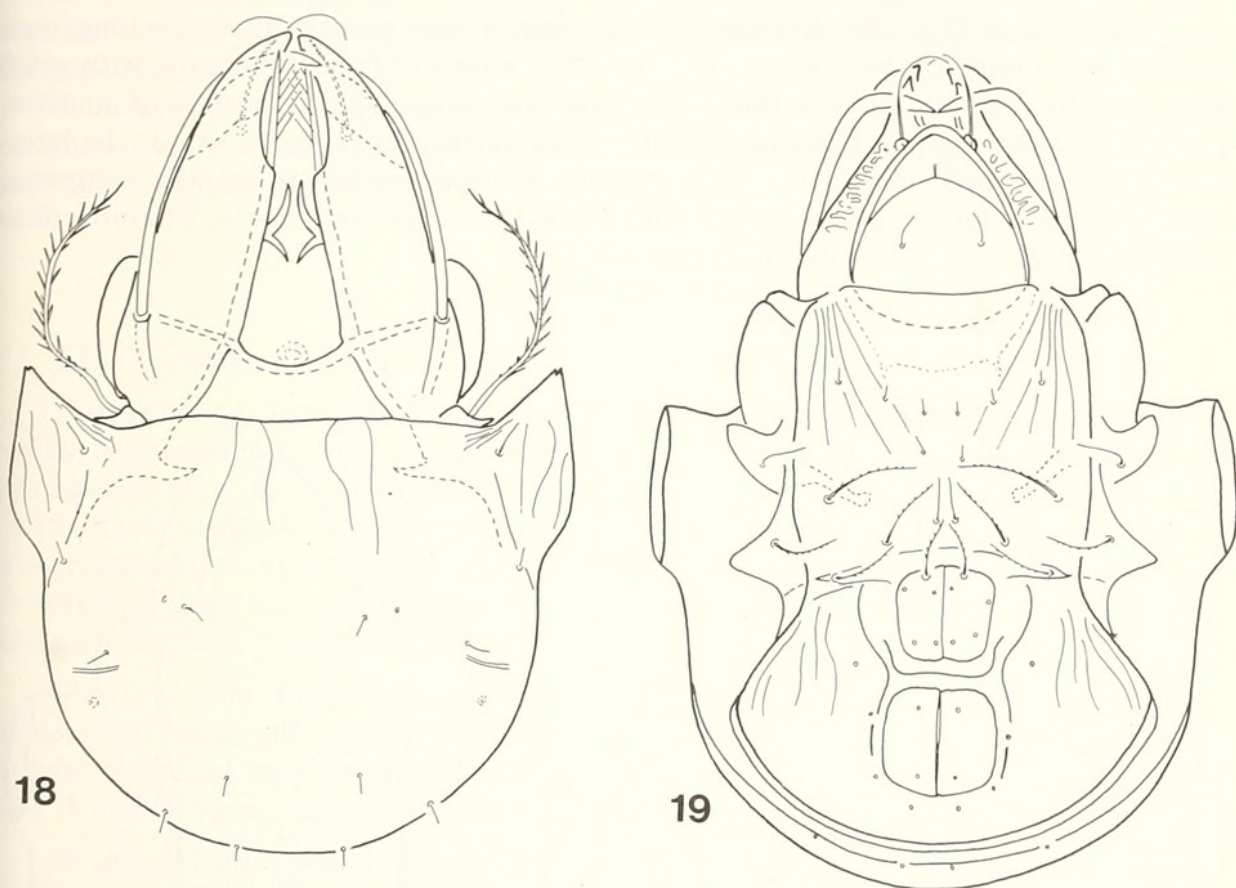
Remarks: A survey of the species belonging in the *horridus* species-group was given first by MAHUNKA (1969); later MORITZ (1976) revised it again in his monograph and synonymized *Liochthonius forsslundi* Mahunka, 1969 and *L. evansi* Forsslund, 1958. The new species stands closest to *L. evansi*, however this species is much smaller ($155-182,5 \times 82,5-103,7 \mu$) than the specimens from Greece. In the new species the rostral and first of all the interlamellar hairs are very thin and without velum, their shape is not similar to that of notogastral hairs. These latter are much shorter and thinner than the similar hairs of *L. evansi*.

I dedicate this new species to Prof. D. Phitos, Director of the Botanical Institute of the University in Patras, in recognition of this constant and generous support of Dr. Hauser's field work in Greece.

Berlesezetes cuspidatus sp. n.

Measurements: Length: 208–222 μ , width: 147–159 μ .

Dorsal side (Fig. 18): Lamellae long, although their cusps bend back, reaching beyond apex of rostrum, from dorsal side covering it. Rostrum rounded, with two horn-shaped processes. Rostral hairs thin, long, curved. Lamellar hairs spindleshaped, charac-



FIGS. 18–19.

Berlesezetes cuspidatus sp. n. 18: dorsal side; 19: ventral side.

teristic for genus, with long cilia. Interlamellar hairs arising on lateral margin of lamellae, very thick, their end blunt, bent under lamellae. In interlamellar region some branching, curved, pointed apophysis present, but covered with secretion. Sensillus densely ciliated. 2–3 weak, longitudinal lines decurrent posteriorad from dorsosejugal suture. 7 + 2 short notogastral hairs present. Pteromorphae with some rugae, laterally sharply pointed.

Ventral side (Fig. 19): Surface of pedotecta and prodorsum laterally striated. Epimeral region displaying some lines directed from pedotecta 1 to median part of body. Some lines exist in anogenital region, too. Epimeral hairs, excepting 1a, 1b, 1c, 2a and 3a long, directed inwards. First pair of genital hairs long, rest minute.

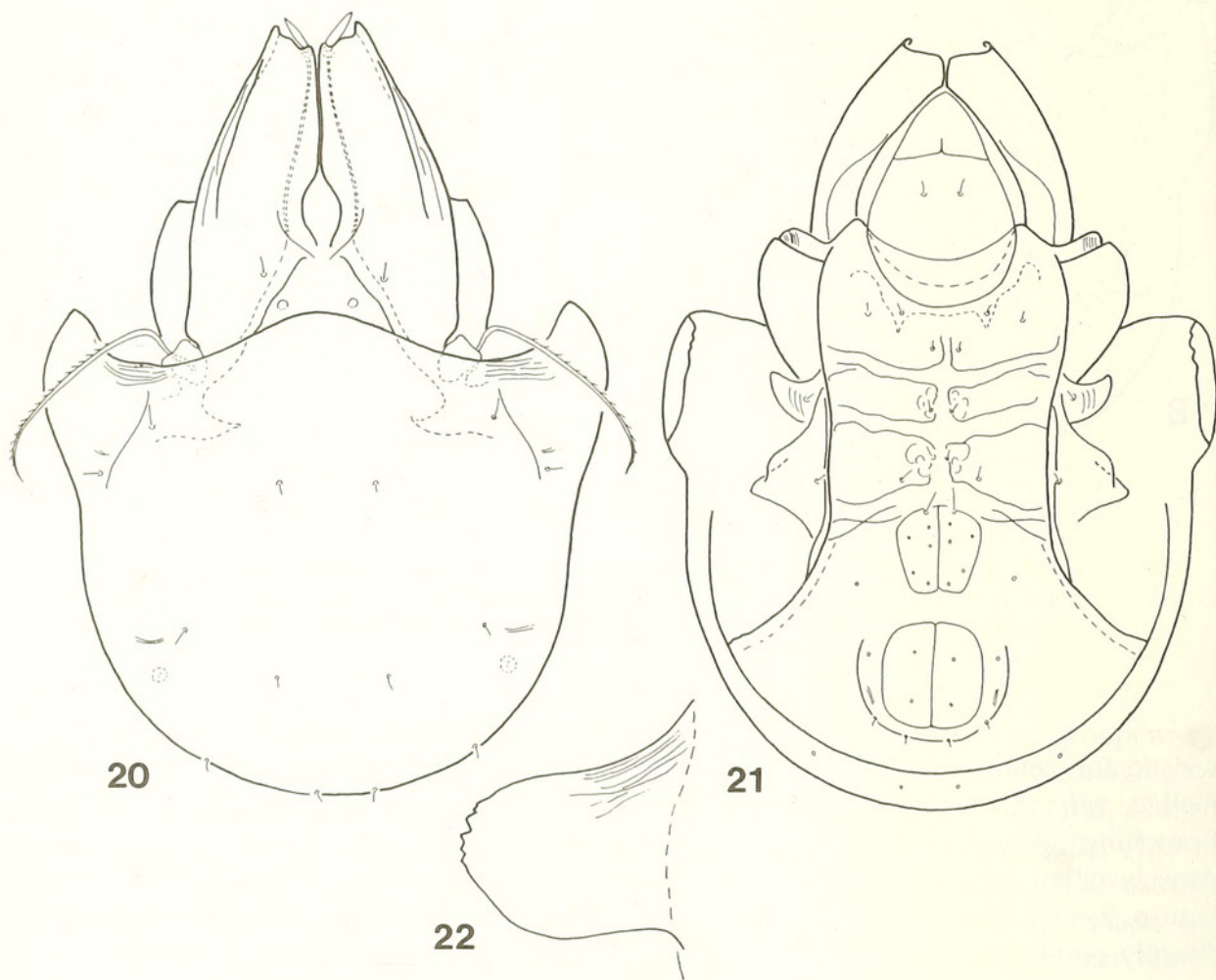
Material examined: Holotypus: The-76/25; 3 ex. paratypes: from the same sample. Holotypus and 2 paratypes: MHNG; 1 paratype: HNHM (493-PO-79).

Remarks: The lamellae of the known species of this genus in front bluntly cut or with a small cuspis laterally. The new species is distinguished from its congeners by the long, bent cuspis.

***Microzetes sestasi* sp. n.**

Measurements: Length: 252–267 μ , width: 189–204 μ .

Dorsal side (Fig. 20): Rostrum conical, rostral hairs minute. Lamellae long, convergent, extending beyond apex of rostrum. Their cuspis obliquely truncate, with small apex laterally. Hairs *le* strongly thickened, spiniform, originating on surface of lamellae, near to its inner margin, reaching laterally. Interlamellar hairs short, simple. In interlamellar region one pair of tubercles present. Sensillus reclinate, apically recurving, heavily ciliated. Surface of notogaster with a hollow, its surface smooth. Pteromorphae with some rugae, apically with many teeth (Fig. 22).



FIGS. 20–22.

Microzetes sestasi sp. n.

20: dorsal side; 21: ventral side; 22: pteromorpha from lateral side.

Ventral side (Fig. 21): Epimeral plate divided by three transversal and sternal apodemes. Pedotecta 2–3 striated. Prodorsum with polygonal sculpture laterally. Epimeral hairs minute. Hairs of anogenital region excepting hairs g_1 also minute. Anal plates framed by a thin semicircular chitin line.

Material examined: Holotypus: The-76/14; 2 paratypes: from the same locality. Holotypus and 1 paratype MHNG, 1 paratype: HNHM (494-PO-79).

Remarks: The new species belongs in a species-group which is characterized by a thin, ciliated sensillus and a reduced outer lamellar apex. Among these species *N. baloghi* Jeleva, 1962 has spherical lamellar hairs, *N. caucasicus* Krivolutsky, 1967 and *N. asiaticus* Krivolutsky, 1975 have thin, simple lamellar hairs, so the new species is readily distinguishable from all.

I dedicate this new species to Anton Sestas, an old farmer in Spilia, who guided several times Dr. Hauser to different caves of the Ossa mountains as he did, half a century ago, with Leo Weirather from Innsbruck.

***Machuella hellenica* sp. n.**

Measurements: Length: 205–217 μ , width: 106–111 μ .

Dorsal side (Fig. 26): Prodorsum elongated, rostrum coniform. Rostral and lamellar hairs arising in frontal third of prodorsum, far of from interlamellar ones. They are equally long, hairs *in* a little longer. Pedicel of sensillus anteriorly incrassate, its clavus finely roughened. Notogaster with one line decurrent from dorsosejugal margin posteriorad. Hairs of notogaster comparatively long, distance of hairs *ti* and *ms* similar to length of these hairs. Only insertional point of hairs *ta* recognizable, *te*, *ti*, *ms* and r_2 arising in a nearly straight longitudinal line.

Ventral side (Fig. 27): Epimeral region with secretion, however, insertional points of epimeral hairs well visible. Posterior margin of epimeral region with 4 pairs of hairs. 5 pairs of genital hairs present, first three pairs very long, much longer, than the other two. 1 pair of aggenital, 2 pairs of anal and 3 pairs of adanal hairs also long.

Material examined: Holotypus: The-76/3; 3 paratypes: from the same locality. Holotypus and 2 paratypes: MHNG, 1 paratype: HNHM (495-PO-79).

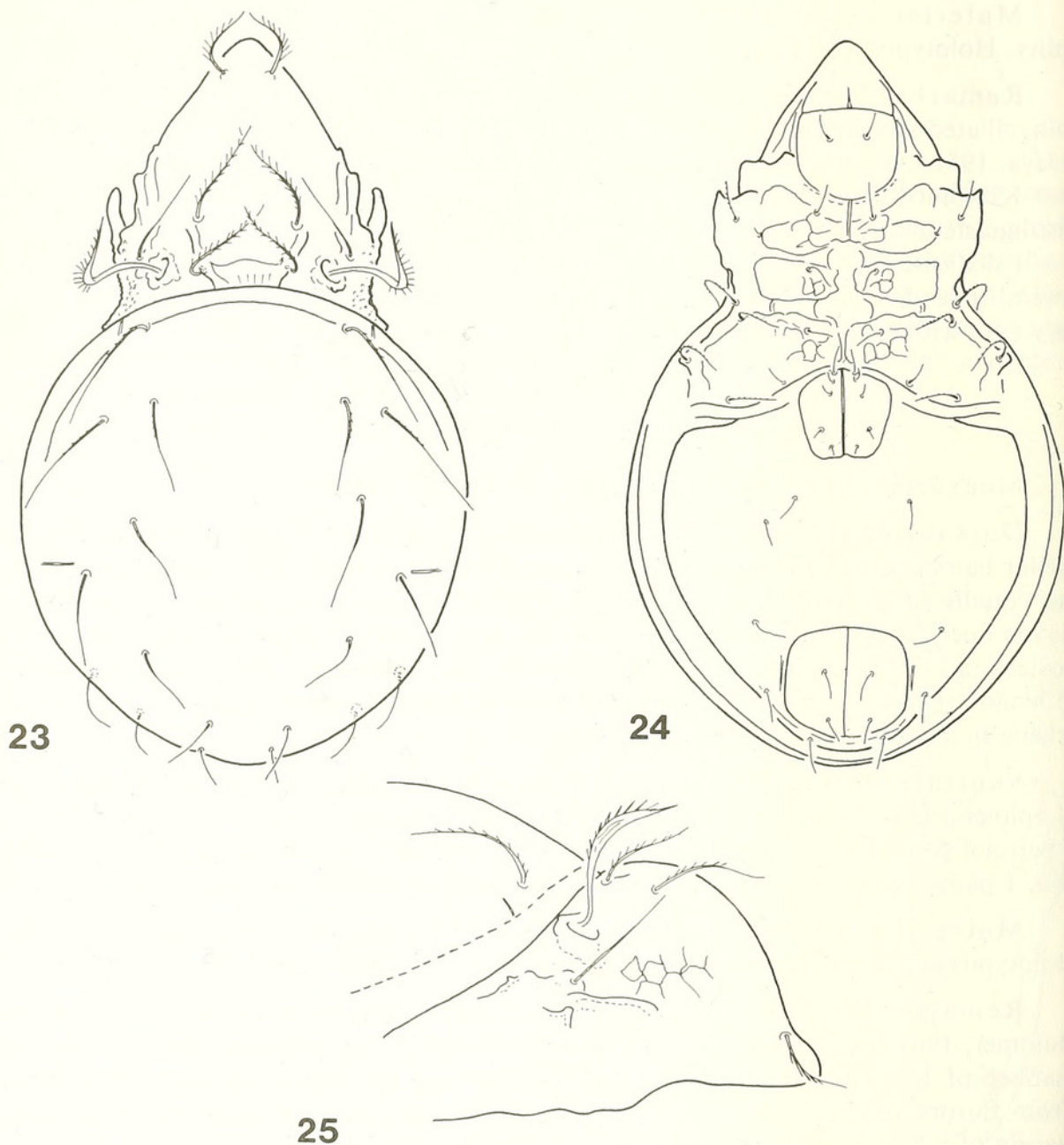
Remarks: MAHUNKA (1977) discussed all known and the closely related *Machuella* Hammer, 1961 species. The species are characterized by the epimeral setal formula, the number of longitudinal lines of the notogaster and the length of notogastral hairs. From Europe only one species was known, which has 8 pairs of setae on the posterior margin of the epimeral region. Among the other species only *M. ventrisetosa* Hammer, 1961 from Peru has one notogastral line, but its genital hairs are very short and among the prodorsal hairs the interlamellar hairs being the shortest. The new species is characterized by the very long genital hairs, and among the prodorsal hairs the interlamellar ones are longest.

***Oppia gibber* sp. n.**

Measurements: Length: 315–349 μ , width: 189–204 μ .

Dorsal side (Fig. 23): Prodorsum extremely convex (Fig. 25) in frontal view very arched. Apex of rostrum weakly incised, invisible in dorsal view. Rostral hairs arising on dorsal surface of prodorsum, having very long cilia. Lamellar and interlamellar hairs

very similar. Among prodorsal hairs *exa* being the longest, but almost smooth. Prodorsum with strong costulae, directed from bothridia to insertional points of lamellar hairs. Sensillus spindle-shaped, its outer margin with long cilia. Lateral part of prodorsum



FIGS. 23–25.

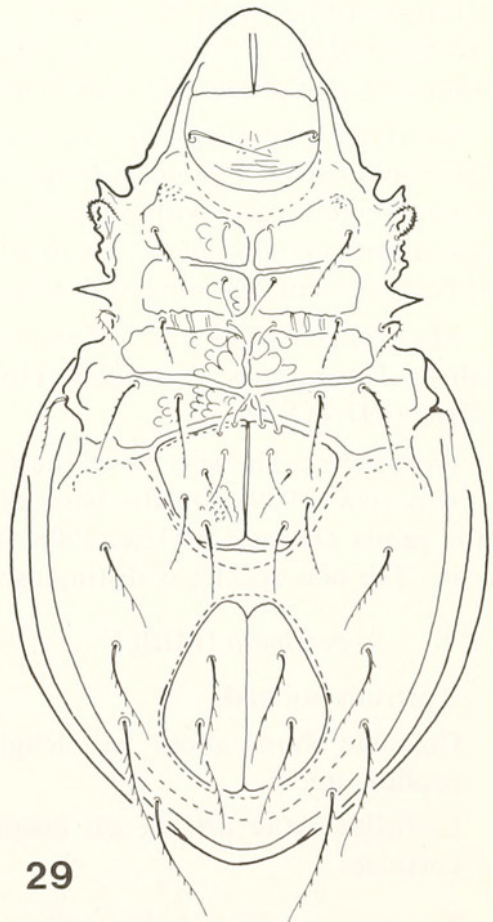
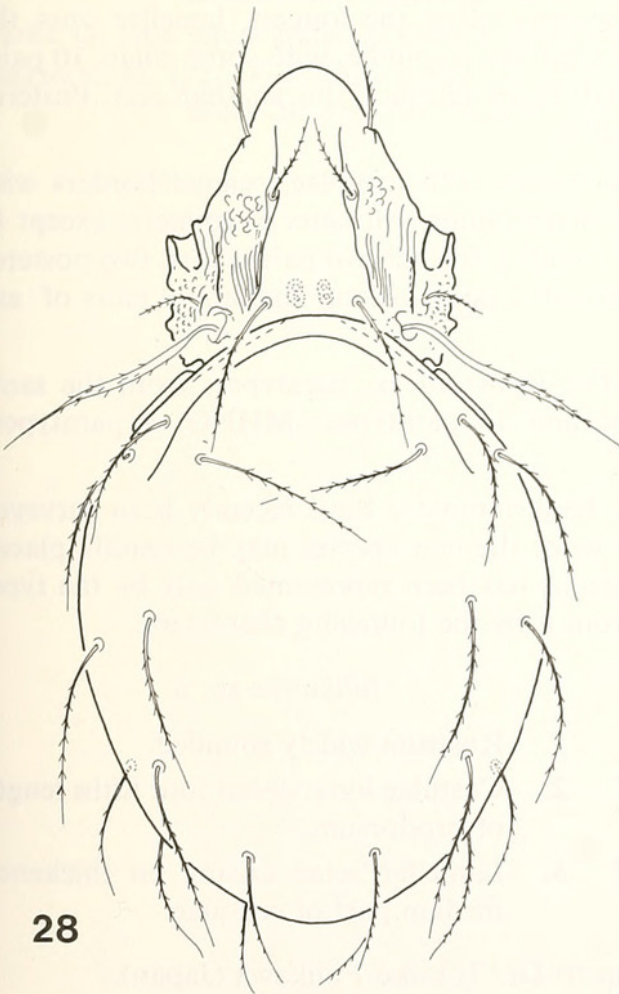
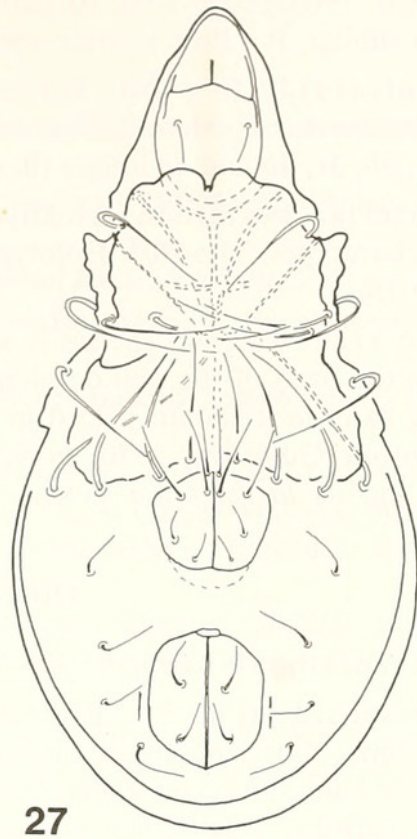
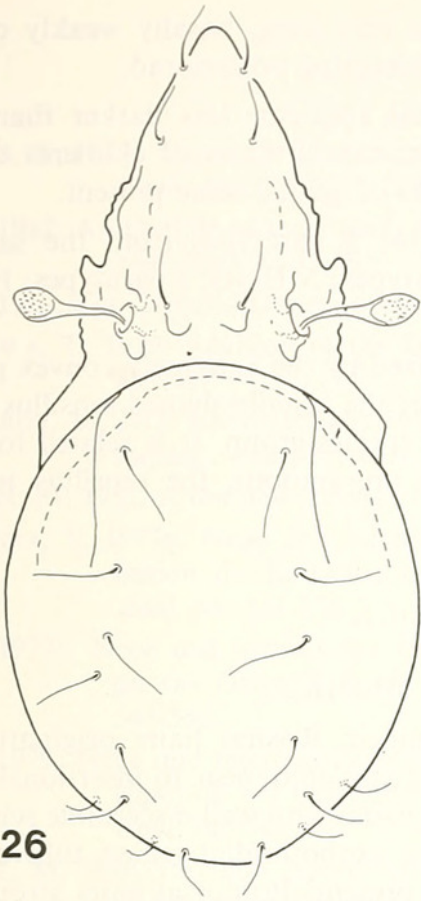
Oppia gibber sp. n.

23: dorsal side; 24: ventral side; 25: prodorsum from lateral side.

FIGS. 26–29.

Machuella hellenica sp. n.; 26: dorsal side; 27: ventral side;

Figs. 28–29: *Oribella fujikawae* sp. n.; 28: dorsal side; 29: ventral side.



granulated. Notogaster with 10 pairs of hairs, *ta* very long, basally weakly ciliated. Hairs *te* similar, *ti* a little shorter, rest gradually shortening posteriorad.

Ventral side (Fig. 24): Border above sternal apodeme less darker than those above transversal apodemes. This region well framed. All hairs of epimeres ciliated, hairs *1c*, *3b*, *3c*, *4b* and *4c* longer than other. 5 pairs of genital setae present.

Material examined: Holotypus: The-76/14; 5 paratypes from the same locality; 3 paratypes: The-76/3. Holotypus and 5 paratypes: MHNG, 3 paratypes: HNHN (496-PO-79).

Remarks: The new species is well characterized by the extremely convex prodorsum. On the basis of the well developed costulae, of the spindle-shaped sensillus and of the long hairs *ta* it should be placed in the *decipiens* species-group. It is related to *Oppia mastigophora* Golosova, 1970, however, its hairs are smooth, the sensillus is much longer, and its *ta* hairs are short.

Oribella fujikawae sp. n.

Measurements: Length: 363–378 μ , width: 208–216 μ .

Dorsal side (Fig. 28): Rostrum widely rounded. Rostral hairs originating laterally, from a short apophysis. Costulae long, basal part thin, near to insertional points of lamellar hairs thickened. Lateral surface of prodorsum with well discernible sculpture, between lamellae longitudinal striation perceptible, exobothridial region tuberculated. In interlamellar region one pair of large foveolae present. Prodorsal hairs strong, ciliated. Among prodorsal hairs interlamellar ones being the longest, lamellar ones the shortest. Sensillus long, in the middle thickened like a spindle, with some ciliae. 10 pairs of notogastral hairs present, all well ciliated. Hairs *ta* much shorter than rest. Postero-marginal hairs also shorter than hairs *r* and *ms*.

Ventral side (Fig. 29): Surface of epimeres with foveolae, sejugal borders with longitudinal ridges. Pedotecta long, with 2 sharp points. All hairs of epimeres except *1c* ciliated. Genital plates with sculpture, hairs ciliated, frontal two pairs short, two postero-marginal pairs much longer. 1 pair of aggenital, 2 pairs of long anal and 3 pairs of ad-anal hairs present. All long and ciliated.

Material examined: Holotypus: The-76/14; 19 ex. paratypes: from the same locality; 2 paratypes: Kar-79/5. Holotype and 13 paratypes: MHNG, 9 paratypes: HNHN (497-PO-79).

Remarks: The species of the family Banksinomidae have recently been surveyed by FUJIKAWA (1979). On the basis of this work the new species may be readily placed in the genus *Oribella* Berlese, 1908. This genus has been represented only by the type-species. The new species is distinguished from it by the following characters:

pectinata (Mich.)

1. Rostrum pointed.
2. Costulae short, about half length of prodorsum.
3. Lamellar setae arising on cuspis of costulae.

fujikawae sp. n.

1. Rostrum widely rounded.
2. Costulae long, about four fifths length of prodorsum.
3. Lamellar setae arising on thickened median part of costulae.

The new species is dedicated in honour to Dr. Tokuko Fujikawa (Japan).

REFERENCES

- BALOGH, J. 1937. *Oppia dorni* spec. nov., eine neue Moosmilben-Art aus den Südkarpaten. *Zool. Anz.* 119: 221-223.
- 1962. An Outline of the Family Microzetidae Grandjean, 1936 (Acari: Oribatei). *Opusc. zool. Bpst.* 4: 35-58.
- 1972. The Oribatid Genera of the World. *Akadémiai Kiadó, Budapest*, 188 pp.
- FUJIKAWA, T. 1979. Revision of the family Banksinomidae (Acari: Oribatei). *Acarologia* 30: 433-467.
- GHILJAROV, M. i D. KRIVOLUTSKY. 1975. Opregyelitelj obitajuscseh pocsvé klescselj (Sarcoptiformes). *Izdatylsztvo Nauka, Moszkva*, 491 pp.
- HAMMER, M. 1961. A few new species of Oribatids from southern Italy. *Zool. Anz.* 166: 113-119.
- MAHUNKA, S. 1977a. Neue und interessante Milben aus dem Genfer Museum. XX. Contribution to the Oribatid Fauna of S.E. Asia (Acari, Oribatida). *Revue suisse Zool.* 84: 247-274.
- 1977b. Neue und interessante Milben aus dem Genfer Museum. XXXIII. Recent data on the Oribatid fauna of Greece (Acari: Oribatida). *Revue suisse Zool.* 84: 541-556.
- 1979. Neue und interessante Milben aus dem Genfer Museum XLI. Vierter Beitrag zur Kenntnis der Oribatiden-Fauna Griechenlands (Acari: Oribatida). *Revue suisse Zool.* 86: 541-571.
- MORITZ, M. 1976. Revision der europäischen Gattungen und Arten der Familie Brachychthoniidae (Acari, Oribatei). Teil 1-2. *Mitt. zool. Mus. Berlin* 52: 27-136; 227-319.
- PAOLI, G. 1908. Monografia del Genera *Dameosoma* Berl. e generi affini. *Redia* 5: 31-91.
- SELLNICK, M. 1927. *Platyliodes* Berlese. — Acari (Lötzen) Nr. 4, 15.III.1927. pp. 23-29. Nachdruck in: *Abh. Ber. Naturk. Mus.-Forschstelle, Görlitz* 44: 25-33 (1969).
-



Mahunka, S. 1982. "Neue und interessante Milben aus dem Genfer Museum XXXIX. Fifth Contribution to the Oribatid Fauna of Greece (Acari: Oribatida)." *Revue suisse de zoologie* 89, 497–515. <https://doi.org/10.5962/bhl.part.82456>.

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