

New and interesting mites from the Geneva Museum LXXII : some anoetid and tarsonemid mites from the Cape Verde Islands (Acari)

Autor(en): **Mahunka, Sandor / Mahunka-Papp, Luise**

Objekttyp: **Article**

Zeitschrift: **Archives des sciences et compte rendu des séances de la Société**

Band (Jahr): **44 (1991)**

Heft 3: **Archives des Sciences**

PDF erstellt am: **23.07.2024**

Persistenter Link: <https://doi.org/10.5169/seals-740203>

Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.

Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.

Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

Ein Dienst der *ETH-Bibliothek*

ETH Zürich, Rämistrasse 101, 8092 Zürich, Schweiz, www.library.ethz.ch

NEW AND INTERESTING MITES FROM THE GENEVA MUSEUM LXXII. SOME ANOETID AND TARSONEMID MITES FROM THE CAPE VERDE ISLANDS (ACARI)

BY

Sandor MAHUNKA* and Luise MAHUNKA-PAPP*

ABSTRACT

New and interesting mites from the Geneva Museum LXXII. Some Anoetid and Tarsonemid mites from the Cape Verde Islands (Acari). – Three Anoetid and six Tarsonemid species are recorded originating from soil samples from the Cape Verde Islands. One species is new to science and necessitates the erection of a new genus: *Stercoranoetus harteni* gen. n., sp. n. A second species of this genus is *S. woolleyi* (Mahunka & Eraky, 1987) comb. n., transferred from *Histiostoma* Kramer, 1876.

RÉSUMÉ

Dans des échantillons de sol provenant des îles du Cap Vert, les auteurs ont trouvé trois espèces d'Anoetidés et six de Tarsonemidés (Acariens). Une espèce est nouvelle et nécessite la création d'un genre nouveau: *Stercoranoetus harteni* gen. n., sp. n.; une seconde espèce *Stercoranoetus woolleyi* (Mahunka & Eraky, 1987) comb. n., a été transférée du genre *Histiostoma* Kramer, 1876.

INTRODUCTION

The mite fauna of the Cape Verde Islands has been poorly explored and no data have been published – as far as we know – either for *Anoetidae* or for *Tarsonemina*. Studying soil samples collected by Mr. A. van Harten we have found some mites belonging to these taxa.

Owing to their geographical situation the fauna of the Cape Verde Islands is very interesting from a zoogeographical point of view (MAHUNKA 1987, 1991). The following list contains species found until now only in the Palaearctic or Holarctic Region (*Brennandania csibiae*, *Heterodispus pubescens*), and species which live in both temperate and tropical zone (*Histiostoma phyllophorus*, *Pseudopygmephorus tarsalis*). It is also very interesting, that the species most related to the new genus live in the tropics and in Europe.

We are very grateful to Dr. B. Hauser and Dr. C. Lienhard for allowing us to study this very interesting material deposited in the Muséum d'Histoire naturelle, Geneva.

LIST OF LOCALITIES

- 655: Santiago: São Jorge dos Orgãos, in litter, IX. 1983.
1532: Santiago: São Jorge dos Orgãos, in litter, I. 1986.

*Zoological Department, Hungarian Natural History Museum, Baross utca 13, H-1088 Budapest, Hungary.

- 1787: Santiago: São Jorge dos Orgãos, in litter, I. 1986.
 1804: Santiago: Santa Cruz, in litter, 28.III.1988.
 1809: Santiago: Ribeira de Charco, in litter, 6.V.1988.
 1837: Santiago: Achada Fazenda, in litter, 16.V.1988.
 1882: Santiago: Serra de Malagueta, in litter, 29.V.1988.

LIST OF SPECIES

ACARIDA Latreille, 1802
Anoetidae Oudemans, 1904

Stercoranoetus harteni gen. n., sp.n.

Localities: 1804, 1837, 1882.

Histiostoma phyllophorus (Oudemans, 1905)

A wide-spread species, extracted mostly from manure.

Locality: 1804: 2 specimens.

Glyphanoetus phyllotrichus (Berlese, 1881)

This species was described from dung, until now many authors published it also from manure and from animal excrement.

Locality: 655: 1 specimen.

TARSONEMINA Canestrini Fanzago, 1877
Pygmephoridae Cross, 1965

Pseudopygmephorus quadratus Ewing, 1909

A cosmopolitan species present wherever organic material – above all manure or dung – is accumulated.

Locality: 1809: 1 specimen.

Pseudopygmephorus tarsalis (Hirst, 1921)

A cosmopolitan (?) species. It is frequent in animal manure.

Localities: 1532: 2 specimens; 1809: 1 specimen; 1882: 1 specimen.

Microdispidae Cross, 1965

Brennandania csibiae Mahunka, 1981

So far it has been known only from Hungary and Greece (MAHUNKA, 1981).

Locality: 655: 1 specimen.

Brennandania silvestris (Jacot, 1936)

A common Holarctic species.

Locality: 655: 2 specimens.

Scutacaridae Oudemans, 1916

Heterodispus pubescens Mahunka, 1969

It was described from Hungary and known from here only.

Localities: 655: 4 specimens; 1882: 10 specimens.

Scutacarus longitarsus (Berlese, 1905)

Common in the Palaearctic Region, several localities also known in the tropical regions.

Locality: 655: 2 specimens.

DESCRIPTION

Stercoranoetus gen. n.

D i a g n o s i s : Family *Anoetidae*. Humeral part of hysterosoma anteriorly protruding, covering the posterolateral part of the propodosoma. Dorsal surface well ornamented. Infracapitulum normal, palps very short. Sejugal apodemes straight, posterior sternal apodeme fused with them. Legs 1 and 2 stout, joints short but wide. Tibia and genu of leg 1 with spiniform appendages, tibia and genu of leg 2 with longitudinal lateral edges. All legs with claws.

T y p e s p e c i e s : *Stercoranoetus harteni* sp. n.

R e m a r k s : The new genus is well characterized by the humeral apophysis and by the shape of legs 1 and 2. On this basis it belongs to the alliance of *Pteranoetus* Mahunka, 1978, however, the latter has a modified gnathosoma and completely different apodemes. A very similar configuration exists in an other recently described *Anoetidae* species (*Histiostoma woolleyi* Mahunka & Eraky, 1987), which has to be transferred to the new genus: *Stercoranoetus woolleyi* (Mahunka & Eraky, 1987) comb. n.

Stercoranoetus harteni sp. n.

M e a s u r e m e n t s . – Length: 155-165 µm, width: 118-125 µm.

D o r s a l s i d e (Fig. 1): Propodosoma very large, wide, trilobate anteriorly. Beside the sharp rostral apex two rounded lateral ones present; the rostral apex not longer than the others. Surface ornamented by polygonate pattern of arcuate lines. Both pairs of prodorsal setae straight, strong and erect; the inner pair originating only slightly anteriorly to the outer pair. Dorsosejugal region striate. Hysterosoma also very wide, its humeral part protruding forwards and covering the lateral part of propodosoma. Lateral part of hysterosoma also ornamented by scratched lines, like propodosoma, this pattern well observable also near posterior margin. Eleven pairs of notogastral setae present, five pairs of them very long, slightly dilated. The other setae simple, short, but well observable.

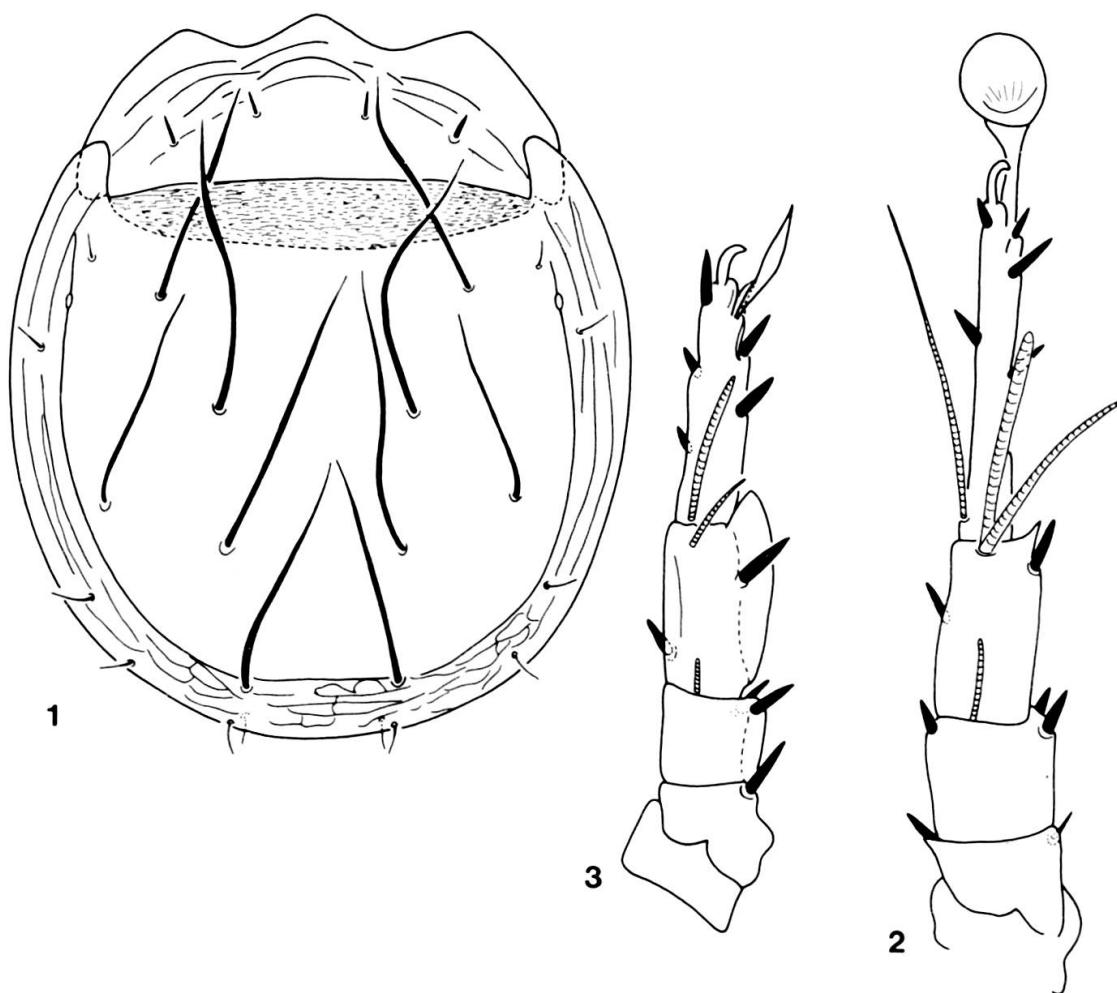
V e n t r a l s i d e (Fig. 4): Infracapitulum long, slightly dilated medially, palps very short. Anterior sternal apodeme ending free, *ap.* 2 fused with the straight jejugal apodemes. These latter with a small lateral arch. Posterior sternal apodeme also fused with the jejugal apodemes. Epimeral suckers well developed, *S*₁ originating above apodeme 2, *S*₂ far from apodeme 4. Adhering plate normal, ending far from posterior margin of the body.

L e g s : Legs 1 and 2 thick (Figs 2-3) all joints short and wide. Tibia and genu of leg 1 with a sharp spur on their outer corner (Fig. 7), tibia and genu of leg 2 with a sharp,

arched lateral edge. Tarsi of legs 3 (Fig. 5) and 4 (Fig. 6) each with a short, phylliform terminal seta.

M a t e r i a l e x a m i n e d : Holotype: 1804; 7 paratypes: from the same sample; 2 paratypes: 1837; 3 paratypes: 1882. Holotype and 8 paratype: MHNG¹; 4 paratypes (1331-PA-1988); HNHM².

R e m a r k s : *Stercoranoetus harteni* differs from *S. wooleyai* by the length of notogastral setae and by the form of the propodosoma.

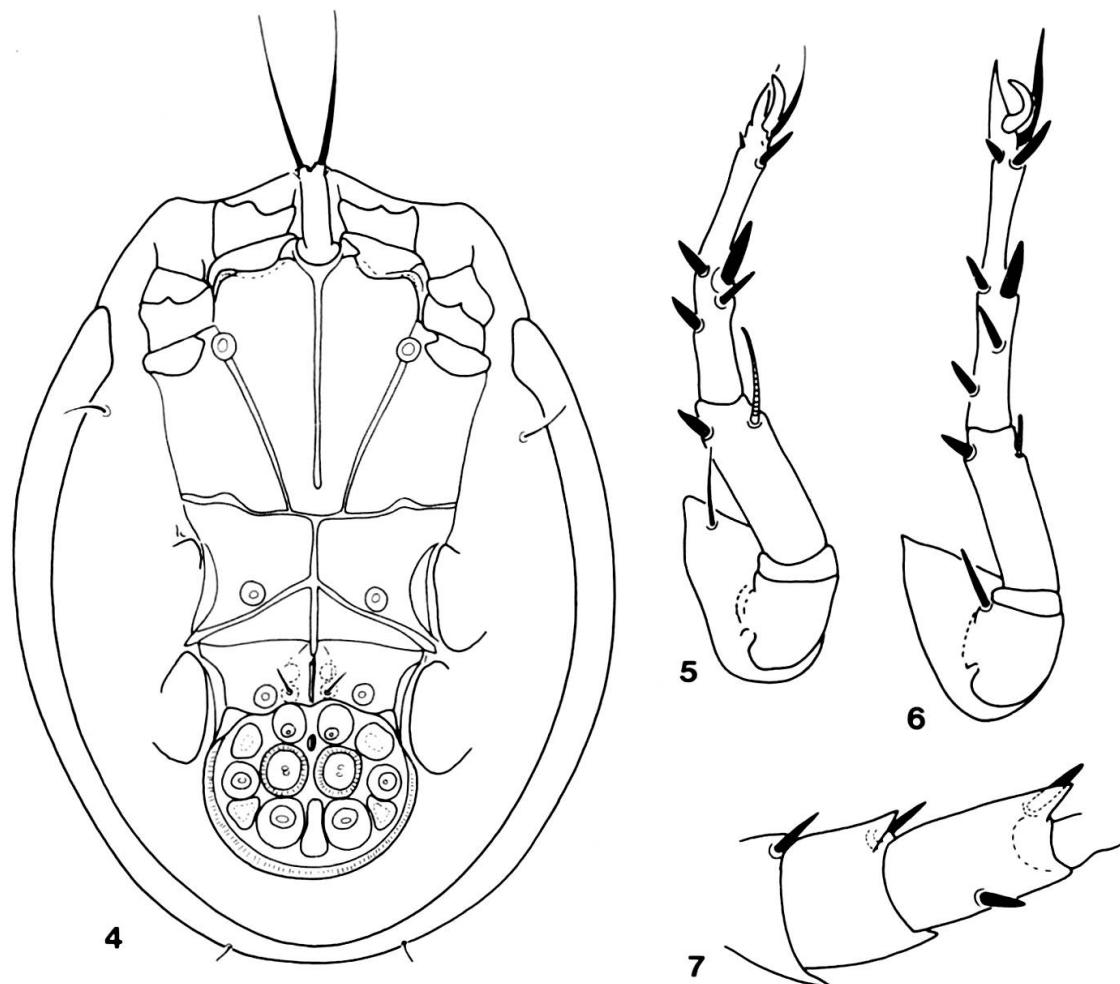


FIGS 1-3.

Stercoranoetus harteni gen. n., sp. n. - 1: dorsal side, 2: leg 1, 3: leg 2.

¹ MHNG = deposited in the Muséum d'Histoire naturelle, Genève.

² HNHM = deposited in the Hungarian Natural History Museum, Budapest, with the identification number of the specimens in the Collection of Arachnoidea.



FIGS 4-7.

Stercoranoetus harteni gen. n., sp. n. – 4: ventral side, 5: leg 3, 6: leg 4, 7: tiba and genu of leg 1 from ventral view.

REFERENCES

- MAHUNKA, S. 1972. Tetüatkák – Tarsonemina. *Fauna Hung.* 110: 215 pp.
- 1981. The Pygmephoroid Fauna of the Hortobágy National Park (Acari: Tarsonemida). In: MAHUNKA, S. (ed.): *The Fauna of the Hortobágy National Park*, Akadémiai Kiadó, Budapest, vol. 1: 343-370.
- 1987. Neue und interessante Milben aus dem Genfer Museum LVIII. Some primitive Oribatids from the Cape Verde Island (Acari: Oribatida). *Revue suisse Zool.* 94: 109-116.
- 1991. New and interesting mites from the Geneva Museum. LXX. Oribatids from the Cape Verde Islands II (Acari: Oribatida). *Revue suisse Zool.* 98: 567-580.
- MAHUNKA, S. & S. A. ERAKY 1987. Mites extracted from manure and silo (Acari: Acaridae, Anoetidae and Tarsonemina), I. *Fol. ent. hung.* 48: 129-140.

