

The Species of the Genus *Hamotegaeus* Balogh & Mahunka, 1969 (Oribatei, Cepheoidea)

By

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Abstract. Three species of the genus *Hamotegaeus* are described. A key to the four known species of the genus is given.

The genus *Hamotegaeus* was described by BALOGH and MAHUNKA in 1969 in the following way: "Ten pairs of notogastral and six pairs of genital setae. Two pairs of humeral tubercles. Bothrydia tubiform, pro- and exclinate. Seven pairs of basally incrassate, coniform, marginally located notogastral setae. Type-species: *Hamotegaeus granulatus* sp. n."

The new genus takes an intermediate position between the genera *Cepheus* C. L. KOCH, 1836, *Compactozetes* HAMMER, 1966 and *Ertzegaeus* BERLESE, 1917. Owing to the combination of characters given above, the new genus cannot be relegated to either one.

The subsequent brief description and the attached figures (Figs. 6–7) supply valuable information concerning the new taxon. The new species is represented by a single specimen collected in Brasilia, Manaus, Amazonas, 13. Nov. 1966. Berlese samples taken in the virgin forest, about 20 km from the city. Lower layer of litter (10 cm), decaying leaves interwoven with hyphae. Since the original description no other datum has been published.

After having examined a large oribatid material (several ten thousands of specimens) only four exemplars of *Hamotegaeus* came forward from three localities. Peculiarly enough, these four specimens represent three new species! This extraordinary circumstance could possibly be explained by the fact that the habitat of the way of life of the *Hamotegaeus* species is rather special. The examined material of oribatids from South America derives mostly from litter, moss growing on trunks of tree, humus, but a smaller proportion derives from the hanging soil of epiphytic plants living on trees, and from the fauna of the lower canopy, shrub level of mountain forest and moss forest; in the latter place an

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umbrella was extensively used. The former materials were extracted by the help of Berlese funnels at room temperature. Apparently, neither the listed localities nor the Berlese funnels are suitable for the recovery of *Hamotegaeus* species.

The so far collected 5 *Hamotegaeus* exemplars belong to 4 species. The species, as it will be unambiguously seen in the following, can be clearly differentiated from one another.

The goal of the present contribution is to give a brief description of the species belonging in the genus *Hamotegaeus* and to call the attention of oribatidologists to these species having such a peculiar way of occurrence.

Hamotegaeus longiseta sp. n.

(Figs. 1–3)

Length 836 μm , width 685 μm .

Prodorsum: Sensillus long, straight, slightly lanceolate with a pointed tip; smooth. Interlamellar setae broken, their alveoli near to dorsosejugal suture. Lamellar and rostral setae long, smooth, directed interiorad. Rostrum rotundate. Lamellae broad, with obliquely truncated cuspis and with narrow translamella. Near to dorsosejugal suture, between interlamellar alveoli 8–9 evanescent dark spots arranged in a transversal row.

Notogaster: 7 pairs of notogastral setae in submarginal, 3 pairs of notogastral setae in postero-marginal position. The first pair of notogastral setae (setae tu or c_1 ?) originated between the protruding bothridium and the humeral appendage in a narrow incisure and long: almost as long as the length of the incisure; the last (7th!) notogastral setae originated near to each other; notogastral setae 2–7 each on a small chitinous apophysis. The three pairs of postermarginal setae (setae p_1 , p_2 and p_3) originated ventrally. The first pair of submarginal setae (situated between the bothridium and humeral appendage) setiform, straight, the 2nd to 7th pairs at their basis thick, then gradually becoming thinner, with a long, pointed tip. Setae p_1 straight, parallel, p_2 and p_3 short, fine, curved. Ventral side: Epimeral setae long and fine. 6 pairs of long, fine genital, 1 pair of aggenital, 2 pairs of anal, 3 pairs of adanal setae. The first pair of anal setae originated near to anterior and exterior margin, the second one far posteriorly near to posterior and interior margin of anal plate. Setae adanales in adanal position: the anterior pair originated at level with the first anal, the posterior pair with the second anal setae.

Locus typicus: Columbia, E. Cordilles at Monterredondo, rain forest, 1300 m. Habitat: litter. Distribution: only the type-locality known.

Holotype: one exemplar.

Hamotegaeus breviseta sp. n.

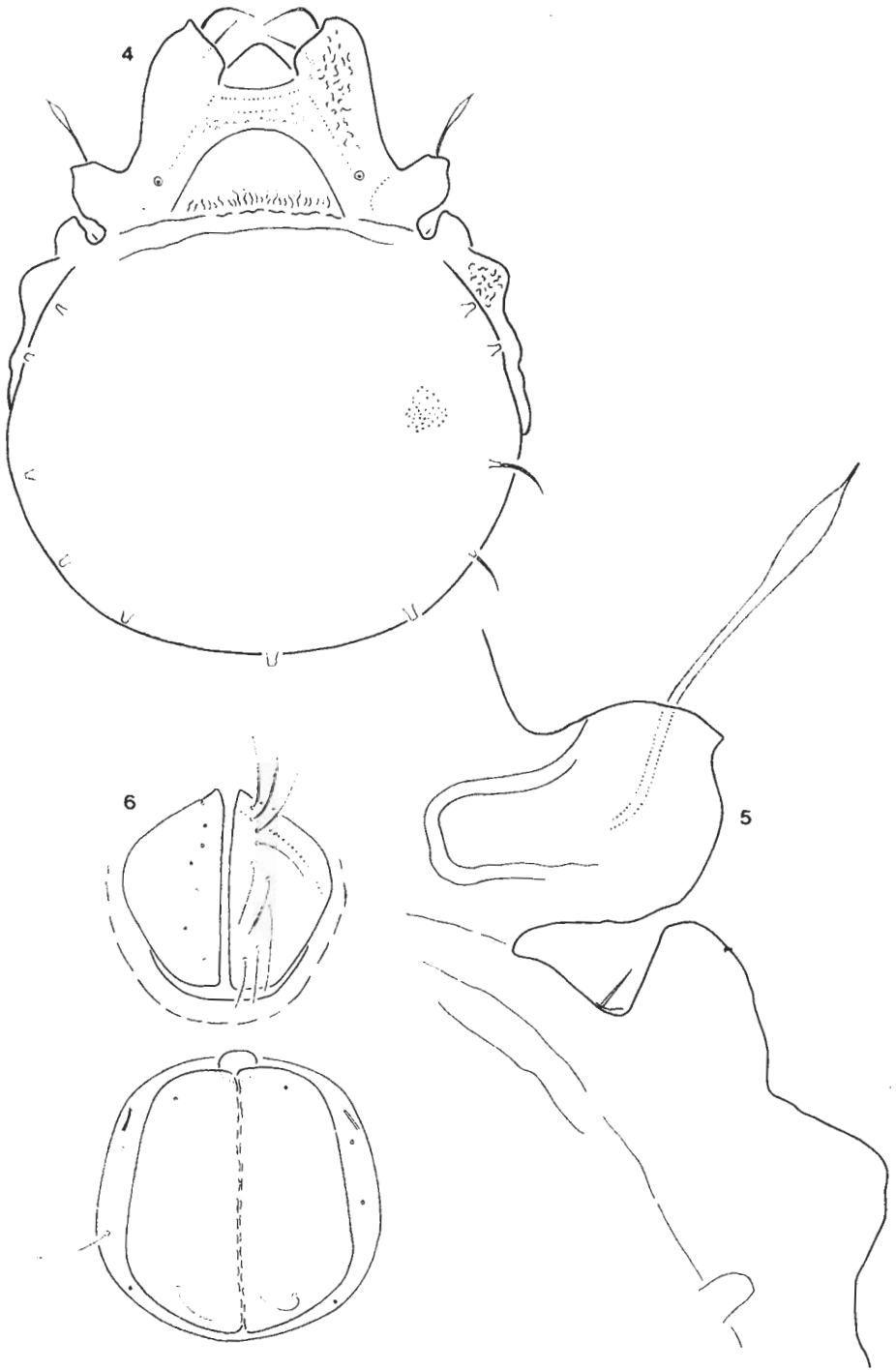
(Figs. 4–6)

Length 820 μm , width 685 μm .

Prodorsum: sensillus medium long, straight, at their apical half broadly lanceolate with a long, pointed tip. Interlamellar setae broken; their alveoli farther from the dorsosejugal suture. Lamellar and rostral setae long, smooth,



Figs. 1–3. *Hamotegaeus longiseta* sp. n. 1: Dorsal view; 2: Bothridium, sensillus and humeral appendage; 3: Ventral view



Figs. 4-6. *Hamotegaeus breviseta* sp. n. 4: Dorsal view; 5: Bothridium, sensillus and humeral appendage

directed interiorad. Rostrum rotundate. Lamellae broad, with short, irregular wrinkles. Lamellar cuspides obliquely truncate, their exterior angles acuminate. Translamella broad, with a few, scattered tubercula. Near to dorsosejugal suture small, longitudinal wrinkles are arranged in a transversal row.

Notogaster: 7 pairs of notogastral setae in submarginal, 3 pairs of notogastral setae in posteromarginal position. The first pair of notogastral setae (setae ta or c_1 ?) originated between the protruding bothridium and the humeral appendage in a narrow incisure and very short: much shorter than the incisure; the last (7th!) notogastral setae originated on a single, fused chitinous apophysis. The three pairs of posteromarginal setae (setae p_1 , p_2 and p_3) originated ventrally. Notogaster finely punctulate.

Ventral side: 7–9 pairs of long, somewhat asymmetrically arranged genital setae. 1 pair of aggenital, 2 pairs of anal, 3 pairs of asymmetrically arranged adanal setae. Adanal setae in adanal position.

Locus typicus: Bogota, 1969, II. 14, leg.: Dr. H. Sturm. Habitat: not given. Distribution: only the type-locality known.

Holotype: one exemplar.

Hamotegaeus franzi sp. n.

(Figs. 7–9)

Length 681–779 μm , width 484–513 μm .

Prodorsum: Sensillus long with a slightly fusiform head and apically with a small, pointed tip. Interlamellar setae long, setiform; lamellar and rostral setae medium long, arched interiorad. Rostrum rotundate. Lamellae broad, with short irregular wrinkles. Lamellar cuspides very obliquely truncated, almost triangular. Translamella narrow, linear. Near to the dorsosejugal suture small tubercles are arranged in a transversal row.

Notogaster: 6 pairs of notogastral setae in submarginal, 3 pairs ventrally in posteromarginal row. The first pair of notogastral setae between the bothridium and humeral appendage in a basally dilated incisure absent. The last (6th!) notogastral setae originated on a single, fused apophysis. Humeral appendage very peculiar: longer than its width at the basis; bilobate.

Ventral side: 6 pairs of genital setae originating on an arched longitudinal ridge. 1 pair of aggenital, 2 pairs of anal, 3 pairs of adanal setae

Locus typicus: Chile, Cuesta La Starria, Nov. 1968, leg. Dr. H. FRANZ. Habitat: soil.

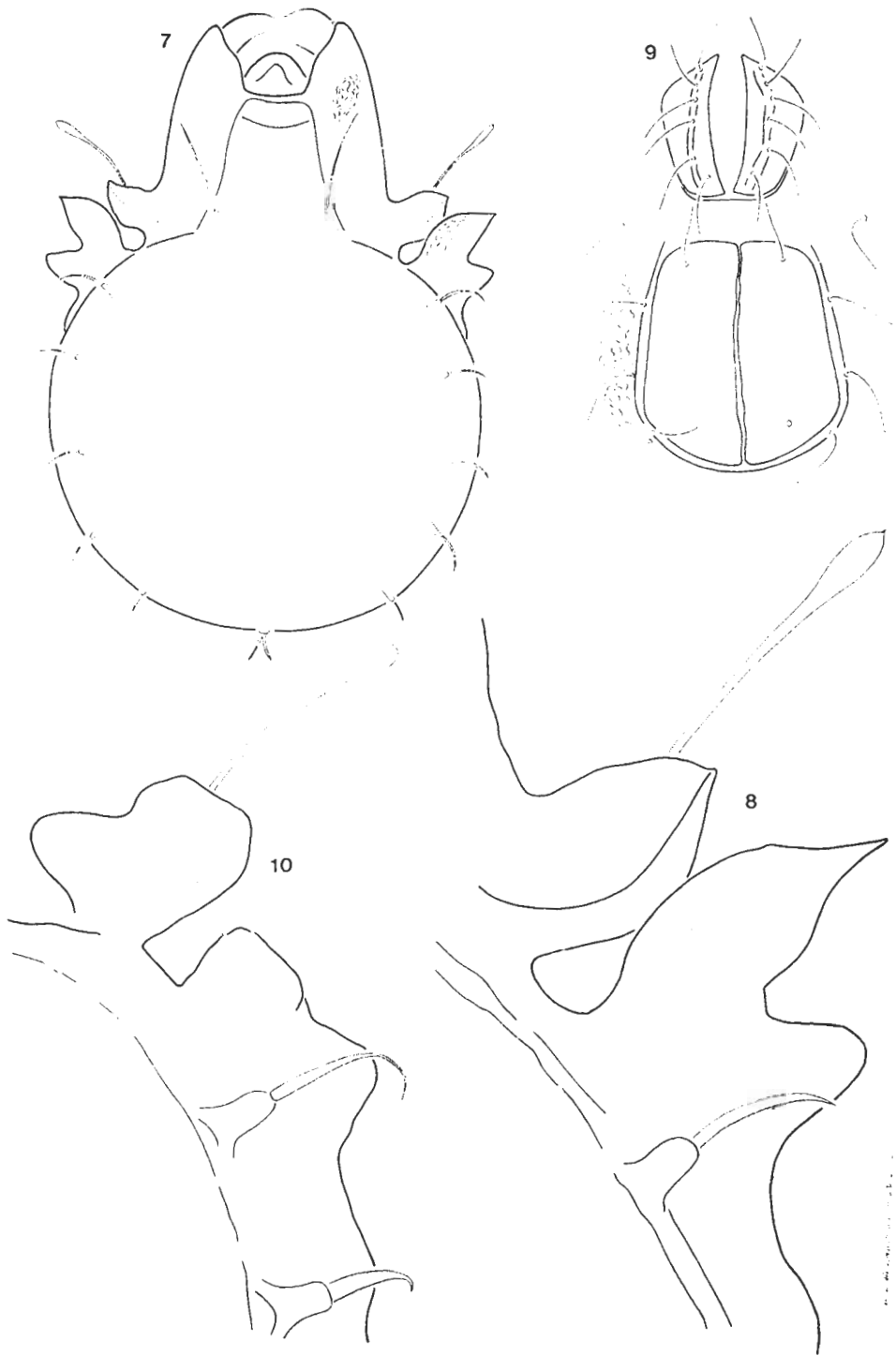
Holotype: 1 exemplar; paratype: 1 exemplar.

Remarks: There are four *Hamotegaeus* species occurring in the Neotropical Region.

1 (4) Sensillus lanceolate with a long, pointed tip.

2 (3) Humeral seta in the incisure between bothridium and horizontal appendage (that is probably seta c_1) long, almost as long as the remaining notogastral setae. The last pairs of notogastral setae originated near to each other, but on separate, short chitinous tubercles. 6 pairs of genital setae. Length 836 μm , width 685 μm . (Columbia.)

longiseta sp. n.



Figs. 7 – 9. *Hamotegaeus franzi* sp. n. 7: Dorsal view; 8: Bothridium, sensillus and humeral appendage; 9: Genitoanal region; 10: *Hamotegaeus granulatus* BALOGH & MAHUNKA, 1969. 10: Bothridium, sensillus and humeral appendage

- 3 (2) Humeral seta in the incisure between bothridium and horizontal appendage short, much shorter than the remaining notogastral setae. The last pair of notogastral setae originated on a fused chitinous apophysis, touching each other. 7–9 pairs of genital setae. Length 820 μm , width 705 μm . (Columbia.)

microseta sp. n.

- 4 (1) Sensillus with a fusiform, slightly dilated end.

- 5 (6) Anterior lobe of humeral appendage elongate and pointed, much longer than posterior lobe. The basis of humeral appendage much shorter than length of anterior lobe. Length 681–779 μm , width 484–513 μm . (Chile.)

franzi sp. n.

- 6 (5) Anterior lobe of humeral appendage truncate, as long as posterior lobe. The basis of humeral appendage much longer than length of anterior lobe. Length 710 μm , width 510 μm . (Brasil.)

granulatus BALOGH & MAHUNKA, 1969

REFERENCE

1. BALOGH, J. & MAHUNKA, S. (1969): The scientific results of the Hungarian Soil Zoological Expeditions to South America, 10. Acari: Oribatids: collected by the second expedition, I. — Acta Zool. Hung., 15: 1–21.