

## **Baloghia gen. n., a new haplozetid genus from the Comoro Islands (Acari: Oribatida)**

By

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**Abstract.** A new haplozetid (Oribatida) genus (*Baloghia* gen. n.) and two species are described from the Comoro Islands.

That small number of publications treating the extra-African fauna of the Ethiopian Region proves the difference in fauna between the main continent and the surrounding islands. Consequently, it is of paramount importance to study the distribution of species in order to be able to draw reliable zoogeographical conclusions regarding the whole of the region\*\*.

One of these significant areas is the Comoro Islands, from which only NIEDBALA (1988) published some records on Oribatida. Thanks to DR. TAMÁS PÓCS (Eger, Hungary), bryologist, recently a fair number of soil samples were passed onto us, which yielded rich oribatid materials. The elaboration resulted in several new taxa planned to me made public continuously.

This contribution presents the description of a new haplozetid genus and two species. The main characteristics of the latter are unanimously refer both into one genus. However, one important generic feature (the number of aggenital setae) relegates them into separate generic groups. Obviously, the question arises: is the separation of the genera within the family well grounded?

The morphological terms follow the authors earlier adopted in my papares (e.g. MAHUNKA, 1993).

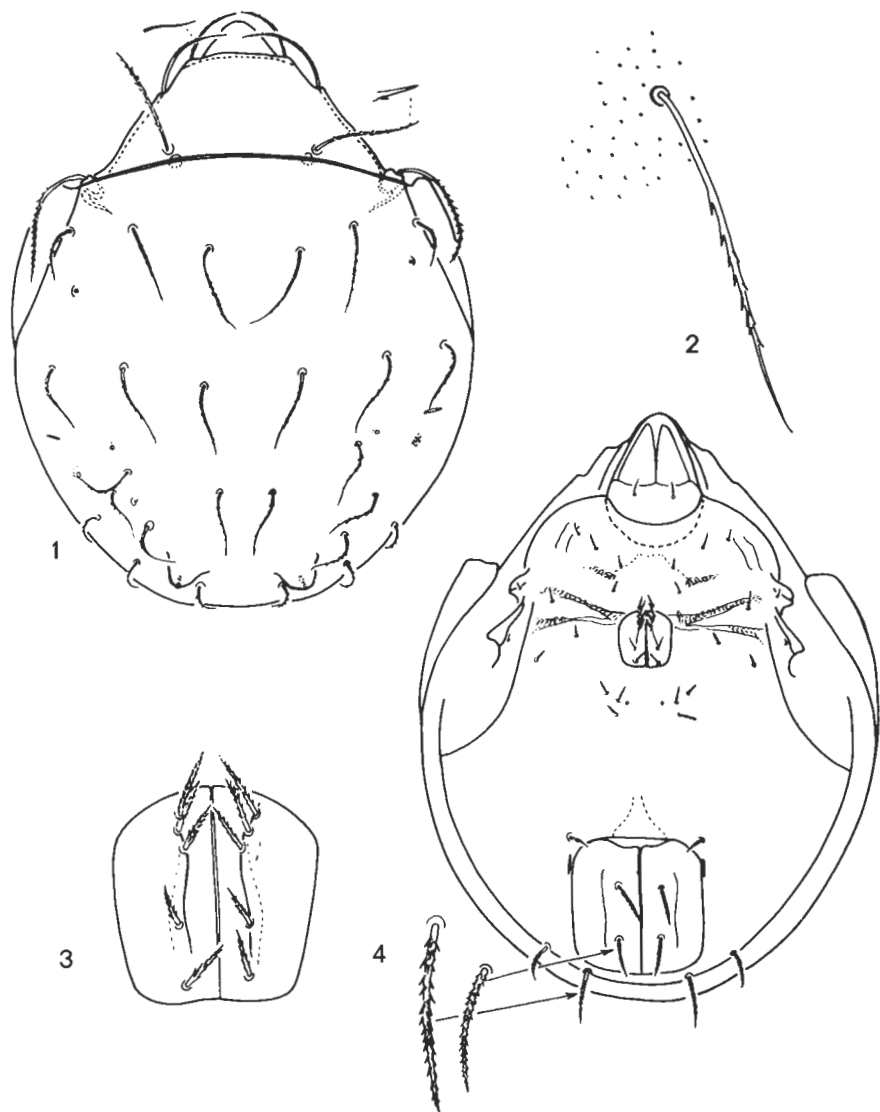
### ***Baloghia* gen. n.**

Diagnosis: Family Haplozetidae. Body surface with sculpture. Rostrum simple. Lamellae short, without cusps, lamellar setae arising on its end. Tutorium strong, rostral setae arising on its cups, and a characteristic transverse laths present between them. Dorsosejugal suture well developed. Pteromorphae large, movable. Notogaster

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with 1 pair of conspicuously protruding tubercles, 13 pairs of long setae, 4 pairs of sacculi (one of them placed on the tubercle), 5 pairs of lyrifissures and 1 pair of glandular openings. Gnathosoma with typical "oribatuloid" characters, palpal solenidium fused with the eupathidium *acm*. Epimeral setal formula: 3-1-3-3. Aggenital neotrichy present or absent. Anogenital setal formula: 5-1-2-3. Lyrifissures *iad* in



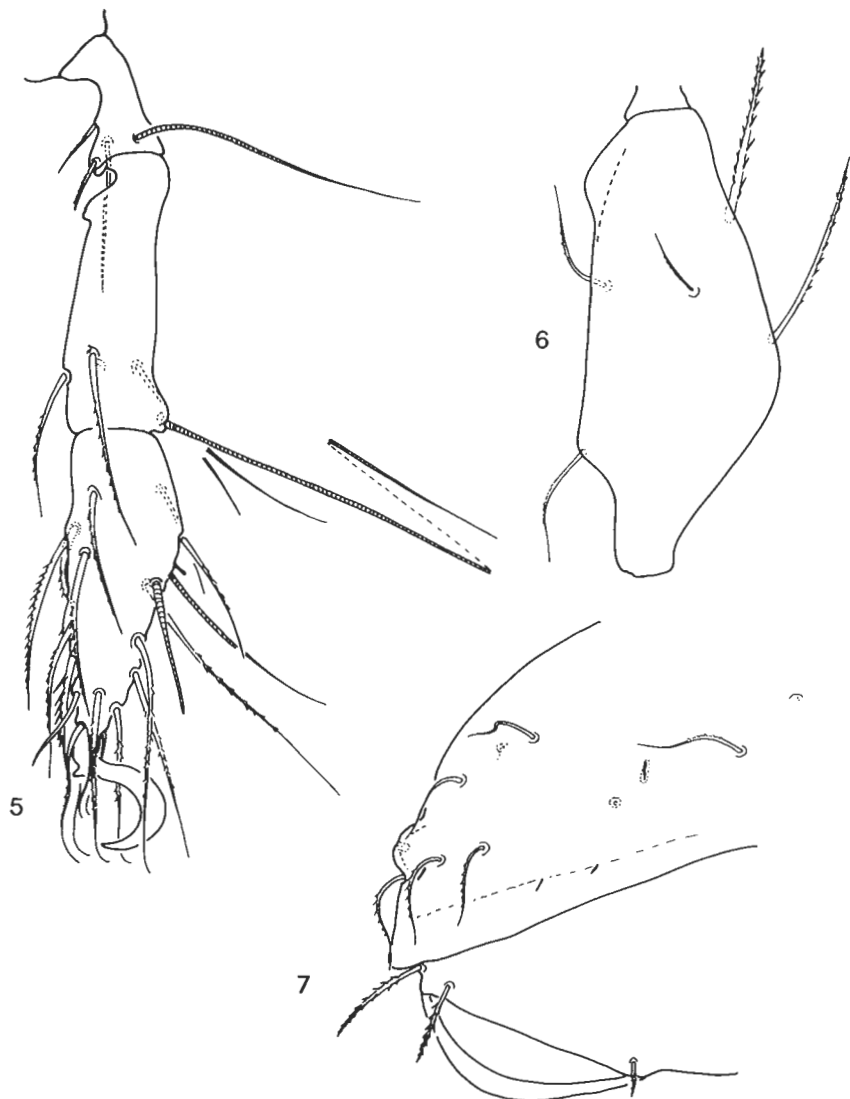
Figs 1—4. *Baloghia juditae* sp. n. 1: dorsal aspect, 2: median notogastral seta, 3: genital plates, 4: ventral aspect

adanal position. Legs monodactylous, with typical chaetotaxy. All femora with sculpture. Solenidia of tibia I arising on a low protuberance,  $\varphi_2$  characteristically anterior, in the same level inside.

Type species: *Baloghia juditae* sp. n.

Remarks: The new genus doubtless belongs to the relationship of the genus *Peloribates* BERLESE, 1908. It is well characterized and on this basis it is well distinguishable from all halplozetid taxa by the one pair of notogastral tubercles bearing the sacculi ( $S_3$ ) and the transverse line between the turtoria.

This new genus is dedicated to the 80th birthday of the great acarologist, my teacher, Prof. DR. J. BALOGH.

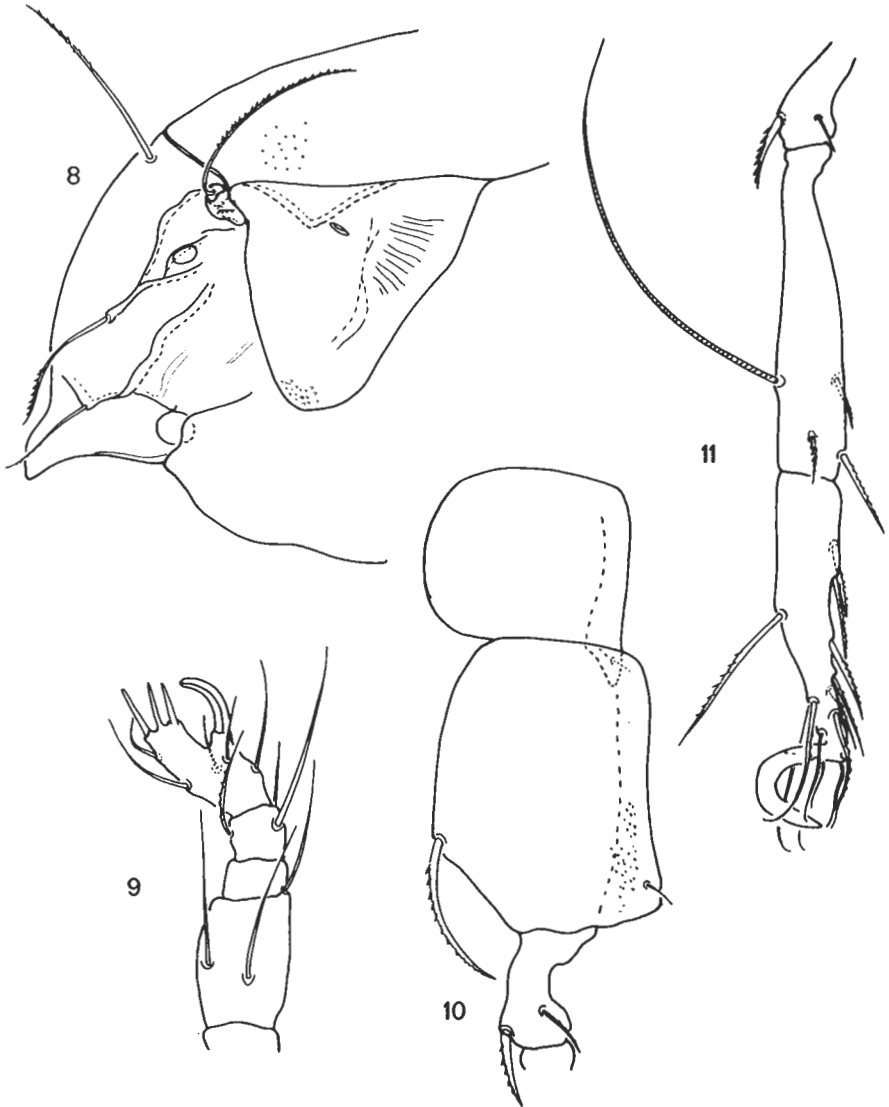


Figs 5—7. *Baloghia juditae* sp. n. 5: genu, tibia and tarsus of leg I, 6: femur of leg I, 7: posterior part of the body in lateral aspect

*Baloghia juditae* sp. n.

Measurements: Length of body: 931—1153  $\mu\text{m}$ , width of body: 681—904  $\mu\text{m}$ . Characteristic difference in the size of the male and female specimens.

Integument: The body mostly covered by a cerotegument layer, consisting of different kinds of granules or filaments. Punctures of cuticle different in size, distinctly on the prodorsum, rarely on the notogaster, again distinctly on the distal margin of the pteromorphae. Femur of all legs foveolate.



Figs 8—11. *Baloghia juditae* sp. n. 8: lateral part of podosoma in lateral aspect, 9: palp, 10: trochanter, femur and genu of leg IV, 11: tibia and tarsus of leg IV

Prodorsum: Rostrum well separated from the rest of the prodorsum, beak-shaped in lateral view (Fig. 8). Lamella weakly developed, sublamella present, prelamella absent. Tutorium resembling a lamella, rostral setae arising on its cusps. Between them a well-observable transversal line or lath observable behind the rostral region. Ratio of the prodorsal setae:  $in > le > ro$ . Lamellar and rostral setae setiform, without filiform end, interlamellar setae needle-shaped (Fig. 1). Rostral and lamellar setae scarcely, interlamellar setae well spiculate. Exobothridial setae minute. Sensillus setiform, reclinate, unilaterally and distinctly ciliate.

Notogaster: Dorsosejugal suture complete, moderately arched anteriorly. Posterior margin of notogaster well protruding over the ventral plate, this part well observable in lateral aspect (Fig. 7). One pair of dorsophragmatic apophyses present behind the alveoli of interlamellar setae. Thirteen pairs of setiform, long, curved notogastral setae present whose distal head filiform (Fig. 2). All four pairs of sacculi small, with wound opening. Five pairs of lyrifissure present, *ib* and *ips* in lateromarginal position.

Gnathosoma: Mentum, chelicera normal. Palpal solenidium and eupathidium *acm* of palpal tarsus arising on a common tubercle (Fig. 9).

Coxisternal region: Surface coarsely punctate and irregularly alveolate. Epimeral borders connected with each other medially, *ap. sej.* and *ap. 4* at the anterior corner of the genital aperture. Among the epimeral setae great difference exist, setae *3a* and *3b* longer than the others. All setae more or less ciliate.

Anogenital region: Surface of ventral plate finely punctate. Genital plate with longitudinal crest, genital setae arising in this line, mostly on the edge of this crest (Fig. 3). Three (exceptionally 4) pairs of aggenital setae; all genital and aggenital setae strong, mostly erect, rarely, but then strongly pilose. Anal plates also with longitudinal crests, anal and adanal setae distinctly pilose (Fig. 4).

Legs: Trochanters III–IV and femora I–IV with longitudinal crests or blade-like formation (Figs 6, 10). On femora I and II a dorsal crest also observable. Tarsi I and II sharply narrowing dorsally. Claws of all legs with a strong tooth basally (Fig. 5). Setae *pv''* and *a''* short, stout.

Material examined: Holotype (1463-HO-93): Mwali Island (Comoro Archipelago), W end of Mwali (Moheli) Island. Secondary lowland rainforest near Miringoni village on the SSW slope of the main mountain range, at 230–400 m, 30. Aug. 1992. Leg. Dr. T. PÓCS. 4 paratypes from the same sample. Holotype and 3 paratypes deposited in the Zoological Department of the Hungarian Natural History Museum, Budapest, and 1 paratype in the Museum d'Histoire naturelle, Geneva.

Remarks: See after the description of the next new species.

I dedicate the new species to JUDIT CSISZÁR (MRS. J. BALOGH), for her continuous help in the scientific work of her husband.

### *Baloghia spinifera* sp. n.

Measurements: Length of body: 583–722  $\mu\text{m}$ , width of body: 430–515  $\mu\text{m}$ .

Integument: Waxy layer thinner than in the preceding species. Cuticle distinctly punctate on the prodorsum, notogaster ornamented by elongate pori or foveolae. Coxisternal region rarely punctate and the ventral plate covered by small granules.

Prodorsum: Rostrum, lamellae, tutoria and the transverse lath between the tutorial cusps are similar to those of the preceding described species. Rostral and lamellar setae setiform, but without filiform end, interlamellar setae needle-shaped (Fig. 14). All prodorsal setae well ciliate. Sensillus reclinate, slightly thicker than in the preceding species, unilaterally, distinctly pilose (Fig. 12).

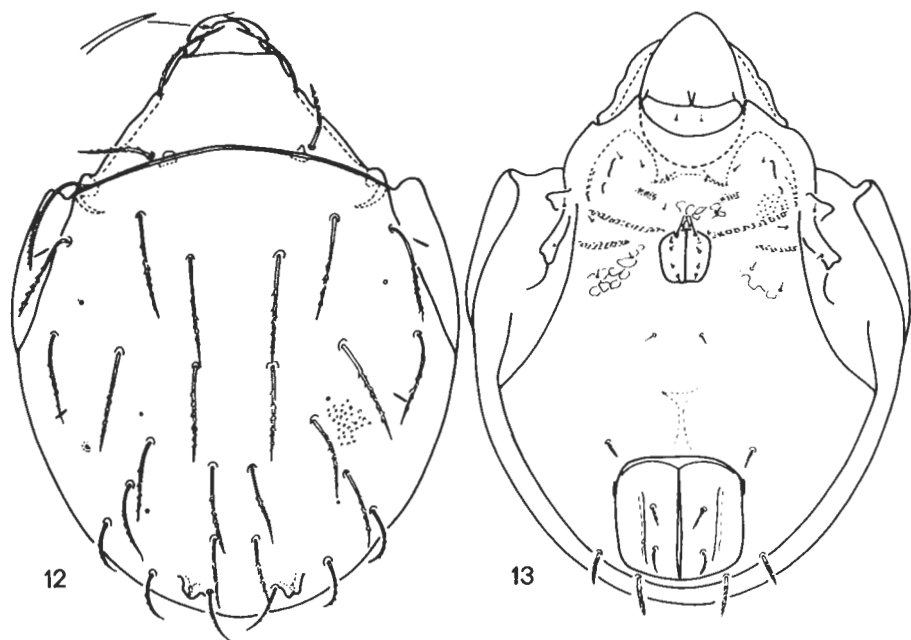


Fig 12–13. *Baloghia spinifera* sp. n. 12: dorsal aspect, 13: ventral aspect

**Notogaster:** Thirteen pairs of needle-shaped, well spiculate notogastral setae (Fig. 15), and four pairs of small sacculi present.  $S_3$  located on the notogastral tubercles, which well protruding from the notogastral surface.

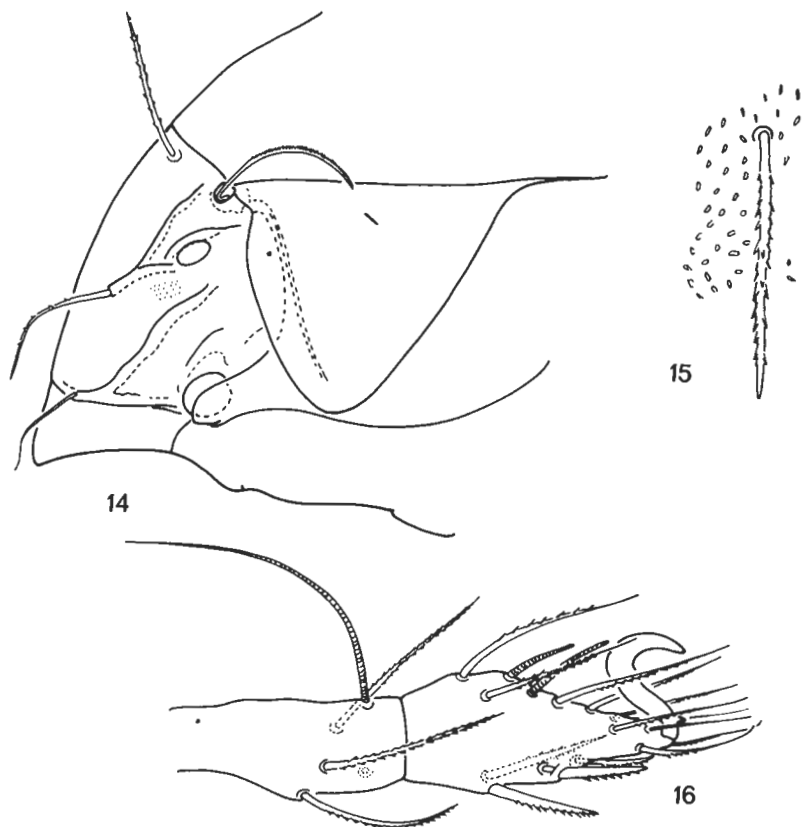
**Ventral regions (Fig. 13):** Epimeral borders hardly discernible. Discidium large, with a broadened inner edge. All notogastral setae short or minute, no essential difference among them. Genital plates without longitudinal crest, but the genital setae arising in longitudinal rows. Anterior pair of the genital setae much longer than the others. Only one pair of aggenital setae present. Anal plates with a longitudinal crest. Epimeral, genital and aggenital setae rarely, anal and adanal setae distinctly barbed (Fig. 13).

**Legs:** Similar to the preceding species, solenidia  $\varphi_1$  and  $\varphi_2$  arising together on the anterior margin of the tibia I, in the same level.  $\varphi_2$  inserted inside.

**Material examined:** Holotype (1464—HO—93): Mwali Island (Comoro Arhipelago), W end of Mwali (Moheli) Island. Secondary lowland rainforest near Miringoni village on the SSW slope of the main mountain range, at 230–400 m, 30. Aug. 1992. Leg. Dr. T. Pócs. 7 paratypes from the same sample. Holotype and 6 paratypes deposited in the Zoological Department of the Hungarian Natural History Museum, Budapest, and 1 paratype in the Museum d'Histoire naturelle, Geneva.

**Remarks:** On the basis of some characteristic features (e.g. the form of the notogastral setae, the sculpture of the notogaster, etc.) the two new species are well distinguishable from each other. Moreover their measurements and first of all the number of the aggenital setae and the structure of the genital plates are also different.

**Derivation nominis:** The species is named after the needle-shaped interlamellar and notogastral setae.



Figs 14—17. *Baloghia spinifera* sp. n. 14: lateral part of podosoma, 15: median notogastral seta, 16: tibia and tarsus of leg II

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