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TWO NEW BRACHYCHTHONIID SPECIES
(ACARI : ORIBATIDA) FROM THE COMORO ISLANDS

by Sándor MAHUNKA

SUMMARY : Two new species of the family Brachychthoniidae Thor, 1934 from the Comoro Islands are described. One of these also represents a new subgenus, *Liochthonius (Afroliochthonius)* subgen. n.


Type Species : *Liochthonius (Afroliochthonius) reductus* sp. n.

Remarks : The new taxon is well characterised by the six pairs of genital setae. This character has been known only in one genus — *Synchthonius* Van der Hammen, 1952 — in this family. Otherwise, the new genus is related to *Liochthonius* Van der Hammen, 1959. On the basis of the absence of the suprpleural plates and the presence of the incision it stands nearest to the genera *Liochthonius* Van der Hammen, 1959.

In closely scrutinizing the distribution data of all taxa of the family Brachychthoniidae (e.g. Chinone & Aoki, 1972; Moritz, 1976a, b; Niedbala, 1977), I hold the view that this group takes its origin from the Laurasian faunal region. This is quite clearly proved by the small number of species with low population density that are present in any of the circumtropical regions, and this holds true also for the supraspecific taxa. From among the latter, there is none which occurs exclusively in the circumtropics. This is why it is striking to find four species collected in the Comoro Islands. Two of these are described hereunder, one of which also represents a new subgenus.

The samples were collected by Dr. T. Pócs, the renowned bryologist, within the frame of a joint research programme 2 (Mahunka, 1993) designed to explore recent evidence of the Ethiopian and the Oriental fauna connections.

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Fig. 1-4. *Liochthonius (Afroliochthonius) reductus* sp. n.
1: Body in dorsal view. 2. — Body in ventral view. 3. — Body in lateral view. 4. — sensillus.
FIG. 5-7: Sellnickethonius comoroensis sp. n.
Hammen, 1952 and Neoliochthonius Lee, 1982. The latter is distinguished from the new subgenus — besides the 7 pairs of genital setae — by the free adanal plates and its epimeral setal formula (3-1-3-3 in Neoliochthonius), the former only by the number of genital setae (seven pairs in Liochthonius). Therefore, I classify it as a subgenus only. This new taxon is the first superspecific taxon in the family Brachychthoniidae Thor, 1934 which has not been found in the Palearctic Region.

**Liochthonius (Afroliochthonius) reductus** n. sp. (Fig. 1-4)

Measurements: Length of body 143-148 μm, width 88-91 μm.

Prodorsum: Rostrum without marginal teeth. All prodorsal setae dilated, with true velum. Rostral setae longest of all, longer than the distance between them, sharply pointed. Lamellar, interlamellar and exobothridial setae nearly equal in length. Interlamellar region with three pairs of well discernible spots, nearly equal in size, aligned. Distance between each pair equalling their diameter. Clavus of the sensillus very broad, apex slightly excised; dorsal surface well covered by short spines, arranged in three to four longitudinal rows, some other spines observable laterally, but no spine ventrally (Fig. 4).

Notogaster: Some weak lines observable around insertion points of some setae. All notogastral setae dilated, phylliform, nearly equal in size (Fig. 1).

Lateral and ventral regions: Insertion points of the posterior exobothridial setae hardly observable. Pleural plates large (Fig. 3). Setae of epimeral and genital plates mostly blunt at tip, slightly spiniform. Setae *ad*_2 extremely large and wide (Fig. 2).


**Sellnickochthonius comoroensis** sp. n. (Fig. 5-7)

Measurements: Length of body 131-155 μm, width 70-79 μm.

Prodorsum: Surface — excepting three pairs of anterbothridial spots — smooth. Four pairs of prodorsal setae nearly equal in length, slightly dilated, with sharply pointed apices. Interlamellar setae shorter than the distance between them. Sensillus comparatively large, its peduncle shorter than the clearly fusiform head, with long spines arranged in five longitudinal rows (Fig. 5).

Notogaster: Surface completely smooth, some weak line hardly observable. Around insertion of some setae on the pygidium a small projection is observable. All setae smooth, simple, not widened, slightly fusiform, with short pointed apices. Setae *ad*_2 arising marginally.

Lateral and ventral regions: Three pairs of suprapleural plates observable, *SpC* clearly visible, bearing setae *c*3. *SpE* and *SpF* hardly recognizable, the latter small. A weak suprapleural incision also discernible (Fig. 7). Epimeral setal formula: 3-1-3-4. Their shape and position typical for the genus, as are the seven pairs of genital setae. Peranal, anal and adanal setae well observable, two pairs of adanal setae (*ad*_2 and *ad*_3) wide, blade-like (Fig. 6).


Remarks: Owing to the absence of the prodorsal and notogastral ornamentation, the new species is related to the *S. tropicus* group. This species-group comprises only a few species [e.g. *S. planus* (Chi none, 1974)]. The new species is distinguished from these by the form of the notogastral setae.
REFERENCES


