

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

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ACARI  
ORIBATIDA  
TAXONOMY  
BIOGEOGRAPHY  
COMORO ISLANDS

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.

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RÉSUMÉ : Description de deux espèces nouvelles de la famille Brachychthoniidae Thor, 1934 de l'Ile Comoro. Une d'elles représente un nouveau sous-genre, *Liochthonius* (*Afroliochthonius*) subgen. n.

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 <sup>2</sup> (MAHUNKA, 1993) designed to explore recent evidence of the Ethiopian and the Oriental fauna connections.

### *Liochthonius* (*Afroliochthonius*) subgen. n.

DIAGNOSIS : Family Brachychthoniidae. Habitus like *Liochthonius* van der Hammen, 1959. Prodorsum with interbothridial spots, notogaster without sculpture. Suprapleural and podopleural plates absent, pygidium without suprapleural incision. Epimeral setal formula : 3-1-3-4. Six pairs of genital setae present. Adanal plates fused caudally, setae *ad*<sub>2</sub> hypertrophied, widening, blade-like.

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 suprapleural plates and the presence of the incision it stands nearest to the genera *Liochthonius* Van der

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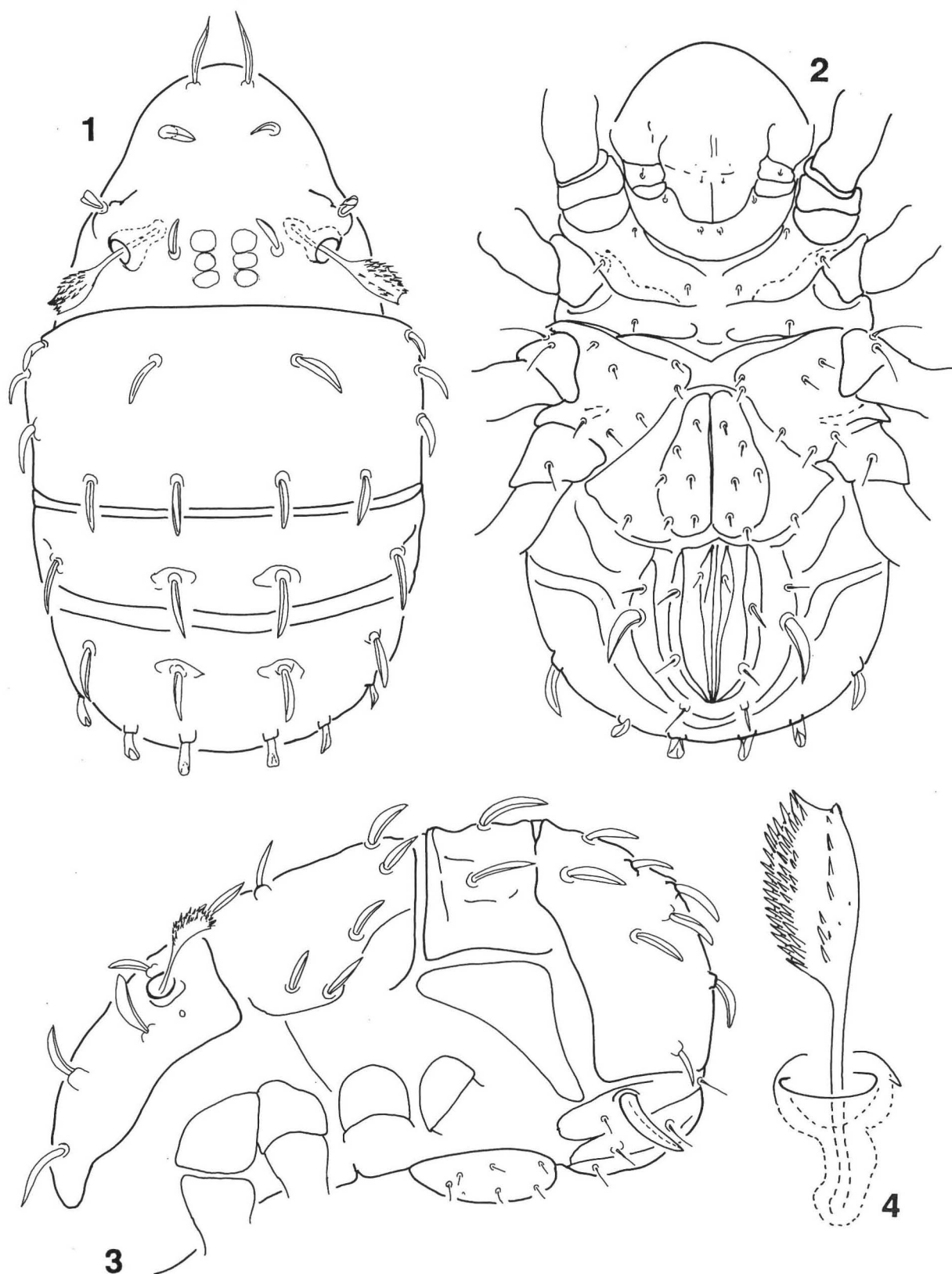


FIG.1-4. *Liochthonius (Afroliochthonius) reductus* sp. n.  
 1 : Body in dorsal view. 2. — Body in ventral view. 3. — Body in lateral view. 4. — sensillus.

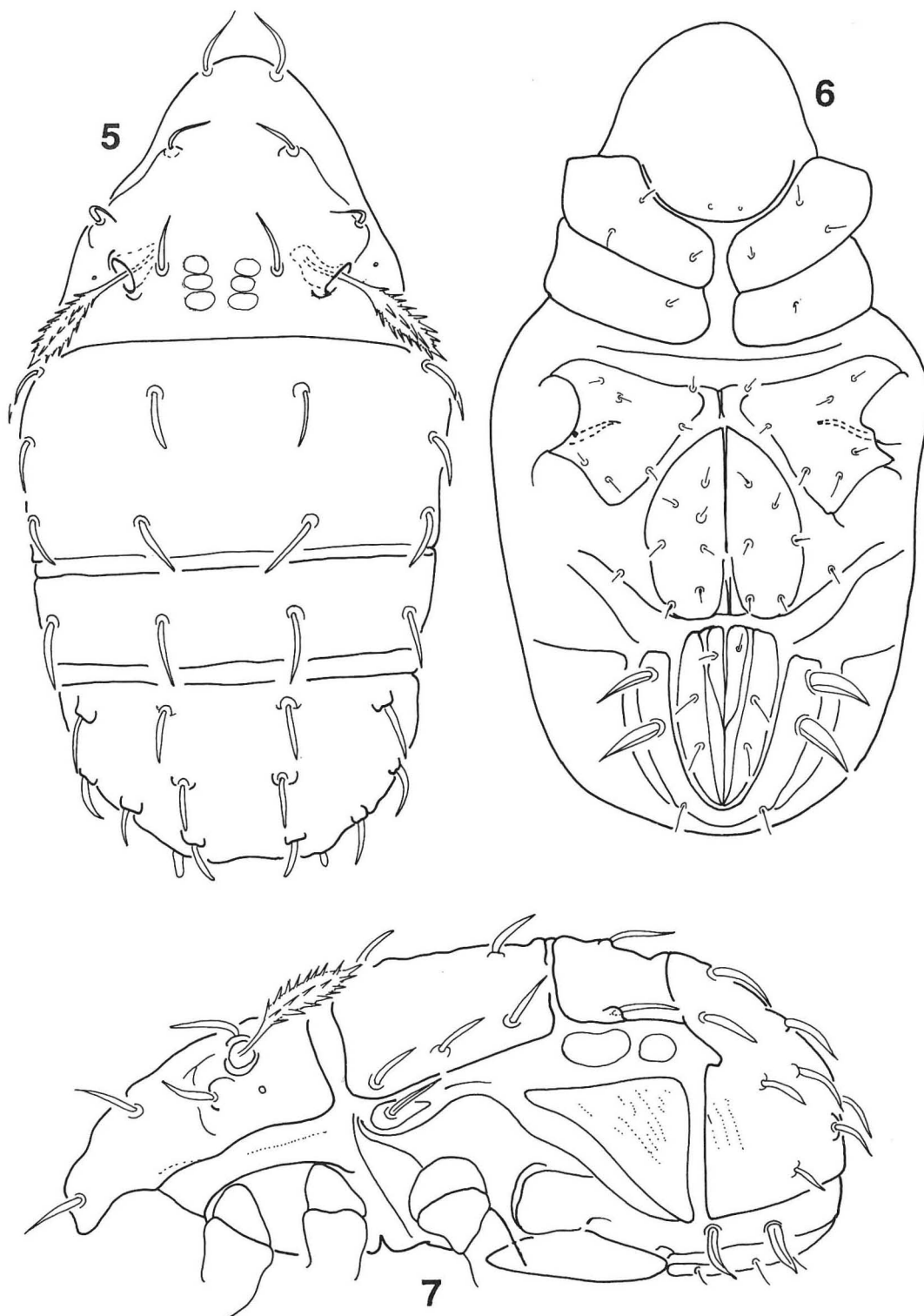


FIG. 5-7 : *Sellnickochthonius comoroensis* sp. n.

5. — Body in dorsal view. 6. — Body in ventral view. 7. — Body in lateral view.

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 supraspecific 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  $\mu\text{m}$ , width 88-91  $\mu\text{m}$ .

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).

Material examined : Holotype (1493-HO-1993) Comoro Islands, Mwali (Moheli) Island. Secondary lowland rainforest near Miringoni village on the SSW slope of the main mountain range, at 230-400 m, 30 August 1992, leg. Dr. T. Pócs. Paratype 1 ex. from the same sample. Holotype deposited in the Hungarian Natural History Museum, Budapest, paratype in the collection of the Muséum d'Histoire naturelle, Geneva.

*Sellnickochthonius comoroensis* sp. n.

(FIG. 5-7)

Measurements : Length of body 131-155  $\mu\text{m}$ , width 70-79  $\mu\text{m}$ .

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  $d_2$  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).

Material examined : Holotype (1494-HO-1994) Comoro Islands, Mwali (Moheli) Island. Secondary lowland rainforest near Miringoni village on SSW slope of the main mountain range, at 230-400 m, 30 August 1992, leg. Dr. T. Pócs. Paratypes : 3 ex. from the same sample. Holotype and 2 paratypes deposited in the Hungarian Natural History Museum, Budapest, 1 paratype in the collection of the Muséum d'Histoire naturelle, Geneva.

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* (Chinone, 1974)]. The new species is distinguished from these by the form of the notogastral setae.

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