

ON SOME NEW OR LITTLE-KNOWN GENERA AND SPECIES OF LISTROPHORIDAE (ASTIGMATA)

A. Fain¹

----- ABSTRACT—The status of some genera and species of Listrophoridae is reevaluated. Genus *Tamiopsochirus* Fain, 1976 is placed in synonymy with *Metalistrophorus* Fain, 1970 and subgenus *Lynxacarus* (*Dubininetta*) Fain & Lukoschus, 1978 is elevated to the generic rank. Four new genera and one new subgenus are described: *Carnilistrophorus* n. g. (type species *Metalistrophorus poecilogalei* Fain, 1970); *Carnilistrophorus* (*Carnilistrophorellus*) n. subg. (type species *Metalistrophorus rhynchocyoni* Fain, 1970); *Pteromychirus* n. g. (type species *Tamiopsochirus lukoschusi* Fain, 1978); *Echinosorella* n. g. (type species *Lynxacarus* (*Dubininetta*) *echinosorex* Fain & Lukoschus, 1978); *Spalacarus* n. g. (type species *Leporacarus spalacis* Fain, 1970). The following species are redescribed and illustrated: *Metalistrophorus sciuricola* Fain, 1970, *M. laosensis* (Fain, 1978), *Carnilistrophorus myospalacis* (Fain, 1970), *Hemigalichus baramensis* Fain, 1970, *Afrolistrophorus rhizomys* (Fain, 1970). Two new species of *Afrolistrophorus* Fain, 1970, are described as *A. sumatrensis* n. sp. and *A. cannomys* n. sp. -----

We deal here with several new of little-known genera and species of Listrophoridae. The genus *Tamiopsochirus* Fain, 1976 is placed in synonymy with *Metalistrophorus* Fain, 1970. The latter is in fact a complex of two genera of which one is new and is described: *Carnilistrophorus* n. g. (type species *Metalistrophorus poecilogalei* Fain, 1970). This new genus contains another subgenus, *Carnilistrophorellus* n. subg. (type species *Metalistrophorus rhynchocyoni* Fain, 1970). The subgenus *Lynxacarus* (*Dubininetta*) Fain and Lukoschus, 1978, is elevated to the generic rank and three new genera are described: *Pteromychirus* n. g. (type species *Tamiopsochirus lukoschusi* Fain, 1978), *Echinosorella* n. g. (type species *Lynxacarus* (*Dubininetta*) *echinosorex* Fain & Lukoschus, 1978) and *Spalacarus* n. g. (type species *Leporacarus spalacis* Fain, 1970). The following species are redescribed and depicted: *Metalistrophorus sciuricola* Fain, 1970, *M. laosensis* (Fain, 1978), *Carnilistrophorus myospalacis* (Fain, 1970), *Hemigalichus baramensis* Fain, 1970, *Afrolistrophorus rhizomys* (Fain, 1970). Two new species of *Afrolistrophorus* Fain, 1970, are described as *A. sumatrensis* n. sp. and *A. cannomys* n. sp.

FAMILY LISTROPHORIDAE Canestrini, 1892

A. GENERA WITH POSTSCAPULAR SHIELD STRONGLY REDUCED OR ABSENT

In 5 genera of Listrophoridae the postscapular shield is either strongly reduced or completely absent e. g. *Metalistrophorus* Fain, 1970 (= *Tamiopsochirus* Fain, 1976); *Sciurochirus* Fain, 1972; *Aeromychirus* Fain, 1976; *Pteromychirus* n. g. and *Carnilistrophorus* n. g.

We give hereunder a key to these genera.

Key to the genera of Listrophoridae with the postcapular
shield either strongly reduced or absent

1. Lateral surfaces of body posterior to prescapular shield with numerous scales or linear

1. Institut de Médecine Tropicale, Nationalestraat 155, B-2000 Antwerpen, Belgium.

- thickenings. Cuticular striations non punctate and very numerous (120-130 in female).
 Body long and narrow. Postscapular shield either strongly reduced or absent 2
- Lateral surfaces of body posterior to prescapular shield without scales or linear thickenings.
 Cuticular striations either punctate or not but less numerous. Postscapular shield absent
 3
2. A postscapular median shield is present but very short and represented by 3 or 4 punctate
 transverse sclerotized bands not reaching the setae *sc e*. Posterior extremity of male with
 2 large lobes partly membranous bearing piliform setae *d 5*. On the Flying-squirrel *Pteromys*
momonga, Japan *Pteromychirus* n. g.
- Absence of postscapular shield. Posterior extremity of male not incized but truncate and
 bearing 2 small chitinous transparent triangular projections. Setae *d 5* foliate and triangular
 On Tree-squirrels *Sciurus*, *Dremomys* and *Callosciurus* and on the Chipmunk *Tamias* sp.
 *Metalistrophorus* Fain, 1970 (Syn. *Tamiopsochirus* Fain, 1976)
3. Body long and narrow. Dorsal surface posterior to prescapular shield formed of cuticular
 transverse punctate bands. Posterior extremity of male either entire or incized, with *d 5*
 setae foliate 4
- Body shorter. Dorsal surface of body posterior to prescapular shield formed of normal
 very thin striations without punctate transverse bands. Posterior extremity of male incized
 in 2 small lobes, bearing piliform setae *d 5*. Mainly on Carnivora
 *Carnilistrophorus* n. g. 5
4. Propodosoma separated from hysterosoma by soft cuticle, bearing or not scales and allowing
 both parts to telescope into each other. Posterior extremity of male incized in 2 large lobes
 bearing large foliate setae *d 5*. On Flying-squirrels *Aeromys* sp. and *Hylomyscus* sp.
 *Aeromychirus* Fain, 1976
- Propodosoma not separated from hysterosoma by soft cuticle. Posterior border of male
 entire and truncate bearing foliate seta *d 5*. On Tree-squirrels mainly *Callosciurus* spp.,
 also on *Ratufa* spp. Rarely on *Tupaia* sp. (Insectivora) *Sciurochirus* Fain, 1972.
5. Anterior border of prescapular shield rounded. Hysteronotum in the male with a median
 shield *Carnilistrophorus* s. str.
- Anterior border of prescapular shield deeply incized in the midline. Hysteronotum in the
 male with two dorso-lateral shields *Carnilistrophorus* (*Carnilistrophorellus*) n. subg.

Genus *Metalistrophorus* Fain, 1970

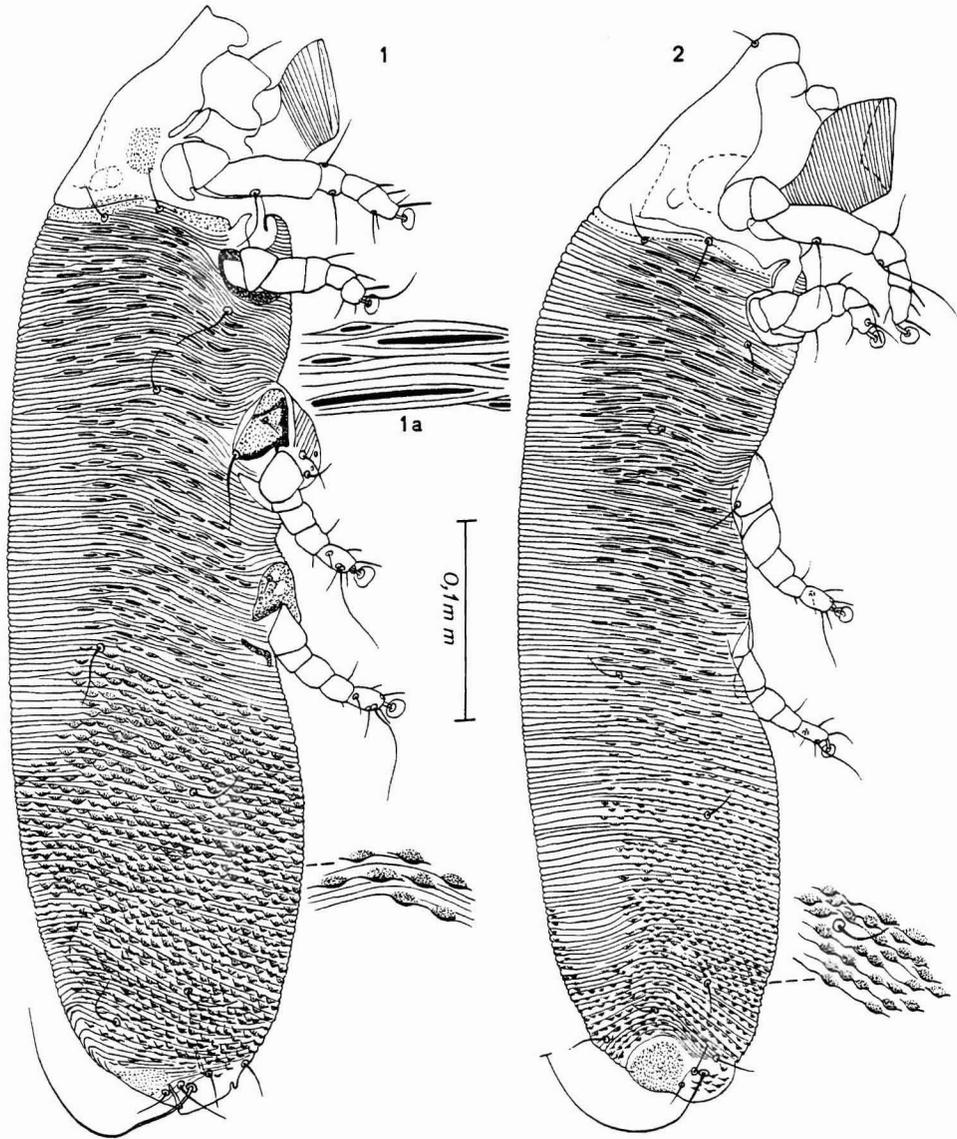
Metalistrophorus Fain, 1970: 278; 1971: 66.

Tamiopsochirus Fain, 1976: 42; 1978: 277 NOV. SYN.

The genus *Metalistrophorus* Fain, 1970 was created for a group of 7 species characterized mainly by the absence of the postscapular shield. In the female the hysteronotal shield is absent. In the male the hysteronotal shield is present (either median or paired lateral), the posterior legs are either normal or inflated, the adanal suckers are well developed and the posterior extremity is either entire or bilobed.

The type species is *Listrophorus pagenstecheri* Haller, 1880, from *Sciurus vulgaris*. Another species *M. sciuricola* Fain, 1970 was described from a Siberian Chipmunk *Tamias (Eutamias) sibiricus uthensis*. The 5 other species in the genus were described mainly from Carnivora (see Fain, 1970 and 1971).

A new genus *Tamiopsochirus* Fain, 1976 was described for 3 new species (type species: *T. pahangensis*) collected from Oriental Sciuridae.



Figs. 1, 2: 1, *Metalistrophorus sciuricola* Fain, 1970. Female -a, cuticular thickenings of anterior region; 2, *Metalistrophorus laosensis* (Fain, 1978) Female.

A new study of this group of mites leads us now to synonymize *Tamiopsochirus* with *Metalistrophorus* and to create a new genus (*Carnilistrophorus* n. g.) for the species living mainly on Carnivora and which previously were included in *Metalistrophorus*.

After this new arrangement the genus *Metalistrophorus* contains now 4 species: (1) *M. pagenstecheri* (Haller, 1880), (2) *M. sciuricola* Fain, 1970, (3) *M. pahangensis* (Fain, 1976), (4) *M. laosensis* (Fain, 1978).

The species *Tamiopsochirus lukoschusi* Fain, 1978, cannot be included in *Metalistrophorus* and it becomes the type species of a new genus *Pteromychirus*.

1. *Metalistrophorus pagenstecheri* (Halle, 1880)

Listrophorus pagenstecheri Halle, 1880: 259 (pl. IX, fig. 1-3).

Metalistrophorus pagenstecheri, Fain, 1970: 278; 1971: 66.

This species is common on the squirrel *Sciurus vulgaris* in Europe. In the female the anterolateral surfaces of the body bear very narrow sclerotized strips, the lateral and ventral

surfaces of the opisthosoma bear short and rather poorly developed scales, these scales are absent in the median region of opisthonotum. In the male only the anterolateral thickenings are present, the region posterior to the legs III is completely devoid of thickenings and scales.

2. *Metalistrophorus sciuricola* Fain, 1970

Metalistrophorus sciuricola Fain, 1970: 278.

Tamiopsochirus laosensis Fain, 1978: 280, in part

This species is distinguished from *M. pagenstecheri* by the following characters: In the female: (1) The cuticular thickening in the anterolateral part of the body are thicker and more numerous and the scales of posterior region are well-formed and more numerous and cover almost all the opisthosoma ventrally and dorsally (in *M. pagenstecheri* the anterolateral cuticular thickenings are very narrow stripes and the opisthonotum bears poorly developed scales only in the lateral parts). (2) The posterior legs are distinctly shorter (the 4 apical segments of leg IV are 57 μm long, while in *M. pagenstecheri* they measure 72 μm) (fig. 1). In the male the anterolateral cuticular thickenings are more numerous, thicker and shorter than in *M. pagenstecheri* and they are also present in the posterior region of body until posterior border of legs IV.

HOST AND LOCALITY—(1) Holotype and paratypes from *Tamias (Eutamias) sibiricus uthensis*. (2) The specimen recorded as *Tamiopsochirus laosensis* from *Eutamia sibiricus*, from Japan (Fain, 1978) also belong to this species.

3. *Metalistrophorus laosensis* (Fain, 1978) n. comb.

Tamiopsochirus laosensis Fain, 1978: 280 (figs. 18-19).

This species (figs. 2, 8) differs from *M. pagenstecheri* in the female by the thicker aspect of the anterior cuticular strips, the much greater number and smaller size of hysterosomal scales and the smaller length of posterior legs. In the male the scales extend laterally until the opisthosoma. It is distinguished from *M. sciuricola* in the female mainly by the different shape of posterior scales and the absence of these scales on a wide median longitudinal band of opisthonotum.

HOST AND LOCALITY—From an unidentified sciurid, Laos. Holotype in Bishop Museum.

Genus *Pteromychirus* n. g.

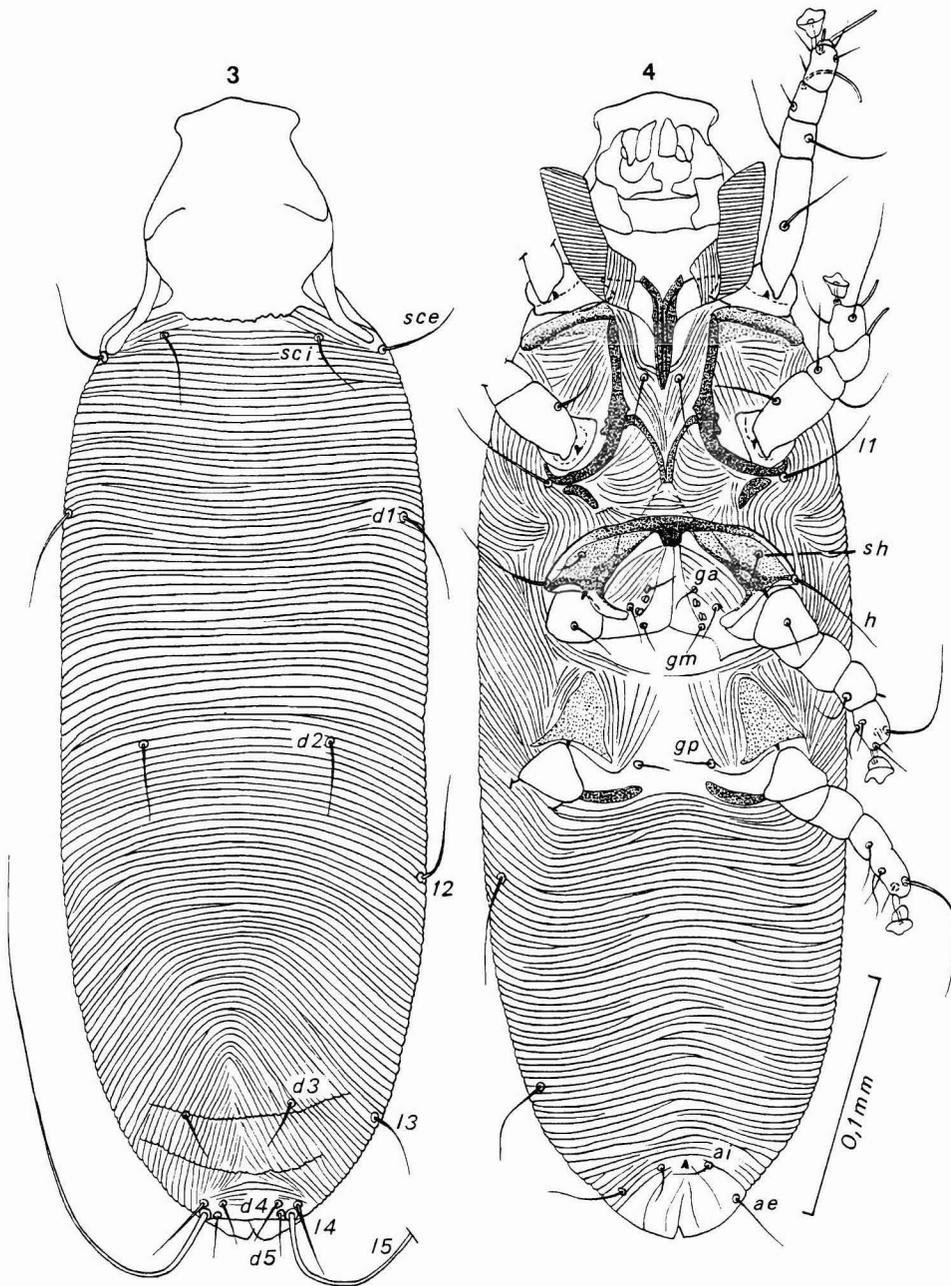
DEFINITION—Close to *Metalistrophorus* but there is a short and narrow postscapular median shield formed of 3 to 4 sclerotized transverse bands not reaching the *sc e* setae. Lateral surface of body with numerous scales or sclerotized linear thickenings. Posterior extremity of male with 2 large lobes partly membranous bearing piliform *d 5* setae.

TYPE SPECIES—*Tamiopsochirus lukoschusi* Fain, 1978. This genus is monotypic. This species has been figured previously.

Genus *Carnilistrophorus* n. g.

DEFINITION—Resembles *Listrophorus* but the postscapular shield is completely absent. Dorsal striations normally developed. Absence of scales or linear thickenings on lateral surface of body. Female without hysteronotal shield. Male with one median or 2 dorso-lateral shields on hysteronotum and 2 well-formed adanal suckers; posterior extremity divided in 2 small lobes, setae *d 5* piliform.

TYPE SPECIES—*Metalistrophorus poecilogalei* Fain, 1970.



Figs. 3,4: *Carnilistrophorus (Carnilistrophorus) myospalacis* (Fain, 1970)—3, female dorsally; 4, female ventrally.

This new genus is divided in two subgenera as follows:

- (1) Subgenus *Carnilistrophorus* s. str.—Anterior border of prescapular shield not incised. In the male the hysteronotum bears a median shield. TYPE SPECIES—*Metalistrophorus poecilogaiei* Fain, 1970. Other species *C. myospalacis* (Fain, 1970) n. comb.
- (2) Subgenus *Carnilistrophorellus* n. sg.—Anterior border of prescapular shield with a deep median incision. In the male the hysteronotum bears 2 dorso-lateral shields. TYPE SPECIES—*Metalistrophorus rhynchocyoni* Fain, 1970. Other species—*C. myonax* (Fain, 1970) n. comb. and *C. genettus* (Radford, 1944) n. comb. (see Fain, 1970 and 1971).

Carnilistrophorus (Carnilistrophorus) myospalacis (Fain, 1970) n. comb.

We complete here the description of this species and give the first figures. Only the female is known.

FEMALE (holotype) (Figs. 3, 4)—Length 450 μm , width 160 μm . In a paratype 460 μm x 153 μm . Body with numerous very thin striations (about 110 in the midline); cuticular scales absent; hysterosoma without punctate plates. Most of the dorsal setae very thin, relatively long (40–50 μm); setae *l5* very long, seta *d5* very short. VENTRALLY—Epimerae I fused in a thick sternum; striated pilicolous membranes of gnathosoma poorly developed. Epimerae III fused in the midline. Legs relatively thick. Femora I long. Tarsi III–IV with a long very thin seta.

HOST AND LOCALITY—From *Myospalax fontanieri cansus*, Chenzi, China (Host n° BM 9.1.1.286). Holotype in the British Museum.

REMARKS—This species differs from *M. poecilogalei* Fain, by the greater length of the opisthosoma, the much smaller length of the setae *l1*, the greater length of setae *h*, the more anterior situation of the *g a* and the absence of the *a 3* setae.

B. GENERA WITH WELL-DEVELOPED POSTSCAPULAR SHIELD (S)
EITHER ONE MEDIAN OR TWO DORSOLATERALS

This group contains a series of genera (see Fain, 1971). We will deal here with the genera *Hemigalichus* Fain, 1970, *Afrolistrophorus* Fain, 1970 and *Lynxacarus* Radford, 1951 and with two new genera.

Genus *Hemigalichus* Fain, 1970

This genus differs from the other genera in the Listrophoridae by the combination of the following characters. In both sexes: (1) Anterior part of prescapular shield separated from its posterior part by a transverse fold. The anterior border of the body is deeply incized in the midline. (2) Presence of a very wide striated postscapular shield; (3) Hysteronotum striated transversely and heavily sclerotized-punctate, except a small anterior part which is soft; (4) Epimerae I fused in a sternum; epimerae II fused forming a longitudinal median sclerite; (5) Absence of scales on the body; (6) Legs—Femora I long and strong with a large dorsal sclerotized crest; (7) Legs II very short. IN THE MALE—(1) Posterior border of body entire, rounded, presenting ventrally a pair of membranous paramedian projections wider than long; (2) With an inverted Y-shaped sclerite in front of aedeagus; (3) Presence of a pair of well-developed adanal suckers.

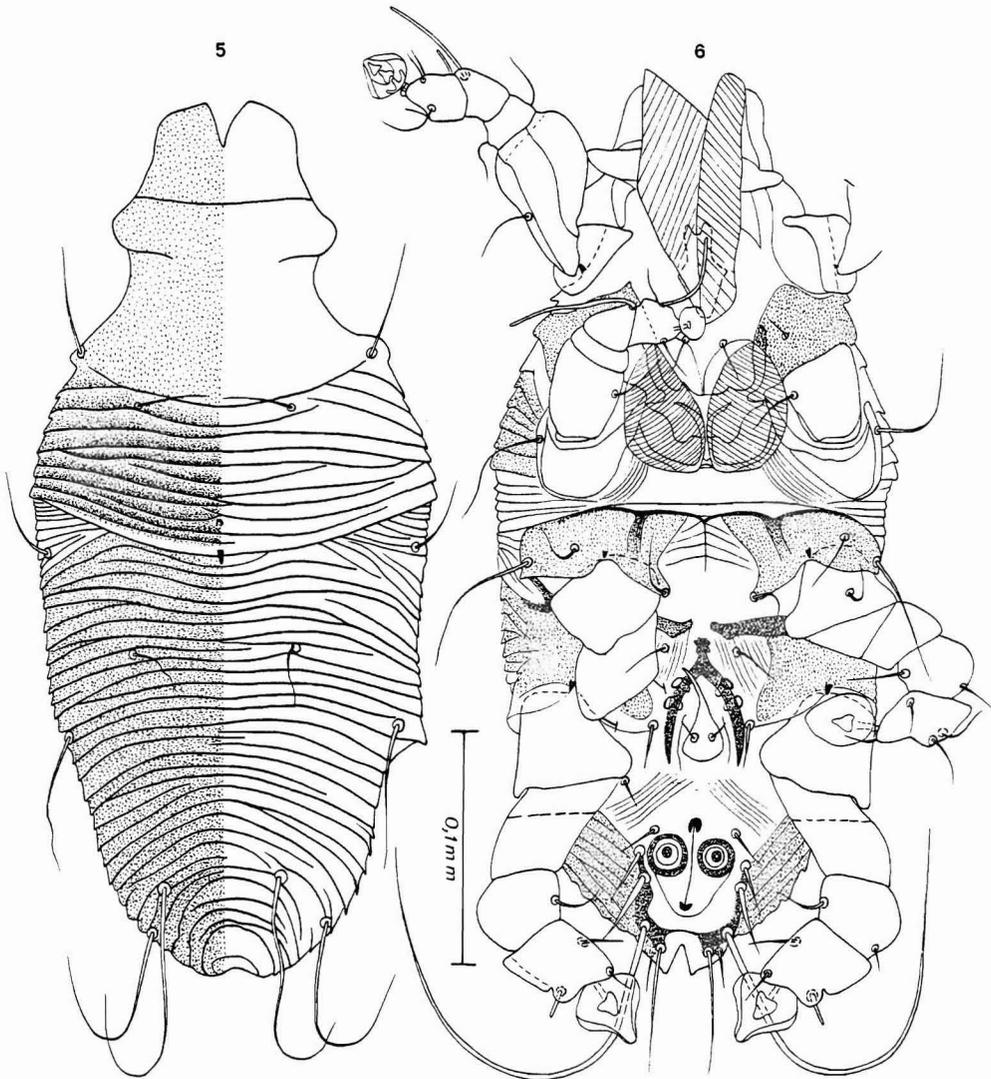
TYPE SPECIES—*Hemigalichus baramensis* Fain, 1970.

This genus is the most close to *Lynxacarus* Radford and to *Carnilistrophorus (Carnilistrophorellus)* Fain. It differs from *Lynxacarus* by the presence of a deep incision in the anterior margin of the body, the presence of an articulation of the anterior part of the prescapular shield, the strong sclerotization of the hysteronotum in both sexes, the aspect of femora I with a large dorsal crest and the short aspect of legs II. It is distinguished from *Carnilistrophorus (Carnilistrophorellus)* in both sexes by the presence of a transverse furrow on prescapular shield and the presence of a well-developed postscapular shield.

Hemigalichus baramensis Fain, 1970

Hemigalichus baramensis Fain, 1970: 276.

MALE (Figs. 5, 6)—Holotype 385 μm long, 170 μm wide. With a large median shield covering most of the hysteronotum. Dorsal setae of median length except the posterior setae which are



Figs. 5,6: *Hemigalichus baramensis* Fain, 1970-5, holotype male dorsally; 6, holotype male ventrally.

strong and long. VENTER—Epimerae III fused in midline. Legs III-IV flattened laterally and strongly inflated dorsoventrally, ending in large suckers. Opisthogaster with a postanal U-shaped sclerite incised in the middle in 2 transparent lobes.

FEMALE (Fig. 7)—Allotype $395\mu\text{m}$ long, $178\mu\text{m}$ wide in ventral view. With the characters given for the genus. Postscapular shield $70\mu\text{m}$ long, with 7-8 striations in the midline. Dorsal setae thin and relatively short (maximum length $40\mu\text{m}$). Opisthosomal setae thin and much shorter than in the male (maximum $40\mu\text{m}$ long). Legs III-IV thick.

HOST AND LOCALITY—From *Hemigalus derbyanus boiei*, Baram, Sarawak. Animal in the British Museum n° 0.7.29.22. The mites were fixed on the hairs of the neck and of the bases of anterior legs. Holotype in British Museum.

Genus *Dubininetta* Fain & Lukoschus, 1978 nov. status

This genus was placed so far as a subgenus of *Lynxacarus*. We elevate it here to the genus rank.

TYPE SPECIES—*Lynxacarus (Dubininetta) talpae* Fain & Lukoschus, 1978.

Genus *Echinosorella* n. g.

DEFINITION—Medium size species. Anterior border of prescapular shield rounded. Both sexes with a median well-developed postscapular shield. FEMALE with a median shield on anterior part of hysteronotum, behind this shield the cuticle is distinctly punctate. MALE with well-developed adanal suckers; hysteronotum with a large median shield; aedeagus surrounded anteriorly by a sclerite in the shape of a tuning fork; posterior extremity with rather well-developed lobes (not slightly incised as recorded in the description of the type species); setae *d* 5 piliform and long; opisthogaster posterior to anus without a U-shaped sclerite as in *Lynxacarus*; coxae III united in the midline by a transverse sclerite.

TYPE SPECIES—*Lynxacarus (Dubininetta) echinosorex* Fain & Lukoschus, 1978.

This new genus is distinguished from *Lynxacarus* Radford, 1951 in the female by the presence of a median shield on hysteronotum, in the male by the presence of rather well-developed posterior lobes and the absence of a U-shaped sclerite behind the anus. In both sexes it is distinguished by the absence of a narrow sclerotized band between the base of epimera II and the prescapular shield. It is distinguished from *Dubininetta* Fain & Lukoschus, 1978 n. stat. mainly in the female by the presence of a median shield on hysteronotum.

Genus *Spalacarus* n. g.

DEFINITION—Somewhat intermediate between genera *Afrolistrophorus* Fain, 1970 and *Leporacarus* Fain, 1970. Body thick. Both sexes with a median well-developed postscapular shield; anterior border of prescapular shield rounded; absence of a sinuous punctate strip between the base of epimera II and the prescapular shield. FEMALE either completely devoid of shields on hysteronotum or with a pair of vestigial punctate plates lateral to coxae III, copulatory pore opening on opisthogaster; all perianal setae short or very short. MALE ending posteriorly in 2 large lobes, setae *d* 5 membranous very large; aedeagus flanked by 2 longitudinal sclerites converging anteriorly.

TYPE SPECIES—*Leporacarus spalacis* Fain, 1970.

This new genus differs from *Leporacarus* in both sexes by the much shorter aspect of legs II compared to legs I (these legs are subequal in *Leporacarus*), the aspect of the prescapular and postscapular shields which are free except in a small area of the midline where they are fused (these shields are completely fused in *Leporacarus*). The male differs from that of *Leporacarus* by the small development of the adanal suckers and the absence of fusion of the coxae III in the midline.

From *Afrolistrophorus* it differs in the male by the small aspect of the adanal suckers, and the strongly inflated aspect of the legs III-IV, in the female by the absence or the vestigial aspect of the hysteronotal shield.

Genus *Afrolistrophorus* Fain, 1970

This cosmopolitan genus has been found only from rodents. It is specially well represented in Africa (by 12 species), but has also been recorded from Asia (6 species), Europe and Middle-East (4 species) and South America (2 species). All these species are endemic except one species from *Mus musculus* (*Afrolistrophorus musculus* Wilson & Laurence, 1967) which has been found in this host in Hawaii and in Pakistan. We describe here *A. rhizomys* Fain, 1970 and 2 new species all from rodents of family Rhizomyidae.

1. *Afrolistrophorus rhizomys* (Fain, 1970) n. comb.

Leporacarus rhizomys Fain, 1970: 277.

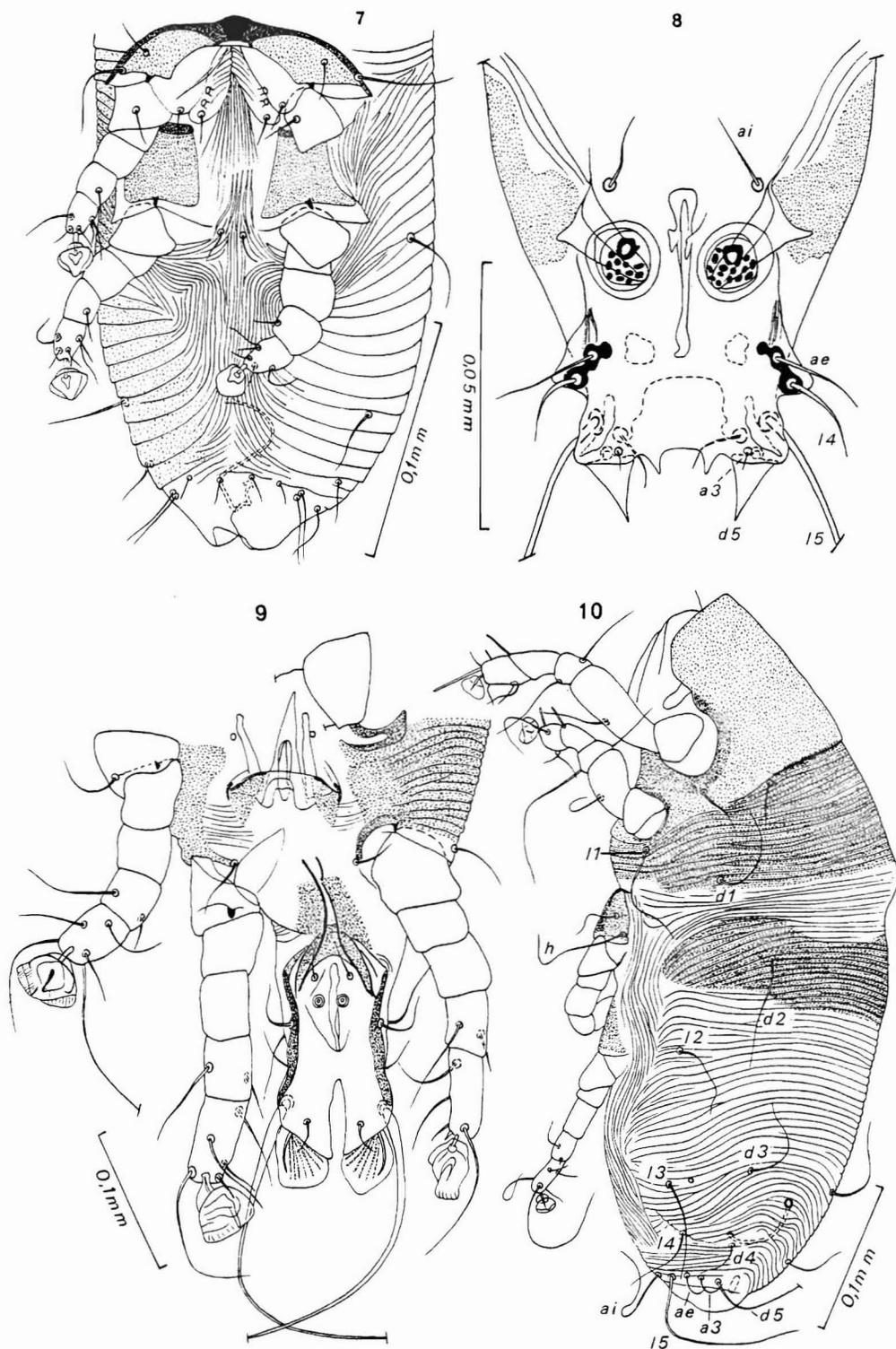
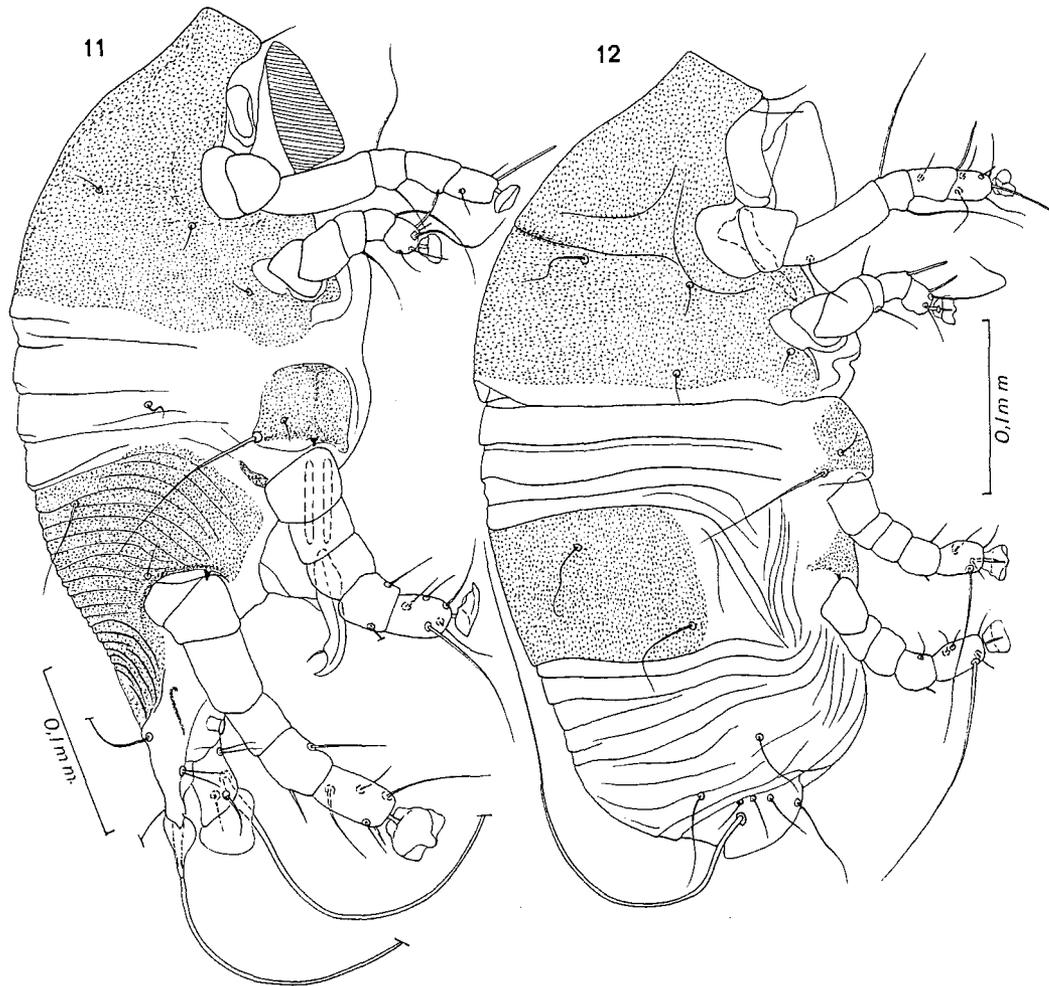


Fig. 7: *Hemigalichus baramensis* Fain, 1970—Female (opisthogaster).
 Fig. 8: *Metalistrophorus laosensis* (Fain, 1978)—Male posterior part of opisthogaster. Figs. 9-10: *Afrolistrophorus rhizomys* Fain, 1970—9, Male, opisthogaster; 10, female in lateral view.



Figs. 11,12: *Afrolistrophorus cannomys* n. sp. —11, male; 12, female.

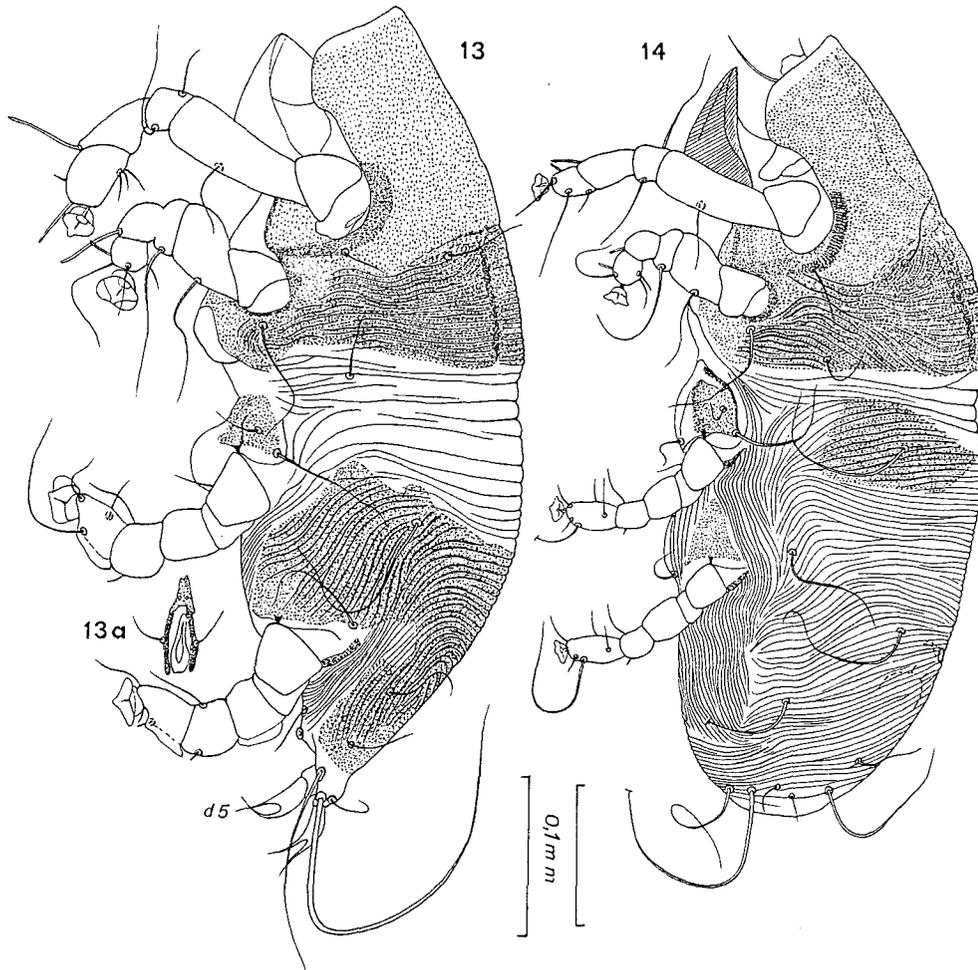
MALE (Fig. 9)—Holotype $651\mu\text{m}$ long, $240\mu\text{m}$ wide (slightly in oblique position). The postscapular shield is striated transversely. Body thick, except opisthosoma much narrower. Prescapular and postscapular shields completely fused. A large striated shield covers the posterior half of hysteronotum. Legs II distinctly shorter than legs I. Posterior extremity with two large lobes. Setae *d* 5 membranous, very wide with dark lines. Setae *l* 5 very long and inflated basally. Adanal suckers small. Aedeagus $75\mu\text{m}$ long flanked laterally by a pair of longitudinal sclerites.

FEMALE (Fig. 10)—Allotype $500\mu\text{m}$ long, $180\mu\text{m}$ wide (laterally). Anterior shields as in the male. Hysteronotum with a shield much wider ($280\mu\text{m}$) than long ($45\mu\text{m}$ in the midline) and bearing 12-14 transverse striations in the midline. Idiosomal setae long. Copulatory orifice surrounded by a small sclerotized ring of $3\mu\text{m}$ wide and situated at $90\mu\text{m}$ from posterior extremity.

HOST AND LOCALITY—From *Rhizomys pruinosus*, Nape, Laos. The mites were fixed on the hairs of the posterior part of body. Host in British Museum n° 28.7.1.154. Holotype in this Museum.

2. *Afrolistrophorus cannomys* n. sp.

MALE (Fig. 11)—Holotype $465\mu\text{m}$ long and $198\mu\text{m}$ wide (laterally). Dorsum humped. Propodonal shields completely fused and punctate without striations. Dorsal surface of metapodosoma with a large striated shield. Anterior part of hysterosoma soft, with 4 striations



Figs. 13,14: *Afrolistrophorus sumatrensis* n. sp.—13, male; 13a, aedeagus; 14, female.

widely separated. Posterior extremity with 2 largest lobes bearing membranous setae *d* 5 and very long *l* 5 setae inflated basally. Adanal suckers well developed. Aedeagus $72\mu\text{m}$ long, flanked laterally by a pair of longitudinal sclerites. Posterior legs very long and thick (in lateral view) ending in large suckers. Anterior legs narrower with smaller suckers.

FEMALE (Fig. 12)—Allotype $455\mu\text{m}$ long and $200\mu\text{m}$ wide (laterally). Soft cuticle with only a few striations widely spaced. Propodosomal shields as in the male. There is a large median and not striated shield on the hysteronotum, it is $66\mu\text{m}$ long and about $225\mu\text{m}$ wide. Some idiosomal setae are rather long and very thin. The *l* 5 are strong and very long. Posterior legs relatively long and thick.

HOST AND LOCALITY—From *Cannomys badius*, Tennasserim, animal in British Museum n° 89.7.30.1 (holotype male, allotype and 3 paratypes female, 3 nymphs) (Coll. A. Fain); Assam, 18. I. 1957 (3 females and 1 nymph, paratypes), animal in the Hamburg Museum (Coll. Dr. F. Lukoschus).

REMARK—This species differs from the other species in the genus in both sexes by the thick aspect of the body; in addition in the female by the structure of the striations very widely spaced and of the shields without striations and in the male by the great development of the postscapular shield and of the posterior legs.

3. *Afrolistrophorus sumatrensis* n. sp.

MALE (Fig. 13)—Holotype 520 μm long and 195 μm wide (in lateral view). Propodosomal shields completely fused. Postscapular shield with numerous dark transverse sclerotized bands and in the midline with a longitudinal poorly sclerotized band. The striations are much more numerous in the median than in the lateral areas. Posterior two-thirds of hysteronotum with a large striated shield. Opisthosoma short ending in two relatively short lobes bearing membranous setae *d* 5 which end in two very thin piliform prolongations. Adanal suckers small. Aedeagus surrounded by an inverted U sclerite. Idiosomal setae long or very long; setae *l* 1 and *h* 75 and 100 μm long. Posterior legs strongly inflated dorsoventrally.

FEMALE (Fig. 14)—Allotype 570 μm long and 212 μm wide (in lateral view). Propodosomal shields as in the male. Hysteronotum with two paramedian separated relatively small shields (maximum length 60 μm). Idiosomal setae long, most of them 80-100 μm . Setae *l* 5 about 200 μm , *d* 5 about 120 μm . Copulatory orifice dorsal, at 160 μm from posterior extremity. Posterior legs well-developed.

HOST AND LOCALITY—From *Rhizomys sumatrensis*, Medan, Sumatra, May 1971. Animal in Senckenberg Museum, Frankfurt, Germany n° 43687 (holotype and 1 paratype male, allotype female; 25 nymphs paratypes among which 10 are in the molting stage and contain either males or females) Coll. Dr. F. Lukoschus). Types in the Senckenberg Museum.

REMARKS—This species is well-characterized in both sexes by the structure of the postscapular shield and in the male by the membranous and bifid aspect of the *d* 5 setae.

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