Two new *Linognathus* species from Mozambique

by

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LINOGNATHUS KIMI SP. N.
(Figs. 1, 2, 3)

Female.—Head: longer than wide. Antennae relatively long. Forehead slightly wider than long; lateral margins parallel posteriorly, converging into an acute point anteriorly; lateral sclerotizations strong, lobed. Hind head longer than wide; lateral margins angularly convex; lateral sclerotizations strong, undulated. Setae short. Thorax: shorter than head and only slightly wider than hind head. Spiracles small. Sternal plate long and slender. Legs small; second and third pairs with elongated sharp claws. Abdomen: an elongated oval with slender setae; median pair on each segment being longer than lateral ones; one long marginal seta on either side of segments 2–5 and two each on segments 6–8. Spiracles small. Genitalia: gonapophyses elongated, roughly triangular in shape; longitudinal sclerotizations along lateral margins strong; setae around apex relatively long. Median sclerotization large; anterior part broadened, roughly diamond-shaped; posteriorly a stout prolongation broadens out to about twice its own size and reaches down to the wall of the vagina. Apical lobes long, acutely rounded.

Male.—Similar to female in general shape and appearance, only slightly smaller. Genitalia: Parameres long and broad with slight mesal expansions in the posterior and anterior thirds. Pseudopenis relatively long. Endosomal piece elongated, consisting of two rod-shaped pieces, enclosing a flat piece of sclerotization which is rounded anteriorly. Basal plate widely expanded posteriorly. Genital plate large. Apex of abdomen ending in a truncate lobe.

Nymphal stages.—Nymph 1 — Total length: 0.60–0.65 mm.

Head: longer than wide with five-segmented antennae. Forehead parabolic. Hind head with almost parallel lateral margins. Lateral sclerotizations incon-
spicuous. Anterior principal head setae about twice as long as posterior principal head setae; the latter being in a row of setae of subequal size. Thorax: about same size as the head, with relatively large spiracles. Sternal plate lacking. Legs strong with sharply pointed claws. Abdomen: small, oval. One pair of major abdominal setae on either side of the apex. Abdominal setae very small and inconspicuous. Spiracles medium-sized.

Nymph III — Total length: 1.23–1.24 mm.

Head: longer than wide; antennae clearly five-segmented. Forehead as wide as long, broadly rounded anteriorly. Hind head slightly longer than wide with smoothly convex lateral margins. Lateral sclerotizations similar to that of the adult stages. Anterior principal head setae much longer than posterior principal head setae. Thorax: as long as, but wider than head. Spiracles small. Sternal plate lacking. Legs strong with sharply pointed claws. Abdomen: oval with slender setae; median pair on each segment well developed but lateral ones very small. One long marginal seta on either side of segment 3 and two each on segments 6–8, with an additional pair on either side of the apex.

Only the first and third nymphal stages are described as the series at hand is very short and it is difficult to determine whether there are any second stage nymphs present.

Host. — *Raphicerus sharpei* Thomas, Sharpe’s Grysibok.


*Notes.* — According to Ellerman, Morrison-Scott and Hayman (1953), *Raphicerus melanotis* Thurnberg occurs only in the Cape Province and they even doubt the validity of the record from Natal. *R. sharpei*, on the other hand, ranges through the Transvaal northwards through Rhodesia, and Zambia to Tanzania and eastwards through Mozambique. These species are not easily separated and the records of *R. melanotis* from Mozambique could be as a result of misidentification of the host. This is the first louse record from the Grysibok and is named in honour of Dr. Ke Chung Kim of Minnesota.

*Novos Tuns est. 55, Janeiro, 1968*
LINOGNATHUS NESOTRAGI SP. N.

(Fig. 4)

Female. — Head: longer than wide with relatively long, slender antennae. Forehead wider than long, slightly parabolic, with minute tubercles antero-laterally; lateral sclerotizations lobed. Hind head longer than wide with almost parallel lateral margins; lateral sclerotizations very slight. Setae short. Thorax: shorter than head, but wider than hind head. Spiracles small. Sternal plate lacking. Legs small with short claws; first pair much smaller than second and third pairs. Abdomen: elongated, about three times as long as wide. Setae few, short, with median pair on each segment slightly longer than lateral ones. One long marginal seta on either side of segment 3 and two each on segments 7–8. Spiracles small. Genitalia: gonapophyses small, roughly triangular; longitudinal sclerotizations along lateral margins strong; mesal margins convergent; five setae arranged in a single row along mesal margins, decreasing in size with longest at apices. Median sclerotization small, roughly octagonal. A small additional piece of sclerotization present between each gonapophysis and its corresponding apical lobe. Apical lobes short, bluntly rounded.

Male. — Similar to female in general shape and appearance but abdomen is only about twice as long as wide. Genitalia: parameres slender, sharply pointed apically; mesal expansions in the anterior third with very slight ones in the posterior third. Pseudopenis strong. Endomeral piece ring-like, consisting of a U-shaped posterior part, the tips of which are connected anteriorly by a slightly expanded wide V. Basal plate slender. Genital plate present. Apex of abdomen rounded.

Host. — Nesotragus moschatus Von Duyben, Sudi.

Material examined. — Collection Smithsonian Institution, Washington — Mozambique: Changara, Tete distr., 5–xii–1964, ex Nesotragus moschatus (1 ♂ holotype, 1 ♀, 2 ♀ ♀ ♀ paratypes).

Notes. — This is the first house record from Nesotragus moschatus and this species is very easily separated from any other Linognathus species.

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Novas Taxa ent. 55. Janeiro, 1968
Fig. 1.—Linognathus kini sp. n., ex Raphicerus ihorrai
(a, female genitalia; b, male genitalia; c, head)
Fig. 2 — *Linognathus kimi* sp. n. (First nymphal stage)

*Nouvo Tese* ent. 55. Janeiro, 1968
Fig. 3 — Linognathus kimi sp. n. (Third nymphal stage)

Novos Taxa ent. 55. Janeiro, 1968
Fig. 4 — *Linognathus neustragi* sp. n., *ex Neotragus moschatus*  
(*a*, female genitalia; *b*, male genitalia; *c*, head)