

New Species of *Linognathus* and *Polyplax* (*Anoplura*).

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Linognathus peleus nov. sp.

(FIGS. 1-2.)

MALES and females taken off *Pelea capreolus* (Vaal Rhebok), Naauwpoort, C.P., 26th July, 1922 (coll. Austin Roberts). Holotype a male.

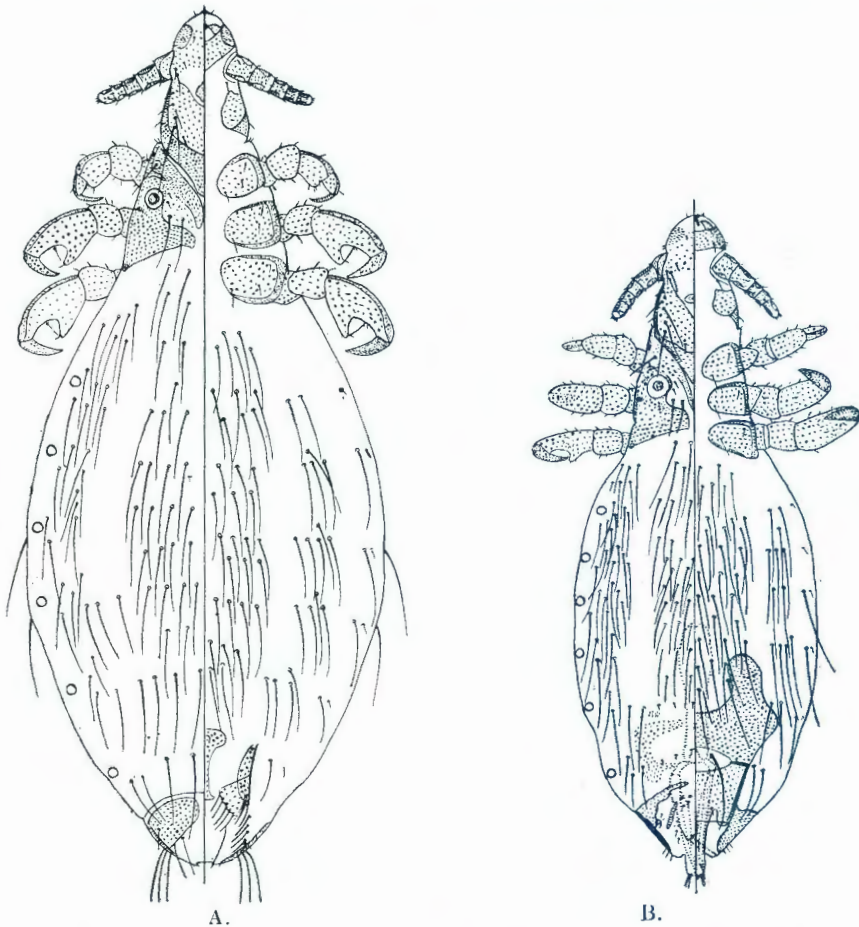


Fig. 1.—*Linognathus peleus* nov. sp., female (A) and male (B).

Female (Fig. 1A).—Length 2·1 mm. *Head* elongate, the forehead parabolic with a transverse band on the venter; antennae set well forward; hind head with the lateral margins gradually broadening from base to apex; dorsum with a distinct, irregular sclerotic pattern, the setae of medium length; pharynx with brushes, mouthparts extending beyond posterior margin of the head.

Thorax shorter than the head; sternal plate absent.

Abdomen elongate oval, the setae arranged dorsally and ventrally into median and lateral groups. *Spiracles* large with distinct markings. *Gonopophyses* (Fig. 2A) elongate with a few short setae on their inner margins; genital plate spatulate.

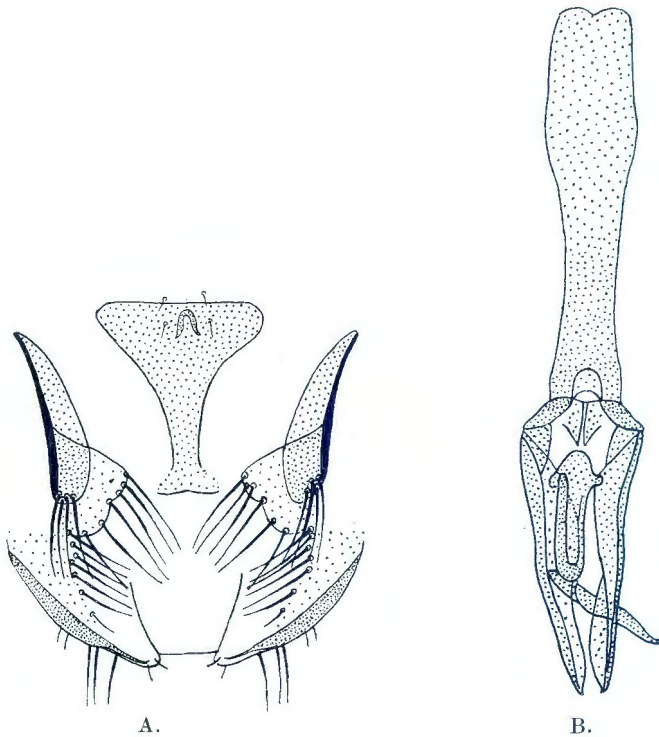


Fig. 2.—*Linognathus peleus* nov. sp., A. genital region of female; B. male genitalia.

Male (Fig. 1B).—Length 1·6 mm. Head and thorax as in the female. *Abdomen* terminating posteriorly in a pointed process. *Genitalia* (Fig. 2B) with the basal plate long and slender, likewise the parameres; endomeral piece well developed.

A very distinct species apparently belonging to the *tibialis* group. It can be distinguished by the shape of the head, the female genital region, male genitalia, and apex of the abdomen of the male.

Linognathus damaliscus nov. sp.

(FIGS. 3-4.)

Males and females (including the holotype, a male, and allotype) taken off *Damaliscus albifrons* (blesbok), Zoological Gardens, Johannesburg (coll. G. Martinaglia), and females off *Damaliscus dorcas* (Bontebok), Bredasdorp, C.P. (coll. Austin Roberts).

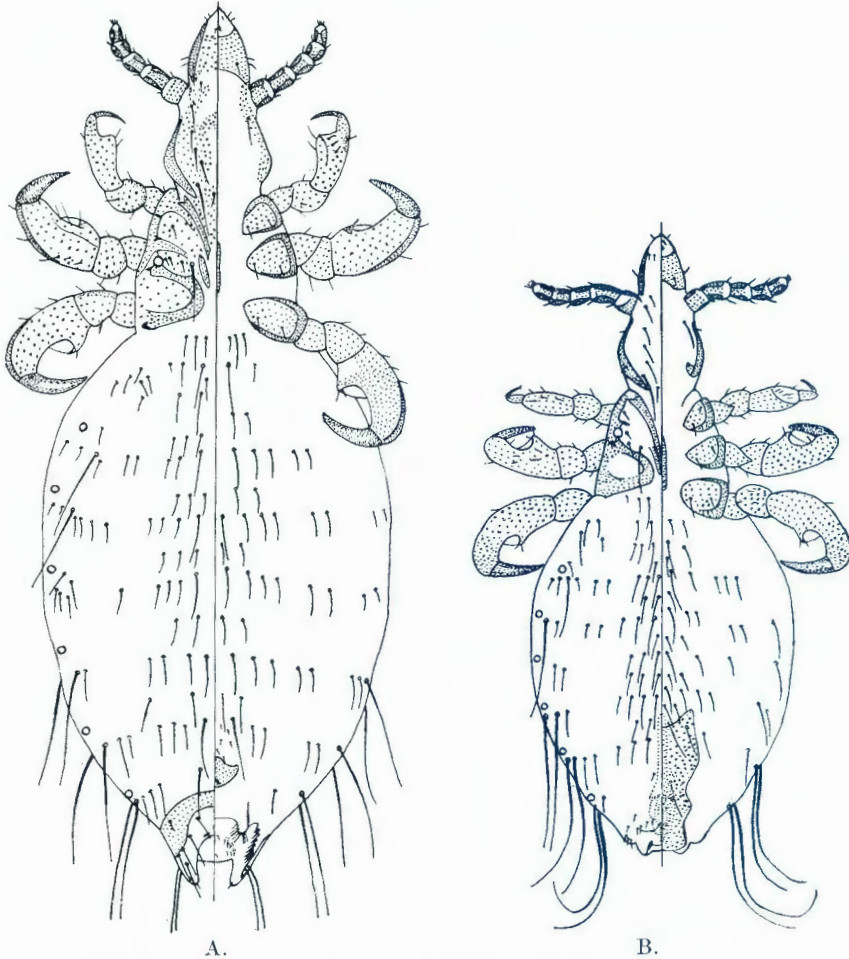


Fig. 3.—*Linognathus damaliscus* nov. sp., female (A) and male (B).

Female (Fig. 3A).—Length 1.75 mm. *Head* elongate; the forehead acutely pointed with a transverse band on the venter; antennae elongate, set about the middle; dorsum with a distinct, irregular sclerotic pattern, the setae of medium length; hand head with lateral margins convex and sclerotic; pharynx with brushes; mouth-parts extending beyond posterior margin of head.

Thorax shorter than the head; sternal plate present, very narrow.

Abdomen elongate oval, sparsely haired, the setae which are short and slender arranged in normal pattern. *Spiracles* medium sized without markings. *Gonopophyses* (Fig. 4A) small, rounded posteriorly, with a row of setae on their inner margins; genital plate subtriangular.

Male (Fig. 3B).—Length 1.55 mm. Head and thorax as in the female. Abdomen terminating posteriorly in a short, broad lobe. Genitalia (Fig. 4B) with the basal plate long and slender; parameres each with a pointed expansion on their inner margins and pointed at their apices; endomeral piece elongate, extending almost to the base of the parameres and pointed in front. This species belongs to the *tibialis* group. The female can be distinguished by the shape of the genital plate and gonopophyses, and the male by the genitalia, especially the shape of the endomeral plate.

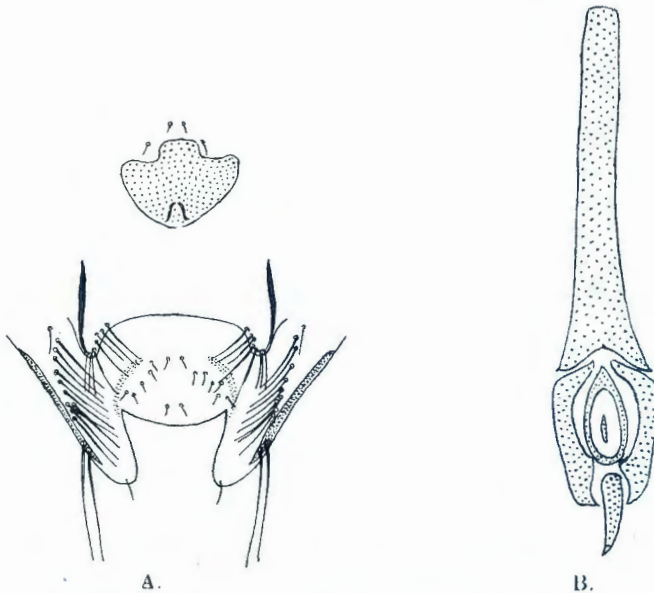


Fig. 4.—*Linognathus damaliscus* nov. sp., A. genital region of female; B. male genitalia.

Linognathus aepycerus nov. sp.

(FIGS. 5-6.)

Males and females (including the holotype, a male, and allotype) taken off *Aepyceros melampus* (Impala), between Pretoria and Johannesburg; also females (mostly slightly immature) off some host species, Rustenburg District, Transvaal.

Female.—Length 1.85–2 mm. *Head* short and broad; forehead rounded; antennae situated slightly forward beyond the middle; hind head with lateral margins distinctly angulate and constricted posteriorly; pharynx with well-developed brushes; mouth-parts extending beyond posterior margin of the head.

Thorax short and broad, of ordinary form; sternal plate present, slender.

Abdomen elongate oval, similar to other species of the *breviceps* group, the setae sparse and short except for a median pair on each segment dorsally and ventrally; long marginal setae present on segments vi to viii, and a single long seta near the spiracle on the second segment. *Spiracles* small. *Gonophyses* (Fig. 6A) elongate with long setae on posterior margin; genital plate racquet-shaped.

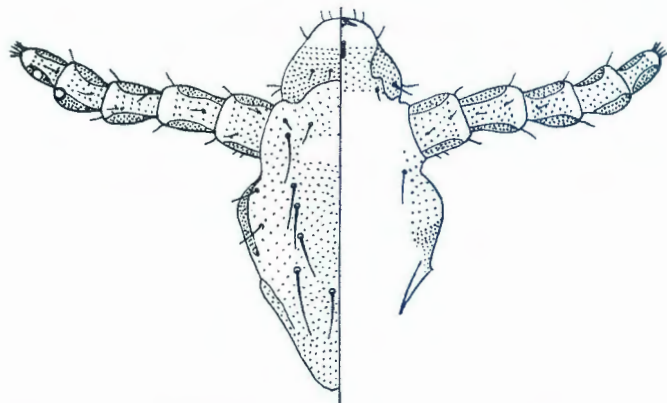


Fig. 5.—*Linognathus aepycerus* nov. sp., head of male.

Male.—Length 1.19 mm. Similar to the female in general characters, except that the abdomen is pointed posteriorly. *Genitalia* (Fig. 6B) with the basal plate long and slender; parameres slender, without notches on their inner margins; endomerale piece long and slender, pointed in front. This species belongs to the *breviceps* group. Both sexes can be distinguished from *L. angulatus* (Piaget) by the shape of the head, and the male also by the genitalia. In the male of *L. angulatus* the parameres are slightly notched at their apices. From other species belonging to the group the females can be distinguished, *inter alia*, by the shape of the genital plate, and the males by the genitalia.

Polyplax subtaterae nov. sp.

(FIG. 7.)

Males and females taken off *Tatera liodon smithii*, Kampala, Uganda (coll. G. H. E. Hopkins). *Holotype* a female.

Female.—Length 1.34 mm. *Head* slightly longer than broad; antennae set close to the anterior margin, which is almost truncate; hind head with prominent post-antennal angles and strongly constricted occipital region, lateral margin straight. Antennae with the first segment dilated.

Thorax about as long as the head, with the lateral angles roundly convex; on the dorsum there is one short seta on each side above the spiracle and a long one on the submargin. Sternal plate as in fig. 7B. *Abdomen* with the tergal and sternal plates short and very narrow, the tergal plates of the second and eighth segments each with about eight setae, and the remainder with about twenty or more setae. Sternal plate of the second segment with ten setae, those of the median segments with about seventeen setae, and of the seventh six setae; between the ends of each sternal plate on the third to seventh segments and the corresponding paratergal plates there is a single seta.

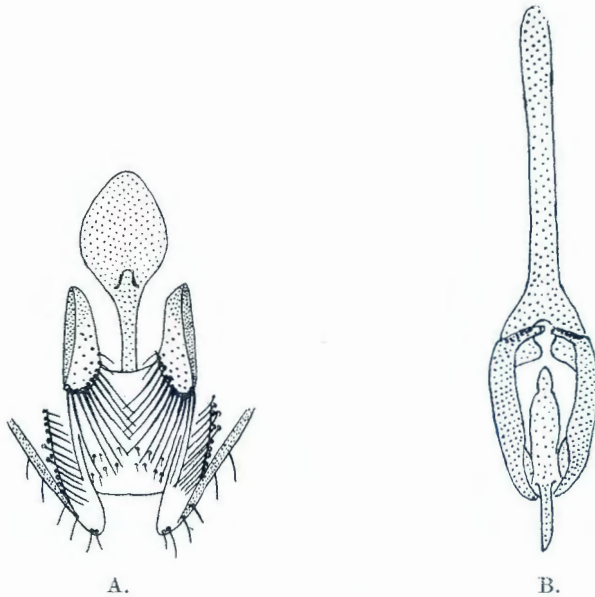


Fig. 6.—*Linognathus aepyrcerus* nov. sp., A. genital region of female; B. male genitalia.

Paratergal plates (fig. 7A) as follows: Those of the second segment distinctly divided longitudinally, each portion with a single seta, and the dorsal portion with a tapering process; plates of the third to sixth segments each with a small tooth at each posterior angle; those of the third and fourth segments each with a short ventral seta and a very long dorsal seta; those of the fifth and sixth segments with two very short setae; plates of the seventh and eighth segments small, especially the latter, each with two long setae.

Male.—Length 1.15 mm. *Head* about as broad as long, with the lateral margins of the hind head rounded, otherwise as in the female. Antennae with the basal segment much dilated and with the third segment strongly modified. Thorax similar to that of the female.

Abdomen as in *P. weneri* (Glink), except that the sternal plates are smaller, and there is only one seta on each of the median segments between the sternal plates and the corresponding paratergal plates; also the long setae on the third and fourth paratergal plates are much longer, being as long as the three following segments. *Genitalia* as in *P. weneri*. This species belongs to the *praecisa* group, and appears to be intermediate between *P. taterae* Ferris and *P. weneri* (Glink). From *P. taterae*, *P. praecisa* and *P. biseriata* it can be distinguished in having the short setae on the paratergal plates much shorter, and the male also by the genitalia. From *P. weneri* the male can be distinguished, apart from the characters given above, by the shape of the sternal plate.

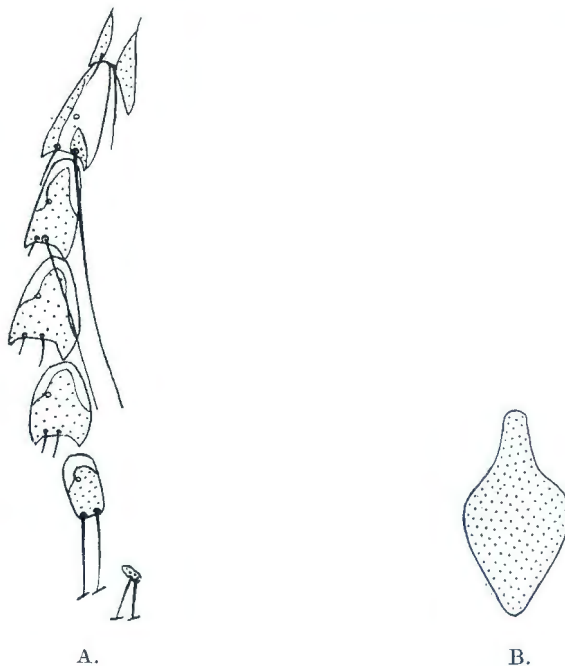


Fig. 7.—*Polyplax subtaterae* nov. sp., A. paratergal plates of female; B. sternal plate.