## TWO RARE ANOPLURA FROM KENYA

Phyllis T. Johnson, Gorgas Memorial Laboratory, Panama, Republic of Panama

Through the kindness of Dr. Theresa Clay of British Museum (Natural History) I had the privilege of examining the specimens of Anoplura collected in Kenya by Dr. G. B. Corbet during 1960-62. Among other interesting finds were the hitherto unknown male of Hoplopleura rukenyae Ferris and a good series of Polyplax praecisa (Neumann), a species known previously only from the poorly preserved type material which left its status in some doubt. Both are described and figured below.

## Hoplopleura rukenyae Ferris (Figs. 1-5)

Hoplopleura sukenyae Ferris, 1921, Contributions toward a monograph of the sucking lice, v. 2, pt. 2, p. 86, fig. 51 (misspelling).

Hoplopleura rukenyae, Ferris, 1951, The sucking lice, p. 143 (emendation).
Johnson, 1960, U. S. D. A. Tech. Bul. no. 1211:17.

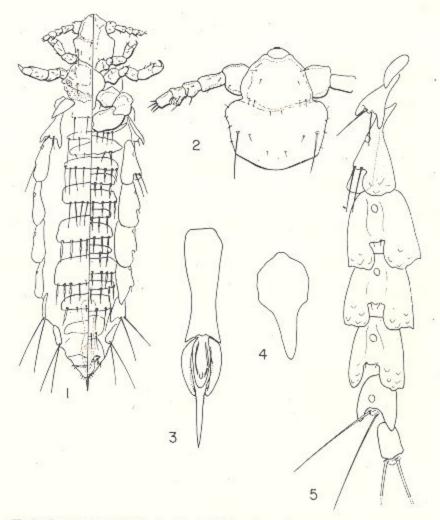
The holotype female was taken from Mus triton, Mt. Rukenya, British East Africa. There are no other records of its occurrence.

New record.—One male from Mus triton, Kerugoya, Kenya, 22 Sept. 1960, G. B. Corbet no. 236.

Diagnosis.—Except for sexually-determined differences, the male rukenyae recorded above agrees closely in morphology with the original description of the female. It may be immediately separated from other described African Hoplopleura species by having the pseudopenis extended into a long, acute point (fig. 3). As in the female, there are medium-sized setae on the thoracic dorsum (fig. 1); the apical lobes of the paratergal plates are scaly, plate III has both

apical lobes rounded, and plate VII has two apical lobes, although these are not as long as in the female (fig. 5).

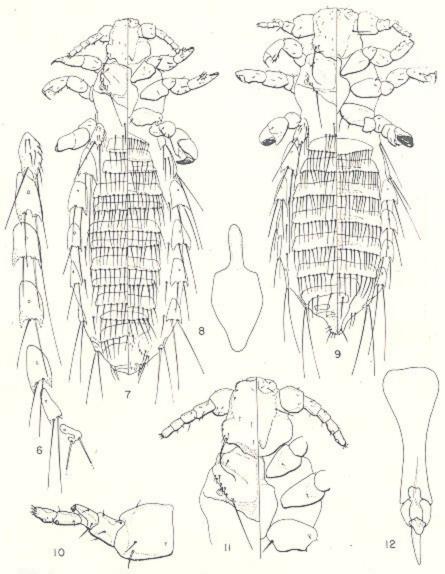
Description.—Head (fig. 2). One very slightly enlarged dorsal seta on each of antennal segments 3 and 4. Postantennal angles rounded, postantennal margins slightly convergent posteriorly, head not rugose dorsally. Thorax (fig. 1). Sternal plate with long, sharply rounded, posterior extension. Medium-sized setae on dorsum. Dorsum not especially rugose. Abdomen (fig. 1). Some of apical setae on tergal and sternal plates are sword-shaped. With usual one dorsal plate and two ventral plates per segment. Apical setae of paratergal plate III (fig. 5) extending well beyond rounded apical lobes; apical setae on plates IV-VI short



Hoplopleura rukenyae Ferris. Fig. 1, Male; fig. 2, Dorsal view of head, male; fig. 3, Aedeagus; fig. 4, Thoracic sternal plate, male. Fig. 5, Paratergal plates II-VIII, male.

but not minute; plates IV-V with apical lobes truncate; plate VI with ventral lobe rounded and dorsal lobe truncate; plate VII with two rounded apical lobes, the dorsal one being the larger. Aedeagus (fig. 3). Basal plate not especially broad anteriorly, about as long as aedeagus proper. Parameres evenly convex laterally. Pseudopenis with very long narrow posterior extension which is as long as the parameres.

Length .- 1.2 mm.



Polyplax praccisa (Neumann). Fig. 6, paratergal plates II-VIII, female; fig. 7, female; fig. 8, thoracic sternal plate, female; fig. 9, male; fig. 10, dorsal view of antenna, male; fig. 11, head and thorax, female; fig. 12, Aedeagus.

## Polyplax praecisa (Neumann) (Figs. 6-12)

Haematopinus praecitus Neumann, 1902, Arch. Parasitol. (Paris) 5:600 (partim, typographical error for praecisus).

Hacmatopinus praecisus, Neumann, 1903, loc. cit., 6: 144, fig. 1 (emend.).

Polyplax praccisa, Enderlein, 1904, Zool. Anz. (Leipzig) 28: 143 (partim). Fabrenholz, 1919, Niedersächs Zool. Ver. Hannover Jahresb. (1913-18) 5-10:25 (restricts name praecisa). Ferris, 1923, Contributions toward a monograph of the sucking lice, v. 2, pt. 4, p. 196, fig. 123. Hopkins, 1949, (London) Zool. Soc. Proc. 119:477. Ferris, 1951, The sucking lice, p. 209. Paterson and Thompson, 1953, Parasitology 43:199. Werneck, 1953, Rev. Bras. Biol. 13:59. Johnson, 1960, U. S. D. A. Tech. Bul. no. 1211:61.

The type series of praecisa was taken from "gros rats" in Abyssinia (Ethiopia). Hopkins (1949) thought the host might be Tatera nigricanda since Hoplopeura neumanni Fahrenholz (included in the type collection of praecisa) is regularly taken from T. nigricanda. The long series taken by Dr. Corbet from this animal strengthens Hopkins' theory. Johnson (1960) reported one small collection of P. taterae Ferris from Tatera nigricanda from Kenya, although not from the same locality as the Corbet material. Certainly it is not impossible that both taterae and praecisa occur on the same host species but it is also not impossible that human error is involved in the record of taterae from nigricanda.

New record.—Numerous males and females from Tatera nigricauda, South Rift Wall, Kenya, 31 October 1960, G. B. Corbet no. 374.

Diagnosis.—P. praecisa differs from closely related African species in having the apical setae of paratergal plates III-VI all longer than the respective plates (fig. 6). It is apparently most closely related to taterac Ferris. As well as having longer apical setae on the paratergal plates, praecisa differs from taterae in that both apical angles of plates III-VI are acute, not with the dorsal lobe of each of these plates larger and subrounded.

Description,-Male (fig. 9): Head (fig. 11, 9). Basal antennal segment much enlarged, about as broad as long, third segment with dorsal prolongation bearing short spine (fig. 10), Occipital angles marked, Thorax. Dorsally with seven to ten small setae above spiracle on each side. Sternal plate (fig. 8, ♀) with anterior prolongation about one-third total length of the plate. Abdomen. Each segment with one dorsal and one ventral plate. These plates broad and wellsclerotized, with a darker area medially along posterior margin. Apical rows of setac very numerous, averaging between 24-30 setac on each plate. Paratergal plates III-VI (fig. 6, 9) scaly, apical lobes short and acute, dorsal and ventral lobes not differing in size; all plates with apical setae longer than plate bearing them and with dorsal seta of plate III very long. Acdeagus (fig. 12). Basal plate expanded anteriorly. Pseudopenis as long as parameres, narrowing to pointed apex. Female (fig. 7). Head as in male except antennae not modified. Thorax as in male, Abdomen. Two well-marked plates per segment dorsally and ventrally. Apical setae on these plates numerous as in male. Paratergal plates as in male. Genitalia not distinctive.

Lengths .- Male: 1.4 mm, Female: 1.6-1.8 mm.