ANOPHLURA FROM AFRICAN HOSTS.

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The following notes and descriptions are based on material received by the Entomological Research Committee, who have kindly presented the types of the new species to the National Collection.

Genus Scipio, nov.

Type: Haematopinus aulacodi, Neumann (Archives de Parasitologie, 1911, p. 403).

Head long and broad, the 3rd joint of the antenna very long, almost equal to the length of the 2nd, 4th and 5th together. Thorax shorter and broader than the head. First pair of legs with a long slender claw and, arising close beside it, another claw, half the length of the first, hook-shaped and enlarged at its base. The pretarsal sclerite of the 2nd and 3rd pairs of legs very large. Abdomen ovoid, as long as head and thorax together; pleurae small but strong, the posterior ones drawn out into tubular processes as in Solenopotes.

The foregoing diagnosis is based on two specimens of S. aulacodi, ♂ and ♀, off Thyronomys swinderianus, Temminck, from Chirimanyama stream, Luangwa Valley, North-Eastern Rhodesia (S. A. Neave 11. ix. 1910). The ♂ is much smaller than the ♀, with the terminal segment of the abdomen rounded.

Genus Neohaematopinus, Mjöberg.

Arkiv. för Zoologi, VI, 1910, p. 160.

This is Mjöberg's genus for Haematopinus sciuroperti, Osborn (Bull. 5, U.S. Dept. Agric. 1896, p. 182). Immediately succeeding his diagnosis of this genus Mjöberg proposes another new genus, Acanthopinus, for a species, A. sciuinus (from Sciuropus vulpinus), in which the basal joint of the antennae in both ♂ and ♀ is very thick and runs out at the distal postaxial corner into a strong spinous projection. But unlike Neohaematopinus, the 3rd joint in the ♂ of Acanthopinus does not run out preaxially into a strong prominence. Some Anoplura from Heliosciurus palliatus, Peters, (British East Africa) are closely allied to both these species and in the form of the antennae combine the characters of the 1st joint in Acanthopinus with those of the 3rd joint of Neohaematopinus. Mjöberg's second genus ought therefore to be sunk and the new species is described below under Neohaematopinus. Neumann's species, Haematopinus echinatus (Arch. Parasit., April, 1910, p. 518) should also be included in this genus.

Neohaematopinus heliosciuri, sp. nov. (fig. 1).

Head a little longer than broad, the anterior border broad, very slightly convex, projecting but little in front of the antennae. Lateral margins expanding a little at
first, broadening, not at right angles yet somewhat abruptly, immediately behind the antennae to form the temples, which posteriorly make a right angle with the lateral borders just before the latter curve in to form the occiput. The occipital border a little convex. A group of bristles on each side at the lower corner of the temple, one very long, with two short ones beside it and a longer one below; near the median line, behind the antennae, two small hairs; another one, a little further forward on each side, near the lower inside corner of the first joint of the antenna; further forward again, but not in front of the antennae, two more small hairs, somewhat nearer the median line than the preceding; a small hair on each side, at the extreme margin of the head, just in front of the antenna; six minute hairs on the anterior border of the head. Under surface triangular, with the apex pointing towards the thorax. A bristle on the lateral margin near the antennae; further forward, two smaller hairs inside the margin; another one just in front of the antenna on each side; several small hairs around the area of the rostrum. Antennae with the 1st joint very large, an appendix at the distal postaxial corner, with a circular constriction at its base; 2nd joint cylindrical, as long as the first, but only half its width; 3rd joint in the ♂ small, with its preaxial margin twice as long as the postaxial, a short stout spine on the prominence preaxially; the 4th joint pedunculate, a little longer than the second,
with a sense organ at the distal lower corner; apical joint shorter, with its senseorgan half-way along the lower side. In the ♂, the 3rd joint approximating in length to the penultimate, which is scarcely pedunculate. Thorax narrow in front, broadening towards the abdomen, posterior margin slightly concave, meta-thorax short. A spine on each “shoulder” and two in line obliquely with the spiracle. Sternal plate broad and long, the base truncate in the middle, concavely oblique at each side of the base, rounded in front. Legs: first pair small, coxae approximated, claw narrow and slender; posterior pairs longer, stouter, with larger claws. Abdomen long, parallel-sided in the ♂, longer in the ♀ and narrowing after the middle. Terminal segment of ♂ conical, of ♀ truncate. On the upper surface of the ♂ segment I is small, with six hairs, two on each side and two in the middle; II with two rows of hairs, 8 in the first row and 11 in the second, the three outside hairs in the latter close together and mounted on a slight projection; succeeding segments with one row each of closely spaced hairs; VIII bare, telson conical, with a fairly long hair on the margin at the base on each side, followed by a series of small hairs around the border. In the ♀, on the upper surface, segment II without the lateral projections; succeeding segments with three rows of widely and equally spaced broad hairs; penultimate segment with two rows; terminal segment with one semicircular row. On the under surface of the ♂, segment I bare, II with two rows of hairs, III with three, succeeding segments with two rows of widely spaced hairs, VII with one row of four stout hairs, VIII with only two long hairs, telson with four hairs, two sub-terminal and two further forward. On the under surface of the ♀, segment II with one row, the succeeding segments with three rows of hairs, VII with two rows and VIII with only one row. Gonopods each with three stout hairs on the outside; anterior lip of the vulva with a serrate edge. Pleurae broad rectangular, except the 8th in the ♂, which is oval and projects almost as far as the end of the abdomen. Each pleura with two bristles at the lower margin; on the 7th and 8th of the ♂ these are abnormally long. Terminal pleurae of ♀ each with a spine and a group of thick bristles.

Length (in mm.), ♂ 975, ♀ 170; head, ♂ 225, ♀ 2; thorax, ♂ 175, ♀ 15; abdomen, ♂ 575, ♀ 135; greatest width, ♂ 35, ♀ 4.

Host: Heliosciurus palliatus, Peters.

British East Africa: Uchweni Forest, With (S. A. Neave).

Genus Polyplax, Enderlein.

Polyplax otomydis, sp. nov. (fig. 2).

In the presence of a transverse suture behind the head and in the large claws of the hind pairs of legs, this species stands close to P. suturalis (Osborn) (Bull. 5, N.S., U.S. Dept. Agric., 1896, p. 185). It is distinguished by its larger size, the long-oval shape of the abdomen and by many other minor features.

♀. Head oval, rounded in front, broadening somewhat behind the antennae, the occipital area entering a V-shaped groove in the thorax. A transverse row of four hairs on the upper surface in front of the antennae and immediately in
front of these another widely-spaced transverse row of 4 hairs, the outer ones being on the margin. The transverse furrow or "suture" behind the antennae is concave on the anterior side and accompanied by a row of six small hairs. Two or three minute hairs at the margin of the temples, and a long bristle at each posterior corner, with a comparatively short one beside it. Two short hairs further in near the median line in the occipital area. On the under surface, a raised median area shaped like a wine-glass; close to the basal joint of the antenna on each side a moderately long bristle; in front of the antennae four shorter bristles, and around the mouth of the rostrum four minute hairs. Antennae short, thick, 1st joint very broad, squat; 2nd longest, narrower; 3rd

Fig. 2.—Polyplus atomydis, Cummings, ♂, dorsal aspect, and ventral aspect of anal segments.

a little longer than the 4th; 5th short, with a sense-organ. Thorax short, with convex lateral margins, and receiving the head in a V-shaped groove. A long hair on the mesonotum on each side a little distance in from the lateral margin. Sternal plate pointed behind, rectangular in front. Legs: the 1st pair small, claw slender; 2nd pair small, claw broader; 3rd pair large, with stout claw like a parrot's beak; 1st pair of coxae closely approximated, 3rd pair contiguous. Abdomen elongate, broadest before the middle, rounded behind. On the dorsal surface, segment I short and small with only two hairs, segment II with a row of six hairs, segment III with one sclerite and one row of hairs; succeeding segments with two sclerites and two rows, but III with one sclerite and one row
of four widely-spaced hairs, the terminal tergite bare. On the ventral surface, I indistinct, bare; II with two sclerites and two rows of hairs, eight hairs in the 1st row and only two in the 2nd; III with three sclerites and three rows of hairs; succeeding segments with two sclerites and two rows, the 2nd row of VII with only four hairs. Anterior lip of vulva with a bilobed serrate edge. The terminal segments on either lateral area with a sharp chitinous projection ventrally and a group of bristles. Pleurae quadrangular, with two spines, one dorsal and one ventral; the dorsal spine or bristle on the pleura of the segment III very long, extending down the length of the next two segments.

Length (in mm.), ♀ 1.125, head .25, thorax .075, abdomen .8; greatest width .35.

Host: Otomys irrortatus tropicalis, Thos.


Described from several females.
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