

NEOTROPICAL MALLOPHAGA MISCELLANY NO. 7.
NEW MALLOPHAGA FROM THE ANTARCTIC

FOR M. A. CARRIKER, JR.

ABSTRACT

Notas misceláneas sobre Mallophaga neotropicales. — El autor describe *Naubates fasciatus* sp. n. ex *Oceanites o. oceanicus* (Kuhl) y *Perineus antarcticus* sp. n. ex *Catharacta skua maccormicki* (Saunders) y agrega una nota sobre *Pseudonirmus gurlti* (Taschenberg). El material sobre el que se basan estas descripciones fué coleccionado en la Antártida por el Dr. Claes Olrog durante enero y febrero de 1953.

The material upon which the present paper is based was collected by Dr. Claes Chr. Olrog of the Fundación Miguel Lillo, at Tucumán, Argentina, during the months of January and February, 1953 in the Deception Islands of the antarctic region south of Argentina and was sent to me for identification.

There are but three species of Mallophaga represented, all *Ischnocera*, and from the following hosts: *Daption capensis* (Linné), *Oceanites o. oceanicus* (Kuhl) and *Catharacta skua maccormicki* (Saunders). The species from *Daption capensis* is the well known *Pseudonirmus gurlti* (Taschenberg), while the other two are apparently new species of *Naubates* and *Perineus*, and are described and figured.

All measurements are in millimeters and apply to extreme length of segments, not lateral exposed portion. All drawings were prepared by the author and made direct from microscope, by the use of an eye-piece micrometer.

Naubates fasciatus n. sp.

Figs. 1 to 6.

Types, male and female adults, from Oceanites o. oceanicus (Kuhl), collected by Claes Chr. Olrog in the Archipelago Antarctica, February 7, 1953. (Coll. Fundación Miguel Lillo).

Diagnosis. - The species is closely related to N. fuliginosus (Tasch.), from Diomedea exulans, especially in the male genitalia and apical sternal plate of the female (see Bedford, Aug. 1930, pp. 169-173). The shape of the head is also similar, but the details of the pre-antennary area are not at all the same. It has a very prominent median perforation in the clypeal signature (similar to N. pterodroma Bedford) which is entirely absent in Bedford's figure of fuliginosus, while the two dorsal bands which form the attachment between the head and the clypeal signature are quite different in their shape and location.

The structure of the pre-antennary portion of the head is rather complicated. In the large figure of the female (Fig. 4) this structure is not correctly shown, some of the bands being reversed (dorsally and ventrally), but in the enlarged figure of this area the head (fig. 1) these details are correctly shown. The ventral, transverse plate across the head, just back of the clypeal signature, is unique in this species, as far as I can determine, and forms a very good character for its identification.

The prosternal plate in the female is very much larger than shown by Bedford for either fuliginosa or pterodromi. The apical sternal plate of the female in my specimens is very difficult to observe, and my figure may not be exactly correct, but the resemblance to that of fuliginosa is very apparent. Bedford gives no figure of the body, so I cannot compare body characters, while Tuchenberg's figure of fuliginosa is unusually poor. There is no trace of the sternal spines on the apical segment of the male, as shown by Bedford.

The abdomen in both sexes is widest in median portion (at IV in ♀ and at III in ♂) and tapering in both directions. Segment IX in female is minute, slightly bifid, while in the male there are but eight segments, VIII being almost as long as VII, but narrower also slightly bifid. Sexual dimorphism is present in the antennae (to a slight degree) and in the shape and markings of the abdomen, also number of segments (see figs.).

The male genitalia is extraordinarily primitive. I can discover no trace of any sort of endomeral structure, while the basal plate and paramers are entirely devoid of coloring matter and apparently very poorly chitinized. The genitalia is of the same type as in fuliginosa, with asymmetrical paramers, but has the

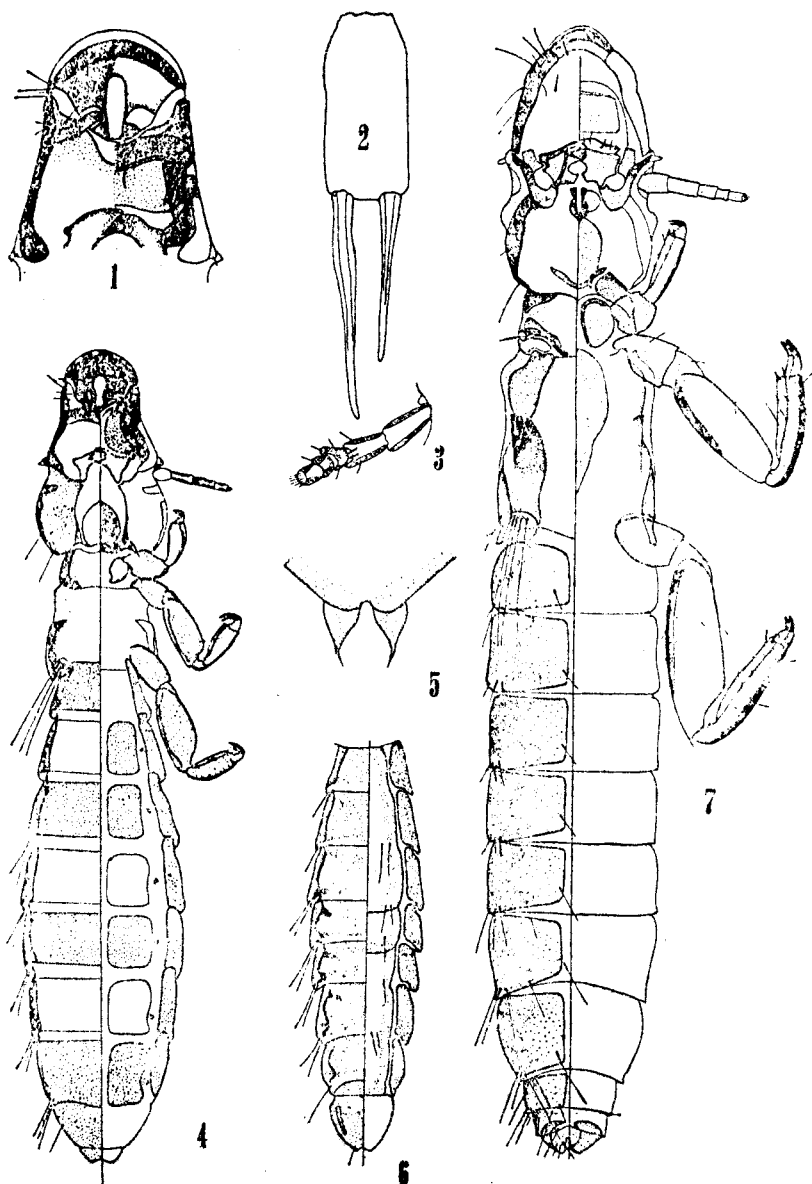


Fig. 1, *Naubates fasciatus* ♂, preantennary portion of head; Fig. 2, *N. fasciatus* ♂ genitalia; Fig. 3, *N. fasciatus*, antenna; Fig. 4, *N. fasciatus* ♀; Fig. 5, *N. fasciatus* ♀ sternal plate on apical segment of abdomen; Fig. 6, *N. fasciatus* ♂, abdomen; Fig. 7, *Perineus antarcticus* ♀.

basal plate shorter and wider, and the paramers longer and considerably thicker, with greater difference in the length between the two paramers. This species is also closely related to *N. annuliventris* (Uchida), from *Oceanodroma furcata*.

Measurements of the types.

| | ♂ | | ♀ | |
|--------------------|------------|-------|--------|-------|
| | length | width | length | width |
| Body | 1.88 | — | 2.18 | — |
| Head | at frons | .20 | — | .217 |
| | at temples | .51 | .326 | .56 |
| Prothorax | .15 | .24 | .162 | .25 |
| Pterothorax | .206 | .28 | .215 | .326 |
| Abdomen | 1.13 | .35 | 1.39 | .48 |
| Antennae | .195 | .04 | .205 | .034 |
| Basal plate | .13 | 0.56 | | |
| Paramers (longest) | .15 | 0.46 | | |

The species is represented by the ♂ holotype, ♀ allotype and three ♀ ♀ paratypes.

Perineus antarcticus n. sp.

Fig. 7

Type, female adult, from *Catharacta skua maccormicki* (Saunders) collected by Claes Chr. Obrog on *Isla Rey Jorge*, January 20, 1953 (Coll. Fundación Miguel Lillo).

Diagnosis.- Nearest to *P. laculatus* (Kell. & Chap.) from *Stercorarius pomarinus*, but quite different from *P. grandis* (Piaget).

The most striking differences between this species and *laculatus* are: whole insect much smaller; head narrower at the temples, the width here being very little more than at the conic (conic, 41; temples, 425); prothorax smaller; pterothorax narrower (proportionately longer); abdomen more slender; hind femora shorter and stouter, and all femora and tibiae with black margins on one side only (see fig.).

The head and body markings are very similar to those of *laculatus*, but the hairs at the lateral angles of the abdominal segments and at tip of abdomen, are very much shorter. The measurements, as compared with *laculatus* are: body, 3.00 × 48 against 4.06 × 78; head, 74 × 425 against 1.00 × 59. Also, in the new species the pterothorax is the same width at

anterior and posterior angles, while the mesonotum is slenderly pointed posteriorly instead of rounded, as in *laculatus*.

A rather unusual character is the number of abdominal segments. Segments I to VII are very uniform in both length and width, the abdomen being practically parallel-sided back to anterior angles of VII, which is narrower at posterior margin. At end of VII the abdomen narrows abruptly and the last three segments are progressively smaller (see fig.), but the sutures separating them are all clearly marked, both on dorsal surface and at lateral angles. Mallophaga in the adult stage, with ten abdominal segments, well marked, are not commonly met with. I have females of *P. hyalinus*, *P. diomedea* and *P. nigrolimbatus*, and all have but eight abdominal segments. The species described and figured by Kellogg also show but eight segments.

Measurements of the type.

| | ♀ | |
|-------------|------------|-------|
| | length | width |
| Body | 3.00 | — |
| Head | at coni | .41 |
| | at temples | .425 |
| Prothorax | .25 | .35 |
| Pterothorax | .51 | .445 |
| Abdomen | 1.66 | .48 |
| Antennae | .28 | .055 |
| Third femur | .52 | .16 |

Species represented by the ♀ holotype and one ♀ paratype.

Pseudonirmus gurlti (Taschenberg)

Lipeurus gurlati Taschenberg, *Nova Acta Leop. - Carol.*, 44: 151. 1882, pl. 5, fig. 6 (Host: *Daption capensis* (Linné)).

Two females were taken on the type host by Mr. Olog at Archipelago Antartico, February 7 1953. I have not been able to compare these specimens directly with material of the species, but there can be no doubt as to their identity.

The only figures of the female of the species thus far published (as far as I know) are the head and apical segments of the abdomen by Taschenberg, and a figure of the head by Thompson (1935, p. 486). These specimens agree in all respects with the above mentioned figures and with Taschenberg's

description, but there is a slight discrepancy in the measurements of the thorax, which may have been an error on the part of Taschenberg, since the other measurements are very close to those given by him.

Measurements of one of my females, and those given by Taschenberg for the female:

| | ♀ | | ♀ | |
|---------------------|--------|-------|--------|-------|
| | length | width | length | width |
| Body | 2.94 | — | 2.97 | — |
| Head (temples) | .63 | .48 | .65 | .46 |
| „ (at <i>coni</i>) | — | .434 | — | — |
| Prothorax | .135 | .34 | .40 | .39 |
| Pterothorax | .30 | .456 | — | — |
| Abdomen | 1.96 | .61 | 1.92 | .53 |
| Antennae | .22 | .046 | — | — |
| 3rd. femur | .28 | .13 | .30 | — |