New Mallophaga from the Streaked Shearwater, *Calonectris leucomelas* from Japanese Waters. Part I.†

By

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Through the courtesy of Prof. H. SAWADA, a member of the Zoological Unit** of Metropolitan Scientific Expedition to the Izu Seven Island, I had an opportunity to examine a series of the Mallophaga from the streaked shearwater, *Calonectris leucomelas* (TEMMINCK). Thereafter Mr. K. SHIRAI and Mr. K. SAKAGUTI each have kindly sent me some examples from the same host. These series consist of *Halipeurus* sp. and *Procellariphaga* sp., of which the former was reported by UCHIDA(1917) under the name of *Lipeurus exiguus* KELLOGG & KUWANA which is probably an immature form of *Lipeurus* (now *Halipeurus*) *languidus* KELLOGG & KUWANA, but it appears to me to be little doubt that "*exiguus*" in UCHIDA, according to the host-record, has appied to a mixture of two species; a population from *Calonectris leucomelas* is certainly new and a population from *Oestrelata longirostris* is presumably *Halipeurus subangusticeps* (PIAGET). shall I, therefore, give the former a name as a new species in this paper.

I am deeply indebted to Prof. H SAWADA for a gift of the interesting species of Mallophaga and also to Messrs. K. SHIRAI and K. SAKAGUTI for a present of additional materials. I wish to express my deep appreciation to Dr. T. CLAY of the British Museum (Natural History) for the loan of *Halipeurus*-material from the petrel with out which the complete comparing of this new species would have been difficult.

Halipeurus sawadai, sp. nov.

Type host: *Calonectris leucomelas* (TEMMINCK), 1835.

Holotype(♂), Allotype(♀) and 3♂♂, 1♀ of Paratypes collected from the type host, in Izu-Toshima, July 17, 1957, by H. SAWADA & K. SHIRAI.

Other paratypes: 2♂♂, 1♀ collected from the same host, in Aogashima, a solitary Islet situated 357 km. to the south of Tokyo, by K. SHIRAI & H. GOTO; 1♂, 2♀♀ collected from the same host, in Kammuri-shima, Kyoto Pref., by K. SAKAGUTI.

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All types deposited in the collection of the author, except a pair of the paratype presented to the British Museum (Nat. Hist.).

Description. Male.-Head elongated, somewhat pointed preantennal region. Clypeal signature well-defined, with one pair of shorter setae; extends beyond the ends of clypeal band and is convex in front, and its posterior margin strongly sinuated. The whole frons is encircled by a wide hyaline margin, beginning at the end of the clypeal band. Clypeal bands are slightly sinuated along the darked inner edge and are slightly sinuate, and are slightly broken at the suture; antennal band continous with clypeal band, bending inwards in front of the base of antennae. Inner band reaching the level of the manublium. Trabecula very small. Chaetotaxy of head is of the usual type of the genus, as showing in text-figure I -B, but two oflateral setae near the suture are considerably developed in this species. Ventral plate with short thickend band anteriorly. Segment I of the antennae moderately enlarged as in the figure II -D, and the distal pre-axial angle of segment III prolonged moderately.

Prothorax small; mesonotum with a median division; metathorax quadrilateral in shape, with the sides nearly straight, diverging posteriorly, bearing a long seta near each anterior angle; the postero-lateral angle with a set of setae which is rather shorter and not reaching to the apex of the femur of the hind legs. Meso-metasternal plate elongated oval in shape, having a pair of lateral setae and a straight anteior margin. The plate jointed to the bell-shaped first abdominal sternal plate by a narrow bar.

Abdomen similar to that of other species from the petrel, but tends to be somewhat narrower. Segments IV-V shorter than any other, and each pleural plate in those segments with two inwardly directed processes. Segment VI-VII longest, with each pleural plate straight in the internal margin. Tergal plates lacking setae except upon the segment I-II complex. Sternal plate I-VII in each bearing two slender setae on each side; segment I-VII in each with three lateral setae on each side. Ventral asp ect of segment VIII in afbdomen are shown as in text-figure I -C. ; the genital plate larger, coverring over most part of the sternite; and is of a peculiar shape, being emarginated at the anterior margin, so that it forms two distinct lobes; and bears a row of about six setae along the posterior margin, while in other *Halipeurus*-species this series of setae consists of two or three rows.

Female..-Head similar to that of the male but different in detials as follows.

Two longish marginal setae near the suture are rather shorter. Posterior margin of the signature forms a reverse V-shape. Trabecula slightly developed. Antennae filament-like, with segment II longest.

Abdomen elongated, somewhat broader than that of the male. Paratergal plates with straight internal margins without inwardly directed processes as in segments IV-VI of the male abdomen. Posterior margin of the terminal segmene marginated. Chaetotaxy of segments I-VI as that in the male.

Remarks : I am pleasure to name this species in honour or Prof. H. SAWADA, whose efforts in this collecting of Mallophaga would contribute to our knowldge towards the Japanese fauna.

Measurements in mm.

	Male	Female
Length of body	2.45- 2.54	2.70- 2.75
Width of body	.29- .31	.33- .34
Length of head	.56- .59	.61- .64
Width of head	.29- .31	.33- .34
Length of thorax	.44- .47	.49- .50
Width of thorax	.26- .30	.31- .32

Explanation of Figures

Text-Fig. I.

***Halipeus Sawadai*, sp. nov.**, ♂.

A. General, (dorsal & ventral aspects).

B. Head. (dorsal & Ventsal aspects).

C. Terminal segment, (ventral aspect).

Text-Fig. II.

A. Terminal segment of *H. mirabilis*, ♀.

B. Terminal segment of *H. Sawadai*, sp. nov., ♀.

C. Antenna of *H. diverns*, ♂.

D. Antenna of *H. sawadai*, sp. nov., ♂.

E. Antenna of *H. mirabilis*, ♂.

F. Terminal segment of *H. mirabilis*, ♂.

G. Terminal segment of *H. abnormis*, ♂.

摘　　要

オオミズナギドリに寄生するハジラミについて　その一

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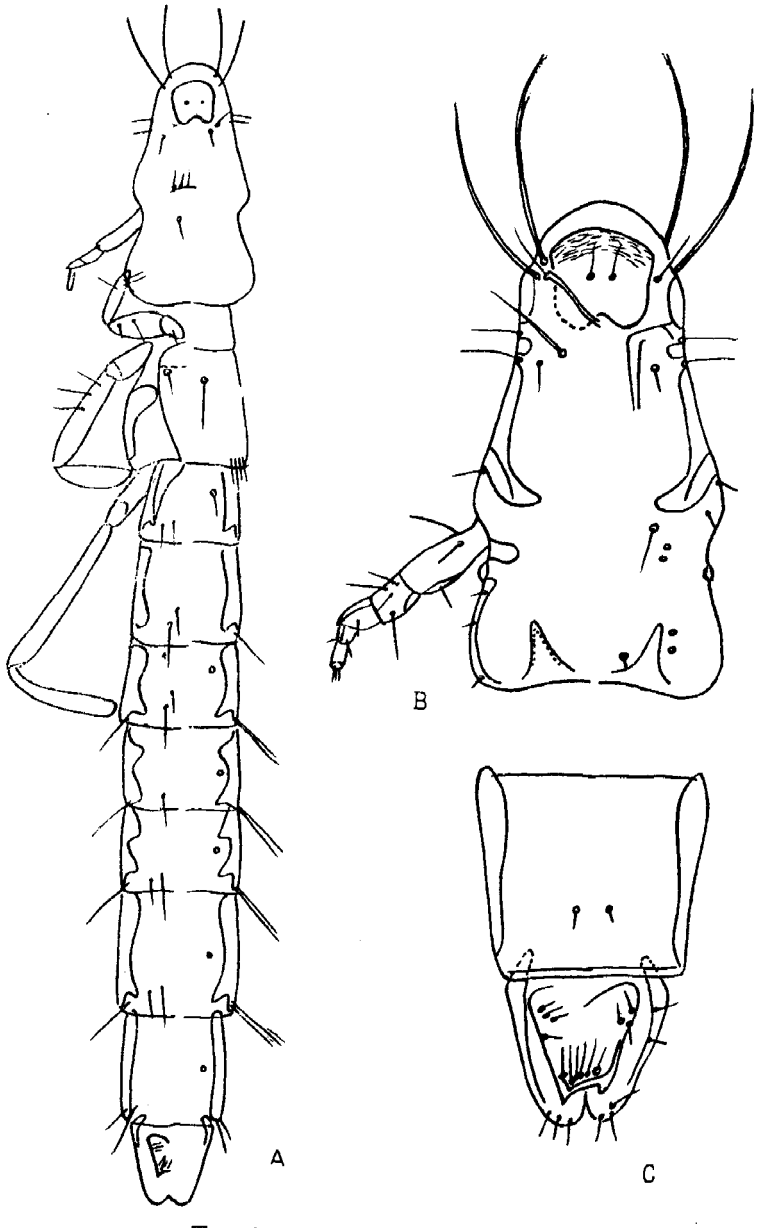
東京都学術調査団，動物班（班長，岸田久吉技官）は離島開発の問題と関連して，1956年来，伊豆七島の動物相の調査を行いつつあるが，その間に採集されたハジラミの研究を筆者に依託された。

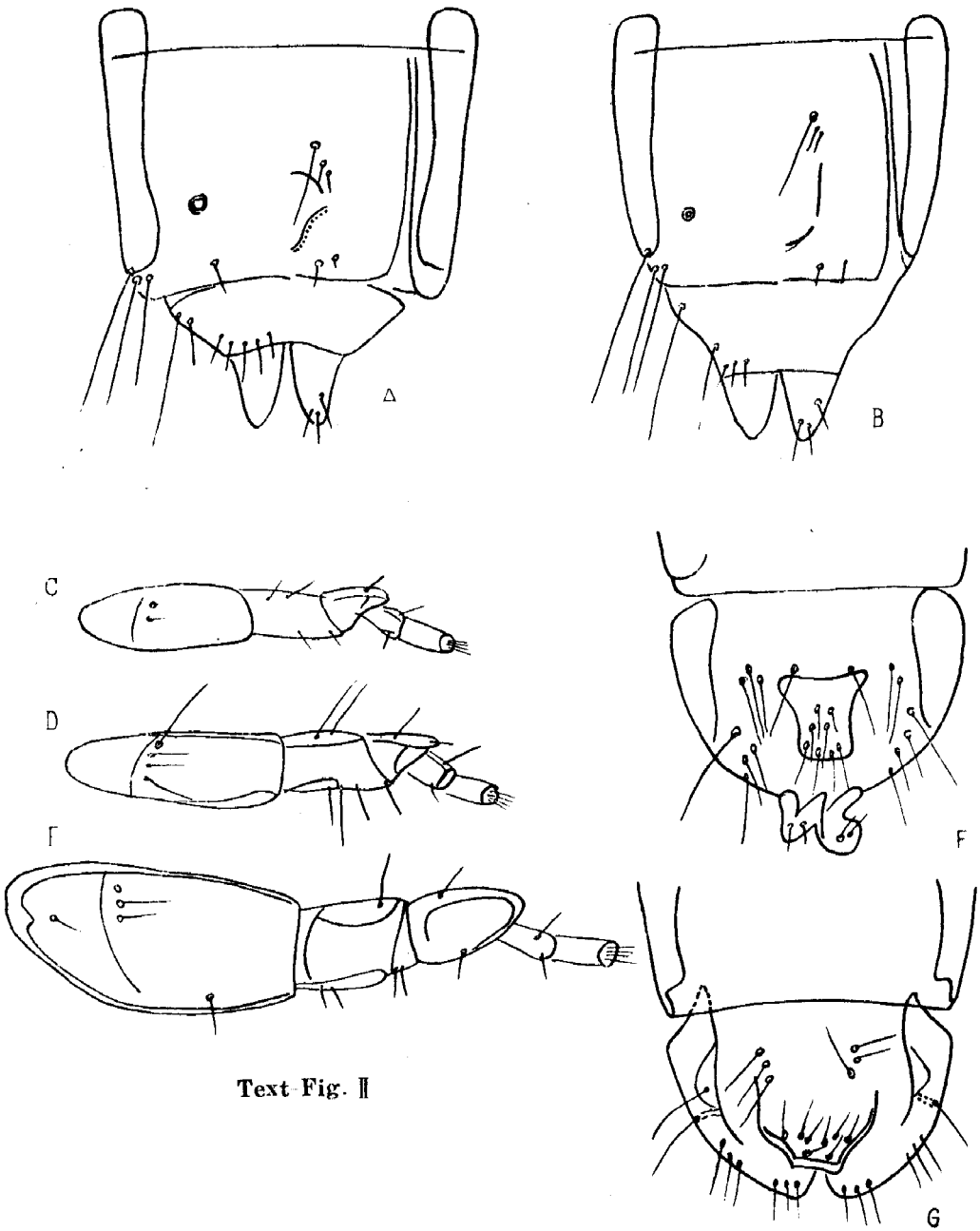
オオミズナギドリより得られたハジラミは長角群の *Halipeurus* sp. と短角群の *Procellariphaga* sp. の二属よりなり，今回は第一報として前者について記載を行った。

本宿主にみられる *Halipeurus* sp. をかって UCHIDA (1917) は *Lipeurus exiguus* KELLOGG & KUWANA の名の下に報告したが，この学名はおそらく *Lipeurus languidus* の幼若期に与えられたものと考えられ，その限りにおいて同種異名である。しかしながら UCHIDA (1917) における "*exiguus*" は KELLOGG らの記載した種類と同一ではなく，オオミズナギドリより得られた種類は明らかに未記載種であると思われる。従って筆者は前者を記載し，*Halipeurus sawadai* と命名した。種名 *sawadai* は東京農業大学教授沢田玄正氏に捧げられたものである。



Tex-fig. I.

Halipeus sawadai sp. nov. ♂.



Text Fig. II