

OCCASIONAL PAPERS
OF
BERNICE P. BISHOP MUSEUM
HONOLULU, HAWAII

Volume XIX

May 14, 1948

Number 9

Mallophaga Collected by the Tanager Expedition

By **GORDON B. THOMPSON**

INTRODUCTION

The following report is based on a small collection of Mallophaga made by the Tanager Expedition in 1923 (B. P. Bishop Mus., Bull. 10, 1924). It is an interesting coincidence that the late Professor L. H. Harrison made an appeal in the same year for special attention to be paid to the parasites of birds of Pacific islands because so many species of birds were fast becoming extinct (Pan-Pacific Sci. Congress, Proc. 2: 1585, 1923). It is unfortunate that this branch of parasitology has risen for the most part as a subsidiary enquiry to bird and mammal collecting. I would like to take this opportunity of reiterating Professor Harrison's request.

The collection is not rich in specimens or species, and it is unfortunate, indeed, that more material is not available from the birds examined. I have not felt justified in spending a great deal of time on this collection, since some of the "species" represented are in such a chaotic state that it is impossible to determine them with certainty without making a complete study of the species occurring on a host group such as Laridae.

One new genus is described for a species which was taken on the Christmas Island shearwater and the wedge-tailed shearwater. The Menoponidae occurring on Procellariiformes are not well known and this species certainly does not seem to fit the descriptions of any of those described to date.

I wish to express my appreciation to Bishop Museum and Mr. Elwood C. Zimmerman for the opportunity to study this material, to Mr. James Bond of the Academy of Natural Sciences, Philadelphia,

for helping me with the host names, and to my assistant, Miss Audrey Shaw, for the drawings.

HOST LIST

PROCELLARIIFORMES

Diomedea immutabilis Rothschild (Laysan albatross; Laysan Island gooney): *Harrisoniella* species, *Docophoroides* species.

Diomedea nigripes Audubon (black-footed albatross): *Harrisoniella* species.

Puffinus pacificus cuneatus Salvin (wedge-tailed shearwater): *Longimenopon puffinus*, new genus, new species; *Halipcurus mirabilis* Thompson; *Giebelia* (?) *mirabilis* Kellogg.

Puffinus nativitatis Streets (Christmas Island shearwater): *Longimenopon puffinus*, new genus, new species.

CHARADRIIFORMES

Numenius tahitiensis (Gmelin) (bristle-thighed curlew): *Lunaceps* species?

Lobipes lobatus (Linnaeus): *Quadriceps connexa* (Kellogg and Kuwana).

Larus hyperboreus (Gunnerus) (glaucous gull): *Austromenopon* (?) *infrequens* (Kellogg).

Sterna fuscata oahuensis Bloxham (sooty tern): *Saemundssonina snyderi* (Kellogg and Paine).

Sterna lunata Peale (gray-backed tern): *Saemundssonina snyderi* (Kellogg and Paine).

Anous stolidus pileatus (Scopoli) (noddy tern): *Austromenopon sternophilum* (Ferris); *Actornithophilus milleri* (Kellogg and Kuwana); *Quadriceps separata* (Kellogg and Kuwana).

SUBORDER AMBLYCERA

1. *Austromenopon* (?) *infrequens* (Kellogg), Calif. Acad. Sci., Proc. II, 6: 161-162, pl. 15, fig. 5, 1896.

“Pearl” (?Hawaii): two females, from *Larus hyperboreus*.

The type host of this species is *Larus glaucescens* Naumann and the original description was based on a single female. The host from which it is recorded here is only a casual visitor to Hawaii. I have

tentatively referred the two females in the present collection to this species.

2. **Austromenopon sternophilum** (Ferris), B. P. Bishop Mus., Bull. 98: 59, fig. 12, *a-f*, 1932.

Laysan Island: one female from *Anous stolidus pileatus*, April 11, 1923.

The type host of this species is *Sterna fuscata oahuensis* (= *Sterna fuscata*, Marquesas Islands) but this single specimen seems to agree with Ferris' description.

3. **Actornithophilus milleri** (Kellogg and Kuwana), Wash. Acad. Sci., Proc. 4: 483-484, pl. 30, fig. 6, 1902; Ferris, B. P. Bishop Mus., Bull. 113: 7-9, figs. 1, 2, 1935.

Laysan Island: four females and three males from *Anous stolidus pileatus*, April 13, 1923.

Genus **Longimenopon**, new genus

Elongate Menoponidae, medium-sized, moderately sclerotised, and pigmented forms. Head squarish, without any indication of slit or preocular notch. Forehead triangular; lateral dorsal margins curving inward slightly just below antennae and thence outward and rounded at the temples. The hind margin is almost straight. The lateral dorsal margin not overlapping the ventral continuation of temple margin to any great extent. Antennal fossae not entirely roofed over, backed up by a moderately sclerotised and pigmented area; antennae four-segmented, terminal segments short, broad, undivided. Labial palpi long. Pharyngeal sclerite well-developed. Gular plate not developed. Prothorax rectangular, posterior margin curved. Prosternal plate rudimentary. Mesonotum small and separated from metanotum by narrow suture. Metanotum large, winged. Abdomen with tergal plates entire with two rows of setae. Paratergal plates with internal moderately sclerotised and pigmented margin. Male genitalia fairly complicated, with elongate, rod-like basal plate. There are no combs or asters present on the hind femur or the venter of the abdomen.

Genotype: *Longimenopon puffinus*, new species. Type host: *Puffinus pacificus cuneatus*. This genus will probably be found to occur on other species of the family Procellariiformes.

4. **Longimenopon puffinus**, new species (fig. 1, *a-d*).

Female: length 2.24 mm.; greatest breadth: 0.63 mm. Slightly larger than male with the characters as given for the genus and as in figure 1, *a, b*, except for terminal abdominal segments which are shown in figure 1, *d*. Male: length 2.06 mm.; greatest breadth, 0.54 mm. As in figure 1, *a, b*, the chaetotaxy seems to be exactly as in the female except for the terminal abdominal segments. Genitalia: as in figure 1, *d* (preputial sac is not shown).

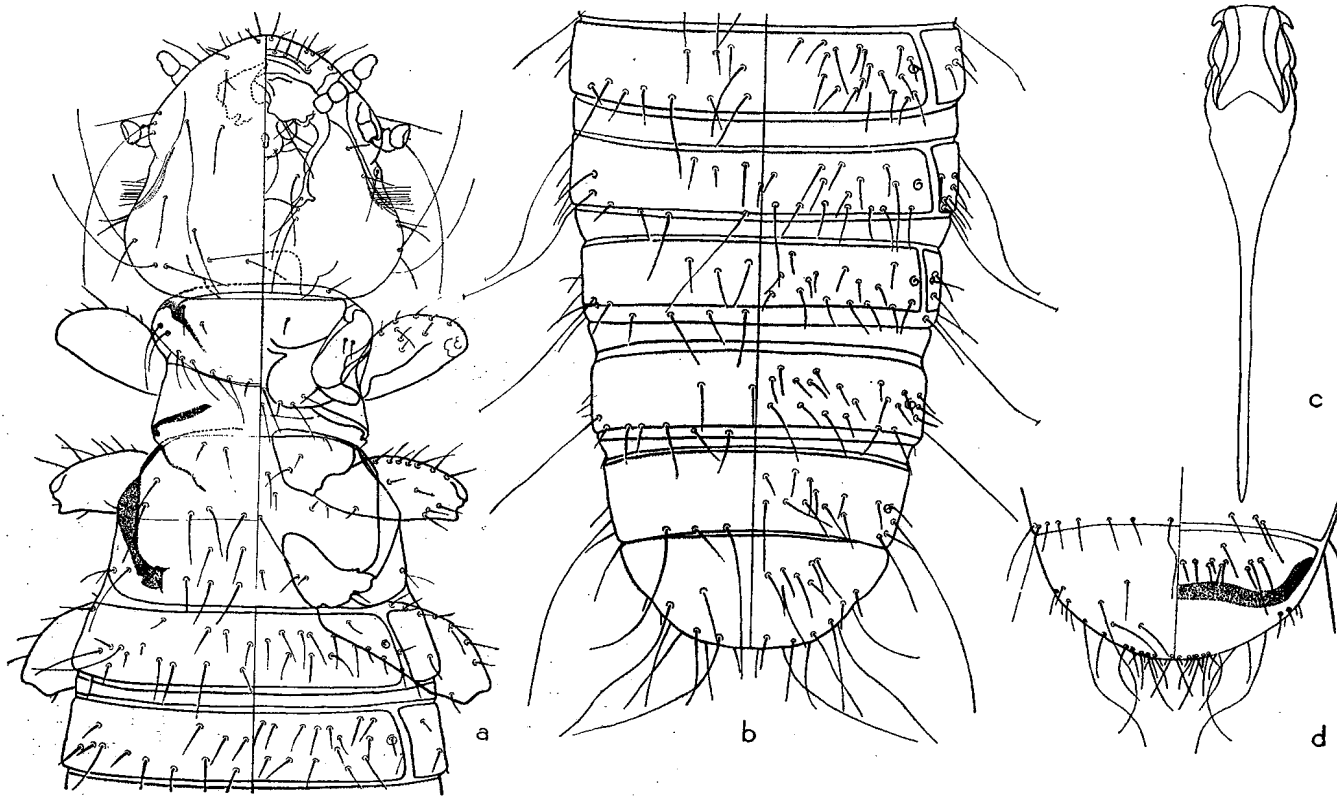


FIGURE 1.—*Longimenopon puffinus*: a, head, thorax, and anterior abdominal segments of male; b, abdominal segments of male; c, male genitalia; d, female terminalia.

Laysan Island: female holotype, male allotype, and three female paratypes from type host *Puffinus pacificus cuneatus*, April 13, 1923; two male and four female paratypes from *Puffinus nativitatis*, April 11, 1923.

I have been unable to find any differences between the specimens from these two hosts.

SUBORDER ISCHNOCERA

5. **Saemundssonina** (?) **gonothorax** (Giebel), Zeitschr. f. naturwis., Halle 37: 450, 1871.

"Pearl": four males and one female from *Larus hyperboreus*.

The original description of this species was based on material obtained from *Larus marinus* Linnaeus, *L. minutus* Pallas, *Rissa t. tridactyla* (Linnaeus), and *Cepphus grylle mandtii* (Mandt) (an obvious mistake) and almost certainly consists of more than one species.

6. **Saemundssonina** **snyderi** (Kellogg and Paine), Ent. News 21: 124-125, figs. 1, 2, 1910; Ferris, B. P. Bishop Mus., Bull. 98: 71, fig. 20, 1932.

Laysan Island: three females and one male from *Sterna fuscata oahuensis*, April 13, 1923; one female from *Sterna lunata*, April 12, 1923.

Sterna lunata is the type host of this species, and the specimens from *S. fuscata oahuensis* seem to agree with Ferris' figures. The species of *Saemundssonina* have, I believe, been worked on by Eichler, but I have not seen the paper.

7. **Quadriceps separata** (Kellogg and Kuwana), Wash. Acad. Sci., Proc. 4: 472-473, pl. 29, fig. 6, 1902; Ferris, B. P. Bishop Mus., Bull. 98: 69-70, fig. 19, a-e, 1932.

Laysan Island: three females from *Anous stolidus pileatus*, April 13, 1923.

8. **Quadriceps connexa** (Kellogg and Kuwana), Ent. News 22: 13, 1912.

Redwood City, California: five males and two females from *Lo-bipes lobatus* (Linnaeus) (= *Phalaropus lobatus*), collected May 5, 1923, by C. D. Duncan and W. Mehan.

This species was originally described as a variety of *Q. infectus* (Kellogg and Kuwana). In the absence of authentically determined material the specimens at hand seem to be referable to this species.

9. **Luniceps** sp.

Laysan Island: two damaged males from *Numenius tahitiensis*, April 11, 1923.

These specimens may possibly represent a new species, but I prefer to leave them undetermined.

10. **Halipeurus mirabilis** Thompson, Ann. Mag. Nat. Hist. XI, 5: 499-502, figs. 1-5, pl. 9, figs. 1, 2, 1940.

Laysan Island: two females from *Puffinus pacificus cuneatus*, April 13, 1923. Ocean Island: one female from *Diomedea nigripes*, April 22, 1923.

This species was originally described from *Puffinus pacificus chlororhynchus* Lesson. The specimen from the albatross is a straggler.

11. **Harrisoniella** sp.

Laysan Island: two males, three females, and four immature specimens from *Diomedea immutabilis*, April 9, 11, 1923. Ocean Island: one male and one female from *D. nigripes*, April 22, 1923.

Harrison (Australasian Antarctic Exped., Section C, 2 [1]: 31, 1937) has already pointed out that when sufficient material from different hosts of this giant parasite has been examined there may prove to be more than one species. Hopkins (Entomologist, 79: 4, 1946) has drawn attention to the confusion which exists over these large Ecthipterinae of Diomedidae, and I do not feel disposed to apply any names to the specimens on hand until it is possible to examine a large series from different hosts.

12. **Giebelia** (?) **mirabilis** Kellogg, Calif. Acad. Sci., Proc. 6 (2): 138-140, pl. 11, figs. 7, 8, 1896.

Laysan Island: one male and one female from *Puffinus pacificus cuneatus*, April 13, 1923.

As the genus *Giebelia* is in need of revision, for the present the specimens at hand may be referred to *G. mirabilis*.

13. **Docophoroides** sp.

Laysan Island: two females from *Diomedea immutabilis*, April 9, 1923.