INSECTS OF SAMOA

PART VII. FASC. 3

MALLOPHAGA.

BY J. WATERSTON, D.Sc.

(With 2 Text-figures.)

Although comparatively few Mallophaga collected from Samoan birds have been submitted to me by Mr. Buxton for determination,* the peculiar constancy of the relation between these parasites and their hosts renders feasible the drawing up of a longer list than the material actually examined might warrant. The chief difficulties in compiling such a list have lain in tracing host-references through the scattered literature of the subject, and in assessing the value of existing records. It is hoped, however, that the following notes, referring to the Mallophaga of about one-third of the birds on the Samoan list, may prove suggestive to some future worker with ampler facilities for study.

It has seemed best to arrange the species of parasites according to their hosts. In doing this I have omitted records which are evidently casual, since confusion of this sort generally results from contact between hosts in the game bag. It is a well-known fact that "straggling" occurs at the present day quite normally among bird parasites in the Galapagos Is. There is no evidence, however, that the unusual conditions of bird life found in the latter group of islands hold in Samoa, and accordingly, even when a host's range covers both areas, only the normal parasites are mentioned below.

The references to the species are restricted to author and year. For fuller details Harrison's "Genera and Species of the Mallophaga" (Parasitology, IX, No. 1, October, 1916) should be consulted.

* The names of these species are printed in large type and numbered.

VII. 3.
HOST.

Tyto alba lulu.

✓ Colpocephalum subpachygaster Piaget (1880).
✓ Philopterus rostratus Nitzsch (1838).

"Nirmus" angulatus Piaget (1880), recorded from this host is apparently a straggler from some (?) passerine bird.

"From legs of owl" presumably T. alba.

✓ 1. Colpocephalum subpachygaster Piag.

♀ Samoa: Matautu, v.1921 (O'Connor).

Vini australis.

✓ 2. Eomenopon denticulatum Harrison (1915).

Samoa: Apia, Vailele, ii.1924.

Eudynamis taitensis.

On cuckoos three genera of Mallophaga occur, Philopterus, Degeeriella and Cuculiphilus.

Cuculiphilus semilunaris Piaget (1880) (doubtfully distinct from C. fasciatus. Scopoli (1763)) will occur on the Samoan bird. The Degeeriella should be a sub-sp. of D. dilatatofasciatus Piaget (1880); while the Philopterus should be compared with P. latifrons Denny (1842).

Halcyon pealei.

✓ Philopterus alatoealyptus Piaget (1855) (or sub-sp.).

Zosterops, sp.

On the genus Zosterops a Philopterus of the "communis" type occurs; Myrsidea has also been recorded. Besides these Menacanthis, sp. and Degeeriella, sp. are to be expected.

Aplonis atrifusca.

Uchida (1926) records Myrsidea teraokai Uchida (1918) from Aplonis kitt-litzi (Caroline Is.; Truk I.), but the Samoan examples differ in important details from the original figures and descriptions.
3. *Myrsidea buxtoni*, sp. n. (Text-figs. 1 and 2).

♀. Dimensions —

<table>
<thead>
<tr>
<th></th>
<th>Length</th>
<th>Breadth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>0.36 mm.</td>
<td>0.51 mm.</td>
</tr>
<tr>
<td>Prothorax</td>
<td>0.19 mm.</td>
<td>0.33 mm.</td>
</tr>
<tr>
<td>Mesothorax</td>
<td>0.09 mm.</td>
<td>0.39 mm.</td>
</tr>
<tr>
<td>Metathorax</td>
<td>0.70 mm.</td>
<td>0.58 mm.</td>
</tr>
<tr>
<td>Abdomen</td>
<td>0.84 mm.</td>
<td>0.60 mm.</td>
</tr>
<tr>
<td>Total</td>
<td>1.65 mm.</td>
<td></td>
</tr>
</tbody>
</table>

Similar to *Myrsidea teraokai* Uchida (*Annot. Zool. Japonenses*, vol. ix, pt. iv, p. 490, fig. 2, 1918), but larger and even more specialised in the tergites and
metathorax. The greatly produced posterior edge of the latter, helmet shaped not rounded triangular as in *M. teraokai*, completely covers tergites 1 and 2 posteriorly. And, its own posterior edge coalesces with that of tergite 3.

In *M. teraokai* tergites 1–3 are only a little less modified than the metathorax, and their hind margins remain subparallel and distinct.

*M. buxtoni* lacks the long lateral bristles of *M. teraokai*, but tergites 4–7 inclusive have each a long bristle remote from the edge. There are numerous shorter pleural spinose bristles.

**Text-fig. 2.—Abdominal sternites (ventral view) of (a) *Myrsidea buxtoni*, sp. n.; (b) *M. teraokai* Uchida.**

The second sternite has on each side a posterolateral lobe bearing an aster of 4 spines, of which the innermost is longest and extends well across the posterior margin of sternite 3.

Samoa: Apia, 4.II.1924, type ♀ (in British Museum), from *Aplonis atrifusca*.

**Carpophaga pacifica.**

✓ *Menopon quinqueguttatum* Rudow (1869).

✓ *Colpocephalum unicolor* Rudow (1866).

**Porphyrio poliocephalus.**

✓ *Menopon gracile* Piaget (1880).

✓ *Ralicola lugens* Giebel (1874).

✓ *Philopterus continuus* Piaget (1880).

**Limosa novae-hollandiae.**

✓ *Menopon meyeri* Giebel (1874).

✓ *Degeerielia lucida* Kellogg and Mann (1912).

✓ *Degeerielia cingulata* Nitzsch in Denny (1842).

✓ *Philopterus limosae* Denny (1842).
MALLOPHAGA.

TOTANUS INCANUS.  

✓ Menopon lutescens Nitzsch in Burmeister (1838).
✓ Colpocephalum kilauense Kellogg and Chapman (1902).
✓ Degeeriella, sp.
✓ Philopterus cordiceps Piaget (1880).

CHARADRIUS DOMINICUS.

✓ Menopon lutescens Nitzsch in Burmeister (1838).

   Upolu: Apia, vi.1925.

✓ 5. Degeeriella oraria Kellogg (1896).
   Upolu: Apia, vi.1925.
✓ Philopterus comicus Denny (1842).
✓ (Syn. Philopterus wallacei Johnston and Harrison (1912); Docophorus hawaiiensis Kellogg and Chapman (1902).)

STREPSILAS INTERPRES.

✓ Menopon lutescens Nitzsch in Burmeister (1838).
✓ Colpocephalum pediculoides Mjöberg (1910).
✓ Actornithophilus bicolor Piaget (1880).
✓ Degeeriella euprepes Kellogg and Chapman (1902).
✓ Degeeriella actuophilus Kellogg and Chapman (1899).
✓ Degeeriella zonaria Nitzsch (1866).
✓ Philopterus variabilis Denny (1842).
✓ Philopterus cordiceps Piaget (1880).

NUMENIUS FEMORALIS.

✓ Menopon crocatum Nitzsch in Giebel (1866).
✓ Colpocephalum patellatum Piaget (1888).
✓ Degeeriella phaeopi Denny (1842).
✓ Dollabella testudinaria Denny (1842).
✓ Philopterus humeralis, sub-sp. numenichola Johnston and Harrison (1912).

DEMIEGRETIA SACRA.

✓ Colpocephalum decimfasciatum Boisduval and Lacordaire (1835).
✓ Colpocephalum nyctarde Denny (1842).
✓ Myrsidea tereokai Uchida (1918) is a straggler in this host.
FREGATA AQUILA.

\( \text{v} \) Menopon aurifasciatum Kellogg (1899).
\( \text{v} \) Colpocephalum spineum Kellogg (1899).
\( \text{v} \) Esthiopterum majus Kellogg (1899).
\( \text{v} \) Esthiopterum gracilicorne Piaget (1880).

SULA SULA.

\( \text{v} \) Menopon, sp.
\( \text{v} \) Pectinopygus sulai Rudow (1870).

"GANNET" presumably S. sulai.

\( \text{v} \) 6. Menopon, sp.
Samoa: Nuulua I., xi.1924, ♂.

\( \text{v} \) 7. Pectinopygus sulai Rud.
Samoa: Nuulua I., xi.1924, ♂.

SULA PISCATOR.

\( \text{v} \) Menopon, sp.
\( \text{v} \) Pectinopygus potens Kellogg and Kuwana (1902).
\( \text{v} \) Esthiopterum annulatum Piaget (1880).

PHAETON AETHEREOS.

\( \text{v} \) Menopon singulare Kellogg and Kuwana (1902).
\( \text{v} \) Menopon becki Kellogg (1907).
\( \text{v} \) Philopterus uppalensis Rudow (1870), ? straggler.

STERNA BERGII.

\( \text{v} \) Menopon fuscofasciatum Piaget (1880).
\( \text{v} \) Actornithophilus crassipes Piaget (1880).
\( \text{v} \) Actornithophilus piceus Denny (1842).
\( \text{v} \) Philopterus melanocephalus Nitzsch in Burmeister (1838).

STERNA FULIGINOSA.

\( \text{v} \) Menopon fuscofasciatum Piaget (1880).
\( \text{v} \) Actornithophilus piceus Denny (1842).
\( \text{v} \) Degeeriella birostris Giebel (1874).
\( \text{v} \) Degeeriella obtusa Kellogg and Kuwana (1902).
\( \text{v} \) Philopterus melanocephalus Nitzsch in Burmeister (1838).
HALOBAENA COERULEA.

\( \sqrt{\text{Esthiopterum clypeatum}} \) Giebel (1874).

GALLUS DOMESTICUS.

\( \checkmark \) 8. Menopon gallinae Linné (1758).

\( \checkmark \) Neumannia pallidula Neumann (1912).

\( \checkmark \) Eomenacanthus stramineus Nitzsch. in Giebel (1874).

\( \) (Syn. Menopon biseriatum Piaget (1880).)

\( \checkmark \) Goniocotes holoaster Nitzsch in Burmeister (1838).

\( - \) Goniocotes gigas Taschenberg (1879).


\( \) 10. Lipeurus caponis Linné (1758).

\( \checkmark \) Lipeurus burnetti Packard (1870).

The above are the species regularly found on domestic fowls. Those numbered 8 to 10 have already been reported as having been met with in Apia, in 1925 (Buxton and Hopkins, *Researches in Polynesia and Melanesia*, 1927).

LIST OF TEXT-FIGURES.

Text-fig. 1. *Myrsidea buxtoni*, sp. n. ♀.

" 2. Abdominal sternites (ventral view) of (a) *Myrsidea buxtoni*, sp. n.; (b) *M. teraokai* Uchida.