

MALLOPHAGA FROM TRISTAN DA CUNHA

PART I

BY

THERESA CLAY

British Museum (Natural History)

A collection of Mallophaga made by Dr. Yngvar Hagen, the terrestrial zoologist of the Norwegian Scientific Expedition to Tristan da Cunha in 1937–1938 is probably the first general collection to have been made from this locality. Since then further collections have been made by Mrs M. K. Rowan in 1949, whose collection is now in the S. African Institute for Medical Research in Johannesburg and accounts of which were published by Dr. S. von Kéler (1951 and 1952); and by Mr. H. F. I. Elliott in 1951–1952, whose collection is in the British Museum (Natural History). The collection of the Norwegian Expedition is in the Zoological Museum of the University, Oslo, some duplicates in the British Museum (Natural History).

As the Mallophaga have a host not a geographical distribution these collections do not add any information to the relationships or origin of the fauna of Tristan da Cunha. Any points of interest relating to host relationships or distribution have been noted below under the species concerned.

The identifications of the specimens collected by the Norwegian Expedition (apart from some unidentifiable nymphs and females) are listed below under their hosts. There is one new species described in the following paper by Dr. G. Timmermann.

Sphenisciformes.

Eudyptes c. crestatus (Miller). Tristan da Cunha.

Kéler (1952) described two new species from *Eudyptes crestatus* in Tristan da Cunha, namely *Austrogoniodes concü* and *A. cristati*, and also discussed the other species found on this host. Below are given the species collected by the Norwegian Expedition:

Austrogoniodes cristati Kéler, 1952.*Austrogoniodes* sp.?

A single female specimen belongs either to *A. hamiltoni* Harrison or *A. concii* (Kéler), the female of the latter species has not been described and the differences between it and *hamiltoni*, if any, are not known.

Austrogoniodes sp.?

A single female of the *cristati*-group is not identifiable as any of the known species from this host nor from *Eudypetes chrysolophus* (see Kéler, 1954) which was also collected by the Expedition.

Procellariiformes.**Phoebetria f. fusca** (Hilsenberg). Tristan da Cunha.*Perineus diomedeeae* (J. C. Fabricius), 1775.

This species, the type host of which has been designated as *Diomedea m. melanophris* Temminck, is known from both *Phoebetria fusca* and *P. palpebrata* (see Clay, 1940).

^m
Diomedea exulans (Linné). Tristan da Cunha and Inaccessible.
Docophoroides brevis (Dufour), 1835.

Diomedea melanophris (Temminck). Tristan da Cunha.

Saracchis }

Perineus diomedeeae (J. C. Fabricius), 1775.*Docophoroides simplex* (Waterston), 1914.*Harrisoniella ferox* (Giebel), 1867.*Diomedea melanophris* is the type host of all these species of Mallophaga.✓ **Diomedea chlororhynchos** Gmelin. Tristan da Cunha.✓ Saracchis *Perineus diomedeeae* (J. C. Fabricius), 1775.✓ *Docophoroides simplex* (Waterston), 1914.✓ **Macronectes giganteus** (Gmelin). Tristan da Cunha.✓ Saracchis *Perineus obscurus* (Rudow), 1869.✓ *Docophoroides hunteri* Harrison, 1937. = *D. murphyi*.✓ *Perineus* sp. n.

The description of this species by E. L. Edwards is in the press.

Pachyptila forsteri (Latham). Tristan da Cunha.

Naubates prioni (Enderlein), 1908.

This species was originally described from *Pachyptila desolata*, but no differences can be found between the populations from the two hosts.

Saemundssonina sp. Nymph.

Ancistrona sp.

This is represented by three females only, and at the present time it is not possible to separate the females of this genus.

Puffinus gravis (O. Reilly). Nightingale. Inaccessible. Tristan da Cunha.

Naubates harrisoni Bedford, 1930.

Halipeurus abnormis (Piaget), 1885.

This species was originally described from *Puffinus major* = *P. gravis*, but Edwards (in press) believes this to be the wrong host, considering *P. kuhlii* the true host. However, as no specimens of *P. kuhlii* were collected by the expedition and as it does not, in fact, occur in this locality it appears that *abnormis* must be a true parasite of *P. gravis*, this latter host also having a second species of *Halipeurus* (see below).

Halipeurus sp. n. The description of this species by Edwards is now in press.

Trabeculus sp. Females only.

Ancistrona sp. Nymph.

✓ **Pterodroma mollis mollis** (Gould).

✓ *Naubates* sp. ?

12 This species is represented by three females only; these may prove to be *Naubates pterodromi* Bedford, 1930 or a subspecies. At the present time material from the type host, *P. microptera* and from *Pterodroma mollis* is inadequate for the identification of *N. pterodromi*. Kéler (1952: 213) identified specimens from *Pterodroma incerta* from Tristan da Cunha as *N. pterodromi* but had not seen material from the type host.

✓ *Trabeculus schillingi* Rudow, 1866.

Pterodroma incerta (Schlegel).

Naubates sp. Females.

Pelagodroma m. marina (Latham). Tristan da Cunha.

✓ *Longimenopon galeatum* n. sp. Timmermann. sp. n. See below (p.9)
under Dr. Timmermann's revision of this genus.

Rallidae.

Atlantisia rogersi Lowe. Inaccessible.

Pseudomenopon rowani Kéler, 1951.

This species together with *Rallicola zumpti* (Kéler) were taken from this host by Mrs. M. K. Rowan and described by Dr. von Kéler in 1951. Hagen (1952: 230) discusses the phylogenetic position of *Atlantisia* and mentions the Mallophaga as a possible source of evidence. Eichler (1952: 39) suggests that his species *Pseudomenopon qadrii* from *Porzana porzana* is near *P. rowani*; however, Eichler had females only and the species of this genus are not easily distinguished in that sex. Three males from *Porzana* in the Meinertzhagen collection, British Museum (Natural History) differ distinctly from those of *P. rowani* in the form of the male genitalia especially in the sclerite of the genital sac — a useful character for specific identification; this sclerite in *rowani* is of a form not seen in any other species of *Pseudomenopon*. It is not easy, therefore, to determine phylogenetic relationships within the genus *Pseudomenopon* until more is known about this genus. Clay (1953: 586) showed that the *Rallicola* species (*R. zumpti*) from *Atlantisia* was closely related to *R. mystax* from *Porzana porzana* and suggested that this close relationship between the two forms, together with the fact that they are unlike any other known species, might be evidence of a relationship between the two hosts.

Charadriiformes.

Sterna vittata tristanensis (Murphy). Tristan da Cunha.

Austromenopon sp.

Females only and not identifiable.

Quadriceps houri Hopkins, 1949.

Saemundssonina sterna (Linn.), 1758.

Saemundssonina lockleyi Clay, 1949.

The occurrence of these two species of *Saemundssonina* on *Sterna vittata* is of considerable interest and difficult to explain. As shown by Clay (1948:

142) it is usual for *S. sterna* to be found on *Sterna hirundo* and *S. lockleyi* on *Sterna vittata* and *S. paradisaea*. As *Sterna hirundo* is not found in this locality there can be no suggestion of natural straggling nor contamination. The most likely explanation would seem to be that both species of Mallophaga may occur on *S. hirundo* and *S. vittata* (the presence of closely related sympatric species is found throughout the Mallophaga) and that one of these has become absent or rare on each of the hosts (see Clay, 1949: 296, fig. 4).

Passeriformes.

Nesocichla eremita gordonii (Stenhouse). Inaccessible.

Bruelia sp.?

Represented by females only and at present unidentifiable.

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RESULTS OF THE NORWÈGIAN SCIENTIFIC EXPEDITION
TO TRISTAN DA CUNHA 1937-1938. NO. 40-41

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OSLO
I KOMMISJON HOS H. ASCHEHOUG & CO. (W. NYGAARD)
1957
