

New Mallophaga from the Streaked Shearwater,

Calonectris leucomelas from Japanese Waters†

(Part 2)

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Concerning insect parasites found on the streaked shearwater, *Calonectris leucomelas*, a ceratophilid flea and two Ischnoceran Mallophaga have been reported. In June, 1959, as a guest-member of the Zoological Unit of Tokyo Metropolitan Expedition to the Izu Islands, I engaged in a bird survey for collecting of the ectoparasites at Mikura-shima, a breeding area of the streaked shearwater, and successfully collected a lot of Mallophaga. The material consists of two named species and two unnamed ones, one of which I here describe as a new. The interest in this note is the fact that the species described below belongs to the Amblyceran genus *Longimenopon*, the first recorded genus from Japan.

This survey was undertaken by cojoint-work of the Zoological Unit of Tokyo Metropolitan Expedition to the Izu Seven Islands. I am greatly indebted for the courtesies and facilities extended to me by Messrs. K. KISHIDA and K. SHIRAI of members of the Zoological Unit; as well as for the guidances and encouragements given by Dr. K. ASANUMA and Prof. H. SAWADA.

Genus *Longimenopon* THOMPSON, 1948

(“New Genus F”. CLAY, 1947, Proc. Zool. Soc. Lond., 117: 466, 473.)

Longimenopon. THOMPSON, 1948, Occ. Pap. Bishop Mus. Honolulu, 19: 197.

Longimenopon. HOPKINS & CLAY, 1952, Check List of Mallophaga, 200.

Longimenopon. TIMMERMANN, 1957, Results of Norw. Sci. Exped. to Tristan da Cunha 1937-1938, 40-41: 7.

Type species: *L. puffinus* THOMPSON, 1948.

Type host: *Puffinus pacificus cuneatus*.

Elongate Menoponidae, medium-sized and moderately sclerotized forms. Head squarish, without preocular notch or slit; lateral expansions of forehead partly roofed the basal half of antennae but not formed antennal fosae; terminal segment of antennae not divided; ventral surface of head without sclerotized process such as are found in *Menacanthus*; occipital margin is straight or concave; temples rounded or angularly projected. Pharyngeal sclerite well-developed. Gular plate not developed. Prothorax rectangular, posterior margin curved. Prosternal plate

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rudimentary. Mesonotum small and separated from large metanotum. Legs: venter of third femora without combs or bushes of setae; tibiae without outer submarginal combs of fine setae. Abdomen cylindrical, elongate and moderately sclerotized; combs or asters of setae on the ventral surface absent. Setae arrangement of both dorsal and ventral surface sparse; dorsal one consisting of two rows of setae on typical terga, ventral one consisting of little more than two irregular rows of setae on typical sterna. Paratergal plates with scattered setae. Spiracles small. Male genitalia symmetrical, with long, narrow basal plate tapering to a point anteriorly; parameres free, clasper-like.

The Amblyceran genus *Longimenopon* THOMPSON, 1948 which contains five species, occurs on the avian family Procellariiformes. In a review of the genus, TIMMERMANN (1957) has given comparative sketches of some morphological features. Also, he has presented a discussion of the relative value of taxonomic characters in current use. In the genus the populations from the different hosts are connected each other by intermediate forms, but the most obvious differences lie on the shape of the head and the size of the body. The male genitalia does not seem to have criteria for the separation of the species since in all known species genital apparatus remains in the same form.

On the basis of configuration of the head, TIMMERMANN has divided the genus into three groups of species as follows; a primitive *infans*-group, an intermediate *puffinus*-group and a developed *galeatum*-group. A specimen from *Calonectris leucomelas* proves to be fitted into the *galeatum*-group, in which one species includes currently, by having the head of the higher *Colpocephalum* type, but it is much larger than *galeatum*, wherefore I prefer to describe it herein.

Table 1. The Species of the Genus *Longimenopon*

Species-group	Species	Type host	Other host
<i>Infans</i> -group	<i>infans</i>	<i>Bulweria bulwerii</i>	<i>Oceanodroma monorhis socarroensis</i>
<i>Puffinus</i> -group	<i>puffinus</i>	<i>Puffinus pacificus cuneatus</i>	<i>Puffinus nativitatis</i> <i>Pterodroma brevirostris</i>
	<i>elliotti</i>	<i>Pterodroma incerta</i>	
<i>Galeatum</i> -group	<i>galeatum</i>	<i>Pelagodroma marina</i>	
	<i>shiraii</i> , n. sp.	<i>Calonectris leucomelas</i>	

***Longimenopon shiraii*, new species**

Holotype female from *C. leucomelas*, Mikura-shima, Izu Seven Islands, Tokyô-to, VI 1959, H. NAKAGAWA. The type is in the author's collection.

Female.—Total index about 4.5. Head broader than long; forehead evenly rounded in front, with several scattered spines and setae. Lateral emargination of forehead with a longish seta and three short setae, and partly covered the first and

second segments of antennae. Antennae four-jointed and the second and third jointed with a narrower bar. Eyes very small and just below them there are moderate ocular setae. Gular plate feebly developed, with five pairs of slender setae. Discal chaetotaxy, as shown in the figure, sparse; two moderate setae just behind to the level of the base of antennae, of which inner pair shorter than outer one; a moderate seta settled fairly posteriorly to an inner microseta on each side. Tempes distinctly and angularly projected, with five strong setae and two longish setae. Posterior margin of occiput is clearly concave, with two pairs of setae.

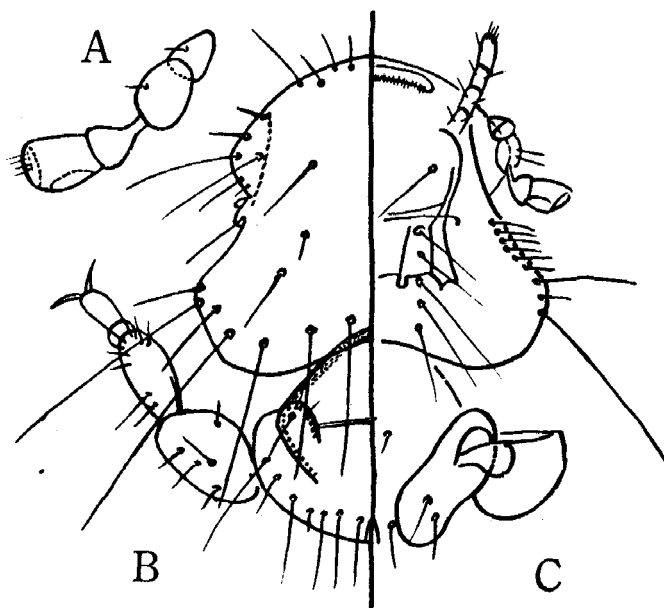


Fig. 1. *Longimenopon shiraii*, new species.

A; antenna, B; dorsal aspect of head and prothorax,

C; ventral aspect of ibid.

Prothorax with produced obtuse lateral angles, each bearing one seta and one spine; posterior margin flatly rounded, with three or four setae on each side; in the basal half there being a longitudinal suture by which prothorax separated bilaterally. Longitudinal bars well sclerotized and connected with an indistinct transverse bar. Suture between small mesonotum and metanotum represented as a creases-like structure. Mesonotum lacking setae. Posterior margin of metanotum straight and bearing a series of setae.

Abdomen elongate-oval, unmodified terga with two rows of setae, sterna with irregular rows of setae.

Table 2. Measurements of the female (in MM.)

	Head		Abdomen width	Total length
	width	length		
<i>L. shiraii</i> , n. sp.	0.43	0.40	0.59	2.55
<i>L. galeatum</i>	0.40	0.31	0.52	2.19

Remarks. The species is dedicated to Mr. K. SHIRAI, Zoologist of the Wildlife Section, Forestry Agency, who befriended me in many ways in the collecting trip to Mikura shima.

References.

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摘 要

オオミズナギドリに寄生するハジラミについて その二

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(昭和34年9月7日受理)

現在オオミズナギドリより寄生性の昆虫はトリノミ1種及びハジラミ2種が報告されている。本年(1959年)6月、筆者は伊豆七島に関する東京都学術調査用動物班の客員としてまねかれ、御蔵島において、本宿主を調査する機会にめぐまれた。調査の結果、採集されたハジラミは既知種2種、未記載種2種であり、その内1種は本邦未記録の短角ハジラミ群の一属 *Longimenopon* に所属する新種と認め、*Longimenopon shiraii* と命名した。種名は農林技官 白井邦彦氏に献呈されるものである。

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