

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

A NEW SPECIES OF *DENNYUS*
(MALLOPHAGA: MENOPONIDAE) FROM
THE MALAYSIAN SPINE-TAILED SWIFT

BY K. C. EMERSON AND ROGER D. PRICE
*Arlington, Virginia and Department of Entomology,
Fisheries, and Wildlife, University of Minnesota,
St. Paul, Minnesota*

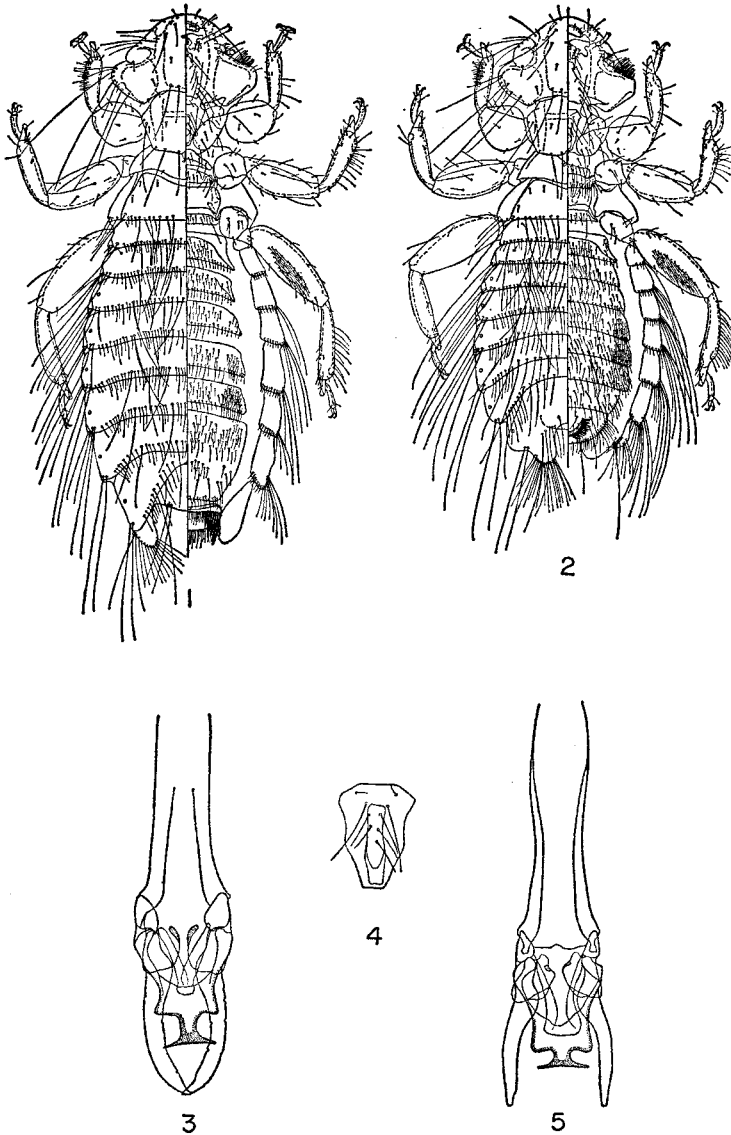
Recently the authors obtained specimens of a new species of Mallophaga, which is herewith described, illustrated, and compared with a closely related species.

Dennyus major (Uchida, 1926)

Dennyus major (Uchida, 1926) is found on the Northern Spine-tailed Swift, *Chaetura caudacutus caudacutus* (Latham). Uchida described the species from specimens collected in Togakushimura and Chikumagun, both in Nagano Prefecture, Japan. Nakagawa (1959) redescribed the female from a specimen collected in Hokkaido, Japan. Both authors noted that the species was the largest in the genus and had many distinctive features. Uchida also noted the unusual genitalia, which we have illustrated in Fig. 5. During this study, Dr. Theresa Clay lent us a male and a female from the type series. Since Uchida did not designate a holotype, the male with collection data "Takamatsuaia major, *Chaetura c. caudacuta*, JAPAN, Nagao, 1917, #162" is hereby designated lectotype and has been so labeled. The labels presently on these two slides are not the original Uchida labels, which accounts for the incompleteness of the locality data and for the fact that the generic name of the host was changed from *Hirundapus* to *Chaetura*.

***Dennyus giganteus* new species**

Holotype male: Total length, 3.13 mm. External morphology and chaetotaxy as illustrated in Fig. 2. Sternal plate of prothorax as illustrated in Fig. 4. Head, thorax (except for prosternal plate) and legs essentially the same as in *Dennyus major*. All setae on the prosternal plate are longer than in *D. major*. Abdominal chaetotaxy, as illustrated in Fig. 2, with fewer short, fine marginal setae on segments I-VI than in *D. major*.



FIGS. 1-4. *Dennyus giganteus*, new species. 1, dorsal-ventral view of female; 2, dorsal-ventral view of male; 3, male genitalia (less sac); 4, sternal plate of prothorax. FIG. 5. *Dennyus major* (Uchida), male genitalia (less sac).

Indentation of terminal abdominal segment deeper than in *D. major*. Genitalia, less sac, as illustrated in Fig. 3.

Allotype female: Total length, 3.78 mm. External morphology and chaetotaxy as illustrated in Fig. 1. Abdominal chaetotaxy, as illustrated in Fig. 1, with fewer short, fine marginal setae on segments I-VI than in *D. major*. Anal fringe with more heavy thick long peglike setae on each side than *D. major*.

Type host: *Chaetura gigantea gigantea* (Temminck), Malaysian Spine-tailed Swift.

Type material: Holotype male and two paratypes collected off the type host on 14 October 1964 at Kabigaan Aborlan, Palawan, Philippines. Allotype female and one paratype collected off *Chaetura gigantea dubia* (McGregor) on 27 January 1966 at Dalton Pass, N. Vizcaya, Philippines. Two paratypes collected off *Chaetura gigantea dubia* (McGregor) on 27 June 1965 at Dalton Pass, N. Vizcaya, Philippines. Two paratypes collected off *Chaetura gigantea indica* (Hume) in October 1943 in Punjab, India. The holotype and allotype will be placed in the collection of the U. S. National Museum. The authors will each retain one pair of paratypes from the Philippine material. The Indian material is in the British Museum (Natural History).

Discussion: Peters (1940) recognized the genus *Hirundapus* for three species of swifts: *caudacutus*, *giganteus*, and *ernsti*. He said of *ernsti*, known only from the unique type, "Probably a race of *giganteus*, but until more is known of its distribution, is better regarded as a distinct species." Several authors since Peters have included these swifts in the genus *Chaetura*; but the large size, indented terminal abdominal segment, and male genitalia are unique features of the species of *Dennyus* found on *Hirundapus* as recognized by Peters.

LITERATURE CITED

- NAKAGAWA, H. 1959. A redescription of *Dennyus major* (Uchida) from the Needle-tailed Swift *Hirundapus caudacutus caudacutus* (Mallophaga). J. Agri. Sci. Tokyo Nogyo Daigaku, 5: 23-27.
- PETERS, J. L. 1940. Check-list of birds of the World, Volume IV. Harvard University Press. 291 pp.
- UCHIDA, S. 1926. Studies on Amblycerous Mallophaga of Japan. J. Col. Agri., Imperial Univ. of Tokyo, 9: 1-56.