

**TWO NEW SPECIES OF *RALLICOLA* FROM TASMANIA
(MALLOPHAGA: PHILOPTERIDAE)**

By K. C. EMERSON*

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Abstract

The new species *Rallicola campbelli* and *R. mortieri* from *Tribonyx mortierii* Du Bus (Rallidae) are described and illustrated.

Through the courtesy of Dr. Theresa Clay, specimens representing two new species of Mallophaga were made available for study. These two species, *Rallicola campbelli* and *R. mortieri*, are herewith described and illustrated. This material was collected as part of a survey of the ectoparasites of Australian birds and mammals now being organized by Mr. J. H. Calaby of the Division of Wildlife Research, C.S.I.R.O., Canberra.

***Rallicola campbelli* sp. n. (Figs. 1-3)**

Type material: *holotype* male, *allotype* female, and *paratypes* collected from *Tribonyx mortierii* DuBus (Rallidae) at Hunting Ground, Tasmania, by K. R. Campbell. *Paratypes* from the same host were collected at Diprose Lagoon, Tasmania, by K. R. Campbell.

The holotypes and allotypes will be deposited in the Australian National Insect Collection, C.S.I.R.O., Canberra.

Male.—General shape and chaetotaxy as shown in Figure 1. Genitalia, less sac, as shown in Figure 3.

Female.—Head, except for filiform antennae, as in the male. Thorax and legs as in the male. Abdominal tergites II-V, divided medianly. Terminal abdominal segments as shown in Figure 2. Abdominal sternites, not shown in Figure 2, as in the male but with two more setae per segment.

Measurements in mm of mounted types

	Male	Female
Length of head	0.61	0.64
Breadth of head	0.53	0.56
Breadth of prothorax ..	0.38	0.43
Breadth of abdomen ..	0.66	0.66
Total length	1.96	2.12

***Rallicola mortieri* sp. n. (Figs. 4, 5)**

Type material: *holotype* male, *allotype* female, and *paratypes* collected from *Tribonyx mortierii* DuBus at Diprose Lagoon, Tasmania, by K. R. Campbell. *Paratypes* from the same host were collected at Hunting Ground, Woodbury, and Tunbridge, Tasmania, by K. R. Campbell and R. H. Green.

The holotypes and allotypes will be deposited in the Australian National Insect Collection, C.S.I.R.O., Canberra.

Male.—Differs from *R. campbelli* in size and male genitalia. Genitalia as shown in Figure 5.

Female.—Differs from *R. campbelli* in size and ventral chaetotaxy of terminal segment. Terminal abdominal segments as shown in Figure 4.

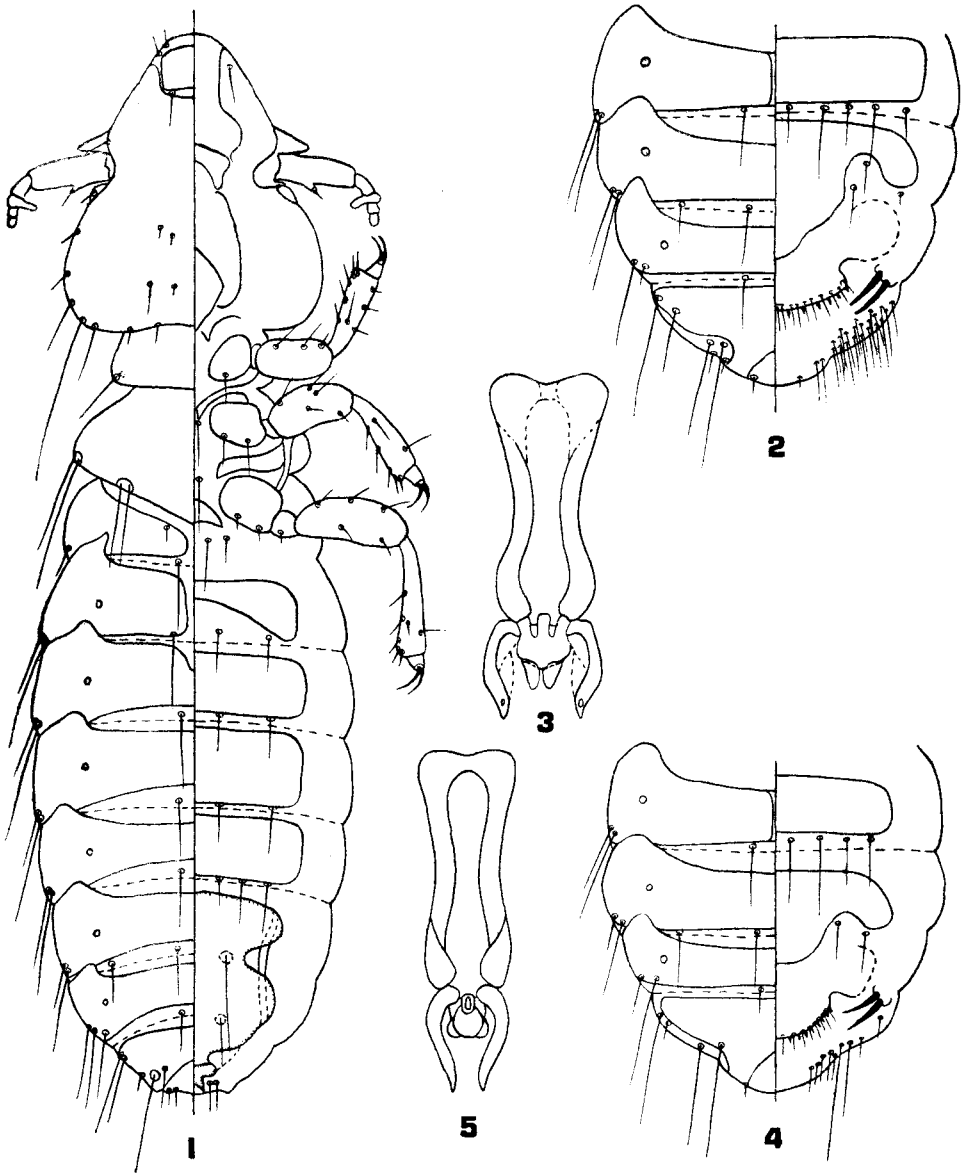
Measurements in mm of mounted types

	Male	Female
Length of head	0.52	0.65
Breadth of head	0.48	0.54
Breadth of prothorax ..	0.36	0.46
Breadth of abdomen ..	0.61	0.66
Total length	1.80	1.81

DISCUSSION

In my key to the *Rallicola* (Emerson 1955) both species will "key out" with *R. cuspidatus* (Scopoli) in couplet 17. The males of these two species have a distinctive ventral plate on the terminal abdominal segment not found on *R. cuspidatus*. The two new species can be separated by differences in size and male genitalia. In the female, the ventral portions of the abdominal segments, especially chaetotaxy, are distinctive, and there is considerable difference in size.

*Stillwater, Oklahoma, U.S.A.



FIGS. 1-5.—(1-3) *Rallicola campbelli* sp. n.: (1) dorsal-ventral view of male; (2) dorsal-ventral view of terminal abdominal segments of female; (3) male genitalia. (4, 5) *R. mortieri* sp. n.: (4) dorsal-ventral view of terminal abdominal segments of female; (5) male genitalia.

It is difficult to say where the affinities of these two species lie, but they appear to belong between *R. sarothurae* Clay and *R. cuspidatus*. *R. cuspidatus* is found on *Rallus aquaticus* Linné, and *R. sarothurae* is found on *Sarothura antonii* Madarasz and Neumann. In the family Rallidae, the genus *Tribonyx* is considered to be more closely related to *Sarothura* than *Rallus*. The morphology of these two species of Mallophaga confirm that this relationship is probably valid, but the differences in the Mallophaga are not as great as in the hosts. The genus *Tribonyx* is considered to be closely related to *Amaurornis*, but the Mallophaga do not reflect a close relationship. *Tribonyx mortierii* is the second host of Rallidae known to harbor two species of *Rallicola*; the other host being *Porzana carolina* Linné found in North America.

REFERENCE

EMERSON, K. C. (1955).—A review of the genus *Rallicola* (Philopteridae, Mallophaga) found on Aramidæ, Psophiidae and Rallidae. *Ann. ent. Soc. Amer.* 48: 284-299.

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