

COLPOCEPHALUM HOLZENTHALI N. SP.
(MALLOPHAGA: MENOPONIDAE) FROM THE
BARRED FOREST-FALCON *MICRASTUR RUFICOLLIS*
(FALCONIDAE) IN PERU

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ABSTRACT: *Colpocephalum holzenthali*, a new species of chewing louse, is described from a series of lice collected in Peru from *Micrastur ruficollis zonothorax*, the barred forest-falcon. *Colpocephalum holzenthali* is most similar to members of the *Colpocephalum polybori* species group.

Colpocephalum Nitzsch, 1818, is one of the largest genera of chewing lice (Mallophaga). In a limited review, Price and Beer (1963) divided the species of *Colpocephalum* from the Falconiformes into 8 species groups and Price (1967) added a ninth group. During a survey of avian ectoparasites in Peru, specimens of a new species of *Colpocephalum* were collected (by D.H.C.). The new species, herein named *Colpocephalum holzenthali*, is a member of the *Colpocephalum polybori* species group that also contains *C. polybori* Rudow, 1869, *Colpocephalum ibicter* (Eichler, 1954), *Colpocephalum ateri* Price and Beer, 1964, and *Colpocephalum maculatum* Pigaet, 1880 (Price and Beer, 1963, 1964).

MATERIALS AND METHODS

Lice were removed from a barred forest-falcon mist-netted in Peru. The freshly killed bird was exposed to ethyl acetate fumes in a chamber for several minutes to kill its ectoparasites. Its feathers were then ruffled vigorously over a large sheet of paper. The lice were removed, stored in 70% alcohol, and later mounted on microslides for taxonomic study with a phase-contrast compound microscope. Taxonomic decisions were based solely on louse morphology, with no a priori consideration of host relationships.

DESCRIPTION

***Colpocephalum holzenthali* n. sp.**
(Figs. 1-3)

Male: As in Figure 1. Head with 4 minute middorsal setae; outer pair of occipital setae minute, inner pair long; gula lightly pigmented across anterior portion, usually with 4+4 setae, less often 3+4 or 3+3. Margin of pronotum with 4 long, 2 short setae on each side; dorsally, with minute pair of central setae, longer setae

at ends of transverse thickening; prosternal plate weak, with pair of minute setae anterior to it. Metanotum with 6 long marginal setae; medioanteriorly with inner pair of minute setae, outer pair of longer setae; mesosternal plate with 3-5 setae in addition to minute anterior pair; metasternal plate with 7-9 setae; 3 ventral rows of ctenidia on each femur III. Abdominal tergites undivided, of essentially similar lengths. Marginal abdominal tergal setae of shorter among longer setae: I, 6-8; II, 10-13; III, 12-16; IV-V, 13-14; VI, 12-14; VII, 9-11; VIII, 8. Few short scattered anterior tergal setae: I, 0-1; II-IV, 1-4; V, 0-4; VI, 0-3; VII, 0-1; VIII, 0. Postspiracular setae very long on I-III and V-VIII, much shorter on IV. Last segment with 2 very long setae on each side, with short seta lateral and medial to each pair. Abdominal sternal setae: I, 5-6; II, 25-32; III, 2 ctenidia on each side with 21-25 setae between them; IV, 33-38; V, 26-30; VI, 21-27; VII, 18-24; VIII (fused with IX), 15-22; IX, 12-16. Genitalia as in Figure 2; genital sclerite with bluntly rounded lateroposterior projections; penis apically barbed; genitalia 0.54-0.62 mm long, 0.08-0.09 mm wide.

Female: As in Figure 3. Much like male, differing primarily in certain quantitative details and structure of terminalia as follows. Marginal abdominal tergal setae: II, 11-15; III-V, 14-17; VI, 13-14; VII, 11-13; VIII, 8-9. Anterior tergal setae: III-IV, 0-1; V, 0-2. Last segment with total of 4-7 inner posterior setae between very long setae. Abdominal sternal setae: I, 6-9; II, 31-34; V, 29-33; VI, 25-29; VII, 22-26. Sternites VII-IX fused with subgenital plate (fused VIII-IX) having 23-29 evenly spaced short marginal setae, 25-28 anterior setae. Anus oval, without inner setae, with 34-39 ventral, 31-35 dorsal fringe setae.

Dimensions (mm): Preocular width, male 0.35-0.37, female 0.38; temple width, male 0.48-0.50, female 0.53-0.54; head length, male 0.31-0.32, female 0.32-0.34; prothorax width, male 0.29-0.31, female 0.32-0.33; metathorax width, male 0.38-0.39, female 0.45-0.46; total length, male 1.50-1.58, female 1.76-1.79.

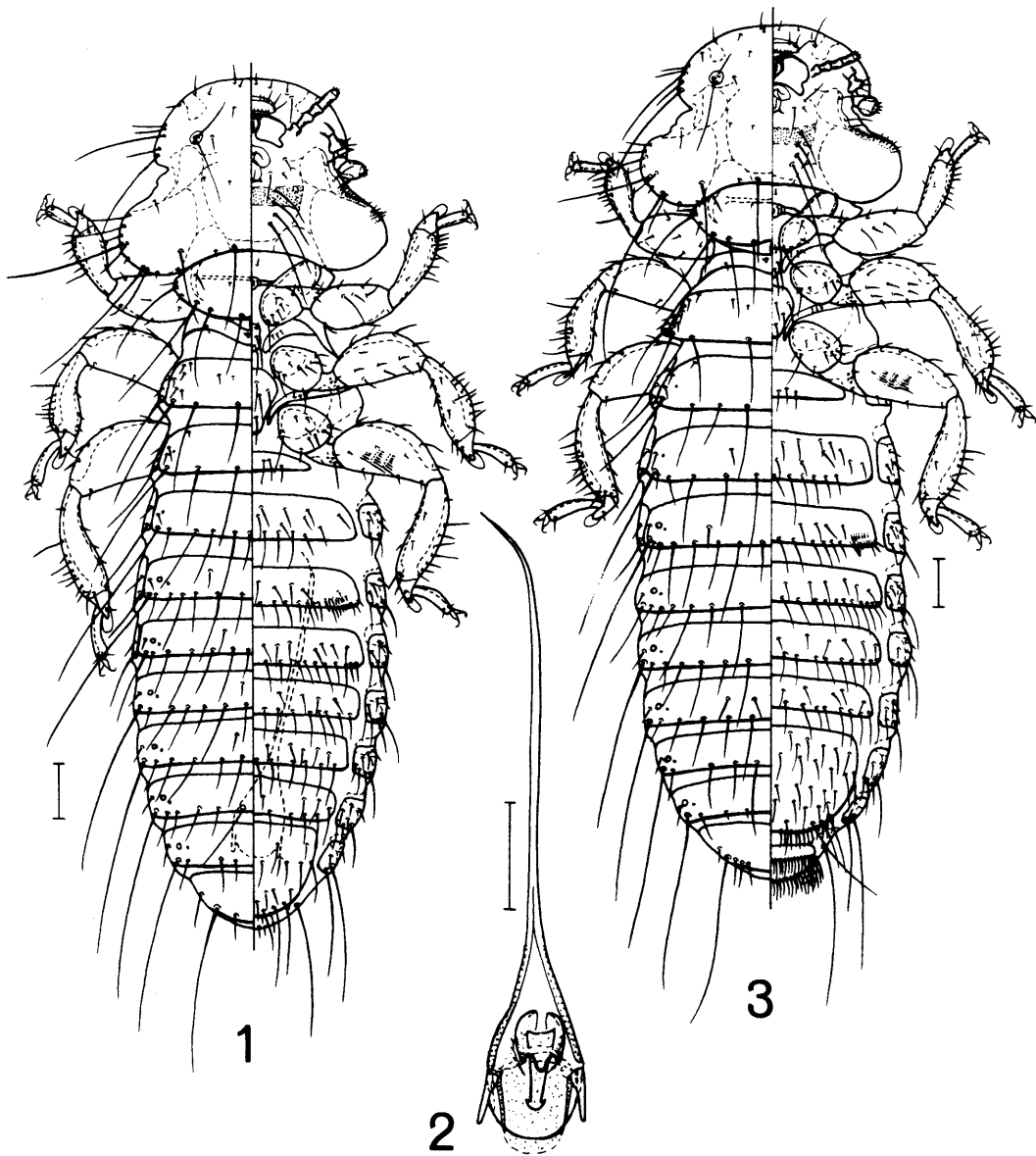
Taxonomic summary

Type host: *Micrastur ruficollis zonothorax* (barred forest-falcon), Field Museum of Natural History 320370.

Type locality: Above Rio Palotoa, Cerro de Pantia-colla, Dept. Madre de Dios, Peru, elev. 1,030 m, 30.VIII.1985.

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FIGURES 1-3. *Colpocephalum holzenthali* n. sp. from *Micrastur ruficollis* (scale bars = 0.1 mm). 1. Male. 2. Male genitalia. 3. Female.

Specimens deposited: Holotype (male), Field Museum of Natural History Number Z-17-561-1; paratypes distributed among Field Museum of Natural History, Division of Insects (1 male, 6 females), U.S. National Museum of Natural History, Department of Entomology (2 males, 2 females), Oklahoma State University, Emerson Insect Collection (2 males, 2 females), and the University of Minnesota, Insect Collection (5 males, 1 female).

Etymology: This species is named for Ralph W. Holzenthali, a friend and colleague in the Department of Entomology at the University of Minnesota.

Remarks

Price and Beer (1963) described 8 species groups of the genus *Colpocephalum* from Falconiformes. *Colpocephalum holzenthali* is most similar to the members of the *C. polybori* species group, to which it is assigned. *Colpocephalum holzenthali* is best separated from the 4 other falconiform *C. polybori* group species by the following unique combination of characters: (1) minute innermost pair of central setae on both pronotum and metanotum; (2) metanotum with only 6 marginal setae; (3) tergite I with only 6 marginal setae for the male,

6–8 for the female; (4) very few irregularly placed anterior tergal setae, rarely approximating an organized row; (5) female with abdominal tergites of similar lengths, with no indication of central division; and (6) postspiracular setae very long on I–III and V–VIII.

In contrast, *C. polybori* (type host: *Polyborus plancus plancus*), *C. ateri* (type host: *Daptrius ater*), and *C. maculatum* (type host: *Polyborus plancus brasiliensis*) have females with short postspiracular setae at least on IV–V; both sexes with numerous anterior tergal setae on most tergites, including IX of the male of the first 2 species; and both sexes with more marginal setae on the metanotum and tergite I. *Colpocephalum ibicter* (type host: *Daptrius americanus*) has very long postspiracular setae on I–VIII and males with numerous anterior tergal setae, especially on II–VI. These 4 species are further distinguished by other details of dimensions and chaetotaxy (see Price and Beer, 1963, 1964).

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