

Two New Species of *Colpocephalum* (Mallophaga: Menoponidae)¹

By ROGER D. PRICE

Department of Entomology, Fisheries, and Wildlife,
University of Minnesota, St. Paul

Abstract

Canad. Ent. 98: 317-319 (1966)

Colpocephalum strangei is described from the falconiform, *Phalcooboenus australis*, from the Falkland Islands, and *C. javensis* from the piciform, *Dryocopus j. javensis*, from Thailand.

Two recent collections of lice, one from several specimens of a falconiform host from the Falkland Islands and the other from a piciform host from Thailand, have been found to contain a new species of *Colpocephalum*. I thank Dr. Theresa Clay, British Museum (Natural History), and Dr. Robert E. Elbel, Dugway, Utah, for making these series available to me for description here.

In the following discussions, the value in parentheses following a statement of range represents the mean. All measurements are given in millimeters.

Colpocephalum strangei new species

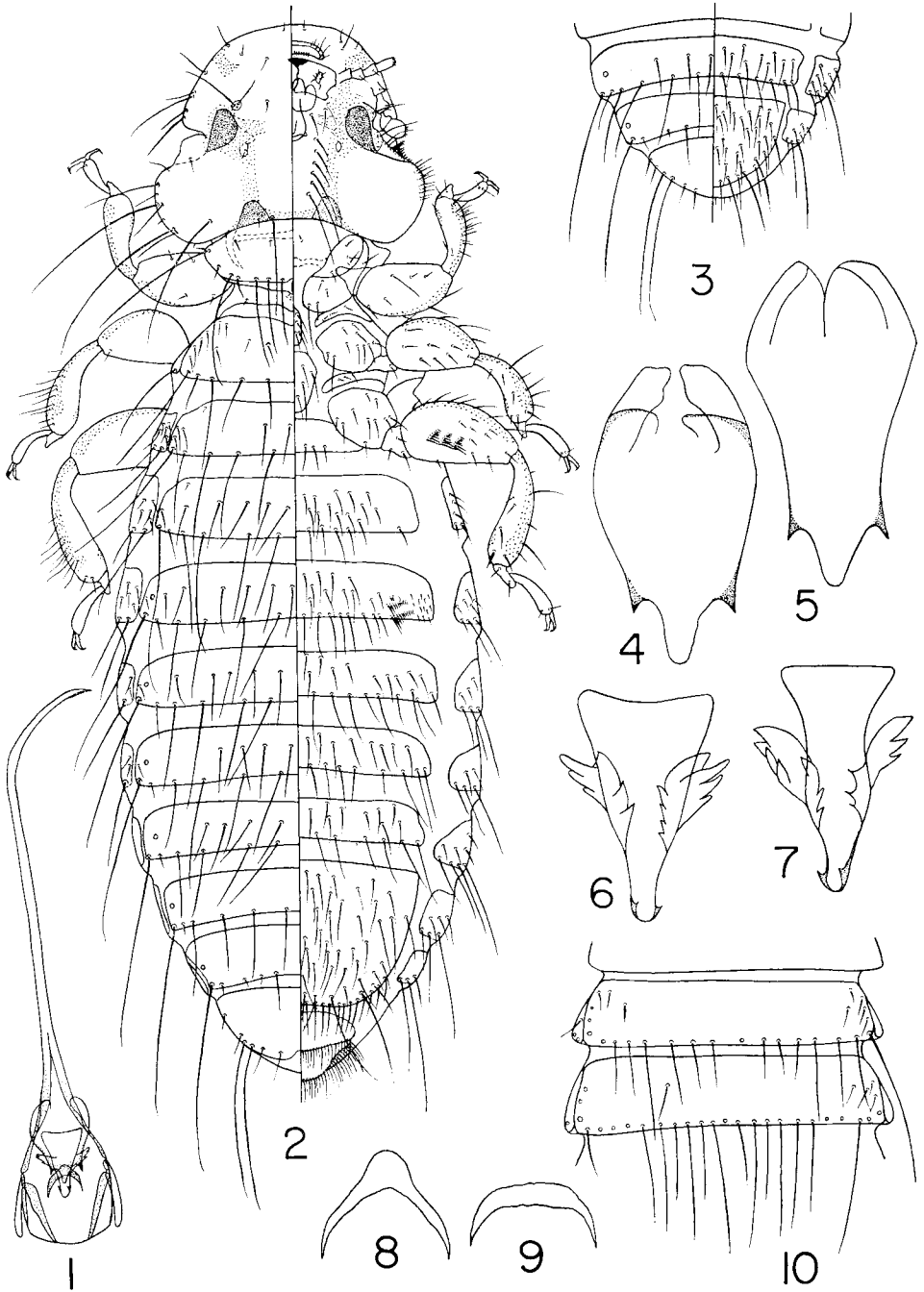
Type-host: *Phalcooboenus australis* (Gmelin).

FEMALE. As in Fig. 2. Outer occipital setae minute, inner long. Margin of pronotum with 5 long, 3 short setae on each side. Metanotal margin with 8-10 (9.3) setae, 4-6 (4.7) short medioanterior setae; metasternal plate with 8-12 (9.5) setae. Abdominal tergites undivided, of essentially similar length. Postspiracular setae very long on I-VIII. Abdominal tergo-central setae: I, 4-6 (4.6); II-VII, 6-10 (8.0); VIII, 3-6 (5.1). Anterior abdominal tergal setae: I, 4-8 (5.2); II-IV, 6-13 (10.4); V, 7-12 (8.4); VI, 2-9 (5.9); VII, 0-1 (0.1); VIII, 0. Each side of last tergite with 2 (rarely 1 on 1 side) very long setae, flanked by 2-3 short setae. Abdominal sternal setae: I, 5-8 (6.3); II, 32-40 (36.1); III, 36-42 (39.6); IV, 37-48 (40.9); V, 33-38 (34.8); VI, 29-37 (32.8); VII, 24-33 (29.9). Sternites VII-IX fused; margin of vulva with 21-28 (25.2) setae; composite VIII-IX anteriorly with 37-44 (39.2) setae. Anal fringe ventrally with 44-53 (49.2) setae and dorsally, 43-59 (51.3). Dimensions: preocular width, 0.42-0.46; temple width, 0.55-0.59; head length, 0.36-0.41; prothorax width, 0.36-0.41; metathorax width, 0.49-0.57; total length, 1.96-2.31.

MALE. Head, thorax, and marginal abdominal tergal chaetotaxy much as for female. Abdominal tergites with more anterior setae: I, 6-13 (8.5); II-V, 10-23 (14.7); VI, 7-16 (10.8); VII, 3-10 (5.9); VIII, 0-2 (0.4). Sternal chaetotaxy of I-VII generally close to female, but III with only 29-38 (31.9) setae. Terminalia as in Fig. 3. Sternite VIII with 25-37 (30.5) setae, IX with 28-38 (32.5) setae. Genitalia as in Fig. 1, with genital sclerite as in Fig. 4, penis as in Fig. 6, and ventral transverse sclerite as in Fig. 8. Dimensions slightly smaller than for female: preocular width, 0.41-0.44; temple width, 0.52-0.56; head length, 0.36-0.38; prothorax width, 0.35-0.37; metathorax width, 0.42-0.48; total length, 1.61-1.95; genitalia length, 0.73-0.79.

REMARKS. *Colpocephalum strangei* is most closely related to *C. phalcooboeni* Price from *Phalcooboenus albogularis* Gould (Price 1964a). Females of *C. strangei* are distinguishable in having: (1) last tergite with 2 very long setae on each side instead of only 1; (2) composite sternites VIII-IX with more marginal, anterior, and total setae; (3) more anterior tergal setae on abdominal segments I-V; (4) abdominal sternites I-VII each with more setae; (5) more setae on the metasternal plate; and (6) slightly larger dimensions. Males of *C. strangei* are best distinguished from those of *C. phalcooboeni* in details of the genitalia, especially in the somewhat shorter more expanded genital sclerite (Fig. 4 vs. Fig. 5), in the shape and blunt finger-like lateral processes of the penis (Fig. 6 vs. Fig. 7), and in the highly arched ventral transverse sclerite (Fig. 8 vs. Fig. 9). Additionally, males of *C. strangei* are slightly larger and have more setae on sternites VIII-IX.

¹Paper No. 5789, Scientific Journal Series, Minnesota Agricultural Experiment Station, St. Paul, Minnesota 55101.



Figs. 1-3. *Colpocephalum strangei* n. sp.: 1, male genitalia; 2, female; 3, male terminalia. Figs. 4-5. Male genital sclerite: 4, *C. strangei*; 5, *C. phalcoboeni* Price. Figs. 6-7. Penis: 6, *C. strangei*; 7, *C. phalcoboeni*. Figs. 8-9. Ventral transverse sclerite of male genitalia: 8, *C. strangei*; 9, *C. phalcoboeni*. Fig. 10. *C. javensis* n. sp., female abdominal tergites I-II.

MATERIAL. Holotype ♀ (at British Museum (Natural History)), 29 ♀ ♀, 28 ♂ ♂ paratypes, from at least three individuals of *Phalcoboenus australis*, Beauchene Is., **Falkland Islands**, 1964, I. Strange.

***Colpocephalum javensis* new species**

Type-host: *Dryocopus javensis javensis* (Horsfield).

FEMALE. General morphology and chaetotaxy much as for *C. inaequale* Burmeister (Price 1964b, fig. 1). Gular setae usually 4 + 4, less often 3 or 5 on a side, with setae shorter than for *C. inaequale*. Pronotum marginally with 5 long, 3 short setae on each side. Margin of metanotum with 13-16 (14.1) setae; metasternal plate with 6-8 (6.9) setae. Marginal abdominal tergal setae: I, 15-19 (16.6); II, 21-23 (22.2); III-V, 16-22 (19.4); VI-VII, 13-19 (16.1); VIII, 11-14 (12.8). No anterior setae between spiracles on abdominal tergites III-VIII; corresponding area on I-II also essentially without setae (Fig. 10), with median three-fourths of I having 0-2 (0.9) setae, and II, 0-3 (1.3), never approaching formation of row. Inner posterior minute setae on last tergite, 6-12 (9.8). Abdominal sternal setae: I, 5-9 (6.9); II, 42-57 (46.8); III, 33-44 (38.3); IV-V, 37-47 (41.6); VI, 34-43 (38.4); VII, 29-36 (32.6); composite VIII-IX marginally with 18-22 (19.3) setae, anteriorly with 32-36 (34.8), including 3-6 longer stouter submarginal setae on each side. Anal fringes both ventrally and dorsally with 46-57 (51.7) setae. Dimensions: preocular width, 0.36-0.37; temple width, 0.49-0.52; head length, 0.32-0.34; prothorax width, 0.32-0.36; metathorax width, 0.45-0.49; total length, 1.66-1.79.

MALE. Head and thorax as for female, with general morphology and chaetotaxy close to male of *C. inaequale* (Price 1964b, fig. 2). Marginal abdominal tergal setae: I, 14-18 (15.4); II, 19-23 (20.8); III-V, 19-27 (23.0); VI, 19-23 (20.9); VII, 15-21 (19.0); VIII, 13-17 (15.2). Anterior abdominal tergal setae often in irregular single row: I, 9-18 (14.1); II, 19-25 (21.7); III, 17-29 (25.1); IV, 22-33 (24.9); V, 16-28 (23.4); VI-VII, 16-25 (19.6); VIII, 10-18 (13.3). Abdominal sternal setae: I, 3-6 (4.8); II, 47-60 (52.4); III, 40-50 (45.8); IV, 52-68 (60.0); V, 46-58 (50.9); VI, 42-61 (48.5); VII, 38-48 (42.7); VIII, 30-37 (32.3); IX, 21-27 (23.7). Genitalia as for *C. inaequale* (Price 1964b, fig. 3), length, 0.49-0.62. Dimensions as for female, but with narrower metathorax width, 0.41-0.45, and shorter total length, 1.39-1.70.

REMARKS. *Colpocephalum javensis* shows a close affinity with the other four known species of this genus from the Piciformes (Price 1964b). Its female differs from all others in the paucity of anterior tergal setae on abdominal segments I-II. Aside from this difference, females are further distinguishable by the combination of the number and lengths of gular setae, the number of setae on the metasternal plate, the vulval chaetotaxy, the absence of anterior setae on all other abdominal tergites, the number of sternal setae, and by dimensions. The number of anterior setae on abdominal tergites III-VIII of the male of *C. javensis* lies distinctly between the ranges for *C. barterti* Price and *C. tirkhan* (Ansari) at the lower level and the ranges for *C. pulverulenti* Price at the upper level. Although overlapping occurs with the ranges for *C. inaequale*, the larger number of sternal abdominal setae for *C. javensis* will distinguish the species.

MATERIAL. Holotype ♀ (at Bernice P. Bishop Museum), 8 ♀ ♀, 12 ♂ ♂ paratypes, *Dryocopus j. javensis*, **Thailand**: Trang, Muang, Chong, Khao Chong Mt., 16 July 1963, W. Songprakob and W. S. Laong (WS 385).

References

- Price, R. D. 1964a. *Colpocephalum phalcoboeni* sp. n. (Mallophaga: Menoponidae) from a Chilean falcon. *J. Parasit.* 50: 763-764.
 Price, R. D. 1964b. *Colpocephalum* (Mallophaga: Menoponidae) from the Piciformes. *J. N.Y. ent. Soc.* 72: 162-167.

(Received 18 October 1965)