The Colpocephalum1 of the Cuculiformes2

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ABSTRACT

A redescription is given for Colpocephalum ignotum, the only previously recognized species of cuckoo. Two new species are described: Colpocephalum phantastis from Centropus phasianus from Papua and Colpocephalum simonis from Centropus cinerascens from India.

Colpocephalum ignotum Tendal from the cuckoo, Centropus superciliosus burchelli Swainson, is the only species of this genus currently recognized as occurring on hosts within the order Cuculiformes. Since I have recently obtained series of lice from this host species as well as several additional species of cuckoos, I have used these to form the basis for a redescription of Colpocephalum ignotum and a description of 2 new species.

All material studied here is from specimens of the genus Centropus, and this would suggest that, within this host order, Colpocephalum is perhaps restricted to Centropus and possibly closely related genera. For the 3 species of Colpocephalum recognized here, the first is represented by specimens from 3 species of hosts of African origin, the second is from a Papuan host, and the third from an Indian host.

In the following descriptions, the characters in common to these species of lice are given first and not subsequently repeated for each. Measurements are in millimeters. The host nomenclature follows that of Peters (1940).

Head.—Broadly rounded in front, distinctly broadest across temple; shallow preocular slit; preocular and occipital suture moderately developed, associated carinae poorly developed; middorsal setae typically 4 (less often 3-6), minute; occipital setae with inner pair very long, outer pair minute; 2 very long marginal temple setae on each side; no ventral sponges; processes; gula evenly pigmented, rounded to flattened posteriorly, with 4-6 setae on each side; subocular comb row with 3-4 setae immediately anterior to it; antennae with only moderately expanded second segment, terminal segment longer than wide, undivided, and not constricted beneath head; prothorax sclerite of hypoglossae as for other Colpocephalum.

Thorax.—Weakly developed prothoracic plate, without longer setae; elongate, narrow mesosternal plate; roughly trapezoidal metasternal plate; venal of each femur III with 3 comb rows of short spiniform setae.

Abdomen.—All tergites unridged, with I-VIII of approximately equal length; tergosternal setae widely spaced, medium to long; postspiracular setae long on I, very long on II-VIII; sparse median posterior row of medium setae on I-VIII; without evident internal pleural thickenings; sternite III with 2 comb rows on each side, rarely with weak anterior third row of 3 or so setae; female ventral terminalia with sternites VII-IX fused (valva), margin of valva with row of medium setae and without lateral hooked setae, anus oval, and with ventral and dorsal fringe of 30-45 short to medium setae in each, anus without inner setae, and either no evident internal structure of genital chamber or with small weak ringlike structure: male ventral terminalia with sternites VIII-IX fused (genital plate); male genitalia with broad conspicuously hersed apical portion of penis, broad genital
**Collopschium ignatum** Tendeiro (Fig. 1-3)


Specimens from *C. superciliosus* Hempich and Ehrenberg as follows, with data in parentheses representing those of specimens from other host species. If data differ from those of type-host material.

**Male:** As in Fig. 3. Margin of pronotum with total of 14 setae, all long except lateral corner seta on each side (specimens from *C. monarchus* Rüppell variable in having third marginal seta from corner long as in Fig. 3 to short as in Fig. 5). Mesosomal plate with 4 (3-4) longer setae. Margin of metasternum with 13 (10-12) setae, all long; mediodorsally with 6 (5-7) setae, including at least 1 longer seta on each side; metasternal plate with 6 (6-8) setae. Posterior margin of each femur III with 2 stout setae. Marginal abdominal tergal setae, including postepisternum setae: I, 10 (10-11); II, 12 (10-12); III-VII, 12 (11-12).

**Female:** As in Fig. 1. Head and thorax much as for male, except for margin of metasternum with 11-12 (10-12) setae, metanotum medioventrally with 5 (4-7) setae, metasternal plate with 6-7 (6-10) setae, and posterior marginal setae of each femur III not so stout. Marginal abdominal tergal setae, including postepisternum setae: I, 9-10 (9-11); II, 12 (10-13); III-V, 12 (12-13); VI-VII, 12; VIII, 11 (10-12). Anterior abdominal tergal setae: I-VII, 5-9 (4-8); VIII, 2-4 (0-2). Last tergite with 3 (2-6) inner posterior setae, no anterior setae. Abdominal sternal setae: I, 6-7 (5-8); II, 27-30 (27-37); III, 26-32 (24-40); IV, 38 (32-48); V, 31 (26-46); VI, 29 (26-39); VII, 20-23 (19-25). Vulva, variably with 12 (12-18) setae, with small gap in center; anteriorly, 19 (19-26) setae. Dimensions: pronotal width, 0.85-0.89 (0.83-0.88); head length, 0.32-0.35 (0.32-0.33); proboscis width, 0.35-0.36 (0.35-0.32); metabuccal width, 0.45-0.57 (0.43-0.49); total length, 1.35-1.39 (1.33-1.39).

Although I have not seen any of the type-series of *Collopschium ignatum*, there are no features of the descriptions that significantly differ from the series at hand. Tendeiro (1998) shows only a fine drawing of the dorsal male head and photographs of a male and female, these lacking much in detail. In view of available materials from *Centropus* species, it seems questionable whether *Hirundo smithii* represents a true host for this species.

**Material Examined:** 2 9, 1 5. *Centropus superciliosus*, Tranvcaud.; 8 9, 6 8. C. monarchus, Mozambique; French Cameron; 2 9, 3 4. *C. squamosus* (L.). N. Rhodesia.

**Collopschium phasianini**, n. sp. (Fig. 5, 6)

*Type-host:* *Centropus phasianinus* (Latham).

**Male:** As in Fig. 5. Differing from *C. ignatum* as follows: pronotum always with short first and third marginal setae near each lateral corner. Only 9-10 marginal metanotal setae; without longer medio-anterior setae on either side. Posterior margin of each femur III with 3 rather stout setae. Fewer marginal abdominal tergal setae: I, 6; II-VI, 8-10; VII-VIII, 8. Anterior abdominal tergal setae: I, 2-5; II-III, 5-6; IV, 5-7; V-VI, 6-9; VII, 4-8; VIII, 1-4. Without anterior setae on last tergite. Sternum IV with 44-53 setae, showing group of shorter spiniform lateroapical setae occasionally aligned in weak comb row. Genitalia as in Fig. 6, with proportionately shorter and more pointed apical portion of penis. Sometimes smaller in size; proboscis width, 0.35-0.38; proboscis length, 0.55-0.60; metabuccal width, 0.35-0.40; total length, 1.65-1.80.

**Female:** As differs from *C. ignatum* in much the same ways as the male, having pronotum, metasternum, and abdominal tergal chaetotaxy on I-VIII essentially as for male. All specimens with last tergite having only 2 inner posterior setae. Sternum IV with 51-55 setae, including lateroapical spiniform setae as for male. Vulva with 16-20 setae distributed across margin, without central gap. Tendency for smaller size than female of *C. ignatum*; proboscis width, 0.35-0.37; proboscis length, 0.44-0.47; metabuccal width, 0.30-0.34; proboscis length, 0.41-0.45; total length, 1.65-1.80.

**Material Examined:** Holotype 3, *Centropus phasianinus* (BMNH 699035), Balimo, Papua, 25 Mar.
1964, H. Clessold; at Bishop Museum. Paratypes, 9 9, 6 3, same data as holotype.

*Colpoccephalum sinensis*, n. sp.

(Fig. 4)

Type-host.—*Centropus sinensis* (Stephens).

**Male.**—Head, thorax, and marginal abdominal tergal setae much as for *C. ignotum*, except no longer medioanterior metanotal setae. Perhaps fewer anterior abdominal tergal setae on V–VIII, with 4, 5, 3, and 2, respectively. No anterior setae on last tergite. Genitalia (Fig. 4) distinctly different from both *C. ignotum* and *C. phasmatii*, with genital sclerite having conspicuous pointed lateroposterior projections and with comparatively short bluntly rounded apical portion of penis.

**Female.**—Head and thorax as for male. Tendency for more marginal abdominal tergal setae than for *C. ignotum*; IV, 11–15; V, 13–16; VI, 12–13; VII, 12–14. Fewer anterior abdominal tergal setae on: IV, 1–4; V–VI, 1–4; VII, 1–3; VIII, 0–1. With 4–6 inner posterior setae. Otherwise, sternites and tergosternites as for *C. ignotum*.

**Material Examined.**—Holotype 4, *Centropus sinensis* sinensis. Bokhador, India, Jan. 1935, Meinertzhagen slide 13991; in British Museum (Natural History). Paratypes, 9 9, same data as holotype.

**REFERENCES CITED**


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