NEW SPECIES OF *CLAYIA* (MALLOPHAGA: MENOPONIDAE) FROM THE FRENCH CAMEROONS.

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Two new species and one new subspecies of the genus *Clayia* are described from material collected by Dr. J. Mouchet, Chargé de Recherches de l'O.R.S.T.O.M., Yaounde, French Cameroons. The author is greatly indebted to Dr. Mouchet for the opportunity to study this material and to Dr. Theresa Clay, British Museum (Natural History), for her assistance and suggestions.

Clayia moucheti sp. n.

Material examined.—Eight males and nine females from *Phasidus niger* Cassin, collected at Ambam, French Cameroons.

Male.—General form and dorsal chaetotaxy as shown in fig. 1. Prosternal plate with four small setae, mesosternal plate with eight medium-length setae, and metasternal plate with twelve medium-length setae. Venter of third femur with distinct patch of setae. First abdominal sternite with six small setae. Abdominal sternites II–VI each with two rows of short setae medianly which expand into three indistinct rows near the lateral margins. Sternites IV–VI each with distinct patches of setae in the posterior lateral angles. Sternite VII with three rows of short setae. Sternite VIII with three rows of short setae, and separated from genital plate, which is void of setae except on posterior margin. Nine long setae posteriorly on each side of genital opening. Pleurites with four medium-length setae on posterior margins, and eight to ten short setae evenly spaced on remainder of surface. Male genitalia as shown in fig. 3.

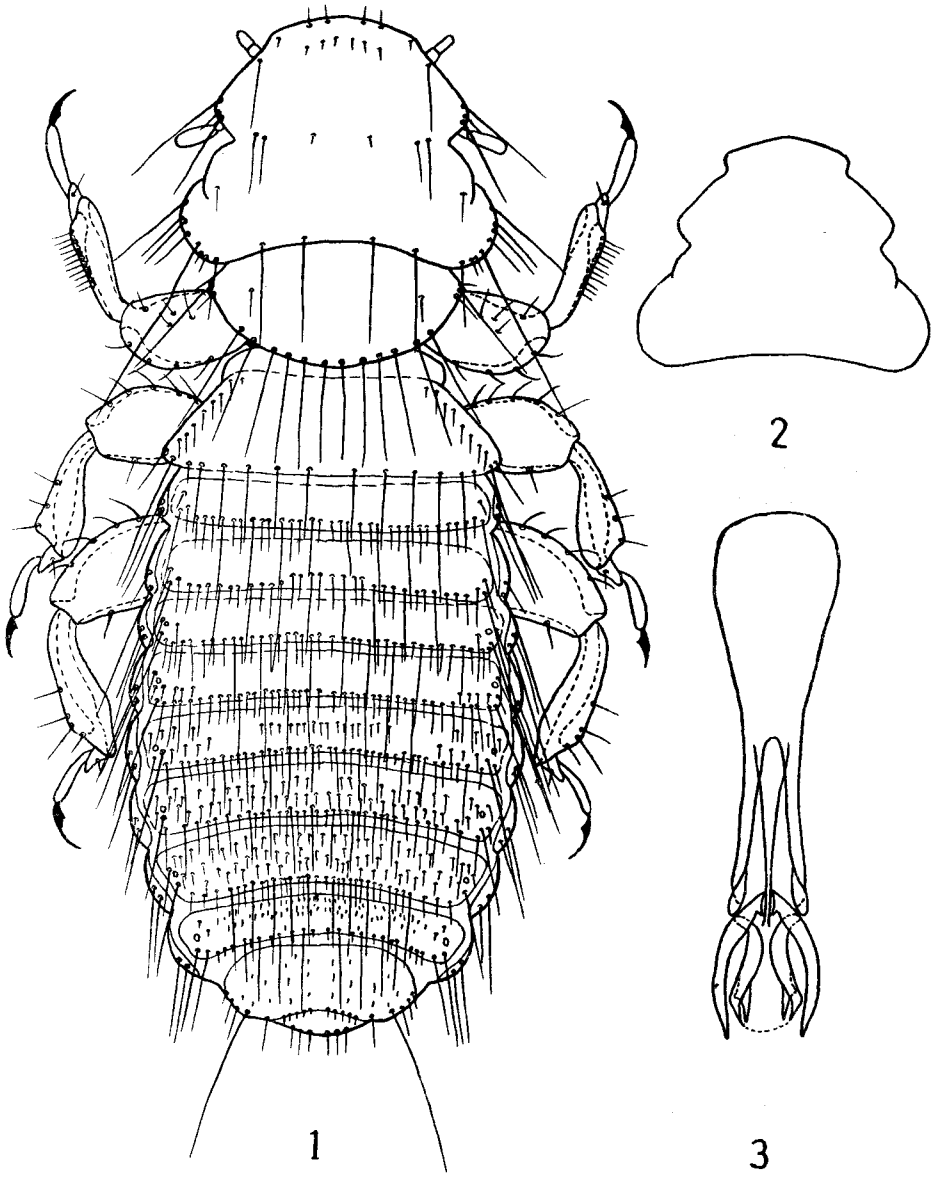
Female.—Shape of head as shown in fig. 2. Similar to male, except as noted. Chaetotaxy of abdominal tergites is slightly more dense, and the medium-length setae are heavier. Tergites VII and VIII are not distinctly separated. Four heavy medium-length setae on lateral margins of tergites VII–IX. Genital plate with ten to twelve short setae on each lateral margin, and eight to ten medium-length and eight to ten short setae on the posterior margin. Anal fringe with only short setae.

Measurements in millimetres.

	Male.	Female.
Length of head . .	0·34	0·43
Width of head . .	0·50	0·55
Width of prothorax .	0·41	0·50
Width of metathorax .	0·54	0·73
Width of abdomen . .	0·63	0·87
Total length . . .	1·56	1·95

This species is closest to *C. chapini* Emerson. It differs from that species and all other known forms as follows: (1) more robust in general form, (2) shape of head in female, and (3) male genitalia. Parameres of the male genitalia are especially unusual, as may be seen by comparing figs. 3 and 6.

Holotype male and allotype female are in the British Museum (Natural History), type slide number 630.



FIGS. 1–3.—*Clayia moucheti* sp. n. (1) Dorsal view of male. (2) Outline of head of female. (3) Male genitalia.

Clayia squamata sp. n.

Material examined.—Eight males and three females from *Francolinus squamatus squamatus* Cassin, collected at Yaounde, French Cameroons.

Male.—As illustrated in fig. 4. Male genitalia as illustrated in fig. 6.

Female.—Shape of head as shown in fig. 5. Dorsal chaetotaxy same as in male. Ventral chaetotaxy, except for terminal abdominal segments, similar to male. Sternite VIII with three medium-length setae on each lateral margin, and six medium-length setae on posterior margin. Sternite IX bare except for eighteen medium-length setae in anal fringe.

Measurements in millimetres.

	Male.	Female.
Length of head . .	0·32	0·33
Width of head . .	0·41	0·41
Width of prothorax .	0·35	0·36
Width of metathorax .	0·47	0·47
Width of abdomen . .	0·58	0·58
Total length . . .	1·76	1·88

This species is related to *C. spinosa* (Piaget) and *C. distincta* Emerson. In addition to differences in size and male genitalia, the new form has fewer dorsal abdominal setae than either of the above mentioned species.

Holotype male and allotype female in the British Museum (Natural History), type slide number 631.

Clayia mjöbergi plumifera subsp. n.

Material examined.—Five males and seven females from *Guttera plumifera plumifera* (Cassin), collected at Yaounde, French Cameroons.

The male genitalia appear to be the same as those of the nominate form. The subspecies differs in both sexes in being larger and possessing fewer dorsal setae on the abdomen. Tergites I–III with only a few setae on the lateral margins or posterior lateral angles rather than two or three distinct rows of setae, as in *C. mjöbergi mjöbergi* (Cummings).

Measurements in millimetres.

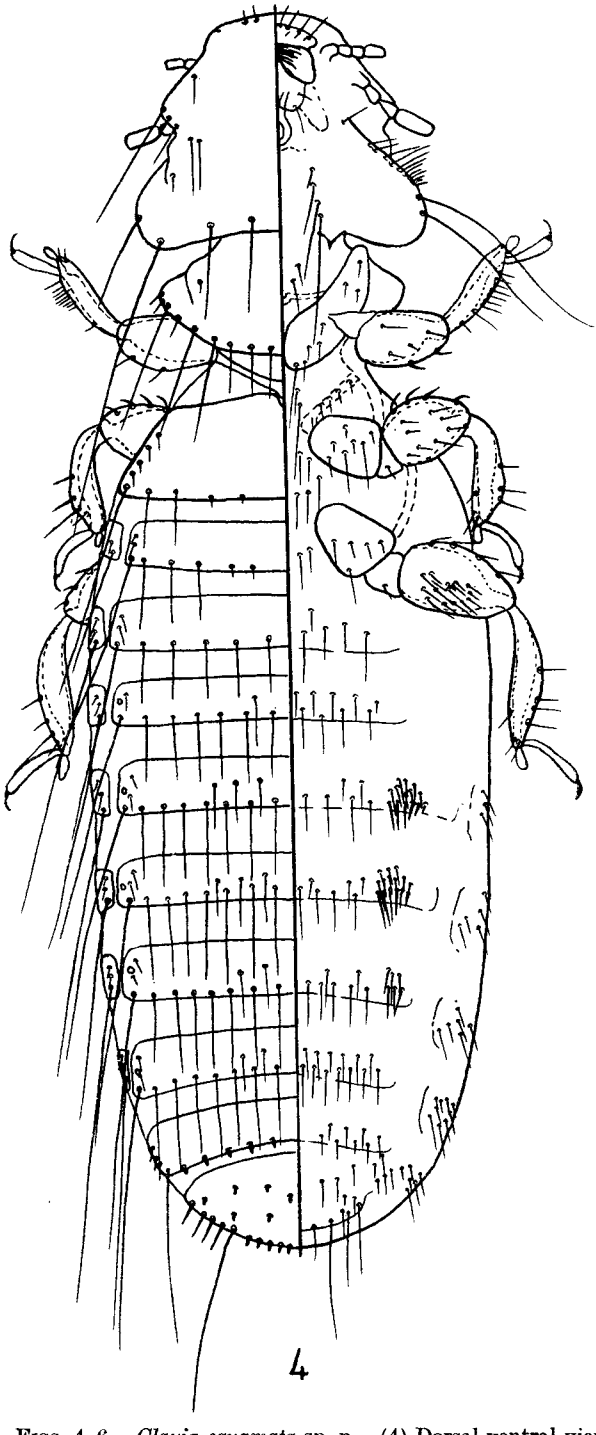
	Male.	Female.
Length of head . .	0·45	0·50
Width of head . .	0·58	0·64
Width of prothorax .	0·45	0·52
Width of metathorax .	0·58	0·71
Width of abdomen . .	0·68	0·95
Total length . . .	2·35	2·85

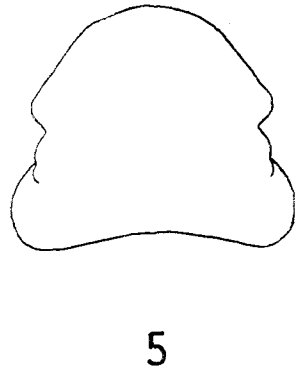
Holotype male and allotype female in the British Museum (Natural History), type slide number 632.

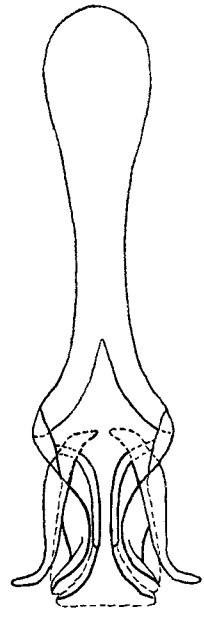
Clayia sp. (1)

Material examined.—Two males and one female from *Guttera plumifera plumifera* (Cassin), collected at Ambam, French Cameroons.

Except for measurements, this form agrees quite well with the description of *C. cruzi* (Tendeiro). The specimens at hand are smaller in all respects than the measurements given by Tendeiro for *C. cruzi*.







FIGS. 4–6.—*Clayia squamata* sp. n. (4) Dorsal-ventral view of male. (5) Outline of head of female. (6) Male genitalia.

Measurements in millimetres.

	Male.	Female
Length of head . .	0·28	0·29
Width of head . .	0·33	0·36
Width of prothorax .	0·30	0·34
Width of metathorax .	0·37	0·43
Width of abdomen . .	0·44	0·54
Total length . . .	1·34	1·56

Clayia sp. (2)

Material examined.—One male and one immature female from *Guttera plumifera plumifera* (Cassin), collected at Ambam, French Cameroons.

Except for being considerably smaller, this form agrees quite well with the description of *C. wernecki* (Tendeiro). The abdomen of the male at hand is narrower and more tapering than illustrated by Tendeiro for *C. wernecki*.

Measurements (in millimetres) of the male are: length of head, 0·28; width of head 0·28; width of prothorax, 0·28; width of metathorax, 0·41; width of abdomen, 0·46; and total length, 1·55.

Other Species in the Genus.

C. chapini Emerson, 1954, *Proc. ent. Soc. Wash.* **56**: 206, figs. 6 and 7. Type host: *Afropavo congensis* Chapin.

C. cruzi (Tendeiro), 1955, *Rev. Garcia de Orta* **3**: 137, figs. 3 and 4; pl. 3, figs. 5 and 6; and pl. 4, fig. 7. Type host: *Guttera edouardi edouardi* (Hartlaub).

C. distincta Emerson, 1954, *Proc. ent. Soc. Wash.* **56**: 206, figs. 8 and 9. Type host: *Francolinus levaillanti kikuyuensis* Ogilvie-Grant.

C. mjöbergi mjöbergi (Cummings), 1914, *Bull. ent. Res.* **5**: 163, figs. 4–6. Type host: *Guttera edouardi sethsmithi* Neumann.

C. spinosa (Piaget), 1880, *Les Pédiculines*: 537, pl. 44, fig. 9. Type host: *Francolinus capensis* (Gmelin).

C. subtheresae Emerson, 1954, *Proc. ent. Soc. Wash.* **56**: 204, figs. 4 and 5. Type host: *Acryllium vulturinum* (Hardwicke).

C. theresae Hopkins, 1941, *J. ent. Soc. S. Afr.* **4**: 46. Type host: *Numida meleagris major* Hartlaub.

C. wernecki (Tendeiro), 1954, *Bol. cult. Guiné Port.* **9**: 25, figs. 5 and 6. Type host: *Guttera edouardi pallasi* (Stone).

References.

Emerson, K. C., 1954, Three new African species of *Clayia* (Mallophaga: Menoponidae). *Proc. ent. Soc. Wash.* **56**: 203–207.

Tendeiro, J., 1954, Malófagos da Guiné Portuguesa. Estudos sobre diversos Malófagos dos Galiformes Guineense. *Bol. cult. Guiné Port.* **9**: 3–162.

——, 1955, Malófagos de Moçambique. Algumas espécies recolhidas em Galiformes. *Rev. Garcia de Orta* **3** (2): 131–164.