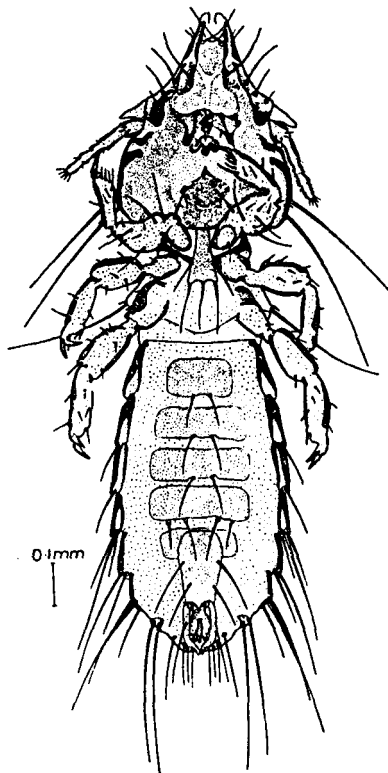


## NEW GENERA AND SPECIES OF MALLOPHAGA.

BY THERESA CLAY, B.Sc., AND COL. R. MEINERTZHAGEN.

*Alcedoffula*, gen. n.

*Description of the genus.*—Small, somewhat large-headed Philopteridae. Head pointed, with hyaline margin either cleft anteriorly or entire; clypeal signature distinct, and not reaching to anterior

FIG. 1.—*Alcedoffula alcedinis* (Denny). ♂.

termination of clypeal band; internal and clypeal bands terminating in sharp point anteriorly and bearing a fine spine at junction. Clypeal suture passing inwards and fusing with that of other side to form median suture passing posteriorly to level of clavi\* which are large. Antennae similar in both sexes. Occipital signature and pharyngeal sclerite and gland present. Prothorax small; true pterothorax, sternal plate and meso- and metasternal hairs present. Abdomen

\* Latin term suggested for German word *Zapfen* (peg or pin) used by Kéler (*Arb. morph. taxon. Ent. Berlin-Dahlem*, V, No. 4, 1938, p. 310).

elongated with segment I small; pleurites with curved re-entrant "heads" and sternal thickening in the form of median plates. Male with segment VIII small and segment IX with rounded or flattened posterior margin. Female with tergal plate VIII transversely continuous and posterior margin of segment IX bilobed.

Genotype: *Philopterus alcedinis* (Denny) from *Alcedo atthis ispida*, the European Kingfisher. (Fig. 1.)

The typical Degeerielline Mallophaga from the Halcyones or Kingfishers.

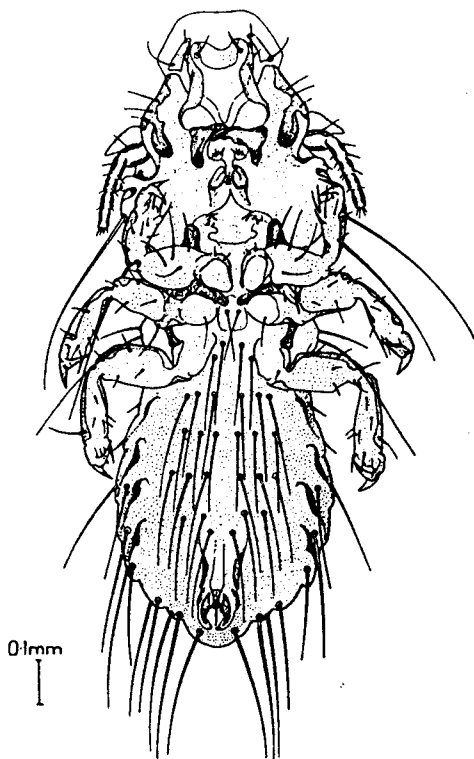


FIG. 2.—*Alcedoecus capistratus* subsp. ? 3.

#### *Alcedoecus*, gen. n.

This genus is distinguished from true *Philopterus* by the absence of prominent trabeculae and by the form of the bands of the pre-antennal region.

*Description of the genus.*—Small Philopteridae. Head large, with anterior hyaline margin arising at clypeal suture. Clypeal signature broad anteriorly and pointed posteriorly; clypeal suture passing inwards and forming median suture, passing back to level of clavi.

Antennae similar in the two sexes; clavi large and prominent. Occipital bands broad; pharyngeal sclerite and glands present. Prothorax short and not greatly rounded in either sex; segment I small; tergal plates I to VII separated medianly; pleurites narrow with curved re-entrant heads. Male with segment VIII small and segment IX with rounded posterior margin. Female with terminal segment emarginate posteriorly.

Genotype: *Philopterus capietratus* (Neumann) from *Halcyon leucocephala*. (Fig. 2 of *P. capistratus* subsp. from *Halcyon a. albiventris*.)

The typical Philopterine Mallophaga from the Halcyones or Kingfishers.

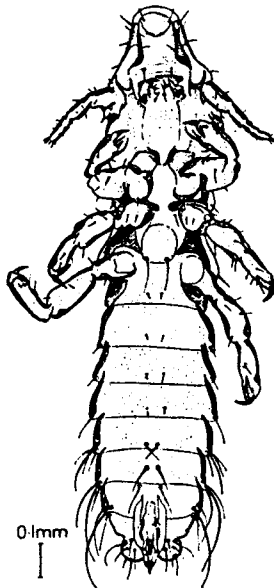


FIG. 3.—*Aquanirmus runcinata* (Nitzsch). ♂.

### *Aquanirmus*, gen. n.

This genus is distinguished by the character of the clavi, clypeal region and terminal segments of the abdomen in both sexes.

*Description of the genus.*—Small elongate Philopteridae. Head somewhat pointed anteriorly and expanded at temples. Rounded hyaline margin arising at junction of clypeal and internal bands. Clypeal signature with rounded anterior margin projecting anteriorly beyond the clypeal bands. Clypeal suture prominent. Occipital bands and signature present. Pharyngeal sclerite and gland absent. Clavi small and scarcely projecting beyond the lateral margin of the head. Prothorax small; pterothorax showing lateral indication of meso-metathoracic junction. Sternal plates and hairs present.

Abdomen elongate with segment I small; pleurites narrow with curved re-entrant heads; sternal thickening in form of median plates in male and lateral plates each side in segments III to VI in female. In the male segment VIII not reduced, segment IX small and posteriorly emarginate. Female with terminal segment bilobed, each lobe bearing a stout spine; vulva bearing stout spine-like hairs on margin.

Genotype: *Degeeriella runcinata* (Nitzsch) from *Podiceps c. cristatus*, Great Crested Grebe. (Fig. 3.)

The typical Degeerielline Mallophaga from the Grebes.

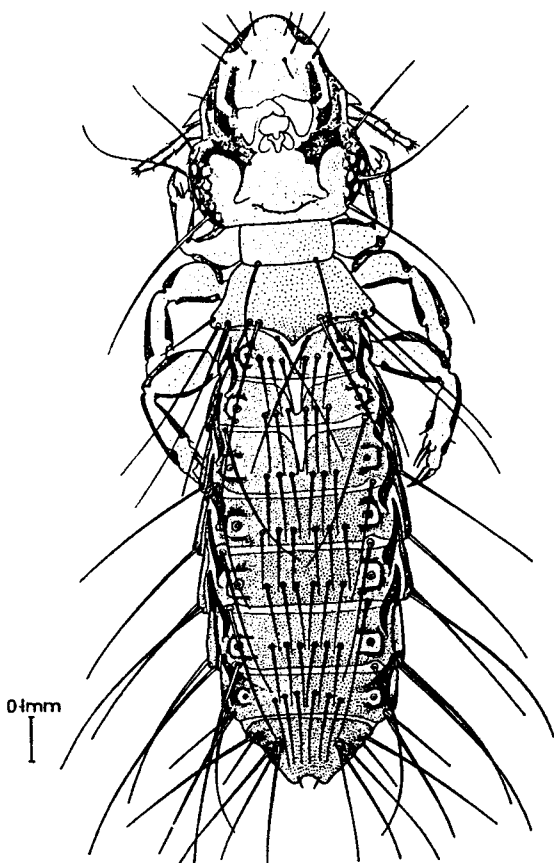


FIG. 4.—*Upupicola melanophrys* (Nitzsch). ♀.

#### *Upupicola*, gen. n.

*Description of the genus.*—Distinguished by its narrow elongate form, circumfasciate head and form of the pleurites.

Head circumfasciate with narrow clypeal band; clypeal suture apparent, passing across head in a half-moon shape; occipital bands

narrow and passing anteriorly, curving out each side towards ocular margin. Small triangular-shaped clavi present. Pharyngeal gland and sclerite present. Prothorax small; meso-metathorax showing lateral indication of junction; meso- and meta-sternal hairs present. Abdomen elongate, segment I small; tergal plates continuous across the segment, those on I to III being partly divided medianly; sternal plates central. The male has segment IX with rounded, thickened margin bearing hairs. Female with terminal segment emarginate posteriorly.

Genotype: *Degeeriella melanophrys* (Nitzsch) from *Upupa e. epops*, Hoopoe. (Fig. 4.)

Confined to the monotypic genus *Upupa*.

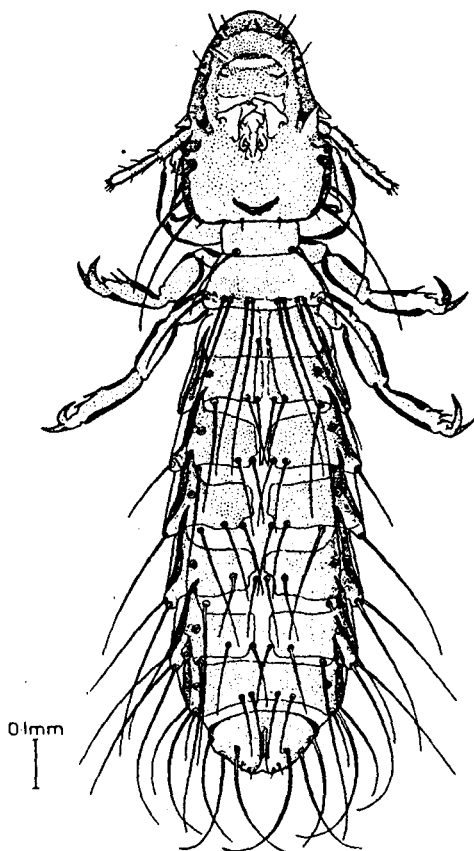


FIG. 5.—*Cuculicola latirostris* (Burmeister). ♀.

#### *Cuculicola*, gen. n.

This genus is distinguished from *Upupicola* by the absence of bands on the occiput and by the tergal plates on segments II to

VII in the female being separated medianly; and from *Degeeriella* (*sens. str.*) by the presence of a clypeal suture and the characters of the abdomen.

*Description of the genus.*—Head circumfasciate; no lateral indication of clypeal suture, but curved transverse suture across pre-antennal region. Clavi small; no occipital bands nor signature. Pharyngeal sclerite and gland present. Pterothorax showing lateral indication of meso-metathoracic junction; meso- and metasternal hairs present.

Abdomen narrow and elongate; segment I small; tergal plates II to VI separated medianly; sternal plate central; pleurites narrow with re-entrant heads. Male with segments VIII and IX small, the latter with narrow thickened marginal band. Terminal segment of female with flattened posterior margin.

Genotype: *Degeeriella latirostris* (Burmeister) from *Cuculus c. canorus*, European Cuckoo. (Fig. 5.)

Apparently the normal Degeerielline Mallophaga in varied form on many genera of Cuculidae.

#### Hopkinsiella, gen. n.

This is a well-defined genus, distinguished by the characters of the clypeal region and abdomen.

*Description of the genus.*—Small Philopteridae. Hyaline margin arising at anterior end of antennal band; internal bands short and not fusing with antennal bands anteriorly and the latter not interrupted by clypeal suture; clypeal signature indistinct, with irregular posterior margin and rounded anterior margin scarcely projecting beyond level of termination of antennal bands. Clavi small. First antennal segment showing sexual dimorphism and third segment unmodified in the male. Pharyngeal sclerite and gland present. Prothorax small. Pterothorax showing lateral indication of meso-metathoracic junction. Abdomen with segment I small. Pleurites with broad re-entrant heads and with inwardly-directed anterior and posterior prolongations in each segment; tergal plates I to VI interrupted medianly; sternal thickening in the form of median plates. Male with segment IX having thickened posterior margin bearing elongate hairs. Female with terminal segment bilobed posteriorly.

Genotype: *Hopkinsiella hopkinsi*, sp. n., from *Phoeniculus bollei jacksoni*, Wood Hoopoe, Upupidae. (Figs. 6 and 7.)

#### *Hopkinsiella hopkinsi*, sp. n.

*Description of male.*—Head with characters for genus. Prothorax with flattened lateral margins diverging slightly posteriorly; posterior

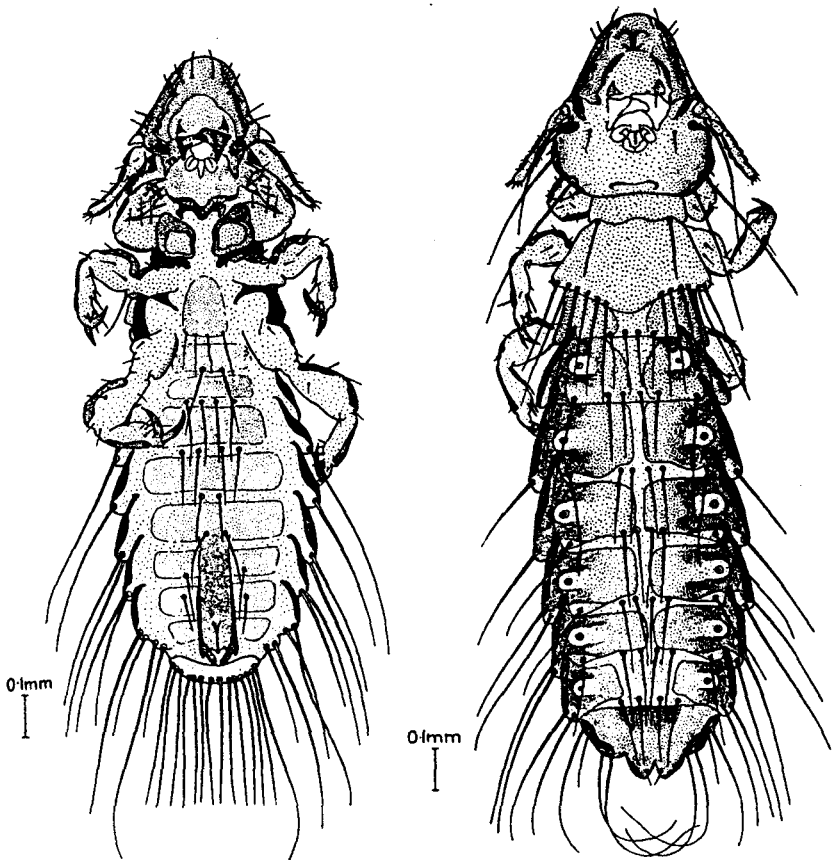


FIG. 6.—*Hopkinsiella hopkinsi* sp. n. ♂. FIG. 7.—*Hopkinsiella hopkinsi*, sp. n. ♀.

margin with hair each side; pterothorax with posterior row of marginal hairs. Sternal plate present bearing hairs posteriorly.

Abdomen short with tergal plates I-VII separated medianly; segment VIII small, with narrow tergal plate continuous across segment; segment IX rounded with thickened margin bearing hairs. Pleurites and sternal thickening as described for genus. Genitalia with basal plate short and broad; paramera bifid anteriorly and mesosome pointed distally.

*Description of female.*—Head similar to that of male with first antennal segment not enlarged.

Thorax as in male. Abdomen more elongate than that of male with tergal plates I-VII separated medianly. Terminal segment with bilobed posterior margin; vulva pointed and bearing marginal spine-like hairs and a number of stout short spines.

	Measurements.			
	Male.		Female.	
	Length (mm.).	Breadth (mm.).	Length (mm.).	Breadth (mm.).
Head . . .	0.40	0.35	0.41	0.36
Prothorax . .	0.09	0.21	0.90	0.21
Pterothorax	0.19	0.36	0.19	0.36
Abdomen . .	0.83	0.45	1.23	0.49
Total . . .	1.50		1.88	
C.I. . . . .		0.87		0.87

Described from 2 ♂♂, 10 ♀♀ from *Phoeniculus bollei jacksoni* Wood Hoopoe, from Kenya Colony, E. Africa.

*Holotype*.—♂ in the Meinertzhagen Collection, slide no. 6249.

*Paratypes*.—1 ♂, 10 ♀♀.

We are indebted to Miss E. Humphreys for the figures illustrating the paper.

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