

*Stray Notes on Mallophaga.*

By G. H. E. HOPKINS, M.A.\*

1. *The Host of the Species described by Kellogg and Paine from "Desert Curlew."*

Kellogg and Paine (1911) described *Docophorus fissi-signatus* (p. 19) and *Lipeurus epiphanes* (p. 21) from a "desert curlew" collected at Lagonillas, Bolivia. Having noted that the former species is clearly an *Ibidoecus* and

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the latter an *Ardeicola*, it was obvious that the host must be some species of ibis. Fortunately Kellogg and Paine note in their introductory remarks that the birds from which the lice were collected were obtained in 1901 by the late Perry O. Simons, a "collector of birds for the British Museum." At this point I referred the evidence to Miss T. Clay, who very kindly ascertained for me that the ibis collected by Mr. Simons at Lagonillas in 1901 is *Theristicus branickii* Berlepsch and Stolzmann ('The Ibis,' 1919, vol. i. ser. 11, p. 271). This bird is therefore the type-host of *Ibidoecus fissisignatus* (Kellogg and Paine) and of *Ardeicola epiphanes* (Kellogg and Paine).

### 2. *A wild Host of the Elephant-Louse.*

In his excellent account of *Hæmatomyzus elephantis* Piaget, Ferris (1931) states: "Apparently all the specimens thus far taken of this species have been from animals in captivity." He then notes that the species is evidently normal to the Indian elephant, and suggests that whether the original record from African elephant indicates anything more than a purely chance occurrence in a zoological garden remains to be determined. Bequaert's record (1930, p. 997) of *H. elephantis* on the African elephant was probably not published at the time when Ferris's paper was written, but even this was from a captive host at the Api elephant-farm. Furthermore, all the published records of this species of parasite, with one exception, are from young animals if the age of the host is mentioned at all.

It is therefore of interest to note that Mr. T. W. Chorley obtained *Hæmatomyzus elephantis* on two out of three wild adult male African elephants shot by him in Ankole district, Uganda. The louse was far from common, and all the specimens were found nearly hidden in small folds of the skin, especially in the neighbourhood of the shoulder. Mr. Chorley searched for the parasite on two other wild elephants which he shot in another district, but without success.

### 3. *Synonymy in the Genus Acidoproctus.*

Although *Acidoproctus* is a very small genus, the synonymy of the species has given much trouble, chiefly owing to the fact that many of the names were applied

to immature specimens (often stragglers), but also owing to the rarity of specimens of the genus in collections.

Two very distinct members of the genus occur somewhat commonly in Africa, one on ducks of the genus *Dendrocygna* (*D. viduata* and *D. fulva*) and the other on *Alopochen ægyptiacus* (Nile goose) and *Plectropterus gambensis* (spurwing goose). Assuming for the moment that the specimens found on each pair of hosts are conspecific (as I believe them to be), I propose for the sake of convenience to refer to them in the following notes as the duck-species and the goose-species respectively; the reason for this will appear later. I give below notes on the various names which have been used in *Acidoproctus*, followed by an amended synonymy for the three species which have been consistently confused and a description of one species which proves to have no valid name.

The types of the species described by Burmeister and by Rudow are still preserved in the Halle Museum, and Dr. S. Kéler has very kindly compared them with material sent to him by me, and thus enabled me to ascertain their identity. Piaget's types are in the British Museum, and during a brief visit there I compared them with my material; Miss T. Clay has been good enough to check and confirm the notes which I then made on these types.

*Acidoproctus bifasciatus* Piaget, 1878.—Described from a straggler on *Dromas ardeola* and subsequently identified by Piaget from *Dendrocygna viduata*. The type is a mature female of the "duck-species"; the specimen described and figured by Piaget (1885, p. 34, pl. iv. fig. 4) from *Dendrocygna viduata* is immature, and Piaget's statement that he had mistaken the sex of his original specimen is erroneous. There are no adult males among Piaget's material in the British Museum, but the adult females from *D. viduata* agree perfectly with the type and with specimens collected by myself from wild individuals of the same host. *Dendrocygna viduata* may be accepted as type-host of the species.

*Acidoproctus kelloggi* Carriker, 1902.—Described from material collected on *Nyroca valisineria* (Wilson) (= *Aythya vallisneria*, canvas-back duck) in Nebraska. I have not

seen specimens, but it resembles *A. maximus* somewhat closely, and should be compared with that species; it seems not impossible that it is a straggler on *Nyroca* from *Dendrocygna arborea*.

*Acidoproctus marginatus* Piaget, 1878.—Described from an immature straggler on *Larus spinicauda*. The type is so immature that it is difficult to be certain what it is, but I can find no differences from equally young specimens of the "duck-species." The page-priority of this name over *bifasciatus* would be over-ruled by the immaturity of the type, but there is another still earlier name for this species.

*Acidoproctus maximus* Piaget.—Described from a series collected on *Dendrocygna arborea* from Rotterdam Zoo, and on *D. vagans* and *D. guttata* in the Leyden Museum. The specimens from *D. guttata* (which are not in the British Museum) are stated by Piaget to differ from the type, so may be left out of account. There is only one male (from *D. arborea*) in the British Museum, and I designate this (the specimen figured by Piaget) as holotype, thus automatically making *D. arborea* the type-host of *maximus*, which appears to be a valid species.

*Acidoproctus rostratus* (Rudow), 1866.—Although this species was described from a specimen collected on *Chenalopex ægyptiacus*, Dr. Kéler's comparison of the immature type with specimens of similar age collected by myself shows conclusively that it is a straggler of the "duck-species"; the name must therefore replace *bifasciatus* Piaget, as had already been suggested by Taschenberg and by Bedford. The fact that the type does not belong to the "goose-species" is surprising and disappointing, for straggling does not appear to be common in this genus in nature, and it leaves the "goose-species" without a valid name.

*Acidoproctus stenopyx* (Burmeister), 1838 (altered by Giebel to *stenopygos*).—Described from two males and a headless female found on *Fuligula rufina* (*Anas rufina*), and not yet known from any other host, all records except those based on the original series being mis-identifications. Dr. Kéler has compared my specimens

of both the common African species with the types, and informs me that this species is certainly distinct from both.

From the above notes it is clear that the "goose-species" is without a valid name. I propose to supply this want by naming it *Acidoproctus taschenbergi*, in honour of the first author to make *rostratus* recognizable by figuring it and to suggest that it was what I have called the duck-species. The species, though undescribed, has been known for many years (usually under the misidentification *stenopygus* Nitzsch), and has been reasonably well-figured by Kellogg and Paine, I have, however, refrained from merely making my name a *nomen novum* for *stenopygus* Kellogg and Paine, 1902 (*nec* Nitzsch, 1867), partly because these authors did not describe the species, but chiefly because I do not know the whereabouts of their material.

The relevant synonymies are given below :—

### 1. *Acidoproctus stenopyx* (Burmeister), 1838.

*Nirmus stenopyx* Burmeister, Handbuch der Entomologie, ii. 1838, p. 428. On *Anas rufina*.

*Nirmus stenopyx* [Burmeister] Denny, Mon. Anopl. Brit. 1842, p. 151. *Lipeurus stenopygus* Nitzsch, Giebel, Zeit. f. d. ges. Nat. xxviii. 1867, p. 386. Revival of Nitzsch's manuscript name.

*Nirmus stenopygus* Nitzsch, Giebel, Insecta Epizoa, 1874, p. 179, pl. viii. figs. 6, 7.

*Akidoproctus stenopygus* N. Piaget, Pédiculines, 1880, p. 212.

*Akidoproctus stenopygus* Nitzsch, Taschenberg, Die Mallophagen, 1882, p. 197, pl. vii. fig. 4.

*Akidoproctus stenopygus* Nitzsch, Kellogg, Genera Insectorum, Mallophaga, 1908, p. 35.

*Acidoproctus stenopygus* Nitzsch, Harrison, Parasitol. ix. 1916, p. 128.

Type-host: *Netta rufina* (Pallas) (red-crested pochard).

### 2. *Acidoproctus rostratus* (Rudow), 1866.

*Ornithobius rostratus* Rudow, Zeit. f. d. ges. Nat. xxvii. 1866, p. 465.

On *Chenalopex ægypticus* [straggler].

*Ornithobius rostratus* Rudow, Beitrag z. Kenntniss d. Mallophagen, 1869, p. 46.

*Ornithobius rostratus* Rudow, Zeit. f. d. ges. Nat. xxxvi. 1870, p. 141.

*Lipeurus rostratus* Rudow, Giebel, Insecta Epizoa, 1874, p. 145.

*Acidoproctus marginatus* Piaget, Tidj. v. Ent. xxi. 1878, p. 179, pl. 12, fig. C. On *Larus spinicauda* [straggler].

*Acidoproctus bifasciatus* Piaget, l. c. p. 181, pl. xii. fig. G. On *Dromas ardeola* [straggler].

*Akidoproctus marginatus* Piaget, Pédiculines, 1880, p. 209, pl. xvii. fig. 4.

*Akidoproctus bifasciatus* Piaget, l. c. p. 210, pl. xvii. fig. 5.

*Ornithobius rostratus* Rud., Piaget, l. c. p. 379.

- Akidoproctus rostratus* Rudow, Taschenberg, Die Mallophagen, 1882, p. 197, pl. vii. fig. 3. (Figures it from type and thinks it the same as *marginatus*.)
- Akidoproctus bifasciatus* Piaget, Kellogg, Genera Insectorum, Mallophaga, 1908, p. 35, pl. i. fig. 6.
- Akidoproctus marginatus* Piaget, Kellogg, *l. c.* p. 35.
- Ornithobius rostratus* Rudow, Kellogg, *l. c.* p. 51.
- Acidoproctus bifasciatus* Piaget, Harrison, Parasitol. ix. 1916, p. 128.
- Acidoproctus marginatus* Piaget, Harrison, *l. c.* p. 128\*.
- Acidoproctus bifasciatus* Piaget, Bedford, 5th and 6th Repts. Dir. Vet. Res. S. Africa, 1919, p. 729.
- Acidoproctus marginatus* Piaget, Bedford, 18th Rept. Dir. Vet. Ser. & Anim. Indust. S. Africa, 1932, p. 333.
- Acidoproctus rostratus* (Rudow), Bedford, *l. c.* p. 523.

Type-host : *Dendrocygna viduata* (Linn.) (white-faced tree-duck). There is no doubt whatsoever that Rudow's unique type was a straggler ; *D. viduata* is the first recorded host on which the species occurs normally in nature.

### 3. *Acidoproctus taschenbergi*, sp. n.

- Akidoproctus stenopygus* "Nitzsch," Kellogg and Paine, Bull. Ent. Res. ii. 1911, p. 148, pl. v. fig. 6. On *Plectropterus gambensis*, Khor Felos, Egyptian Sudan. Misidentification.
- Acidoproctus stenopygus* "Nitzsch," Bedford, 5th and 6th Repts. Dir. Vet. Res. S. Africa, 1919, p. 729.
- Acidoproctus stenopygus* "(Nitzsch)," Bedford, 15th Rept. Dir. Vet. Ser. S. Africa, 1929, p. 528.
- Acidoproctus rostratus* "(Rudow)," Bedford, 18th Rept. Dir. Vet. Ser. & Anim. Indust. S. Africa, 1932, p. 333. Misidentification.
- Acidoproctus stenopygus* "(Nitzsch)," Bedford, *l. c.* p. 523.

The species may be described as follows :—

General appearance as in *stenopyx*, but much broader in proportion and sides of abdomen more convex. White with small blackish markings which are chiefly marginal. *Head* with emargination broad and usually narrower distally than proximally, more rarely straight-sided or strongly narrowed distally. Lobes bordering emargination much broader than in *stenopyx*, bearing five slender setæ on their outer margins. Margins of temples with a series of six or seven very small and inconspicuous setæ. Occipital margin sinuate, strongly convex at sides, nearly straight in the centre. Whole head almost colourless except for the mandibles and a pair of small black spots, near the occipital border, whose shape is

\* For some unexplained reason Harrison sinks *rostratus* as a synonym of the much later *marginatus*.

well shown in the figure\*. Shape and chaetotaxy of *thorax* as in the figure, but posterior margin of pterothorax without the distinct median projection there shown. Posterior margin of prothorax strengthened by a pair of rod-shaped incrassations, with broadened ends, which extend obliquely in a disto-central direction almost from the outer margin. Pterothorax with a pair of somewhat quadrate sclerotic blotches just proximal to the base of the middle leg. *Abdomen* and modified segments of female as in the figure. Sexual differences as in *stenopyx*.

*Measurements (in millimetres).*

	Male.	Female.
Head, length .....	0.84	0.89
„ breadth.....	0.79	0.84
Abdomen, length .....	2.32	2.41
„ breadth ...	1.07	1.12
Total length .....	3.25	3.92

The abdomen is the broadest part of the insect.

Male holotype and female allotype collected on *Alopochen aegyptiaca* (Linn.), Nile goose, on Nsadzi Island, Lake Victoria, Uganda, by T. W. Chorley, November 1932. Numerous paratypes collected from the same host-species in several localities in Uganda and Sudan by Mr. Chorley and others. Holotype and allotype presented to the British Museum, paratypes in several collections, including that of the writer.

4. *The Identity of Goniodes aliceps Nitzsch.*

The name *Goniodes aliceps* Nitzsch was first published by Giebel in 1867 as a *nomen nudum*; its validity dates from 1874, when Giebel published a description of it. Taschenberg, in 1882, published a more complete description of it and figured the type; he assumed it to be the male of *G. oniscus* Nitzsch, and sank the latter name, although it has eight years priority. He made *aliceps* the genotype of his new genus *Rhopaloceras*. Harrison, 1916, accepted this erroneous synonymy with the exception that he restored the name *oniscus*, and Carriker has

\* References to the figure are to that published by Kellogg and Paine.

also accepted it in his monograph on the lice of the Tinamidæ.

But Carriker notes of this species: "Taschenberg has published a very good figure of a *Rhopaloceras* which he has called *aliceps* (= *oniscus*), but if he has given an approximately correct delineation of the genital armature the specimen from which the drawing was made is either not *aliceps* or else the type of *aliceps* was not taken from *Tinamus tao*, the genital armature being of a type very distinct from that of the parasite I have taken on that host, and approximates the genital armature of *R. genitalis simplex*, from *Tinamus major castaneiceps*."

Carriker's remark is a testimony both to his own knowledge of the Mallophaga of the Tinamidæ and to Taschenberg's figure (drawn from the type of *aliceps*), for this type (as a more careful reading of either Giebel or Taschenberg would have informed him) was not from *Tinamus tao* but from *Tinamus "macrourus"* from Brazil. As Clay (1937) has shown, this name refers to *T. major major*, and it is to be expected that the *Rhopaloceras* found on this host will be very close to, if not identical with, *R. genitalis simplex* Carriker, described from another form of the same species. *R. oniscus* (Nitzsch) is almost certainly the form described and figured by Carriker under this name from the original host, but *simplex* and *genitalis* Carriker must be placed as subspecies of *aliceps* instead of as forms of *genitalis*.

#### REFERENCES.

(References which are given in full in the synonymies are not repeated here.)

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