XXV. Stray Notes on Mollusca.—VI.

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27. "Stray Notes on Mollusca.—V.” A Correction.

A misprint on p. 118 of the last installment of these notes (Hopkins, 1942) makes nonsense of my statement. At the end of the first line, “now” should be ”not.”

28. The Host of Falcochepirus africanaus Bedford.

In a previous note in this series (Hopkins, 1941 b, pp. 202-203) I stated that the host of Falcochepirus tinctorius Bedfordi is Pseudogyps africanaus, and suggested that the host of F. africanaus Bedford, might be Gyps coprotheres (J. R. Forster), but certainty was unattainable because I had not seen any material from the latter host. Among a number of specimens sent to me for determination from the South African Museum, Cape Town, there is a good series of a Falcochepirus from Gyps coprotheres; these specimens prove my suggestion to be correct, for they are F. africanaus Bedford.

How the extraordinary double error arose by which the parasite of Gyps coprotheres was described as that of Pseudogyps africanaus and vice versa cannot now be ascertained, but this is of little importance now that the error is corrected.

29. The Name Strongylometes tinamii (Rudow).

Rudow (1870, p. 473) described a “Nimus tinamii” from “Timannus banaqui,” at that date called Timannus baquaia; his misspelling of the name of the
host caused him to misspell that of the parasite also. Giebel (1874, p. 181) corrected the spelling to *tinami*, and the few authors who mentioned the name at all used Giebel’s corrected version until Carriker (1936, p. 93) reverted to Rudow’s original mistake. In taking this course Carriker undoubtedly believed himself to be acting in accordance with Article 19 of the International Rules of Zoological Nomenclature.

Dobell (1939, p. 256) points out, in a paper for which all zoologists should be grateful, that the English translation of Article 19 of the Rules is incorrect, and that the original and authoritative version authorizes the correction of “une faute de transcription, d’orthographe ou d’impression.” In other words errors of transcription, spelling-mistakes and typographical errors may (and should) be corrected, though the error must be evident in the original publication.

Now “*tinami*” is both an error of transcription and a spelling mistake; since there is no such bird-genus as *Tinamus* it is quite evident that Rudow copied the name of the host wrongly, misspelling it. In these circumstances the correct name of the insect is *Strongyloides tinami* (Rudow), not *tawani*.

30. The identity of *Lamnochirus lathreobium* Kolenati.

Kolenati (1846, p. 139, pl. 19, f. 6) described and figured as *Lamnochirus lathreobium* a species “sub lapidibus ad annues Transcaucasiae, in nemoribus subfoliis delapsis et in *Vultur cinereus*, *Fulcanis buteo*, *Canis pugnax*, *Meyo merops*, *alhelo*, *Anato boschas*, rudis semper singularum a me observatum.” Subsequent authors merely mention the species, without adding anything to our knowledge of it, except that Piaget (1880, p. 587) remarks, very truly, that a species of Mallophaga found under stones and fallen leaves, on birds of prey and on water-birds must be a strange insect. Harrison (1916, p. 64) rather adds to the difficulties by giving *Vultur* sp. as the sole host.

Fortunately Kolenati’s figure is not as all bad, and it shows a quite unmistakable female *Entomobothrium*. It seems practically certain that Kolenati’s specimens from the vulture and buzzard belonged to *Lamnochirus*, s. str., so that his series must have been composite; in these circumstances the reasonable attitude is to accept
the figure as a restriction. We can, therefore, discard the vulture and buzzard as possible hosts for Eulamobothrium lathrobiun, but this does not get us very much further because none of the water-birds mentioned by Kolenati is normally infested by this genus. Eulamobothrium, however, is only known to occur on two species of birds likely to be found in Transcaucasia: Folica atrna and Gallinula chloropus. The latter species is the host of Eulamobothrium chororios (Schranks), which has never been sufficiently described, but Schrank’s description does not fit Kolenati’s species, nor does Piaget’s description of E. coccinigera, from a subspecies of Gallinula chiltapus. We are left, therefore, with a strong probability that the true host of E. lathrobiun was Folica atrna, and that lathrobiun is a synonym of E. atrna (Nitzsch). The latter species, also, has never been really satisfactorily described, but Kolenati’s figure and description fit the female of this species (figured by Kellogg, 1890, pl. 11, f. 3) very fairly. Giebel’s failure to realize that the two names probably refer to the same species is doubtless due partly to Kolenati’s very misleading list of hosts and partly to the fact that Giebel seems only to have known the male of atrna.

Pending re-examination of Kolenati’s type, if it still exists, I consider Eulamobothrium lathrobiun (Kolenati) 1846, to be a synonym of E. atrna (Nitzsch) 1818, and a strangler from Folica atrna.

31. The Host of Lipurus furcatus Piaget.

Lipurus furcatus was described (Piaget, 1885, p. 72, pl. 8, f. 1) from a male found on a skin of Bucephus (now Tropicus) abecirimasa in Leyden Museum. In my description of the genus Buceconurus, found on hordes in I.East (1913, p. 43) the known species of Ichthyes, which appeared to me as referable to this genus, but omitted furcatus because it does not exhibit the characters of Buceconurus, and I thought it probably a strangler. This opinion proves to be correct, for on re-examination Piaget’s figure I was struck with the resemblance to certain plantain-eater lice, and further investigation showed that furcatus is undoubtedly a Splendoroofra.

It is possible, however, to go a little further in identifying the host. I possess specimens of Splendorofra from all the genera of Musophagidae except Gallirix and Prorhina, and, as the sole known species of the latter genus was not described until 1923, we can probably rule it out as the host of an insect described in 1885. Furthermore, Piaget’s figure shows very clearly the claw-like lateral lobes of the terminal abdominal segment which are conspicuous features in the males of many species of Splendorofra. The lobes shown in Piaget’s figure in no way resemble those of the species found on Cercopoda, Cercopidae, Gymnoscopidae and Musophaga, but they do very closely agree with the shape of these structures in the species found on Rucerumuris and Turusus. Of these last two genera, Rucerumuris is not a probable host of furcatus because the single known species was not discovered until 1901. I have not mentioned Cusinefer, because this genus apparently does not possess a Splendorofra.

Piaget’s specimen having been found on a skin of a West African hornbill, there is a strong probability that the true host is a West African plantain-eater, since it is not likely that contamination took place in the Museum and is much more probable that it occurred either when the specimens were collected or when the skins were packed together for transport to Holland. If this suggestion is well-founded we can probably rule out the genus Gallirix, because this genus does not occur farther west than Uganda. We are left, therefore, with the genus Turusus, and the species of this genus in South Africa are macrochynhus, persa, schistii, leucocephus and erythrophus; the host of S. furcatus is not likely to have been the first-named if the record of Splendorofra dispar (Piaget) from this host is correct (as it probably is), because dispar is very unlike furcatus and there is no known instance of the occurrence of two species of Splendorofra on the same host.

To summarise: it is nearly certain that the true host of Splendorofra furcatus (Piaget) is a Turusus and very probably that it is T. persa, T. schistii, T. leucocephus or

• Harman’s name distinctum for this species falls into synonymy, because dispar Piaget, 1880, was described as a Nirmus and is now in Postinopora, whereas Splendorofra dispar was described as a Lipurus.

32. The Identity of Helconomus confusus Ferris.

Kellogg (1910, p. 53) described as the female of his *Cephalophorus micranthus* a form which differed from the male chiefly by its smaller size and more uniform coloration ("body all over strong opaque brown except transverse pale sulcal lines on the abdomen, and a narrow uncoloured median longitudinal line . . . ."). Ferris (1916, p. 397), after examining Kellogg's material of the "female," stated that "One of two specimens at hand is a male in which the genitalia are very weakly developed," and named this form *Helconomus confusus*. Bedford (1936, p. 99) sank *confusus* as immature *Helconomus micranthus* (Kellogg), pointing out that Kellogg's description of the "female" agrees perfectly (with one unimportant exception) with "immature females" of *H. micranthus*. If, as is apparently the case, Bedford used the term "immature" to represent nymphs in this instance, his explanation is unsatisfactory, because Ferris definitely remarks on the presence of the male genitalia. Bedford also described the true female of *H. micranthus*.

Believing Bedford to have been wrong, and possessing a large amount of material from *Balearesia regelorhynch gilberiza*, I searched through this material in an endeavor to find a male which should correspond with *H. confusus*, but in this I was entirely unsuccessful: I did, however, find a specimen which, so I believe, provides a clue to the explanation of the problem. This specimen is a female *H. micranthus* which was killed during the process of moulting its last nymphal skin; the skin is still attached to the insect and shows the markings of *H. confusus*. It seems practically certain that the type of *H. confusus* was an individual which had reached the end of the last nymphal instar and had developed the male genitalia, but was killed just before its final moult: the mention by Ferris of the fact that the genitalia were "very weakly developed" greatly strengthens this supposition, for this is the condition we would expect to find in a tetral adult.

There is, of course, nothing inherently improbable in the occurrence of two species of one genus on a single host-individual (most crabs, for instance, normally possess two species of *Myzodes*), but in this instance I am convinced that Bedford was right, that *Balearesia regelorhynch gilberiza* is infested by only one species of *Helconomus*, and that *H. confusus* Ferris is a synonym of *H. micranthus* (Kellogg). I asked Mr. O. R. Cope of Stanford University if he would be good enough to examine the type of *H. confusus* and check my supposition, but he informs me that the type has unfortunately been mislaid.

33. The Identity of Nirurus paradoxus Rudow and of Lepirurus alchata Rudow.

In his "Beitrag" (1859, pp. 18 and 36) Rudow described two species of Mellophaga from sandgrouse, both obviously belonging to the genus *Syphкратes*. *Nirurus paradoxus* (p. 18) is from *Syphкратes paradoxus* and *Pterocles alchata*, and is described as having the head anteriorly broadly rounded and a "grisse" of 0.5 mm.; *Lepirurus alchata* is from *P. alchata*, and is stated to have a triangular head and a "grisse" of 2 mm.

In Rudow's next paper both *N. paradoxus* and *L. alchata* have disappeared, but we find (1870, p. 472) a *Nirurus alchata* which is evidently intended to represent them both, for the main description appears to refer to material from *Pterocles alchata* and there are notes on differences in material from *N. paradoxus*, but the question of the difference in shape of head is completely ignored. It is somewhat amusing to note (cf. Hopkins, 1910, p. 418) that as regards "grisse," Rudow has split the difference and gives it as 1 mm. The head of *N. alchata* is described as broad anteriorly, no broader posteriorly, and almost circular in outline, and this description is emphasized by a statement that *N. alchata* somewhat resembles *N. turritus* (itself a broad-headed species), but is separable by its broader head. This description is, therefore, primarily an expanded version of that of *N. paradoxus* and not of the triangular-headed
L. alchata, which is only represented by the name, some of the notes on variation, and to some extent the size. If Rudow had deliberately set out to create confusion he would hardly have needed to alter his methods of procedure.

Giebel (1874, p. 152) re-describes *N. alchata* Rud. from four dried specimens received from Rudow: the species is again the round-headed one ("Der Vorderlöffel hat einen halbkreisförmigen Umfang") and is therefore *alchata* Rudow, 1870, not *alchata* Rudow, 1869. The hosts are given as "*Pieroces alchata* and *Syriphates paradoxus* nach Rudow," which suggests that the specimens sent to Giebel by Rudow were without data.

Piaget (1880, p. 165, pl. 13, f. 12) describes and figures, under the name *Nirmus alchata* Rud., a species which might very well represent the triangular-headed form which Rudow described in 1869 under the same name, except that it is from *Syriphates paradoxus*: in view of the high specificity of the Mallophaga of sand-grouse (except *Syriphates brevifrons*), it can hardly have been the same as Rudow’s species. It could not possibly represent the round-headed *N. paradoxus*.

Waterston (1928, p. 342, f. 1a) describes, as *Syriphates alchata* Rud., a triangular-headed form from *Pieroces a. alchata* and *P. a. caudatus*, and this may certainly be accepted as *Lipurus alchata* Rudow, 1869, though it is definitely not *Nirmus alchata* Rudow, 1870, as stated by Waterston. Similarly Waterston’s *Syriphastes bedfordii* (1928, p. 342, f. 2b, h, c) may be accepted as representing Piaget’s misidentification of *alchata* Rudow, more especially as it is the only species definitely known to occur on *Syriphates paradoxus*. We are left only with the round-headed species, described in 1870 as having an almost circular head and by Giebel as having a semicircular preantennal region.

There is only one known species on sand-grouse, *Syriphastes brevifrons* Waterton, which has a strikingly round head, and no other known species which could possibly be described as having a head broader than that of *Otitipesaurus normalis* (Denny), as Rudow states in 1870. As yet *brevifrons* is not known from either *Syriphates paradoxus* or from *Pieroces alchata*, though it is known from *P. unnaequus*, which is closely related to *alchata*. Complete certainty as to the identity of *N. paradoxus* and *S. brevifrons* must await the obtaining of *brevifrons* from one of the original hosts, and examination of the specimens in the Halle collection, if these are still preserved. But there is at least a very strong probability that they are the same, especially as *brevifrons* is known to occur on several species of sand-grouse (Waterston, p. 340).

The synonymy of the various forms dealt with is as follows:–

*Syriphastes alchata* (Rudow), 1869.


Type-host: *Pieroces a. alchata* Linn.

*Syriphastes bedfordii* Waterston, 1928.


Type-host: *Syriphastes paradoxus* (Pallas).

*Syriphates paradoxus* (Rudow), 1869.


Type-host not established, either *Syriphates paradoxus* or *Pieroces a. alchata*.
34. Monoconia incism Giebel and Menopon virgo Giebel.

In 1866 (p. 391) Giebel mentioned a *Menopon cinctum* from *Carnivora garrulus*, without description but with a reference to p. 121 of vol. 57 of the *Zeitschrift*. Reference to this earlier paper (Nitzsch, 1866) reveals no mention of parasites of *Carnivora*, but the starting parasite now known as *Myzodes cinctum* is briefly described on p. 121 as *Menopon cinctum*. On the next line of the later paper Giebel briefly described a *Menopon incisum*, without mentioning the host. In 1874, Giebel (p. 288) described a *Menopon virgo* from *Carnivora garrulus*, giving *M. cinctum* Giebel, 1866, p. 391, as a synonym; *Menopon incisum* does not appear at all, either in the body of the work or in the host-list (pp. 91-94), nor did it appear in the literature until Harrison listed it in 1916 and suggested the possibility that the host might be *C. garrulus*.

Having obtained a long series of a Menoponid from *Carnivora garrulus*, I compared my specimens with Giebel's descriptions of *M. incisum* and *M. virgo* and found them to be in very fair agreement with both, particularly in regard to the more diagnostic characters which he mentions.

Complete certainty on the matter can only be attained when the Nitzsch collection of Mallophaga again becomes accessible, but I am convinced that *incisum* and *virgo* are two names for the same insect. What happened is that Giebel intended at first to call the insect *cinctum* and later decided to call it *incisum*; he listed it under the former name and then described it under the latter. In 1874 he had realized that the name *cinctum* was preoccupied, but completely overlooked the fact that he had described the species as *incisum*, so he redescribed it as *virgo*. If I am right it is likely that Nitzsch's collection will be found not to contain any specimens labelled *Menopon incisum*, the type-series of this species being labelled *M. virgo*.

The species will probably require a new genus, but is not far removed from *Allomenopon*; for the present I prefer to call it *Allomenopon incisum* (Giebel).

35. The Host of Cummingia maculata Ferris.

Ferris (1832, p. 83) described *Cummingia maculata* from three males and a female obtained from a skin of *On the Marine Fauna of the Scot Head Region*.

*Cænolestes* sp. preserved in the United States National Museum. As Ferris gave the data of the skin I wrote to Dr. Remington Kellogg, Curator of the Division of Mammals in the Museum, and asked him if it were possible to trace this skin. He most kindly informed me that the skin has been found and that it is a specimen of *Cænolestes*.

References.


1874. *Insect Epitome*. Leipsie.


Compared with that of the west country the marine shore fauna of East Anglia seems poor in variety, even if it is rich in numbers of individuals. But the fauna is nevertheless of interest because the physiographic conditions along parts of the coast are unlike those in the rest of Britain. Unfortunately, our knowledge of it is very limited even for particular localities. A survey of the Invertebrate fauna of the Scot Head region has been made by Serventy (1934), but visits to this region by