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A. Neboiss, Trichoptera Types Described by J. CURTIS

Näheres hierüber siehe UHMANN, Festschr. Strand, 3, 451, 1937 und Revista Ent. Rio, 18, p. 120, 1947.

Dem Muséum National d'Histoire Naturelle in Paris, Herrn J. DEMAUX in Caen und Herrn R. von DIRINGSHOFFN in S. Paulo spreche ich hiermit meinen besten Dank für das mir vorgelegte Material aus.

Zusammenfassung

Bei meinen Arbeiten am "Coleopterorum Catalogus 1957–58, Hispinae" konnte Material der vier hier behandelten "Alten Arten" nicht untersucht werden. Den Nachforschungen meines Freundes J. DEMAUX, Caen, im Museum Paris verdanken wir das erneute Interesse an diesen Arten. Wiederaufgefunden wurde der Typus von Hispa longespinosa FAIRM., neu eingeordnet Hispa incerta CHAP., zweifelhaft gelassen Cephaloleia microdonta FAIRM., neu beschrieben Uroplata trivittata CHAP.

Summary

The author being unable to study the four species dealt with in this paper when he was preparing the manuscript for the "Coleopterorum Catalogus, 1957–58, *Hispinae*" has to thank his friend, J. DEMAUX, Caen, who searched for these species in the Paris Museum. The type of *Hispa longespinosa* FAIRM. could be found, *Hispa incerta* CHAP. was new arranged, *Cephaloleia microdonta* FAIRM. remains dubious, and *Uroplata trivittata* CHAP. is described as new.

Резюме

Во время моих работ над "Coleopterorum Catalogus 1957-58, *Hispinae*" мне было невозможно исследовать материал изложенных здесь "Старых видов". Исследованиям моего друга J. DEMAUX, Caen, в Парижском музее мы обязаны заново возникшим интересом к этим видам. Вновь найден был тип *Hispa* longespinosa FAIRM., впервые классифицирован тип *Hispa incerta* Снаг., остался сомнительным тип *Cephaloleia microdonta* FAIRM., заново описан тип *Uroplata trivittata* Снаг.

The Trichoptera Types of Species Described by J. Curtis

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(With 58 textfigures and 1 plate)

Introduction

CURTIS collection of British insects was purchased by the National Museum of Victoria and shipped to Australia on board of "Prince of Wales" which sailed from England on 5th May, 1863. It is in perfect state of preservation, and most of it is arranged in the order of CURTIS Catalogue of British Insects, except for Hemiptera and Ichneumonidae, which CURTIS could not rearrange because of loss of sight.

Like the majority of early collections, types of new species were not designated. On those very few labels attached to specimens with references as to the place and time of collecting; other specimens have only a small label with a number attached,

but no register is available for these numbers. However additional and more complete information is available from CURTIS' note book (Plate 7), which contain some data for almost every species found in the collection, and arranged in the same sequence as published in his "Catalogue". How fully this information could be referred to the selected type specimen should be judged by each individual case.

Time and time again European workers have referred to this collection, and a number of lectotypes in various groups have been designated. It was obvious that a revision of an entire taxonomic unit like order Trichoptera would be of great importance, and would clarify some important taxonomic problems.

The order Trichoptera in CURTIS collection occupies 3 cabinet drawers of $15'' \times 17''$ size containing 491 specimens of which 72 are now designated as lectoholotypes and 21 as lectoallotypes. These specimens represent 45 valid species and 27 synonyms. In this order of insects CURTIS published 84 specific names, of which one — Acentropus garnonsii belongs to order Lepidoptera, lectotype of which is not designated in this publication. Type specimens of all but two of CURTIS species have been located in this collection. Those not present are: Agrypnia pagetana which originally had been in PAGET's cabinet, and is now in the British Museum (Nat. Hist.), London; and Tinodes hirtipes for which there is no information of its whereabouts.

The specimen of *Tinodes hirtipes* (apparently one specimen only) is one of about one hundred Arctic insects collected by Sir JAMES C. Ross. Very little information can be obtained about the fate of this small collection. With documents and correspondence in the National Museum of Victoria relating the purchase of CURTIS collection is a small piece of paper with the following information: "The remaining portion of Mr. CURTIS Foreign Coleoptera are arranged in an upright cabinet... ... they are from all parts, many from Australia, Java, Philippines, Brazil, Chile &. c. in all 5047 specimens, price £ 191.7.0. Cabinet included".

"Also a small collection of Arctic insects collected by Sir JOHN Ross* about 100, consisting of Lepidoptera, Coleoptera &. c. price £ 10.0.0".

* (Sir JOHN Ross had placed his nephew Sir JAMES CLARK Ross in charge of the Natural History department.)

This document bears neither a date nor signature, but presumably was written by SMITH of British Museum in 1863. The number of specimens and the price quoted for the foreign collection is the same as advertised on the back cover of "The Zoologist", Vol. 20, London, 1862 probably in March or April issue. A cut out piece of this advertisment was found in CURTIS file in the National Museum of Victoria. Unfortunately all available copies of "The Zoologist" have been bound and paper covers of individual issues removed.

The next reference relating to Ross's Arctic insects is found in a letter from Dr. J. E. GRAX to Prof. McCov dated 10th April 1863; "... enclosed with is a report (probably that mentioned above) made by Mr. SMITH my assistant here, who attends to Entomology here on CURTIS's foreign insects..." The above letter is endorsed by McCov — "25. 6. 63. ordered the collection for £ 190 including cabinet". Copy of McCov's letter to GRAY in the National Museum of Victoria letter book No. 2, p. 214 accepts offer of CURTIS Foreign collection of 5047 specimens, but the Arctic insects were not mentioned. As the National Museum letter book No. 2 has been mislaid, the above information could only be gathered from the extracts made by J. A. KERSHAW from the originals. These extracts were added to CURTIS file.

HORN and KAHLE (1935) p. 49 states: "...-Lepidopt. Typen der II. Ross'schen Exped. nach der Nordwest-Passage (1829/33) via A. GUENÉE, via CH. OBEETHÜR (Rennes) vereinzelt." From this we may assume that Ross's collection of Artic insects was dissolved.

Five names (autumnalis, fuscocupreus, pusillus, scotica, tenebrosus) published in the first edition of "Guide... British Insects", and three names (abdominalis, me-

marmoratus - retained in preference to discoidalis nebulosus - suppressed under lunatus obscurus - suppressed under auricula ochraceus - suppressed under centralis terminalis - suppressed under centralis

Acknowledgements

The author is greatly indebted to Mr. D. E. KIMMINS of British Museum (Natural) History), London, for the encouragement and most valuable assistance in supplying important data on European Trichoptera without which this publication could not be completed; to Dr. H. GISIN of Museum d'Histoire Naturelle, Geneva, for the information on PICTET's specimens, and to Mr. R. A. DUNN of Melbourne for his constructive criticism.

abdominalis

Limnephilus incisus (CURTIS)

Limnephilus abdominalis CURTIS, 1837, Guide Br. Ins. 2nd Ed., 168. nom. nud.

Two female specimens in the collection are identified as Limnephilus incisus (CUBT.). No type has been designated.

In his note book CURTIS had entered the name *abdominalis* accompanied by pencil mark "MS" and locality "b. Aug. Bute". This name was not listed by McLachlan (1875).

affinis

Limnephilus affinis CURTIS

Limnephilus affinis CURTIS, 1834, Philos. Mag., 4, 123. Limnephilus affinis CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text).

CURTIS decribed the species as follows:

"11 lines: superior wings more or less pubescent, fuscous freckled with pale dull ochre; stigma, most of the nervures and the inferior margin spotted with piceous".

There are six specimens, all conspecific, with this name in the collection, from which lectoholotype \mathcal{J} and lectoallotype \mathcal{Q} are now selected and identification labels to this effect attached. This species has been correctly interpreted, and descriptions and figures by McLachlan (1875), Mosely (1939) and WINKLER (1961) should be sufficient for identification. The species has always been known under this name. It is impossible to select. any one locality in particular, as references in the note book include: "Aug. abundant amongst rushes under cliff going to Lamlash"; "24 June, Horning; 13 June ...? ... nr. Southampton & New Forest, Oaks?", "21 May abundant on reeds, Todsbury, Salterns; m. Oct. Sandhills Sandwich" and some later entries. In Brit. Ent., 11, Pl. 488 text (Dec. 1834) similar localities have been published: "b. June, Southampton and New Forest; e. August, Covehithe, Suffolk; m. October, Sand-hills, Sandgate".

angustata

Molanna angustata CURTIS

Molanna angustata CURTIS, 1834, Philos. Mag., 4, 214. Molanna angustata CURTIS, 1838, Brit. Ent., 15, Pl. 716.

Beitr. Ent. 13

CURTIS described the species as follows:

"3 lines long, 12 broad: very pubescent and silky, tawny; antennae spotted fuscous; head, thorax and abdomen fuscous; nervures dark; inferior wings pale fuscous; legs fulvous."

Another two names — rufipalpis and nigripalpis have been associated with angustata; both being credited by CURTIS to STEPHENS, and as such occur in the collection. In the note book nigripalpis is referred as "var. of next" (rufipalpis); which latter name has been adjusted to angustata CURT. As the name angustata does not appear in the collection, and is associated with rufipalpis in the note book, the lectoholotype \mathcal{J} and lectoallotype \mathcal{Q} are selected from rufipalpis group in the collection and labelled to this effect. The species has been recognized correctly by previous workers.

Detailed description of generic characters was published in 1838; where also details of locality were included: "*M. angustata* I find on paling near the water in Regent's Park: ... I have never taken it elsewhere, excepting a single male in a boat whilst I was fishing last August at Henley." The published information agrees with that entered in the note book. As the selected lectoholotype is male, the latter locality — Henley should be regarded as the locality for it.

angustipennis

Hydropsyche angustipennis (CURTIS)

Philopotamus angustipennis CURTIS, 1834, Philos. Mag., 4, 213. Hydropsyche angustipennis CURTIS, 1836, Brit. Ent., 13, Pl. 601 (text).

CURTIS described this species as follows:

"10 to 13 lines: antennae slightly serrated and annulated; head, thorax and abdomen blackish; wings fuscous, superior with an ochreous tint, a large brown trigonate stigma and an ochreous oblong spot before, and another round one at the posterior angle; intermediate tibiae and tarsi compressed and dilated in the female; legs ochreous, darker at the base."

From six specimens $(3 \not\subset 3 \not\subseteq)$ in the collection labelled *angustipennis* by CURTIS a male with 18 mm wing span is now selected as lectoholotype. The cleared genitalia preparation agrees favorably with figure published by MOSELY (1939) p. 188. The other specimens in this group appear to . be conspecific, but without dissecting of genitalia this could not be confirmed.

The original specimens were taken at Norfolk (CURTIS, 1836); locality which also corresponds to the entry in note book "Norf. sev." followed by another entry "28 June dark \mathcal{Q} out of Ivy Quarr Abbey". This latter entry may refer to the last female in the row, which appears to be slightly darker in appearance than the others.

Genitalia as microscope preparation in canada balsam T-115. *apicalis*

Limnephilus lunatus CURTIS

Limnephilus apicalis CURTIS, 1834, Philos. Mag., 4, 123. Limnephilus apicalis CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Limnephilus lunatus McLachlan, 1875, Rev. & Syn. Trich., p. 61-63.

Original description of apicalis:

"14 lines: superior wings dull ochreous, the lower portion variegated with bright brown, leaving an oblique subreniform transparent spot on the disc, a larger one covering the transverse nervures (which are piceous) with various dots, and a lunule on the posterior margin; stigma piceous."

The three names — *apicalis*, *lunatus* and *nebulosus* have been recognized as synonymous since McLACHLAN's publication 1875. The latter name has been treated by CURTIS (1834) as a species although with reservation that it could be "probably a var. of the next" which is *apicalis*. Judging from the entry in note book specimens corresponding to the two names *apicalis* and *nebulosus* are standing under the name *apicalis* in the cabinet. Lectoholotype φ selected corresponds more closely to the description than the other three specimens, and now labelled accordingly.

For further detailed discussion see lunatus.

The time and place of capture is given in note book as: "9. Aug. abundant on Oaks nr. Rothsay".

auricula

Limnephilus auricula CURTIS

Limnephilus auricula CURTIS, 1834, Philos. Mag., 4, 124. Limnephilus auricula CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text).

Original description:

"10 lines: superior wings pubescent, dark ochre with a hyaline spot on the disc and a larger ear-shaped one covering the transverse nervures: stigma obscure; tips of the inferior wings pale brown."

The cleared genitalia preparation undoubtedly supports the synonymy with *obscurus* which has priority over *auricula*. Following the amended Zoological rules, *obscurus*, as nomen oblitum not in use for more than 50 years, is retained in synonymy. From the six specimens, all females, in the collection, one is now selected as lectoholotype and labelled to that effect. Descriptions and figures published by various previous authors leave no doubt of correct interpretation.

According to CURTIS' note book specimens have been taken at various places: "b. June Oxford, 2 Knighton Wood; Spring Fir-trees; Gl. Wootton; m. Oct. Sandhills, Lowestoft." The same information was published Dec. 1834 in Brit. Ent., 11, Pl. 488 (text).

Lectoholotype \mathcal{Q} genitalia as microscope preparation T-51 in canada balsam. autumnalis

Triaenodes conspersa RAMBUR (?)

Leptocerus autumnalis CURTIS, 1829, Guide Br. Ins. 1st. Ed. nom. nud.

No description has been published of this species which is identified, with some doubt, as *Triaenodes conspersa* RAMB. female. Only a single specimen is in the collection labelled *autumnalis*; lectotype not designated. According to note book the locality is given as "Aug. Covehithe. Suff."

Abdomen mounted as microscope preparation T-127.

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basalis

Glyphotaelius pellucidus (RETZIUS)

Limnephilus basalis CURTIS, 1834, Philos. Mag., 4, 122. Limnephilus basalis CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Limnephilus pellucidulus (sic!) WALKER, 1852, Cat. Brit. Mus. (Neuropt.), p. 18. Glyphotaelius pellucidus McLACHLAN, 1875, Rev. & Syn. Trich., p. 44.

CURTIS described basalis as follows:

"Expansion of wings 16 lines: pale dirty ochre; superior wings freckled with brown, leaving an oblique plain spot on the disc, with a larger one connecting it with the apex; stigma and a sinuated oblique line at the base piceous, 3 pale spots on the posterior margin; tips of inferior wings ochreous variegated with brown; body green."

Two later authors WALKER (1852) and KOLENATI (1859) recognized that the two species — *basalis* and *emarginatus* described by CURTIS are both synonymous to *pellucidus*. The collection contains three specimens identified as *basalis* — 2319; as the notes indicated that only one sex, a male, was described only lectoholotype 3 is designated herewith.

In his notes CURTIS gives the locality as: "b. June, trunks of trees Oxford meadows; holly bushes New Forest". The second locality should more probably be accepted as the type locality, from the reference to it in Brit. Ent., 11, Pl. 488 (text), December 1834. In the note book reference also is made to REAUMUR, 3, pl. 14, fig. 4, and giving the following remark "The larva lives on oak leaves, vide REAUM." Actually all first four figures in REAUMUR's plate 14 are referred to this species (REAUMUR, 1737).

bicolor

Triaenodes bicolor (CURTIS)

Leptocerus bicolor CURTIS, 1834, Philos. Mag., 4, 214.

Triaenodes bicolor McLachlan, 1877, Rev. & Syn. Trich., p. 320-322.

Originally described as follows:

"8 lines: bright ferruginous ochre; antennae very long, black annulated with white; abdomen and inferior wings blackish; legs fulvous."

From the four specimens in the collection, one is without abdomen. Lectoholotype is selected from the remaining three males. In the collection the species is placed under the genus "*Ceraclea*", although described as *Leptocerus*. The following localities are given in the note book: "13 June Coonell (?) wood; 22 July Killarney upper Lake. Duddington Loch".

There is no doubt about the identity of the species, as it has been correctly interpreted.

binotatus

Limnephilus binotatus CURTIS

(Figs. 1 - 2)

Limnephilus binotatus CUBTIS, 1834, Philos. Mag., 4, 122.

Limnephilus binotatus CUBTIS, 1837, Guide Br. Ins. 2nd. Ed.

Limnephilus xanthodes McLachlan, 1875, Rev. & Syn. Trich., p. 60. syn. nov.

CUBTIS described the species as follows:

"16 lines: superior wings ochreous yellow, deepest towards the base, with three pale spots on the disc and a large one covering the transverse nervures, a large brown spot at the posterior angle; stigma large ovate and piceous."

There are two specimens, both males, in CURTIS cabinet, one of them with attached identification label "*Limnephilus borealis* ZETT." by unknown hand. The second specimen is now selected as lectoholotype of *binotatus*

and labelled as such. It should be noted that in the drawer below both specimens is placed a printed label "5. bimaculatus Ste." and below that a handwritten label "borealis Kol.". Nevertheless in his note book CURTIS had corrected the name "bimaculatus Ste" by overwriting letters and adjusting to "binotatus Curt." under which name it appars in



to "binotatus Curt." under Fig. 1-2. Limnephilus binotatus CURT. lectoholotype & genitalia: - 1. lateral; - 2. dorsal

print. It was found that *binotatus* is not synonymous with *marmoratus* as suggested by McLachlan 1875, p. 54, but fully agrees with his species *xanthodes* which is now suppressed to synonymy. Figures prepared from the *binotatus* lectotype genitalia were compared by Mr. KIMMINS to the type of *xanthodes* and found to be conspecific. Locality given in note book is "London".

Lectoholotype & genitalia mounted as microscope preparation T-81.

bipartitus

Limnephilus centralis CURTIS

Limnephilus bipartitus CURTIS, 1834, Philos. Mag., 4, 124. syn. nov. Limnephilus bipartitus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text).

Original description as follows:

"10 $\frac{1}{2}$ lines: superior wings pale ochreous, very much freckled with brown, excepting the costa, the sixth or apical longitudinal nervure forming a brown line; apex of inferior wings tinged with ochre."

Following the examination of genitalia it was established beyond any doubt that *bipartitus* is not synonymous with *vittatus*, but with *ochraceous*, *terminalis*, *centralis* group. For full discussion on priority see *centralis*.

In the cabinet a group of eight specimens are labelled "18. strigosus". This name also appears in the note book, but this time together with the name "bipartitus" indicating that both names were applied to the same species of insect. From these specimens lectoholotype \mathcal{J} and lectoallotype \mathcal{G} are now selected and labelled to that respect. In the Brit. Ent. Vol. 11,

Pl. 488 text (December, 1834) gives the localities as "B. June Oaks, Rushes & c., New Forest." In the note book besides New Forest is mentioned also "Aug. Bute" but probably refers to some later specimen.

Lectoholotype 3 genitalia mounted as microscope slide T-88.

bipunctatus

Limnephilus bipunctatus CURTIS

Limnephilus bipunctatus CURTIS, 1834, Philos. Mag., 4, 123. Limnephilus bipunctatus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text).

CURTIS described this species as follows:

"11 to 13 lines: superior wings pubescent, pale brown, darkest towards the apex, very much freckled with ochreous white, the costa plain, as well as a lunulate spot on the disc, two smaller ones beyond it forming an 2, a pale spot on the posterior margin; stigma and some of the longitudinal nervures piceous dotted with white."

From the five specimens in CURTIS collection the first two are Limnephilus griseus LINN. and only the last three could be referred as being bipunctatus. From these latter ones the lectoholotype \mathcal{J} and lectoallo-



Fig. 3. *Glossosoma boltoni* CURT. lectoholotype 5 genitalia lateral

boltoni

type \mathcal{Q} are selected although they are slightly larger than measurements given in the original description. Time and place of capture is given in the note book as "June, hedges Bayley wood, Holly & White-thorns, Nw-Forest: Devon" and "Sept. Durnford; Camb." The same entry is also found in Brit. Ent. 1834, Vol. 11, Pl. 488 (text).

Descriptions and figures published by subsequent authors correctly refer to this species.

Glossosoma boltoni CURTIS (Fig. 3)

Glossosoma boltoni CURTIS, 1834, Philos. Mag., 4, 216.

(not *boltoni* McLACHLAN and subsequent authors)

Rhyacophila vernalis PICTET, 1834, Rech. Phryg., p. 189, pl. 15, fig. 4. syn. nov. Glossosoma vernale McLachlan, 1879, Rev. & Syn. Trich., p. 472-473.

(and subsequent authors)

CURTIS described his species *boltoni* as follows:

"10 lines: antennae, head, thorax and abdomen fuscous castaneous, the former annulated with and the latter tipped with ochre; wings pubescent, pale fuscous, superior with the callous lump at the base in the male, brown, clothed with black hairs; stigma and a spot opposite on the inferior margin fuscous, and each nervure terminated by a spot of the same colour on the margin alternating with ochreous spots, with an indistinct row behind them, and two or three near the disc of the same colour; inferior wings gray and transparent at the base."

From the four specimens in CURTIS cabinet, $1 \circ and 2 \circ belong$ to boltoni but the fourth specimen, a female, is *Cheumatopsyche lepida* PICTET. *Glossosoma boltoni* presents rather unfortunate difficulties in taxonomy. By examination of genitalia and wing venation it was undoubtedly established that CURTIS species boltoni is synonymous with PICTET's cernale as described and figured by MCLACHLAN and followed by all subsequent authors, but is not the same as *Glossosoma boltoni* MCLACHLAN nec CURTIS. This latter species therefore (as no synonyms are available) requires new name and designation of a type specimen, which is done herewith.

Lectoholotype \mathcal{J} and lectoallotype \mathcal{G} of *boltoni* are now designated and labelled to that effect. Time of capture and locality in the note book has been given as: "June; Ambleside".

Lectoholotype & genitalia mounted as microscope preparation T-114.

Glossosoma conformis nom. nov.

Glossosoma boltoni McLachlan nec CURTIS, 1879, Rev. & Syn. Trich., p. 471-472, pl. 49, figs. 1-12 (and subsequent authors).

This species is characterized by having the posterior wings in both sexes with second apical cellule truncate at its base, or with other words that R3 and R4 are separate along the whole distance between discoidal cell and the wing margin. Further specific distinction is found in the male genitalia where superior appendages are prominent and incurved as shown by MCLACHLAN (1879) and MOSELY (1939, fig. 522).

Type specimen has been selected from McLACHLAN's material in the British Museum (Nat. Hist.) collection by Mr. KIMMINS who found that in McLACHLAN's collection there were not many examples to chose from that were taken before the publication of the Monographic Revision of the European Trichoptera. There are five males in all, two of which have no locality data and therefore were excluded from selection of type. The three remaining males are labelled "Lake District. June 1871. H. G. Stainton", a small round label bearing McLACHLAN's own Register number "1/71", a printed label "Glossosoma boltoni Curt. det. R. McLachlan" and a British Museum (Nat. Hist.) register label "McLachlan Coll. B. M. 1938—674". To one of these specimens Mr. KIMMINS added a red-ringed British Museum Holotype label and my identification label "Holotype 3 Glossosoma conformis mihi, det. Neboiss, 1962", and this specimen is now designated as the holotype of *Glossosoma conformis*.

To facilitate the separation of the two species and avoid future misinterpretation of names, amended key is here given:

1. Posterior wing in both sexes with second apical cellule usually truncate at its base (Fig. 521 by MosELY, 1939); in the 3 superior appendages prominent, incurved, lower angles produced into an incurved projection . . .

brevipennis

Anabolia brevipennis (CURTIS)

Limnephilus brevipennis CURTIS, 1834, Philos. Mag., 4, 125. Phacopteryx brevipennis MOSELY, 1939, Brit. Caddis-flies, p. 75. Anabolia brevipennis SCHMIDT, 1955, Mitt. Schweiz. ent. Ges., 28, Beih. p. 151. CURTIS described this species as follows:

"11 lines: superior wings scabrous tawny ochre, a pale dot at the base of the third marginal cell, another below the centre, and a third near it towards the posterior angle, posterior edge dark, dotted pale."

A single male in the collection is labelled "Chaetopteryx" above and "33. brevis Curt." below the specimen. This combination of names appears in the note book with the name "brevipennis" immediately following "brevis" and thus establishing the correct identity. The specimen is now designated as lectoholotype 3 and labelled to this effect. Although this species has been referred to various genera, the specific identity has been correctly established and figures by MOSELX (1939, fig. 121–122) illustrate this insect. No locality has been given opposite the name in the note book.

centralis

Limnephilus centralis CURTIS

Limnephilus centralis CURTIS, 1834, Philos. Mag., 4, 124. Limnephilus bipartitus CURTIS, ibid. syn. nov. Limnephilus ochraceus CURTIS, ibid.

Limnephilus terminalis CURTIS, ibid.

CURTIS described *centralis* as follows:

"11 lines: superior wings brown freckled with ochre, the costa entirely ochreous, a pale spot on the disc, a smaller one beyond it, and a large semi-orbicular one on the posterior margin: inferior wings ochreous at the tips."

From the three specimens labelled as *centralis* in CURTIS cabinet lectoholotype \mathcal{J} and lectoallotype \mathcal{P} has been selected. The prepared genitalia slides undoubtedly show characters already figured by MOSELY (1939) and WINKLER (1961), and no difficulties should be experienced in identification. According to the note book specimens of this species have been captured "Aug. Bute & Arran amongst Heath".

The synonymy of ochraceus, terminalis and centralis was established by McLACHLAN (1875), when centralis was chosen as the standing name. In terms of priority ochraceus should take centralis place, but being suppressed to synonymy for more than 50 years ochraceus as well as terminalis are treated as nomen oblitum and referred to the International Commission on Zoological Nomenclature for inclusion on the official list of rejected names. To these another synonym is added — bipartitus, name which also has priority over centralis, but its rejection is proposed because it has been transferred to synonymy of a rejected name.

cinereus

Athripsodes cinerea (CURTIS)

Leptocerus cinereus CURTIS, 1834, Philos. Mag., 4, 214. Athripsodes cinerea KIMMINS, 1949, The Entomologist, 82, 201-204.

CURTIS described the species as follows:

"12 lines: antennae very long, black annulated with white, clothed with griseous hairs; wings fuscous, superior clothed with grey pubescence; costa slightly ochreous, as well as some indistinct marks, a small portion of the base of the inferior wings pale ochreous; tibiae and tarsi of the same colour."

The lectoholotype \mathcal{S} is selected from a group of 14 specimens in the collection with this name. Genitalia structures and other morphological structures correspond to the figures and description by MOSELY (1939, p. 154) and no difficulties arises in the identification of the species.

Two localities are given in the note book: "e. July, Connemara. m. Jul. side of Avon, Hants."

coenosus

Limnephilus coenosus CURTIS

Limnephilus coenosus CURTIS, 1834, Philos. Mag., 4, 123.

Asynarchus coenosus MOSELY, 1939, Brit. Caddis-flies, p. 77.

Limnephilus coenosus SCHMIDT, 1955, Mitt. Schweiz. ent. Ges., 28, Beih. p. 143.

CURTIS described this species as follows:

"11 lines: ochreous brown; superior wings rather short and broad; stigma scarcely visible, with a pale spot on each side the posterior angle; inferior wings paler except at the tips.

A single specimen in Scotland."

From the three specimens present in the collection a male is now selected as lectoholotype and labelled to that effect. Time and place of capture has been given as "July, Scotland" without any further data.

The characteristic male genitalia leaves no doubt about the identity, which has been correctly applied by previous authors.

Lectoholotype 3 genitalia as microscope preparation T-52.

consobrinus

Limnephilus vittatus (FABRICIUS)

Limnephilus consobrinus CURTIS, 1834, Philos. Mag., 4, 124. Limnephilus consobrinus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Limnephilus vittatus McLachlan, 1875, Rev. & Syn. Trich., p. 81-82.

CURTIS described his species consobrinus as follows:

"11 lines: superior wings ferruginous-ochre freckled with brown excepting the costa, the posterior angle brown freckled with ochre; apex of inferior wings ochreous."

From the group of seven specimens in CURTIS cabinet one female is identified as probably being *Limnephilus ignavus* MCLACHLAN. The remaining six are all referred to *consobrinus* and from those the lectoholotype \Im and lectoallotype \Im are selected. The footstalk of fork no. 3 in the anterior wing is a useful guide and identification should not produce any serious difficulty. The synonymy to *vittatus* as suggested by McLACHLAN (1875) is accepted as correct.

The locality and time of capture has been given in the note book as: "m. Oct. Heron Court", the same locality is published in Brit. Ent., 11, pl. 488 (text), 1834.

conspersus

Plectrocnemia conspersa (CURTIS)

Philopotamus conspersus CURTIS, 1834, Philos. Mag., 4, 213. Plectrocnemia conspersa McLachlan, 1878, Rev. & Syn. Trich., p. 394-395.

CURTIS described this species as follows:

"12 lines: pale fuscous; palpi, legs and antennae tawny, the latter annulated with white; superior wings thickly and minutely spotted with ochre, leaving brown markings on the costa and inferior margin, and two forked ones on the disc, the margin spotted yellow and brown from the stigma to the posterior angle."

There are three specimens in CURTIS cabinet labelled as conspersus CURT. of which lectoholotype \mathcal{J} and lectoallotype \mathcal{Q} are selected. Figures given by McLachlan (1878) and Mosley (1939) agree favorably to the type specimens. Locality as given in the note book is "July, Devon".

The third specimen in this group is a male of Plectrocnemia geniculata MCLACHLAN.

costalis

Orthotrichia costalis (CURTIS) comb. nov.

(Fig. 4)

Hydroptila costalis CURTIS, 1834, Philos. Mag., 4, 218.

Orthotrichia tetensii KOLBE, 1887, Ent. Nachr., 13, 356-359. syn. nov.

CURTIS described *costalis* as follows:

"3 lines: pale ochreous shining; superior wings variegated fuscous, with a dot on the disc, the costal cilia long and black, with a long pale space at the centre."

Only a single male specimen is in the collection labelled as "costalis", this specimen is now designated as the lectoholotype. The examination



Fig. 4. Orthotrichia colotype 3 genitalia ventral

of genitalia showed immediately that it is not the species described, figured and selected as the type species of genus Oxyethira by EATON (1873). It is interesting to note that H. flavicornis PICTET doubtfully considered by EATON as synonym of costalis (1873 p. 144) was also known to CURTIS, but he considered it to be the same as Hydroptila tineoides DALMAN and not that of his species *costalis*, as it could be seen from the entry in the note book. CURTIS species costalis was found to be identical with Orthotrichia tetensii KOLBE, which is now suppressed as synonym, while costalis takes its position in genus Orthotrichia.

Following this move it is necessary to rename Oxystalis (CURT.) lectoho- ethira costalis EATON nec CURTIS, and the first available synonym is Hydroptila flavicornis PICTET. PIC-

TET's type specimen has not yet been located. One female specimen in Museum d'Histoire Naturelle, Geneva believed to be the type, bears a label "Zurich 9/81", which suggests that it was not collected

until 1881. Dr. GISIN informed that there is another example in that museum, but it has no abdomen, and it seems, therefore, that one cannot prove beyond some doubt that O. costalis EATON nec CURTIS and H. flavicornis PICTET are conspecific. It was decided to accept this synonymy as one of the possible answers. The possibility of *flavicornis* PICTET being synonym of *tineoides* DALMAN should not be overlooked, in which case the species here treated as *flavicornis* PICTET = costalis EATON nec CURTIS would require a new name, but as indicated above there are difficulties in establishing the correct identity of PICTETS species.

There is no locality given in CURTIS note book for costalis, the only information available is the time of capture being "Aug.".

Lectoholotye & genitalia mounted as microscope slide T-125.

Oxyethira flavicornis (PICTET) comb. nov.

Hydroptila flavicornis PICTET, 1834, Rech. Phryg., p. 225, Pl. 20., fig. 11a-d. Oxyethira costalis EATON nec CURTIS, 1873, Trans. Ent. Soc. Lond., 1873, p. 144.

This name now replaces Oxyethira costalis CUBTIS as the type species of the genus Oxyethira following the discovery that EATON's description and figures are not those of CURTIS species costalis. The first available synonym is now revived although the synonymy is still doubtful as explained above.

discoidalis

Limnephilus marmoratus CURTIS (Fig. 5)

Limnephilus discoidalis CURTIS, 1834, Philos. Mag., 4, 122. Limnephilus marmoratus McLachlan, 1875, Rev. & Syn. Trich., p. 54.

CURTIS described this species as follows:

"15 lines: superior wings pale brown, with the costa (as far as the stigma), a large spot below the disc connected with a large one covering the transverse nervures, and numerous dots semitransparent; apical margin of inferior wings fuscous.'

The collection contains four specimens labelled as discoidalis, one is identified as L. lunatus male, the other three as discoidalis, and from these

latter ones a male is designated as lectoholotype. In regard to time and place of capture the following information is included in the note book: "Aug. I. of Bute nr. Loch Fad: common on Marrams, Sandwich".

This species was correctly considered synonymous with marmoratus, but discoidalis had page priority. The revised edition of International Code of Zoological Nomenclature makes it possible to retain marmoratus as suggested by McLachlan (1875) keeping discoidalis in sy- aaus GURT. = L. Mar more and McLachlan (1875) keeping discoidalis in sy- <math>aaus GURT.) lectoholotype σ geninonymy as nomen oblitum which has not been



Limnephilus discoi-Fig. 5. dalis CURT. (= L. marmoratus talia dorsal

in use for more than 50 years. The case has been referred to the International Commission on Zoological Nomen clature.

Abdomen of lectoholotype 3 mounted as microscope preparation T-82.

dorsalis

Rhyacophila dorsalis (CURTIS)

Philopotamus dorsalis CURTIS, 1834, Philos. Mag., 4, 213.

Rhyacophila dorsalis McLachlan, 1879, Rev. & Syn. Trich., p. 439.

CURTIS described his species *dorsalis* as follows:

"12 lines: ochreous; superior wings obscurely clouded and freckled; stigma pale brown, inferior margin fuscous, leaving three pale spots, the anal one minute, forming when the wings are closed three suborbicular spots down the back; the first pair of spurs below the middle in both pair of legs."

Five specimens in CURTIS cabinet are labelled "obscurus Leach" in printed label, and a smaller handwritten label "dorsalis C." A lectoholotype \mathcal{J} and lectoallotype \mathcal{Q} are now selected and labelled to that effect. The figures published by MOSELY (1939) agree favorably to the type specimens, and should not present any difficulty in identifying the species.

The name "obscurus Lea." in the note book has been overwritten and corrected to *dorsalis*, the word "Lea." crossed out and replaced by "Curt." Locality entry reads as follows: "b. Sept. Clydesdale in copula".

elegans

Limnephilus elegans CURTIS

Limnephilus elegans CURTIS, 1834, (February) Philos. Mag., 4, 124.

(name without description, but reference is made to Brit. Ent.)

Limnephilus elegans CURTIS, 1834, (December) Brit. Ent., 11, Pl. 488.

CURTIS described the species as follows:

"Palpi and antennae ferruginous; head and thorax somewhat castaneous, the crown of the former and the back of the latter lead colour; abdomen ochreous, the back fuscous with whitish margins to the segments. Wings shining, superior pale brown, the nervures darker, with the 3rd cell, a stripe on the disc, the 1st, 2nd, 4th and 5th posterior cells and a spot at the base of 3rd and 6th whitish, the superior discoidal cell very long."

CURTIS also gives a list of other *Limnephilus* species on the following page among which details of locality relating to this species are included: "17 b. *elegans* Curt. Brit. Ent., Pl. 488. J. 1st of June, Mr. Dale took 2 from Alders, by side of river in New-Forest". The same reference is also in his note book, and this must be regarded as the type locality.

A single male specimen in CURTIS collection shows very clearly the typical superior appendages with deep excision in the apical margin and leaves no doubt that the species has been correctly identified by previous authors. The specimen is now designated as lectoholotype \mathcal{J} of *elegans* and labelled to that effect.

emarginatus

Glyphotaelius pellucidus (RETZIUS) Limnephilus emarginatus CURTIS, 1834, Philos. Mag., 4, 122. Limnephilus emarginatus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text).

Limnephilus pellucidulus (sic!) WALKER, 1852, Cat. Brit. Mus. Neuroptera, p. 18. Glyphotaelius pellucidus McLachlan, 1875, Rev. & Syn. Trich., p. 54.

CURTIS description of *emarginatus* is as follows:

"17 lines: dull ochre; superior wings mottled with a deeper colour, a pale oblique spot on the disc unconnected with one beyond it, and a short narrow one approaching the posterior margin, which has three spots, and the edge of the angle as well as the stigma piceous; apex of inferior wings brownish ochre; body green."

As already discussed under *basalis*, this is the second synonym of *pellucidus*. In CURTIS collection there are three female specimens under the name of *emarginatus*. One is now selected as lectoholotype and the recorded synonym is confirmed.

According to the note book these specimens have been collected at "b. June New Forest & Gl. Wootton, nr. London. Norf. Suff. Dover. Scotld.", but in Brit. Ent., 11, Pl. 488 (text) 1834, only the first two localities are noted and should be considered as the more likely type localities.

fenestralis

Limnephilus griseus LINNÉ (Figs. 6–8)

Limnephilus fenestralis CURTIS, 1834, Philos. Mag., 4, 123. Limnephilus fenestralis CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Limnephilus griseus MoLACHLAN, 1875, Rev. & Syn. Trich., p. 86.

CURTIS described *fenestralis* as follows:

"10 to 15 lines: superior wings dirty white freckled with pitchy brown, generally leaving a plain spot near the base, an oblique one on the disc, a sublunulate one beyond the transverse nervures connected with another on the inferior margin; stigma piceous and spotted pale."



All five specimens in CURTIS collection with this name are females, o which one with printed label "531" and wing span of 21 mm is now selected as lectoholotype. The locality "b. June Fir-trees & c., New-Forest" is given in the note book as well as in Brit. Ent. 1834. Vol. 11, pl. 488 (text), and undoubtedly should be regarded as the type locality.

The abdomen of lectoholotype \mathcal{Q} mounted as microscope slide T-83.

flavipes

Goera pilosa (FABRICIUS)

Silo flavipes CURTIS, 1833, Entom. Mag., 1, 188. Goera flavipes CURTIS, 1834, Philos. Mag., 4, 215. Goera pilosa McLachlan, 1876, Rev. & Syn. Trich., p. 241-242.

CURTIS described this species as follows:

"4. Flavipes. CURT

Rather silky ochreous: thorax and abdomen piceous, inferior wings, and under side, also the coxae and thighs, fuscous. (Length 3, breadth 11 lines.)"

A similar description appeared 1834 in the Philos. Mag., Vol. 4. Of the three specimens in the collection one has a damaged abdomen. The other two are male specimens, and one is now selected as lectoholotype and labelled accordingly. Figures given by MOSELY (1939, figs. 215—219) agrees fully with the type specimen and leaves no doubt of its synonymy with *pilosa* FAB. as accepted there.

Locality has been recorded in the note book as follows: "b. June on hedge, Magdalen gardens Oxford & in abund. in Hollies nr. rivers, New Forest".

fulvipes

Hydropsyche fulvipes (CURTIS) (Figs. 9–10)

Philopotamus fulvipes CURTIS, 1834, Philos. Mag., 4, 213. Hydropsyche fulvipes CURTIS, 1836, Brit. Ent., 18, Pl. 601.





CURTIS described this species as follows:

"13 lines: black; antennae annulated with fulvous, neck clothed with griseous hair, edges of abdominal segments white; wings pale black, superior obscurely freckled with ochre; legs fulvous, thighs fuscous."

There are two female specimens in CURTIS cabinet labelled as this species. One is without label but the other has a label in CURTIS handwriting "11 June Dale Wootton"; which is locality recorded in Brit. Ins. 1936, Vol. 13, Pl. 601 (text) where full reference is made as follows: "Taken by J. C. Dale, Esq., the end of June, off a hedge with a brook running below it, by Muller's Copse, near Glanville's Wootton."

Presumably this locality could be referred to both specimens, as there is no other information recorded in the note book, except records from London, Devon and Carlisle apparently received from STEPHENS. The specimen with the attached locality label is now selected as lectoholotype and labelled to that effect.

Figures prepared from the lectoholotype specimen differs slightly from those published by KIMMINS (1957) but that is probably due to differences of interpretation and should be considered as conspecific.

The abdomen of lectoholotype Q mounted as microscope slide T-107.

fuscipes

Agapetus fuscipes CURTIS

Agapetus fuscipes CURTIS, 1834, Philos. Mag., 4, 217.

CURTIS described this species as follows:

"5 lines: \mathfrak{F} black: superior wings and tips of inferior ochreous fuscous, iridescent, nervures darker; head and thorax with shining griseous hairs; legs fuscous; trochanters ochreous."

A lectoholotype \mathcal{J} is now selected from the group of six specimens in the collection labelled *fuscipes*. The identity of this species has been interpreted correctly by earlier workers and does not require any further remarks.

According to the note book several localities are recorded: "28 May, J side of river, Wilson; 8 June Stafford; 28th out of Ivy Quarr Abbey". It is impossible to refer any of the localities to the selected lectotype specimen.

fuscocupreus

Potomaria fuscocupreus CUBTIS nom. nud.

Potomaria fuscocupreus CURTIS, 1829, Guide Brit. Ins. 1st. Ed.

The specific name appears only in the first edition of CURTIS "Guide Brit. Ins." There is a printed species label in the collection drawer but no specimens are placed with it. The name has been also crossed out from the note book where it appeared under "assimilis Ste." garnonsii

Acentropus niveus OLIV.

Acentropus garnonsii CURTIS, 1834, Brit. Ent., 11, Pl. 497.

Describing this Lepidopterous insect CURTIS made the following remarks: "... so near an approach does *Acentropus* make to the Lepidoptera, that if the palpi were broken off, it would not be easy to decide to which Order it belonged, whether to the Trichoptera or Lepidoptera."

CURTIS collection contain 12 specimens, which are placed in a drawer together with other Trichoptera following genus *Hydroptila*. Lectotype is not selected on this occasion.

gracilicornis

Lepidostoma hirtum (FABRICIUS) (Figs. 11-12)

Mormonia gracilicornis CURTIS, 1834, Philos. Mag., 4, 215. Lepidostoma hirtum McLachlan, 1876, Rev. & Syn. Trich., p. 274-276.

CURTIS described gracilicornis as follows:

"10 lines: δ fuscous very public ent; maxillary palpi and eyes black; antennae, legs and sometimes the body ochreous, the former dotted fuscous; wings with an ochreous tint."

A lectoholotype 3 is selected herewith from three specimens in the collection. According to his note book CURTIS himself had considered the



Figs. 11-12. Mormonia gracilicornis CURT. (= Lepidostoma hirtum FAB.) lectoholotype \mathcal{J} genitalia; - 11. lateral - 12. ventral

possible synonymy with *hirtum*. The information regards time and locality is following: "b. Sept. Durnford, washed in, \mathcal{J} in abund. in an oak tree in meadows by Pigshoot". As no other localities have been recorded, Durnford in Wiltshire should be regarded as the type locality.

The abdomen of lectoholotype & mounted as microscope slide T-110.

gracilipes

Psychomyia pusilla (FABRICIUS)

(Fig. 13)

Anticyra gracilipes CURTIS, 1834, Philos. Mag., 4, 217. Psychomyia pusilla McLachlan, 1878, Rev. & Syn. Trich., p. 426-427. CURTIS described gracilipes as follows:

"51/3 lines: pale fuscous; antennae whitish, annulated with black; head griseous; eyes black; wings lanceolate, superior glossy ochreous; legs slender, pale dull fulvous."

From the two male specimens in the collection, one is now selected as lectoholotype of gracilipes. There is no doubt that synonymy has been referred correctly by previous authors, and it should not produce any difficulties in identification. The following localities are given in the note book: "July Hertford. 10th & Avon, Hants."

13

Fig. 13. Anticyra gracilipes CURT. (= Psychomyia pusilla FAB.) lectoholotype 3 genitalia lateral

The abdomen of lectoholotype 3 mounted as microscope slide T-112.

hibernica

Hydropsyche pellucidula CURTIS

Hydropsyche hibernica CUBTIS, 1836, Brit. Ent., 13, Pl. 601. Hydropsyche pellucidula McLachlan, 1878, Rev. & Syn. Trich., p. 358-360.

CURTIS described *hibernica* as follows:

"2. hibernica CURT. Ochreous; antennae with slender rings to the basal joints, head, thorax and abdomen fuscous; superior wings with a few small obscure spots at the base, below the disc and round the apex and cilia: expanse 12 lines. I took a male the end of July at Roundstone in Connemara; it is readily distinguished by its ochreous nervures."

As there is only the single male specimen in the collection it leaves no doubt of the identity of the species and the locality as published with the original description (see above), and also entered in the note book. Unfortunately the specimen has lost the head but otherwise it is in good condition. The cleared genitalia preparation supports the synonymy with pellucidula CURT.

The abdomen of lectoholotype & mounted as microscope slide T-106.

hieroglyphicus

Halesus digitatus SCHBANK

Limnephilus hieroglyphicus CURTIS, 1834, Philos. Mag., 4, 125. Limnephilus hieroglyphicus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Halesus digitatus McLACHLAN, 1876, Rev. & Syn. Trich., p. 150-152.

CURTIS described *hieroglyphicus* as follows:

"2 inches: ochreous; superior wings with numerous brown markings (excepting a broad portion next the costa) forming irregular pale spots." 40

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There are two specimens, both females, in CURTIS collection identified as *hieroglyphicus*. One of them is now selected as lectoholotype Q and labelled to that effect. Figures published by McLACHLAN (1876) and MOSELY (1939) agree favorably with the type specimen.

According to the note book the specimens have been captured "m. Oct. windows at Cobham, Surrey". The same information is published by CURTIS 1834 in Brit. Ent., and therefore should be regarded as the type locality.

hirtipes

Apatania hirtipes (CURTIS)

Tinodes hirtipes CURTIS, 1835, in Ross, Append. to the Narrative of a North West Passage, p. 64.

Apatania hirtipes McLachlan, 1871, Journ. Linn. Soc. (Zool.), 11, 139.

The following is CURTIS description:

"9. *Hirtipes*. Slate colour, wings pale fuscous. Length two lines and a half, breadth nine lines.

Pale slate colour, sparingly clothed with long whitish hairs; head small; eyes prominent, as well as two ocelli; wings pale ochreous fuscous, pubescent and glossy, superior elongated and narrow, gradually narrowed to the base; cilia short; inferior wings iridescent; tibiae and tarsi dull ochreous, with numerous short black bristles inside, and especially beneath the latter; the four posterior tibiae furnished with ochreous spurs at the apex.

This insect has the habit of a *Tinodes*, but the neuration of the wing does not quite agree with any in my possession, and it has but one pair of spurs to the posterior tibiae; if, therefore, the antennae were not wanting, I should be disposed to give it a generic name."

An abbreviated form of description appeared in WIEGMANN'S Arch. f. Naturg., 2, 288 (1836), and after that McLACHLAN (1871) gave the following note in regard the change of its taxonomic position: "I once saw the type of T. (?) hirtipes CURTIS, and noted that it was an Apatania, a genus belonging to another family". Ross (1941) suggested the use of the generic name Radema HAGEN for certain species among them also hirtipes, but SCHMIDT (1955) retained it in the genus Apatania as species incertae sedis.

The type specimen of *hirtipes* has not been located in the National Museum of Victoria collection. For details about the fate of the collection of Arctic insects collected by Sir JAMES C. Ross see the introductory part of this paper.

incisus

Limnephilus incisus CURTIS

Limnephilus incisus CURTIS, 1834, Philos. Mag., 4, 124.

CURTIS described this species in the following words:

"10 lines: wings scarcely longer than the body, superior ochreous, the inferior margin and the nervures freckled with brown, the discoidal cell very long; inferior wings deeply notched beneath the apex, which is slightly ochreous."

All four specimens in the collection are females, one of which is now selected and designated as lectoholotype. Descriptions and figures published

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by McLACHLAN (1875) and MOSELY (1939) agree favorably to the lectotype specimen and should not cause difficulties in identification. In the cabinet two names are attached to this group of specimens, "7. hirsutus" in printed label and "incisus" in CURTIS handwriting. The former name has been entered in the note book, but later corrected to *incisus*. There are no locality records which could be referred to the lectotype specimen; the only record being "28. Aug. 44 in Black Park", which is 10 years after the publication of the original description.

instabilis

Hydropsyche instabilis (CURTIS)

(Fig. 14)

Philopotamus instabilis CURTIS, 1834, Philos. Mag., 4, 213. Hydropsyche instabilis CURTIS, 1836, Brit. Ent., 13, Pl. 601 (text).

CURTIS described this species as follows:

"B. Antennae long and slender.

"7. instabilis CURT. - maculatus Don.? pl. 548,2.

"Similar to DONOVAN'S figure; but as I believe OLIVIER'S P. maculata is different, it became necessary to give another name to our insect. The intermediate tarsi are dilated."

The latter character should be referred to the female only, as already

noticed by CURTIS, adding in his reprint copy after the last word "dilated" the words "in the female". There are ten specimens altogether in the cabinet labelled "instabilis" though not all conspecific, as at least two are identified as *H. pellucidula*. One of the true *instabilis*, a female, bears a label in CURTIS handwriting "m. May, So-gate"; this specimen is now selected as lectoholotype and labelled to this effect. The only locality recorded in the note book is "May, Southgate" thus corresponding to the label on the selected lectotype specimen. As the description refers to female only no male has been selected.





Abdomen of lectoholotype \mathcal{Q} mounted as microscope slide T-116; \mathcal{J} of *instabilis* – slide T-101, and \mathcal{J} pellucidula – slide T-102.

irrorata

Crunoecia irrorata (CURTIS)

Goera irrorata CURTIS, 1834, Philos. Mag., 4, 215. Crunoecia irrorata McLachlan, 1876, Rev. & Syn. Trich., p. 271–272.

CURTIS described this species as follows:

"7 lines: ochreous, pubescent; antennae piceous, slightly annulated with ochre, the basal joint long, stout and very hairy; wings very pale fuscous, superior subochreous, with numerous indistinct whitish dots."

40*

From the two female specimens in CURTIS collection one is now selected as lectoholotype; the other is without abdomen. These specimens have been labelled with a printed label "pusillus Curt.", and "irroratus Curt." in CURTIS handwriting. The species name "pusillus" has been entered in the note book, but later crossed out and replaced by "irroratus Curt." and followed by the locality "June G. Wootton". The species has been correctly interpreted, descriptions and figures published by MCLACHLAN (1876) and MOSELY (1939) are conspecific with the type.

irroratus

Polycentropus irroratus (CURTIS) (Figs. 15-16)

Philopotamus irroratus CURTIS, 1835, Brit. Ent., 12, Pl. 544.

Polycentropus multiguttatus McLachlan nec CURTIS, 1878, Rev. & Syn. Trich., p. 399-400.

CURTIS described *irroratus* as follows:

"3. irroratus CURT. Brit. Ent., Pl. 544 8

"Male, expansion $6^2/_3$ to 8 lines, female 9 lines. Brown, head and thorax with shining yellowish hairs; antennae annulated with ochre; superior wings



Figs. 15-16. Polycentropus irroratus (CURT.) lectoholotype & genitalia: - 15. lateral; - 16. dorsal

with numerous ochreous silky spots, close together, but leaving several spaces, forming 7 or 8 brown patches on the costa, disc, and inferior margin; under wings very iridescent; legs dull ochreous, with pale castaneous tint.

The brown spots on the upper wings, most evident in the males, distinguish this species from the others.

I took specimens the middle of last August in the Isle of Arran, and the beginning of September I met with others on large masses of rock in the bed of the river at Cartland Craigs, a magnificent and highly picturesque ravine near Lanark, which I visited with Mr. HALLDAY and Mr. H. WALKER."

The examination of specimens in CURTIS collection reveals a rather unfortunate misinterpretation by earlier workers on CURTIS' species. From the five specimens in the cabinet three males belong to *irroratus*, one of which is now selected lectoholotype \mathcal{J} and labelled to that effect. Description and

figures published by MCLACHLAN (1878) as multiguttatus should be referred to *irroratus*, but CURTIS species multiguttatus is synonymous to *flavomaculatus* PICTET (1834). The remaining specimen apparently is a female of *irroratus*. Following this discovery *irroratus* CURTIS is now revived and replaces multiguttatus MCLACH. nec CURTIS. Further details of this complex may be found in the following pages under multiguttatus.

According to the note book three localities are recorded as follows: "m. Aug. I of Arran.; c. July Galway;" and "b. Sept. Cartland Crags on mosses of Rocks in the Mouse River". The latter, corresponding with original reference, should be regarded as the type locality.

Abdomen of lectoholotype \mathcal{J} mounted as microscope slide T-100; from this group of specimens abdomen of another \mathcal{J} (*multiguttatus*) microscope slide T-99.

lanceolatus

Hydropsyche pellucidula (CURTIS)

Philopotamus lanceolatus CURTIS, 1834, Philos. Mag., 4, 123. (syn. nov.)

CURTIS decribed *lanceolatus* as follows:

"13 lines: wings fuscous, superior slightly hooked, clothed with shining ochreous pubescence, slightly freckled, the posterior margin slightly spotted; intermediate tarsi but little dilated."

From the three specimens in CURTIS cabinet a male which exhibits the "slightly hooked" anterior wings is now selected as lectoholotype, but this specimen undoubtedly is a male of *Hydropsyche pellucidulus* (CURTIS), and according to the note book was captured "in Scotland" without further details. The other two are a pair of *Hydropsyche fulvipes* (CURTIS), and according to the label were collected at "Ben Lawers J. C. D. $\mathcal{J}\mathcal{G}$ " (J.C. D. = J. C. Dale).

The synonymy with guttata as suggested by McLACHLAN (1878) is here rejected, and *lanceolatus* is placed under *pellucidulus* as a new synonym. The slightly hooked appearance of anterior wings has been caused by improper flattening of wing membrane on setting.

The abdomen of σ and Q *H. fulvipes* mounted as microscope slides T-103 and T-108 respectively.

latipennis

Potamophylax latipennis (CURTIS) (Figs. 17–18)

Limnephilus latipennis CURTIS, 1834, Philos. Mag., 4, 125. Limnephilus stellatus CURTIS, 1834, ibid. syn. nov.

Original description of *latipennis* by CURTIS is as follows:

"19 lines: pale ochreous, silky; superior wings with the edges of the nervures very pale fuscous, forming indistinct rays towards the apex."

Both of CURTIS species *latipennis* and *stellatus* present some difficulty in taxonomy. Although *latipennis* is a larger insect, and *stellatus* smaller and has slightly different wing pattern, the cleared male genitalia of both lecto-

holotypes although differing in some detail failed to exhibit sufficient structural differences to regard them as distinct species (Figs. 17-18, 42-43). As the former name has priority, *stellatus* is now suppressed to synonymy.



Figs. 17-18. Potamophylax latipennis (CURT.) lectoholotype & genitalia: - 17. lateral; - 18. apex of superior appendage

On the other hand information was received from Mr. KIMMINS that the two distinct types of male superior appendages as figured by MOSELY (1939. Figs. 142 and 145) are present. "In the English Lake District I found these two species in different habitats, and there are also differences in the female genitalia" KIMMINS (in litt.). Potamophylax latipennis (McLachlan) nec (CURTIS) as described and by McLachlan figured (1875; p. 130, pl. 14, figs. 1-5), and MOSELY (1939;

p. 85, figs. 145—146) will therefore take the name of first available synonym which agrees with McLachlans interpretation of the species. — *Potamophylax cingulatus* STEPHENS (1837), type (\mathfrak{Z}) of which is in British Museum (Nat. Hist.) London.

There are two specimens of *latipennis* in CURTIS cabinet, a male and a female, of which the male is now designated as the lectoholotype. Locality according to CURTIS note book is "Sept. nr. Hertford".

Abdomen of lectoholotype & mounted as microscope slide T-92.

latipes

Psychomyia pusilla (FABRICIUS)

Anticyra latipes CURTIS, 1834, Philos. Mag., 4, 217.

Psychomyia pusilla McLachlan, 1878, Rev. & Syn. Trich., p. 426.

CURTIS described *latipes* as follows:

"6 lines: similar to the last (gracilipes), but the wings are narrower, the superior more rounded, the inferior more pointed; abdomen carneous; intermediate tibiae and tarsi dilated."

A single specimen in the collection, a female is now designated as lectoholotype and labelled to that effect. Locality label on specimen reads: "June, Hants", although the only locality entered in the note book is "e. June, Ripley".

Abdomen of lectoholotype \mathcal{Q} mounted as microscope slide T-113 leaves no doubt that it is conspecific to *pusilla* as described and figured by McLach-Lan (1878).

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longipennis

Rhyacophila dorsalis (CURTIS)

Philopotamus longipennis CURTIS, 1834, Philos. Mag., 4, 213. Rhyacophila dorsalis McLachlan, 1879, Rev. & Syn. Trich., p. 439.

CURTIS described longipennis as follows:

"13 to 14 lines: pale dirty ochre; antennae and legs fulvous, the former short and annulated; superior wings long, narrow and lanceolate, fuscous with innumerable yellow dots; stigma long and fuscous, bearing three yellow spots; first pair of spurs on intermediate tibiae considerably below the middle."

From the two female specimens in CURTIS collection one is now designated as lectoholotype, and the synonymy suggested by McLachlan (1879) appears to be correct. The specimens have been recorded as being captured: "Sept. North Devon".

lunatus

Limnephilus lunatus CURTIS (Figs. 19–21)

Limnephilus lunatus CURTIS, 1834, Philos. Mag., 4, 123. Limnephilus apicalis CURTIS, 1834, ibid. Limnephilus nebulosus CURTIS, 1834, ibid.

CURTIS described this species as follows:

"14 $\frac{1}{2}$ lines: superior wings brown, the costa, a spot on the disc, and a large sublunulate spot beyond it semihyaline, there are four pale rays between this and the posterior margin which is spotted brown and whitish; stigma large and piceous.

A single specimen of this fine species was taken last July at Whittlesea Mere by J. C. Dale, Esq."

The nebulosus - apicalis - lunatus complex involves some complication regarding selection of lectotype specimens and priority of names. Firstly there are no specimens in the collection labelled "lunatus". The arrangement included one male labelled "nebulosus" and two males and two females labelled "apicalis". The present interpretation of the arrangement has been greately facilitated by presence of CURTIS note book where all species has been listed as well as all changes during and after publication. In this note book we found that in the position "nebulosus" the name has been corrected to read "lunatus". Opposite this entry is also the locality record "July, Whittlesea mere J. C." the locality as published for lunatus. Considering that in some other places also in this drawer were names which did not corresponded to the published, and were indicated in the note book with corrections e.g. bimaculatus was published as binotatus; hirsutus as incisus; strigosus as bipartitus, one can assume that the names in the collection were lagging somewhat behind those in the note book or publications. Based on this belief, a lectotype of lunatus is selected from specimens labelled nebulosus in the collection, and the first in the row of nebulosus - apicalis complex. The following four specimens are all labelled apicalis, but again in the note book we found that below the name apicalis is entered "9 nebulosus Curt.

P. M. 4.123 var." and we can assume that the specimen which was originally referred to as *nebulosus* was included with *apicalis*, of which CURTIS believed *nebulosus* to be a variety. As from the four specimens in this group two only give the measurment of 14 lines, and the more yellowish specimen in



Figs. 19-21. Limnephilus lunatus CURT. lectoholotype σ ; - 19. genitalia lateral; - 20. genitalia dorsal; - 21. portion of posterior wing

closer agreement to the description is now selected lectoholotype \mathcal{S} of *nebulosus*. The darker one, a female becomes lectoholotype of *apicalis*. This would also explain the disagreement in sex as given in WINKLER's publication (1961) where *lunatus* type was recorded as being female.

Whatever combination of factors are observed all three species *nebulosus*, *apicalis* and *lunatus* are synonymous and *nebulosus* has priority over the other two. Following the revised code of Zoological Nomenclature regarding names unused for more than 50 years to be considered as nomen oblitum, which fits *apicalis* and *nebulosus*, it is therefore proposed that the name *lunatus* be retained. The case has been referred to the International Commission on Zoological Nomenclature.

Abdomen of lectoholotype 3 of lunatus mounted as microscope slide T-58.

luridus

Limnephilus luridus CURTIS

Limnephilus luridus CURTIS, 1834, Philos. Mag., 4, 124.

CURTIS described this species as follows:

"13 lines: superior wings dirty reddish ochre freckled with paler dots, the nervures darker; inferior wings with the apex tinged with the same colour."

From the four specimens in CURTIS collection three females belong to this species, but the only male is *Limnephilus centralis*. One of the females is now selected lectoholotype and labelled to that effect. The information supplied to Dr. WINKLER that both sexes are in the collection is therefore corrected herewith.

According to the note book the locality has been recorded as "Aug. Arran" and "24 June Horning". There is no indication available which of the two could be regarded as the type locality.

luridus

Tinodes waeneri (LINNEUS)

Tinodes luridus CURTIS, 1834, Philos. Mag., 4, 216.

Tinodes waeneri McLachlan, 1878, Rev. & Syn. Trich., p. 413-414.

CURTIS described *luridus* as follows:

"9 lines: dirty ochreous; head, thorax and abdomen castaneous brown; nervures of superior wings dark brown, inferior wings hyaline and iridescent; legs fulvous."

Altogether seven specimens are in CURTIS collection labelled as *luridus*; three males and three females are in good condition, but one specimen is without abdomen. A male is now selected as lectoholotype and the cleared genitalia undoubtedly proves its identity. The entry in the note book shows that specimens have been collected at various places: "2 & 8th June side of River Frome ab. (?) & Portland Isle" (Dorset); "July Scotland" and in another place "June Hertford".

Abdomen of lectoholotype 3 mounted as microscope slide T-109.

maculicornis

Lepidostoma hirtum (FABRICIUS)

Mormonia maculicornis CURTIS, 1834, Philos. Mag., 4, 215.

Lepidostoma hirtum McLachlan, 1876, Rev. & Syn. Trich., p. 274-276.

CURTIS described maculicornis with the following words:

"10 lines: 3 pale black, very pubescent; antennae ochreous annulated with fuscous, labial palpi, underside of abdomen and legs tawny."

Only a single male specimen of *maculicornis* is in CURTIS collection, now selected as lectoholotype. Irrespective of its darker overall colour in comparison with specimens of *gracilicornis* CURTIS (which also is a synonym of *hirtum*), no structural differences could be found in genitalia and therefore the synonymy with *Lepidostoma hirtum* is supported. Locality given for *maculicornis* in CURTIS note book is "June, Hertford".

Abdomen of lectoholotype & mounted as microscope slide T-111.

maculipennis

Odontocerum albicorne (Scopoli)

Odontocerus maculipennis CURTIS, 1834, Philos. Mag., 4, 214. Odontocerum albicorne McLachlan, 1877, Rev. & Syn. Trich., p. 292.

CURTIS described maculipennis as follows:

"16 lines: pubescent black; head and thorax griseous, scutellun ochreous; superior wings ochreous; nervures, margin and cilia black, a spot on the costa, the stigma, another beyond it, a large one at the posterior angle and several small ones round the disc pale black; legs fulvous, anterior pair and thighs dusky.

I took a single specimen of this beautiful insect, flying over a stream in the New Forest, in June."

Out of three males in the collection one is selected as lectoholotype and undoubtedly is synonymous with *albicorne*. Type locality in the original description has been given as being New Forest, and this name also appears in the note book.

marmoratus

Limnephilus marmoratus CURTIS (Figs. 22-24)

Limnephilus marmoratus CURTIS, 1834, Philos. Mag., 4, 123.

CURTIS described his species marmoratus as follows:

"14 lines: superior wings dull pale ochreous, variegated with brown, leaving an oblique transparent spot below the centre, a large one covering the transverse nervures (which are brown) and several dots surrounding them; stigma brownish."



Figs. 22-24. Limnephilus marmoratus CURT. lectoholotype \mathfrak{F} genitalia: - 22. lateral; - 23. dorsal; - 24. ventral

The collection contains two males and two females of which a lectoholotype \mathcal{J} and lectoallotype \mathcal{Q} are now selected. This species is synonymous to CURTIS *discoidalis* which also would have priority, but on grounds of revised International Code of Zoological Nomenclature it is proposed to retain the name *marmoratus* which has been in use since McLACHLAN'S publication 1875.

The only locality which could be referred to the specimens in CURTIS collection is "Aug, Devon".

Abdomens of lectoholotype 3 and lectoallotype 9 mounted as microscope slides T-56 and T-57 respectively.

maurus

Beraea maurus (CURTIS)

Thya maurus CURTIS, 1834, Philos. Mag., 4, 216. Beraea maurus McLachlan, 1879, Rev. & Syn. Trich., p. 496. Beraea maurus KIMMINS, 1959, Bull. Zool. Nomencl., 17, 32-34. Beraea maurus KIMMINS, 1960, Entom. Gaz., 11, 202.

CURTIS described this species as follows:

"5 lines: black; wings narrower and more lanceolate, with a slight ochreous tint; legs shining dirty ochre."

Lectotype \mathcal{J} and allotype \mathcal{Q} of *B. maurus* were designated by KIMMINS (1960); who also found that other specimens belonged to *Lype phaeopa*, *Ernodes articularis* and *Agapetus fuscipes* (?).

The only locality entered in the note book is "b. May Rougham on grass in Ponds I think".

memorabilis

Neureclipsis bimaculata (LINNEUS)

Polycentropus memorabilis CURTIS, 1837, Guide Brit. Ins. 2nd. Ed.: 169. nom. nud.

The only place where this name has appeared in print is in CURTIS catalogue, where it was published without description. All five specimens $(3 \not\in 2 \not\in)$ in the collection labelled as *memorabilis* are identified as *Neureclipsis bimaculata* LINN. In the note book the capture has been recorded as follows: "29 & 31 July in abundance on the steam boat on Loch Derg & on the bridges going through Connemara" (Ireland). Lectotypes not designated.

minor

Trichostegia minor (CURTIS)

Phryganea minor CURTIS, 1834, Philos. Mag., 4, 212.

Phryganea minor CURTIS, 1836, Brit. Ent., 13, Pl. 592.

Trichostegia minor KOLENATI, 1847, Allgem. dtsch. Naturhist. Zeit., 2 (5-6); folio page appendix.

Trichostegia minor MILNE, 1934, Stud. N. Amer. Trich., 1, 6, 8. (as type species).

The original description by CURTIS is as follows:

"11 lines: brown, antennae annulated; superior wings variegated with numerous ochreous dots, forming two large spaces on the costa, two abbreviated oblique lines on the inferior margin and another parallel to the posterior margin, the edge of which is spotted brown and yellow; on the centre is a minute white dot; inferior wings pale fuscous, darkest towards the apex".

There are only two specimens in the collection a male and a female which are designated lectoholotype and lectoallotype respectively. There is no doubt about the identity of this species, and figures and description by MOSELY (1939) illustrate it sufficiently for recognition.

The entry in note book indicates that they have been captured at "21 July Epping forest J. C. com.; Parley Heath; Scotland." The same localities have been given in Brit. Ent. 1836 with addition that further specimens were captured at the first locality by Mr. BENTLEY, and that two latter records are from Mr. DALE.

multiguttatus

Polycentropus flavomaculatus (PICTET) (Figs. 25–26)

Hydropsyche flavomaculata PICTET, 1834, Rech. Phryg., p. 220, pl. 19, fig. 2. Philopotamus multiguttatus CURTIS, 1835, Brit. Ent., 12, Pl. 544. syn. nov.

CURTIS described *multiguttatus* as follows:

"2. multiguttatus CURT. MSS.

"Male, expansion 6, female 8 lines. Fuscous, iridescent: antennae nearly as long as the superior wings in the male, spotted or annulated with ochre; superior wings with innumerable ochreous spots, with a white dot on a fuscous space on the interior margin, and an oblique line on the disc; posterior tibiae brown, especially the upper side in the male."

"The blacker colour of the upper wings and the hinder tibiae, and the whitish transparent dot and line on the former, most evident in the female, distinguish this from the former species. (Cyrnus trimaculatus").

"It appeared in multitudes on the shores of Loch Fad in the Isle of Bute the beginning of last August."

There are eight specimens in CURTIS collection labelled *multiguttatus* of which two males and two females could be referred to this species, but the remaining four males are *Cyrnus trimaculatus*. This group of specimens together with five specimens of C. trimaculatus in the collection dictates the



Figs. 25–26. Philopotamus multiguttatus CURT. (= Polycentropus flavomaculatus (PICT.) lectoholotype σ genitalia: - 25. lateral; - 26. dorsal

choice of lectotypes for *multiguttatus* and *irroratus*, so that in no case would it be possible to accept a reverse situation for the two species. It was found that *multiguttatus* CURTIS is not the same as *multiguttatus* MCLACHLAN and subsequent authors, but is synonymous with *flavomaculatus* PICTET, whereas this latter species has priority, but *multiguttatus* MCLACHLAN nec CURTIS becomes *irroratus* CURTIS (see above).

There are two localities recorded in the note book: "b. Aug. Loch Fad in multitudes on the shore" and "b. July Lake of Killarney." of which only the first has been published and should be regarded as the type locality.

Abdomens of lectoholotype 3 T-98 and another $\mbox{\tt 2}$ T-97 mounted as microscope slides.

multipunctata

Agraylea multipunctata CURTIS

Agraylea multipunctata CURTIS, 1834, Philos. Mag., 4, 217.

The original description is as follows:

"4 lines: fuscous; crown of head griseous; superior wings with a long ochreous spot beyond the stigma, with several small ones on the posterior margin and along the centre to the base, two oblong ones on the inferior margin and two at the base of the cilia; face, abdomen and legs fulvous."

From the eight specimens in CURTIS cabinet labelled as this species a male lectoholotype is now selected and labelled to that effect. The cleared genitalia preparation shows that the species has been correctly interpreted in the past, but suggestion by EATON (1873) of A. sexmaculata being synonymous is not correct (for discussion see under sexmaculata).

The recorded localities of this species are "29 July Thatford River. 3^d abundant on rushes side of river by Guildford".

Abdomen of lectoholotype 3 mounted as microscope slide T-121.

nebulosus

Limnephilus lunatus CURTIS

Limnephilus nebulosus CURTIS, 1834, Philos. Mag., 4, 123. Limnephilus lunatus McLachlan, 1875, Rev. & Syn. Trich., p. 61.

CURTIS described *nebulosus* as follows:

"14 lines: superior wings yellowish ochre, the posterior margin brown, with a pale lunule on the edge, the inferior margin brown also, with the disc pale, forming 2 lobes below; stigma deep ochreous".

Lectoholotype \mathcal{J} of *nebulosus* is selected from a group of four specimens labelled as *apicalis* in the collection; reasons and explanation for this move being given under *lunatus*. Locality for *nebulosus* in the note book is given as "b. Sept. in bushes Durnford abund. everywhere".

This species is synonymous with *apicalis* and *lunatus*, although *nebulosus* has priority it has been rejected in favor of *lunatus* on the grounds of the revised International Code of Zoological Nomenclature where *nebulosus* falls into the category of being nomen oblitum and not in use for more than 50 years.

nervosus

Anabolia nervosa Curtis

Limnephilus nervosus CURTIS, 1834, Philos. Mag., 4, 124. Limnephilus nervosus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Anabolia nervosa McLachlan, 1875, Rev. & Syn. Trich., p. 103-104. CURTIS described the species as follows:

"14 to 15 lines: superior wings ochreous brown, with a pale lunulate whitish spot near the centre and a dot at the base of the third marginal cell".

Later in the same year further information regarding localities is found in Brit. Ent., 11, Pl. 488 (text): "27 nervosus LEA. - May to October, sides of rivers Heron Court, and between Sandgate and Sand-hills in abundance". This information corresponds with the entry in the note book.

From the four specimens in the collection a lectoholotype 3 and lectoallotype \mathcal{Q} are selected. The interpretation of this species by subsequent authors has been correct and there is no doubt about the identity.

obscurus

Limnephilus auricula CURTIS (Figs. 27-29)



Limnephilus obscurus CUBTIS, 1834, Philos. Mag., 4, 124. Limnephilus auricula McLACHLAN, 1875, Rev. & Syn. Trich., p. 84.

CURTIS described *obscurus* as follows:

"11 lines: superior wings fuscous ochre; the stigma brown, a pale dot at the disc and 2 interrupted transverse lines of dots beyond it; inferior wings tipped with fuscous".



Figs. 27-29. Limnephilus obscurus CURT. (= Limnephilus auricula CURT.) - 27. lectoholotype o genitalia lateral; - 28. dorsal; - 29. lectoallotype Q genitalia lateral

From the five specimens in CURTIS collection labelled as obscurus lectoholotype \mathcal{J} and lectoallotype \mathcal{Q} are now selected. As already believed by MCLACHLAN (1875) it is synonymous with auricula. Although obscurus has priority it is here retained to the suggested synonymy because of the revised

International Code of Zoological Nomenclature by suppressing names which have not been in use for more than 50 years.

The recorded locality in the note book is "4 June sand hills Lowestoft". Abdomen of lectoholotype ♂ mounted as microscope slide T-85, lectoallotype ♀ slide T-86.

ochraceus

Oecetis ochracea (CURTIS)

Leptocerus ochraceus CURTIS, 1825, Brit. Ent., 2, Pl. 57.

Leptocerus ochraceus CURTIS, 1834, Philos. Mag., 4, 214.

Oecetis ochracea McLachlan, 1877, Rev. & Syn. Trich., p. 331.

CURTIS described this species with the following words:

"Ochraceus nob.

"Pale and dull ochre colour. Eyes black. Antennae towards their apex and annulations fuscous. Head and thorax ferruginous, the latter with 3 longitudinal fuscous obscure stripes. Abdomen cinereous. Superior wings long, lanceolate, rounded. Cilia fuscous. Inferior wing semi-transparent. Legs pale.

"In the Author's Cabinet".

From the nine specimens in CURTIS cabinet lectoholotype \Im and lectoallotype \Im are now selected. The figures and descriptions given by McLACH-LAN (1877) and MOSELY (1939) agree well with the lectotype specimens, and need no further remarks on identity. The locality given for this species in the note book is "b. m. June pales Regent's Park" and "e. Aug. Covehithe, Suff."

ochraceus

Limnephilus centralis CURTIS (Figs. 30-31)

Limnephilus ochraceus CURTIS, 1834, Philos. Mag., 4, 124.

Limnephilus centralis McLachlan, 1875, Rev. & Syn. Trich., p. 79.

CURTIS described ochraceus as follows:

"11 lines: superior wings pale fuscous yellow, freckled with yellowish spots; stigma obscure; inferior wings slightly ochreous at the apex."

There is only a single female specimen in the collection which is now labelled as lectoholotype. According to the note book the recorded locality is "June New for."

This species is synonymous with bipartitus, terminalis and centralis, and although having priority over all three of these species, the name ochraceus is kept suppressed to synonymy on grounds of amended Code of Zoological Nomenclature as nomen obli-



Figs. 30−31. Limnephilus ochraceus CURT. (= Limnephilus centralis CURT.) lectoholotype ♀ genitalia: — 30. lateral; — 31. dorsal

tum which has not been in use for more than 50 years. See also discussion under *centralis*.

Abdomen of lectoholotype Q mounted as microscope slide T-87.

ochripes

Agapetus ochripes CURTIS (Figs. 32—33)

Agapetus ochripes CURTIS, 1834, Philos. Mag., 4, 217. Rhyacophila comata PICTET, 1834, Rech. Phryg., p. 194, Pl. 16, fig. 17. syn. nov.

CURTIS described his species ochripes as follows:

" $5\frac{1}{2}$ lines 9: similar to the last; the antennae are rather longer and more slender; the head, thorax and body are subcastaneous, and the legs pale ochre, basal joint of intermediate tarsi dilated elliptical."

The single female in the collection is now selected as lectoholotype. There is no locality given in the note book for this specimen.

The long established belief that A. fuscipes and A. ochripes are synonymous dates back to WALKER's publication (1852) p. 123, and his suggestion has been followed by KOLENATI (1859) and subsequent authors. By comparing female specimens of *fuscipes* with ochripes type it was clearly shown that they are not conspecific, particularly from the difference in wing venation of posterior wing with an additional fork no. 1 and differences in genitalia. It is clear that ochripes belogs to comatus — delicatulus group, and Mr. KIMMINS of British Museum very kindly supplied and gave permission



Fig. 32. Agapetus ochripes CURT. Q abdomen lateral

Fig. 33. Agapetus delicatulus McLACH. Q abdomen lateral to publish this information for separation of females in the two species. In *comatus* the eighth segment is yellowish brown, and in side-view it is excised almost to the base, so that it appears to be divided into tergite and sternite. In *delicatulus* the eighth segment is shining piceous, synscleritous, and with the lateral margins only shallowly excised (Figs. 32 and 33). As *ochripes* agrees fully with characters described for *comatus* they are now regarded as synonymous, and the former has priority.

pagetana

Agrypnia pagetana CURTIS

Agrypnia pagetana CURTIS, 1835, Brit. Ent., 12, Pl. 540.

There are two specimens, one male and one female, in CURTIS collection which he had obtained in later years; they both bear date labels "1 June '40' and "13. 5. 43" respectively.

The holotype female is in the British Museum (Nat. Hist.) collection.

pellucidulus

Hydropsyche pellucidula (CURTIS) (Figs. 34-36)

Philopotamus pellucidulus CURTIS, 1834, Philos. Mag., 4, 213. Hydropsyche pellucidula CURTIS, 1836, Brit. Ins., 13, Pl. 601.

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CURTIS described this species as follows:

"15 lines: head, thorax and abdomen blackish; antennae very long, ochreous, spotted fuscous; wings semitransparent, superior obscurely freckled with pale fuscous and ochre, margin spotted with ochre from the stigma to the posterior angle, and there are longer ochre spots on the inferior margin; legs ochreous, intermediate tarsi dilated".

A total of seven specimens in the collection are placed as *pellucidulus*, but one of them is identified as H. guttatus. One male of the remaining six



Figs. 34-36. Hydropsyche pellucidula (CURT.) lectoholotype & genitalia: - 34. lateral; - 35. dorsal; - 36. ventral

specimens is now selected as lectoholotype. Descriptions and figures of later authors correspond to the characters found in the type and leaves no doubt about correct interpretation of CURTIS species. In the note book the name of this species is entered in two separate places, one with locality recorded as "b. June in Magdalen walks Oxford" the other "July comm. in Perthsh."

Abdomen of lectoholotype \eth mounted as microscope slide T-104, and a female ab domen slide T-117.

plorator

Agapetus fuscipes CURTIS

Agapetus plorator CURTIS, 1837, Guide Brit. Ins. 2nd. Ed. Col. 171. nom. nud.

CURTIS collection contains four specimens, two of them bearing only small printed number labels "280" and "287" respectively; both these specimens are females of Agapetus fuscipes CURTIS. The other two specimens

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are both labelled "3.7.47 riverside Guildford" and it is therefore quite certain that they have been added later to the collection, both are females of Lype phaeopa STEPHENS.

In the note book is the following entry in regard the locality: "4. Plorator C. Ms. m. Aug. Arran".

pullata

Beraea pullata (CURTIS)

Thya pullata CURTIS, 1834, Philos. Mag., 4, 216.

Beraea pullata McLachlan, 1879, Rev. & Syn. Trich., p. 493-495.

CURTIS described his species *pullata* as follows:

"6 lines: black; tarsi shinning whitish; wings with a blueish tint, superior with a few very obscure whitish spots".

Lectoholotype δ is now selected from the group of three specimens in the collection labelled "pullata". Interpretation of this species has been correct and no further comments are necessary. In the note book *pullata* is entered under the genus *Tinodes*; the locality given is "b. June Southampton".

pusillus

Crunoecia irrorata (CURTIS)

Silo pusillus CURTIS, 1829, Guide Brit. Ins. 1st. Ed. nom. nud.

The label "pusillus" in collection drawer is placed under *Goera irrorata*. In the note book the name *pusillus* has been crossed out and corrected to "irroratus Curt. P. M. 4.215" with locality "June G. Wootton".

pusillus

Tinodes pusiilus CURTIS

Tinodes pusillus CURTIS nec FABRICIUS, 1834, Philos. Mag., 4, 216.

Status of this species has been referred to the International Commission on Zoological Nomenclature by Mr. D. E. KIMMINS, who will also publish further details on its taxonomic position elsewere. From the four specimens in the collection three $(1 \ \mathcal{J} \ 2 \ \varphi)$ could be referred to this species, the fourth is *T. waeneri* \mathcal{J} , and has been collected a year later. According to the note book specimens have been captured: ,,15 Aug. & on moss at spring nr. Ventnor, & on face of cliff. b. Sept. June nr. London Ste."

radiatus

Halesus radiatus (CURTIS)

Limnephilus radiatus CURTIS, 1834, Philos. Mag., 4, 125. Limnephilus radiatus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Halesus radiatus McLachlan, 1876, Rev. & Syn. Trich., p. 148-150.

The original description of *radiatus* is as follows:

"19 to 22 lines: pale dirty ochre; superior wings with brown spots and lines variegating the cells, the transverse nervures surrounded with the same colour, the posterior margin brown, with a long pale stripe down each cell, with a brown line in the centre".

From the three specimens in CURTIS collection the male is now selected as lectoholotype, and one female as lectoallotype. This species has been

identified and described correctly by subsequent authors. Some information regarding locality was published 1834 in Brit. Ent., **11**, Pl. 488 (text) as follows: "28 radiatus Lea. — Do. Isle of Wight, and Apple-trees, Glanville's Wootton and m. November paired and feeding on Yew berries, Mr. Walton." In addition to that "banks of Avon, Heron Court J. C." is recorded in the note book.

scotica

Hydroptila scotica CURTIS (nom. nud.)

Hydroptila scotica CURTIS, 1829, Guide Brit. Ins. 1st. Ed.

Label with this name is in the collection, but no specimens are attached. In note book the name is crossed out and replaced by "sparsa" with corresponding locality entry "July Scotland", and probably regarded by CURTIS himself as synonym of the latter.

sexmaculata

Agraylea sexmaculata CURTIS

(Figs. 37–39)

Agraylea sexmaculata CURTIS, 1834, Philos. Mag., 4, 217.

Agraylea pallidula McLachlan, 1875, Neuroptera in Fedtschenko's Trav. in Turkestan, p. 46. syn. nov.

CURTIS described his species *sexmaculata* as follows:

"4 lines: ochreous; antennae fuscous, except at the base; superior wings pale fuscous, with two whitish spots on the costa, two bands towards the apex, and two oblong spots on the inferior margin of the same colour".

There is only a single male specimen in the collection, and it is now designated as lectoholotype of Agraylea sexmaculata. By comparing the



Figs. 37-39. Agraylea sexmaculata CURT. lectoholotype 3 genitalia: - 37. lateral; - 38. ventral; - 39. dorsal

cleared genitalia preparations it was established that the synonymy with *multipunctata* as suggested by EATON (1873) and followed by subsequent authors was invalid. On the other hand McLACHLAN's species *pallidula* agrees with CURTIS type of *sexmaculata* and as a later name should be suppressed to synonymy. The locality and date for *sexmaculata* is given by CURTIS in his note book as "Sept. Lisson Grove". Mr. KIMMINS informed me that this

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locality most probably a street near Marylebone Station, London, and the northern end of it crosses the Grand Union Canal. In the early nineteenth century, when CURTIS was collecting, this area was right on the fringe of London, and it is quite possible that the specimen was taken there.

Abdomen of lectoholotype 3 mounted as microscope slide T-120.

sparsa

Hydroptila sparsa CURTIS

(Figs. 40-41)

Hydroptila sparsa CURTIS, 1834, Philos. Mag., 4, 217.

CURTIS described this species as follows:

"3 lines: fuscous black; antennae and legs fulvous; head gray; superior wings with a silvery white spot on the middle of the costa, another opposite, the margin between this and the base with an interrupted whitish line, and several minute dots of the same colour round the apex".

Only two specimens are placed above the species label "sparsa". A male with attached locality label "6 Aug. Dublin" most probably is *H. angulata*



Figs. 40-41. Hydroptila sparsa CURT. lectoholotype φ : - 40. internal structure of vagina; - 41. chitinized abdominal plate

MOSELY; the other specimen, a female, is now selected as lectoholotype of *sparsa*. Slight variations between figures given by MOSELY (1939) figs. 553 to 555 and those made from the lectotype might be due to different angle of view. The locality has been given as "July Scotland".

Abdomen of lectoholotype \mathcal{Q} mounted as microscope slide T-124; abdomen of \mathcal{J} (*H. angulata*) as slide T-123.

sparsus

Limnephilus sparsus CURTIS

Limnephilus sparsus CURTIS, 1834, Philos. Mag., 4, 123. Limnephilus sparsus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). CURTIS described his species as follows:

"11 to 13 lines: superior wings very silky brown freckled with ochre, with an ochreous mark on the inferior margin towards the angle, inferior wings pale fuscous, brown at the apex; antennae brown, annulated with ochre; anterior tibiae annulated fuscous and ochre."

From the group of six specimens in CURTIS collection one male is now selected as lectoholotype, and one female as lectoallotype and labelled to that effect. There is no doubt of the identity of this species and figures given by MOSELY (1939) p. 72 clearly indicates the main features as found in type specimen.

Information about localities are given 1834 in Brit. Ent., 11, Pl. 488 (text) as follows: "23 sparsus CURT. — B. May and June, Coombe, New Forest and G. Wootton". The same localities are repeated in the note book as well as a few additional ones "Aug. Bute", "June hedge Bagley wood" and "Battersea, marshy districts around London".

stellatus

Potamophylax latipennis (CURTIS)

(Figs. 42-43)

Limnephilus stellatus CURTIS, 1834, Philos. Mag., 4, 125. syn. nov. Limnephilus stellatus CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text).

CURTIS described *stellatus* as follows:

"16 to 17 lines: superior wings very pubescent fuscous ochre, with pale lines at the base and centre of the discoidal nervures, 2 or 3 small spots at the



Figs. 42-43. Limnephilus stellatus CURT. (= Potamophylax latipennis (CURT.) lectoholotype & genitalia: - 42. lateral; - 43. apex of superior appendage

base, a bilobed one near the centre, 2 dots by the transverse nervures and a curved series of pale streaks beyond them; inferior wings fuscous ochreous, very pale at the base".

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Irrespective to the smaller size, more greyish colouring, and more distinct markings on the anterior wings, the cleared genitalia preparation failed to give sufficient reason to warrant specific separation of *stellatus* and *latipennis*. The latter has priority and *stellatus* is now suppressed to synonymy. For further discussion see under *latipennis*.

Information on localities may be found 1834 in Brit. Ent., 11, Pl. 488 (text): "32 stellatus CURT. — Autumn Glanvilles' Wootton, Mr. DALE" and abbreviated version of the same meaning is entered in the note book.

Abdomen of lectoholotype 3 mounted as microscope slide T-94.

stigma

Limnephilus stigma CURTIS

(Figs. 44 - 46)

Limnephilus stigma CURTIS, 1834, Philos. Mag., 4, 123.

The extremly short description by CURTIS is as follows:

"14½ lines: superior wings yellowish ochre; stigma piceous".

A single male specimen in CURTIS collection bears locality label "6 Oct Heron Court" and is now selected as lectoholotype.



Figs. 44-46. Limnephilus stigma CURT. lectoholotype 3 genitalia: - 44. lateral; - 45. ventral; - 46. dorsal

The "beard" on the first apical sector of the posterior wing although present in lectotype is not very conspicuous, but is probably related to the

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rather abraded condition of the specimen. Otherwise there is no doubt of correct interpretation of this species.

Abdomen of lectoholotype 3 mounted as microscope slide T-50.

subnubila

Brachycentrus subnubilus CUBTIS

Brachycentrus subnubila CURTIS 1834, Philos. Mag., 4, 215.

The original description by CURTIS is as follows:

"10 lines: black; head and thorax with woolly griseous hairs; wings pale fuscous, the nervures piceous, especially in the superior, which bear several pale yellow spots on the stigma, the discoidal cell and one between each nervure on the posterior margin; tibiae and tarsi ochreous".

The lectoholotype male is now selected from a group of four male specimens in the collection labelled as *subnubila*. According to the note book specimens have been collected by CURTIS himself and we find the following information: "Ap¹ 11th flying in streets of Worcester & abt. whitethorn hedge over the bridge J. C." and "11 May Mildenhall, on the bridge at Christchurch Hants in profusⁿ J. C."

tenebricus

Limnephilus sparsus CURTIS

(Fig. 47)

Limnephilus tenebricus CURTIS, 1834, Philos. Mag., 4, 123. Limnephilus sparsus MoLachlan, 1875, Rev. & Syn. Trich., p. 94.

CURTIS described *tenebricus* as follows:

"13 lines: superior wings very pubescent, dark brown more or less freckled with ochre, the costa often very ochreous, a spot of the same colour before the stigma and another opposite to it on the posterior margin; stigma piceous; inferior wings slightly fuscous, with the apex brown".

From five specimens in CURTIS collection which are labelled *tenebricus* lectoholotype \mathcal{J} and lectoallotype \mathcal{Q} are now designated. Comparison of genitalia preparations clearly show the similarity with *sparsus* as already suggested by MCLACHLAN (1875). In the note book the following locality entry is found: "July nr. London. No. of Engld. New for. Devon Ste." If any of the localities could be referred to specimens in the collection, it



Fig. 47. Limnephilus tenebricus CURT. (= Limnephilus sparsus CURT.) lectoholotype & genitalia lateral

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would be only the first entry, whereas the rest of information apparently was received from STEPHENS.

Abdomen of lectoholotype 3 mounted as microscope slide T-90.

tenebrosus

Micropterna lateralis STEPHENS

Limnephilus tenebrosus CURTIS, 1829, Guide Brit. Ins. 1st. Ed. nom. nud.

A single male specimen in CURTIS collection labelled as *tenebrosus* was identified as *Micropterna lateralis* STEPH. The name *tenebrosus* has been crossed out in the note book and changed to *latipennis*. No lectotype has been designated.

terminalis

Limnephilus centralis CUBTIS (Figs. 48-49)

Limnephilus terminalis CURTIS, 1834, Philos. Mag., 4, 124. Limnephilus centralis McLachlan, 1875, Rev. & Syn. Trich., p. 79.



Figs. 48-49. Limnephilus terminalis CURT. (= Limnephilus centralis CURT.) lectoholotype 3 genitalia: - 48. lateral; - 49. dorsal CURTIS described terminalis

as follows:

"11 lines: superior wings ferruginous ochre, the inferior portion freckled with brown, leaving a large plain subtrigonate spot on the posterior margin; apex of inferior wings pale ochreous".

There are four specimens in the collection of which lectoholotype \mathcal{J} and lectoallotype \mathcal{Q} are now selected. Cleared genitalia preparation shows that this species is synonymous to *centralis*, which could be referred to for discussion on taxonomic position and priority. As localities in the note book are given "b. m. Aug. Bute & Arran amongst heath".

Abdomen of lectoholotype 3 mounted as microscope slide T-89.

testaceus

Oecetis testacea (CURTIS)

Leptocerus testaceus CURTIS, 1834, Philos. Mag., 4, 214. Oecetis testaceu McLachlan, 1877 Rev. & Syn. Trich., p. 336-337.

CURTIS described his species *testaceus* as follows:

"8 lines: reddish ochre, very pubescent; antennae long; eyes black; cilia fuscous; inferior wings transparent, subfuscous at their tips".

From the four specimens (1 & 3 &) the lectoholotype \Im and lectoallotype \Im are now selected and labelled to that effect. The figures given by McLACH-LAN (1877) and MOSELV (1939) clearly show the main points necessary for identification and no further description is necessary. Unfortunately there is no locality given for this species in the note book, but only date and habitat "9 July beat out of Oaktrees at the base of ... (?)".

^tineiformis

Setodes tineiformis (CURTIS) (Figs. 50-51)

Leptocerus tineiformis CURTIS, 1834, Philos. Mag., 4, 214. Setodes tineiformis McLachlan, 1877, Rev. & Syn. Trich., p. 340.

The species was described by CURTIS as follows:

"6 lines: antennae $4\frac{1}{2}$ lines long, white annulated with black; cinereous pubescent; superior wings very lanceolate, the nervures dotted with fuscous; legs ochreous white".

For some reason the group of three specimens identified by CURTIS as L. tineiformis are in rather poor state of preservation, and the wings are not expanded as in other specimens. One male and one female are identified as



Figs. 50-51. Setodes tineiformis (CURT.) lectoholotype Q genitalia: - 50. la⁺eral; - 51. ventral

Oecetis lacustris PICTET, and only one poorly preserved specimen is tineiformis as interpreted by later authors. This latter specimen is now selected as lectoholotype, mainly for the sake of preserving the well established specific name. Its identification was possible only from the cleared genitalia preparation. According to the note book these specimens had been collected "Oct. I. of Wight".

Abdomen of lectoholotype Q mounted as microscope slide T-119; the abdomen of male and female specimens of *O. lacustris* mounted as slides T-118 and T-126 respectively.

trimaculatus

Cyrnus trimaculatus CURTIS

Philopotamus trimaculatus CURTIS, 1834, Philos. Mag., 4, 213. Polycentropus trimaculatus CURTIS, 1837, Guide Brit. Ins. 2nd. Ed. Col. 169. Cyrnus trimaculatus McLachlan, 1878, Rev. & Syn. Trich., p. 406. The species was described by CURTIS as follows:

"6 lines: fuscous with an ochreous or coppery tinge; similar to *P. variegatus* FAB., but the superior wings are more regularly sprinkled with ochreous dots."

From the five specimens in the collection, which are all males, one is now selected and designated as lectoholotype. Description and figures given by MOSELY (1939) figs. 447—450 agree well with CURTIS specimens and do not require further remarks. According to the note book specimens have been captured at "June Horning Norf."

vectis

Hydroptila vectis CURTIS (Fig. 52)

Hydroptila vectis CURTIS, 1834, Philos. Mag., 4, 217. Phrixocoma sparsa EATON, 1873, Trans. Ent. Soc. Lond., p. 133 (partim). Hydroptila maclachlani KLAPALEK, 1890, Dod. Sezn. Cezk. Trich., p. 177. syn. nov.

CURTIS described his species vectis as follows:

"3³/₄ lines: fuscous; head whitish or ochreous; superior wings with an ochreous spot near the base, an angulated band across the middle, a spot on the cilia at the stigma, and seven round, and one at the apex; legs and belly dull silvery".



GURT. lectoholotype ♂ genitalia ventral Altogether two specimens are associated with *vectis* label in CURTIS collection, one of them without abdomen. Thus only one complete specimen, a male was available, and is now selected as lectoholotype. Cleared genitalia preparation indicated that it is not synonymous with *sparsa*, but with KLAPALEK's species *H. maclachlani*. The latter name is now suppressed to synonymy. Figures and description of *maclachlani* published by MOSELY (1939) p. 272 agree favorably to the lectoholotype of *vectis*. The only locality data available in the note

book is "15 Aug. on the wet moss covering a spring in Ventnor" (Isle of Wight), and should be considered as the type locality.

Abdomen of lectoholotype 3 mounted as microscope slide T-122.

ventralis

Cheumatopsyche lepida (PICTET) (Figs. 53-55)

Hydropsyche ventralis CURTIS, 1836, Brit. Ent., 13, Pl. 601 (text). Hydropsyche lepida McLachlan, 1878, Rev. & Syn. Trich., p. 358. CURTIS described ventralis with the following words:

"7. ventralis CURT. – angustata ? PICT.

"Antennae shorter than the wings, annulated; head and thorax griseous; abdomen slate-colour, beneath silky green or whitish; wings subdiaphanous fuscous, superior ochreous, with silky yellowish pubescence and slightly iridescent, a large obscure ochreous spot on the costa towards the apex, and another on the interior margin beyond the middle; $6\frac{1}{2}$ lines.

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This makes an approach in habit to the genus Tinodes. I took both sexes in July on the steam-boat on Loch Derg".



From the five specimens in CURTIS collection one male is now selected as lectoholotype and one female as lectoallotype. The apical lobes of the aedeagus are not usually outspread as shown in the figures 54 and 55, but they are capable of such movement.

According to the note book time and place of capture have been recorded as "July $\mathcal{J} \cap$ on Steamer Loch Derg".

Abdomen of lectoholotype 3 mounted as microscope slide T-105.

vibex

Stenophylax vibex (CURTIS)

(Figs. 56-58)

Limnephilus vibex CURTIS, 1834, Philos. Mag., 4, 125. Limnephilus vibex CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Stenophylax vibex McLachlan, 1875, Rev. & Syn. Trich., p. 136.

CURTIS described vibex as follows:

"14 to 20 lines: ochreous; superior wings mottled with pale brown, excepting the costa, forming innumerable ochre dots".

From the four specimens in CURTIS collection labelled as *vibex* one male is now designated lectoholotype and figures given by MOSELY (1939) figs. 152—156 correspond very well with this specimen; another male in the same group is identified as *Micropterna sequax* MCLACHLAN; the remaining two are *S. vibex* females. Two localities have been recorded in the note book:

"Halifax Rev. J. B. Reade. 11th June 3 Muller's Copse". The localities recorded in 1834, Brit. Ent., 11, Pl. 488 (text) are Norfolk and Halifax.

Abdomen of lectoholotype 3 mounted as microscope slide T-96; and abdomen of M. sequax 3 as slide T-95.

vinculum

Limnephilus sparsus CURTIS

Limnephilus vinculum CURTIS, 1834, Philos. Mag., 4, 124. Limnephilus vinculum CURTIS, 1834, Brit. Ent., 11, Pl. 488 (text). Limnephilus sparsus McLachlan, 1875, Rev. & Syn. Trich., p. 94.

CURTIS described *vinculum* as follows:

" $9\frac{1}{2}$ lines: superior wings deep fuscous; the stigma a little darker with numerous pale dots, and a larger one before the stigma, two opposite on the inferior margin and another upon the transverse nervures; apex of inferior wings fuscous".

Although the two specimens in CURTIS cabinet labelled as *vinculum* show considerable difference in size and colour pattern on wings, the cleared ge-



Figs. 56-58. Stenophylax vibex (CURT.) lectoholotype & genitalia: - 56. lateral; - 57. dorsal; - 58. ventral

nitalia preparation undoubtedly show that they are in fact the same as L. sparsa as already suggested by McLachlan (1875). According to the note book the locality is recorded as: "June New Forest". The same locality has been repeated in 1834 Brit. Ent., 11, Pl. 488 (text), and should therefore be regarded as the type locality for *vinculum*.

Abdomen of lectoholotype Q mounted as microscope slide T-91.

Summary

CURTIS collection of British Trichoptera contains 491 specimens, and occupies 3 cabinet drawers. From this material 72 lectoholotypes and 21 lectoallotypes are now designated and represent 45 valid species. The only Trichoptera type not located is that of *Tinodes hirtipes* which was one of a small collection of Arctic insects collected by Sir JAMES CLARK Ross.

84 specific names proposed by CURTIS in the order Trichoptera are listed alphabetically, accompanied by the present taxonomic interpretation, followed by the original description, general discussion and information about the type locality.

Zusammenfassung

Die Sammlung der Englischen Trichopteren von CURTIS enthält 491 Exemplare, die in drei Schubladen aufbewahrt werden. Von diesem Material sind 72 Lektoholotypen und 21 Lektoallotypen aufgestellt und bezeichnet worden; und diese repräsentieren 45 gültige Arten. Der Typus von *Tinodes hirtipes* ist der einzige, der nicht ausfindig gemacht werden konnte. Er gehört zu einer kleinen Sammlung Arktischer Insekten, die von Sir JAMES CLARK Ross zusammengebracht wurde.

Die 84 von CURTIS aufgestellten Artnamen der Trichopteren sind alphabetisch geordnet. Zu jedem Artnamen ist die jetzige taxonomische Auslegung angegeben, wie auch die ursprüngliche Beschreibung, allgemeine Besprechung und Information über die Lokalität der Typen.

Резюме

Коллекция, встречающихся в Англии Trichoptera, собранная Сиктіз содержит 491 экземпляр, которые хранятся в трех выдвижных ящиках. Из этого материала установлено и обозначено 72 лектоголотипа и 21 лектоаллотип, они являются представителями 45 действительных видов. Тип *Tinodes hirtipes* единственный тип, которого не удалось найти. Он принадлежит к небольшой коллекции арктических насекомых, которую собрал Sir James Clark Ross.

Установленные Сиктіз 84 названия видов Trichoptera распределены в алфавитном порядке. К каждому названию вида добавлено современное таксономическое толкование, а также первичное описание, общее описание и информация о местообитаниях типов.

List of publications by J. CURTIS

in which references to the Order Trichoptera are made

- 1. 1825. British Entomology,¹) 2, plate 57 and text.
- 2. 1829. A Guide to an arrangement of British Insects. 1st Edition, (4°) 248 pp., London.
- 1833. Characters of some undescribed genera and species indicated in the Guide to an arrangement of British Insects. Ent. Mag., 1, 186-199 (Trichoptera pp. 188-189).
- 4. 1834. British Entomology, 1) 11, plates 488; 497 and text.
- 1834. xxvi. Descriptions of some nondescript British species of May-flies of Anglers. London and Edingburgh Philos. Mag. & Journ. Sci. (3) 4, No. XX (February), p. 120-125.
- 6. 1834. ibid. continued, (3) 4, No. XXI (March), p. 212-218.
- 7. 1835. British Entomology¹), 12, plates 540; 544; 561 and text.

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A. Neboiss, Trichoptera Types Described by J. CURTIS

- 8. 1835. Descriptions & c. of the insects brought home by Commander James Clark Ross. Appendix to the Narrative of a second Voyage in search of a North-West Passage" by Sir John Ross, pp. LIX-LXXX (Trichoptera pp. LXIV).
- 9. 1836. British Entomology¹), 13, plates 592; 601 and text.
- 1836. Zoologische Resultate von John Ross zweiter Nordpol-Reise (Fortsetzung). Insekten von John Curtis Esq., bearbeitet. Mitgetheilt von WIEGMANN, in: Arch. Naturg., 2, 286-294 (Trichoptera p. 288-289).
- 11. 1837. A Guide to an arrangement of British Insects. 2nd Edition, (8°), London.
- 12. 1838. British Entomology, ¹), 15, plate 716 and text.

1) Text pages not numbered.

References others than those by CURTIS

- EATON, A. E., On the Hydroptilidae, a Family of the Trichoptera. Trans. ent. Soc. London, 1873, p. 125-151, 1873.
- HORN, W. & KAHLE, I., Über entomologische Sammlungen. Ent. Beih., 2-4, 1-536, 1935-1937.
- KIMMINS, D. E., Some Changes in Generic Names in the Family Leptoceridae (Order Trichoptera). Entomol. 82, 201-204, 1949.
- -, British Trichoptera (Caddis-Flies). A modified Family Key to the Genera of the Family Limnephilidae, with a Check List of the Species of the Limnephilidae. Ent. Gaz. 7, 29-38, 1956.
- -, Notes on some British Species of the Genus Hydropsyche (Trichoptera). Ent. Gaz., 8, 199-200, 1957.
- -, The Lectotype of *Thya maurus* CURTIS 1834 (*Beraea maurus* CURTIS, 1834). Trichoptera, Beraeidae. Ent. Gaz., **11**, 202-203, 1960.
- KOLENATI, F. A., Genera et Species Trichopterorum. Pars I, Pragae, 180 pp., 1848 Pars II, Nouv. Mém. Soc. Imp. Natural. Moscou, 17 (11), 143-296, 1859.
- McLachlan, R., On new Forms, & c., of extra-European Trichopterous Insects. Journ. Linn. Soc. (Zool.), 11, 98-141, 1871.
- -, A Monographic Revision and Synopsis of the Trichoptera of the European Fauna. London & Berlin, 1874-1880.
- MOSELY, M. E., British Caddis Flies (Trichoptera). London, 1939.
- PICTET, F. J., Recherches pour servir à l'histoire et l'anatomie des Phryganides. Genève, 1834.
- REAUMUR, M., Memoires pour servir à l'histoire des Insectes, 3, 200-201; pl. 14, figs. 1-4, Paris, 1737.
- Ross, H. H., Descriptions and Records of North American Trichoptera. Trans. Amer. ent. Soc., 67, 35-126, 1941.
- Ross, J. C., Account of the Objects in the several Departments of Natural History. In: Appendix to the Narrative of a second Voyage in Search of a North-West Passage, 1829-1833, by Sir JOHN Ross. London 1835.
- SCHMIDT, F., Contribution à l'étude des Limnephilidae. Mitt. Schweiz. ent. Ges., 28, Beih., p. 1-254, 1955.
- WALKER, F., Catalogue of the Specimens of Neuropterous Insects in the Collection of the British Museum. London, 1852.
- WINKLER, D., Die mitteleuropäischen Arten der Gattung Limnephilus Leach. Dtsch. ent. Ztschr., (N. F.) 8, 165-214, 1961.

Comparative table and index of CURTIS Trichoptera species

CURTIS	McLachlan 1875-80	Mosely 1939	present status	page
abdominalis Limnephilus	not listed	not listed	incisus Limnephilus	585
affinis Limnephilus	as before	as before	as before	585
angustata Molanna	as before	as before	as before	585
angustipennis Philopotamus	angustipennis Hydropsyche	angustipennis Hydropsyche	angustipennis Hydropsyche	586
apicalis Limnephilus	lunatus Limnephilus	not listed	lunatus Limnephilus*)	586
auricula Limnephilus	as before	as before	as before*)	587
autumnalis Leptocerus	not listed	not listed	conspersa (?) Triaenodes	587
basalis Limnephilus	pellucidus Glyphotaelius	not listed	pellucidus Glyphotaelius	588
bicolor Leptocerus	bicolor Triaenodes	bicolor Triaenodes	bicolor Triaenodes	588
binotatus Limnephilus	marmoratus Limnephilus	not listed	binotatus Limnephilus	588
bipartitus Limnephilus	vittatus Limnephilus	not listed	centralis Limnephilus	589°
bipunctatus Limnephilus	as before	as before	as before	590
boltoni Glossosoma	boltoni (sic!)	boltoni (sic!)	boltoni Glossosoma	590
brevipennis Limnephilus	as before	brevipennis Phacopteryx	brevipennis Anabolia	592
centralis Limnephilus	as before	as before	as before*)	592
cinereus Leptocerus	as before	as before cinereus Athripsodes		592
coenosus Limnephilus	coenosus Asynarchus	coenosus Asynarchus	coenosus Limnephilus	593
consobrinus Limnephilus	vittatus Limnephilus	not listed	vittatus Limnephilus	593
conspersus Philopotamus	conspersa Plectrocnemia	conspersa Plectrocnemia	conspersa Plectrocnemia	594
costalis Hydroptila	costalis (sic!)	costalis (sic!)	costalis Orthotrichia	594
discoidalis Limnephilus	marmoratus Limnephilus	not listed	marmoratus*) Limnephilus	595
dorsalis Philopotamus	dorsalis Rhyacophila	dorsalis Rhyacophila	dorsalis Rhyacophıla	596

*) Name referred to the International Commission on Zoological Nomenclature.

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CURTIS	McLachlan 1875-80	Mosely 1939	present status	page
elegans Limnephilus	as before	as before	as before	596
emarginatus Limnephilus	pellucidus Glyphochilus	not listed	pellucidus Glyphochilus	596
fenestralis Limnephilus	griseus Limnephilus	not listed	griseus Limnephilus	597
flavipes Silo	pilosa Goera	not listed	pilosa Goera	598
fulvipes Philopotamus	fulvipes Hydropsyche	fulvipes fulvipes Hydropsyche Hydropsych		598
fuscipes Agapetus	as before	as before	as before	599
fuscocupreus Potomaria	not listed	not listed (fuscocupreus Potomaria)		599
garnonsii Acentropus	not listed	not listed	(niveus Acentropus)	600
gracilicornis Mormonia	hirtum Lepidostoma	not listed hirtum Lepidostoma		600
gracilipes Anticyra	pusilla Psychomyia	not listed	pusilla Psychomyia	601
hibernica Hydropsyche	pellucidula Hydropsyche	not listed	pellucidula Hydropsyche	601
hieroglyphicus Limnephilus	digitatus Halesus	not listed	digitatus Halesus	601
hirtipes Tinodes	not listed	not listed	hirtipes Apatania	602
incisus Limnephilus	incisus Colpotaulius	incisus Colpotaulius	incisus Limnephilus	602
instabilis Philopotamus	instabilis Hydropsyche	instabilis Hydropsyche Hydropsyche		603
irrorata Goera	irrorata Cruneocia	irrorata Crunoecia Crunoecia		603
irroratus Polycentropus	flavomaculatus Polycentropus	not listed <i>irroratus</i> <i>Polycentropus</i>		604
lanceolatus Philopotamus	guttata Hydropsyche	not listed	pellucidula Hydropsyche	605
latipennis Limnephilus	latipennis Stenophylax	latipennis Stenophylax	latipennis Potamophylax	605
latipes Anticyra	pusilla Psychomyia	not listed	pusilla Psychomyia	606
longipennis Philopotamus	dorsalis Rhyacophila	not listed dorsalis Rhyacophila		607
lunatus Limnephilus	as before	as before	as before	607
luridus Limnephilus	as before	as before	as before	609

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CURTIS	McLachlan 1875-80	Mosely 1939	present status	page
luridus Tinodes	waeneri Tinodes	not listed	waeneri Tinodes	609
maculicornis Mormonia	hirtum Lepidostoma	not listed	hirtum Lepidostoma	609
maculipennis Odontocerus	albicorne Odontocerus	not listed	albicorne Odontocerus	610
marmoratus Limnephilus	as before	as before	as before*)	610
maurus Thya	maurus Beraea	maurus Beraea	maurus Beraea	611
memorabilis Polycentropus	not listed	not listed	bimaculata Neureclipsis	611
minor Phryganea	as before	minor Nannophry- ganea	minor Nannophry- ganea	611
multiguttatus Philopotamus	multiguttatus (sic!)	multiguttatus (sic!)	flavomaculatus Polycentropus	612
multipunctata Agraylea	as before	as before	as before	613
nebulosus Limnephilus	lunatus Limnephilus	not listed lunatus*) Limnephilus		613
nervosus Limnephilus	nervosa Anabolia	nervosa Anabolia	nervosa Anabolia	613
obscurus Limnephilus	auricula Limnephilus	not listed	auricula*) Limnephilus	614
ochraceus Leptocerus	ochracea Oecetis	ochraceus Oecetis	ochracea Oecetis	615
ochraceus Limnephilus	centralis Limnephilus	not listed centralis*) Limnephilu		615
ochripes Agapetus	fuscipes? Agapetus	not listed ochripes Agapetus		615
pagetana Agrupnia	as before	as before as before		616
pellucidulus Philopotamus	pellucidula Hudropsyche	pellucidula pellucidula Hudropsyche Hudropsyche		616
plorator Againetus	not listed	not listed fuscipes		617
pullata Thua	pullata Bergeg	pullata pullata Bergeg		618
pusillus Silo	not listed	not listed irrorata		618
pusillus Tinodes	not listed	not listed ref. to ICZN		618
radiatus Limnenhilue	radiatus Halesus	radiatus Halesus	radiatus Halesus	618
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CURTIS	McLachlan 1875-80	Mosley 1939	present status	page
scotica Hydroptila	not listed	not listed	(scotica Hydroptila)	619
sexmaculata Agraylea	multipunctata Agraylea	not listed	sexmaculata Agraylea	619
sparsa Hydroptila	as before	as before	as before	620
sparsus Limnephilus	as before	as before	as before	621
stellatus Limnephilus	stellatus Stenophylax	stellatus Stenophylax	latipennis Potamophylax	621
stigma Limnephilus	as before	as before as before		622
subnubila Brachycentrus	as before	as before as before		623
tenebricus Limnephilus	sparsus Limnephilus	not listed sparsus Limnephilus		623
tenebrosus Limnephilus	not listed	not listed lateralis Micropterna		624
terminalis Limnephilus	centralis Limnephilus	not listed	centralis*) Limnephilus	624
testaceus Leptocerus	testaceus Oecetis	testaceus Oecetis	testaceus Oecetis	624
tineiformis Leptocerus	tineiformis Setodes	tineiformis Setodes	tineiformis Setodes	625
trimaculatus Philopotamus	trimaculatus Cyrnus	trimaculatus trimaculatus Cyrnus Cyrnus		625
vectis Hydroptila	sparsa Hydroptila	not listed vectis Hydroptila		626
ventralis Hudropsyche	lepida Hydropsyche	not listed <i>lepida</i>		626
vibex Limnephilus	vibex Stenophylax	vibex vibex Stepophylar		627
vinculum Limnephilus	sparsus Limnephilus	not listed	sparsus Limnephilus	628

Index of species names others than those by CURTIS

albicorne SCOP. (Odontocera) angulata MOS. (Hydroptila) articularis PICT. (Ernodes) bimaculata LINN. (Neureclipsis) borealis ZETT. (Limnephilus) cingulatus STEPH. (Potamophylax) comata PICT. (Rhyacophila) conformis NEBOISS (Glossosoma)	610 620 611 611 589 606 616 591	digitatus SCHR. (Halesus) flavicornis PICT. (Hydroptila) flavomaculatus PICT. (Polycentropus) geniculata MCLACH. (Plectrocnemia) . griseus LINN. (Limnephilus) hirtum FAB. (Lepidostoma)600, ignavus MCLACH. (Limnephilus) lacustris PICT. (Oecetis)	601 594 612 594 597 609 593 652
conformis NEBOISS (Glossosoma) conspersa RAMB. (Triaenodes) delicatulus MCLACH (Agapetus)	591 587 646	lacustris PICT. (Oecetis) lateralis STEPH. (Micropterna)	652 624
activities and an and an and an and an and and and	010	in printer 1 202. [One and an opsgene]	040

maciachian KLAP. (Hyaropilla) 626	sequax MCLACH. (Micropterna) 627
niveus OLIV. (Acentropus – Lepido-	tetensii Kolbe (Orthotrichia) 594
ptera) 600	tineoides DALM. (Hydroptila) 594
pallidula McLACH. (Agraylea) 619	vernalis PICT. (Glossosoma) 590
pellucidus RETZ. (Glyphotaelius) .588, 596	vittatus FAB. (Limnephilus) 593
phaeopa STEPH. (Lype)	waeneri LINN. (Tinodes) 609
pilosa FAB. (Goera) 598	xanthodes McLACH. (Limnephilus) 588
pusilla FAB. (Psychomyia)601, 606	ti i jena socionosia jenanosiano je na social na

Untersuchungen zur Variationsbreite von Chirothrips aculeatus Bagnall

(Thysanoptera: Thripidae)

THEO WETZEL

Institut für Phytopathologie der Karl-Marx-Universität Leipzig

(Mit 1 Textfigur)

Im Rahmen von Untersuchungen über die an Gramineen auftretenden Thysanopteren bereitete uns die Determination der Arten *Chirothrips aculeatus* BAGN. und *Chirothrips angusticornis* BAGN. erhebliche Schwierigkeiten, da die von PRIESNER (1949) angegebene Variationsbreite einzelner wichtiger Merkmale nicht ausreichte, beide Arten eindeutig gegeneinander abzugrenzen. Auch das Studium der Artbeschreibungen von BAGNALL (1927, 1932) konnte keine Klärung herbeiführen, zumal *Chirothrips* aculeatus BAGN. hier nur unvollständig beschrieben worden ist.

Inzwischen hat zur STRASSEN (1959) klärende Untersuchungen zu diesem Problem veröffentlicht. Sie führten zu dem Ergebnis, daß es sich bei *Chirothrips aculeatus* BAGN. und *Chirothrips angusticornis* BAGN. um eine einzige Art mit großer Variabilität handelt, für die nach der Prioritätsregel der wissenschaftliche Name *Chirothrips aculeatus* BAGNALL 1927 Gültigkeit besitzt.

Da unser Tiermaterial mit großer Wahrscheinlichkeit einer einheitlichen Population entstammte — es wurde in den Jahren 1957 und 1958 ausschließlich in einem *Lolium*-Bestand des Saatzuchtbetriebes Plaußig gefunden — erschien es angezeigt, die von zur STRASSEN (1959) vorgenommene Neubeschreibung sowie die von ihm angegebenen Meßwerte systematisch wichtiger Merkmale mit den von uns ermittelten Angaben zu vergleichen.¹) In Übereinstimmung mit zur STRASSEN (1959) kann für die Spezies Chirothrips aculeatus BAGN. folgende allgemeine Beschreibung gegeben werden:

Chirothrips aculeatus BAGNALL 1927

Weibchen: Geflügelt, verhältnismäßig groß, dunkelbraun bis schwarzbraun gefärbt, kleinere Exemplare zuweilen etwas heller. Spitzen der Vordertibien, alle Tarsen und das 3. Fühlerglied deutlich aufgehellt. Vorderflügel graubraun.

¹) In diesem Zusammenhang sei Herrn Prof. Dr. E. TITSCHACK (Hamburg) für die freundliche Unterstützung bei der Deutung und Auswertung des umfangreichen Zahlenmaterials und für die Überprüfung der angefertigten Dauerpräparate der gefundenen Thysanopteren-Arten nochmals herzlich gedankt.

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ZOBODAT - www.zobodat.at

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