

March 1988

**EMPID AND DOLICHOPODID STUDY GROUP NEWSHEET NO 5****Editorial**

We are grateful to Jon Cole, Peter Dyte and Peter Chandler for their contributions to this issue of the Newsheet; there are not as many contents as in some earlier ones but it was felt that, rather than delay the issue in anticipation of further contributions, we would make Jon's amendments to the Medetera key available as soon as possible, and well in advance of the more formal publication which is to follow. Also Peter Chandler's note on Xanthochloros and Campscinemus deserves early circulation.

In addition, the list of RDB Empids and Dolis will be of immediate use to those who do not have their own copy of the Red Data Book; Peter's summary comments are also very helpful.

May I suggest that if anyone comes across relevant accounts of Empids and Dolis in journals which are not in general circulation in the UK, a suitable note be published in the Newsheet. A case in point is the little piece on Platypalpus kirtlingensis which came to my attention when Dr Grootaert kindly sent me an off-print of his paper.

Finally, please let Anthony Bainbridge or myself have any items for the next Newsheet before the end of August.

Roy Crossley, 46 St David's Road, Otley, West Yorkshire, LS21 2AW.

**SOME REMARKS ON Ortochile nigrocoerulea**

First, I fear, some nomenclatorial comments. Dr Hans Ulrich has drawn my attention to the fact that the correct (ie original) spelling of this generic name is Ortochile, not Orthochile. In the second edition (1976) of the Kloet and Hincks checklist, I followed Becker and Parent as a subgenus of Hercostomus, and, understandably, this practice was followed in Fonseca's handbook. This was an unfortunate mistake on my part. Ortochile Latreille 1809 is an older name than Hercostomus Loew 1857, so if these taxa are related as subgenera then the genus must be called Ortochile, with Hercostomus and Ortochile ss as subgenera. This would involve the horrific prospect of changing the generic name of all our Hercostomus, to say nothing of nearly 300 more species from overseas. Our knowledge of relationships between these flies is much too meagre to justify this. It can be avoided if Ortochile is given full generic rank, related to, but not part of, Hercostomus, and this is the practice I think we should follow.

Second, and more interestingly, what about the insect itself. Fonseca says 'usually frequent where it occurs' and lists eleven localities in Cambs, Essex, Kent, Devon and Dorset. I think the Devon record is an error because Verrall (1095) mentions this species from Lee in Kent, not Lee in Devon. There is an old record from Felden, Herts in Gibbs and Barraud's (1908) list of Herts Diptera which is supported by specimens in the BMNH, and this museum also has specimens from Warnock, Sussex; Flatford, Suffolk; and Norbury, Surrey. Thus Ortochile nigrocoerulea appears to be known only from the south east. I have not taken it in England, but have collected it in the Mediterranean region where it appears to be much more common than it is here. I wonder therefore whether this species is a migrant, and whether when several specimens are found they may represent the progeny of a few females reaching England from the south when weather conditions are appropriate. One way of testing this hypothesis is to examine whether years in which O. nigrocoerulea has been found coincide with "good years" for better recorded migrants from southern Europe such as the Clouded Yellow Butterfly (Colias crocea). I am therefore trying to assemble all records of O.

nigrocoerulea from the UK and would be grateful for information from anyone who has collected it, or has specimens. Information on specimens from older collections would be particularly useful even if they are from published localities, as the number of specimens taken on any occasion may be relevant.

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**MODIFIED KEY TO Medetera**

The addition of Medetera parenti, bred out by Ivan Perry near Cambridge, and M. veles found by Tony Irwin and myself in Scotland, necessitates altering the key in the Dolichopodid Handbook. Non-genitalic characters applicable to both sexes are used, and only the end of the key from couplet 27 needs to be changed. Details of these species will be published elsewhere. I am always pleased to look at any Medetera causing problems or doubts.

- |     |  |                              |
|-----|--|------------------------------|
| 27  | Unchanged.   | 28                           |
| -   | Two or more strong propleural bristles, sometimes with additional weaker upper ones in <u>parenti</u> .                                    | 29                           |
| 28  | Unchanged.   |                              |
| -   | Unchanged.   |                              |
| 29  | Clypeus dull black or dusted grey or brown.  | 29a                          |
| -   | Clypeus strongly shining green, blue or purple, only narrowly dulled or dusted at sides.   | 29b                          |
| 29a | Thorax not striped. Arista not more than 1.5 times length of antenna. Apical section of discal vein strongly curved. Larger sp 3-3.5mm.    | <u>melancholica</u> Lundbeck |
| -   | Thorax with distinct stripes. Arista more than 4 times length of antenna. Apical section of discal vein almost straight. Smaller sp 2.5mm. | <u>veles</u> Loew            |
| 29b | Clypeus brilliantly shining green.   | 30                           |
| -   | Clypeus brilliantly shining blue-purple.   | 31                           |
| 30  | Thorax conspicuously and broadly striped. Acrostichals very small and numerous. Larger sp 4.25-4.5mm.                                      | <u>diadema</u> (L.)          |
| -   | Thorax unstriped. Acrs normal. Smaller sp. 3.75-4.25mm.  | <u>parenti</u> Stackelberg   |
| 31  | Unchanged.   |                              |
| -   | Unchanged.   |                              |

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### Platypalpus kirtlingensis Grootaert, In Britain

Dr Patrick Grootaert of Brussels has recently described Platypalpus kirtlingensis as a new species (Bull. Anns Soc. r. belge Ent. 122 [1986]: 187-193), the name being derived from the locality, Kirtling, where the Holotype was collected by J E Collin in June 1921. P. kirtlingensis is closely similar to P. pictitarsis (Becker), and according to Grootaert, the easiest way to separate the two is by the colour of the coxae which in P. pictitarsis are black and in P. kirtlingensis they are yellow. I have re-examined my own specimens of P. kirtlingensis in the light of Dr Grootaert's paper and all of them appear to be the new species. My specimens are from three widely differing Yorkshire localities, these being Thorne Moors, a peatland site, the river bank at Otley, and Hetchell Wood near Wetherby which is on the Magnesian Limestone. Kirtling is in Cambridgeshire, not far from Newmarket.

In his paper Dr Grootaert mentions, somewhat tantalisingly, that there are more undescribed species related to P. pictitarsis to be dealt with in another paper, so the prudent course is to retain all specimens for future examination.

Roy Crossley

### EMPIDS AND DOLIS IN THE BRITISH RED DATA BOOK

The British Red Data Book 2, Insects, published by the NCC in 1987, attempts to list the most threatened (not the most rare) British insects in the main insect orders. It lists 270 Endangered, 226 Vulnerable and 328 Rare species of Diptera. Thus almost 14% of the known British species of Diptera are allocated to these categories. The lists are followed by individual accounts of particular species. It is hoped that the lists will help conservationists in assessing faunal lists and evaluating sites. It is also hoped that the lists will stimulate entomologists to find out more about the species listed, and to do more to ensure their survival in Britain.

The category definitions and species listed for Empids and Dolis are as follows:-

**ENDANGERED:** Taxa in danger of extinction and whose survival is unlikely if the causal factors continue operating.

**Empididae:** Tachypeza heeri, T. truncorum, T. acklandi, T. halidayi, T. woodi, Platypalpus alter, P. analis, P. carteri, P. excisus, P. inexpectatus, P. infectus, P. ingenuus, P. longimanus, P. mikii, P. niveiseta, P. ochrocera, P. pygialis, P. subtilis, P. tonsus, P. unicus, Symballophthalmus pictipes, Syndyas nigripes, Syneches muscarius, Leptopeza borealis, Oedalea oriunda, Rhamphomyia aethiops, R. albidiventris, R. breviventris, R. ignobilis, R. marginata, R. physoprocta, R. plumipes, R. trigemina, R. vesiculosa, Empis limata, E. melaena, Hilara aeronetha, H. gallica, H. merula, H. pilosopectinata, H. setosa, Chelifera astigma, Weidemannia impudica, W. lamellata.

**Dolichopodidae:** Sciapus heteropygus, Dolichopus laticola, D. lineatocornis, D. melanopus, D. nigripes, D. plumitarsis, D. signifer, Hercostomus sahlbergi, Poecilobothrus majesticus, Thrypticus cuneatus, Cyrturella albosetosa, Rhaphium pectinatum, Syntormon macula, Neurigona abdominalis, Diaphorus hoffmannseggii, D. winthemi, Acropsilus niger, Telmaturgus tumidulus.

**VULNERABLE:** Taxa believed likely to move into the Endangered category in the near future if the causal factors continue operating.

**Empididae:** Platypalpus aeneus, P. albicornis, P. divisus, P. luteolus, P. pallidicoxa, P. stabilis, P. stigma, Hormopeza obliterated, Rhaphomyia murina, Empis laetabilis, E. volucris, Hilara barbipes, H. germanica, H. hirta, H. medeteriformis, H. submaura, Hemerodromia melangyna.

**Dolichopodidae:** Dolichopus agilis, D. caligatus, D. cilifemoratus, D. maculipennis, D. medicornis, Hercostomus angustifrons, H. fulvicaudis, Peocilobothrus ducalis, Hydrophorus rufibarbis, Rhaphium penicillatum, Syntormon mikii, Nematoproctus distendens, Melanostolus melancholicus, Argyra auricollis, A. grata.

**RARE:** Taxa with small populations that are not at present Endangered or Vulnerable, but are at risk.

**Empididae:** Platypalpus articulatus, P. aurantiacus, P. confinis, P. interpolus, P. pseudociliaris, P. rapidus, P. sylvicola, Ocydromia melanopleura, Oedalea apicalis, Rhaphomyia albosegmentata, R. hirtula, Empis prodromus, E. woodi, Hilara media, H. recedens, Dolichocephala ocellata, Clinocera nivalis.

**Dolichopodidae:** Dolichopus andalusiacus, D. arbustorum, D. linearis, D. migrans, Hercostomus platiatus, Hydrophorus viridis, Schoenophilus versutus, Aphrosylus mitis, Medetera cuspidata, M. excellens, M. infumata, M. inspissata, M. melancholica, M. oscillans, M. pinicola, M. striata, M. unisetosa, Thrypticus divisus, T. nigricauda, T. tarsalis, Systemus pallipes, S. tener, Campsicnemus compeditus, C. magius, C. pectinulatus.

The individual species accounts of Endangered and Vulnerable species are restricted to a representative selection in the case of the Diptera. For our two families only Syneches muscarius and Poecilobothrus ducalis are included.

There are two other categories - OUT OF DANGER for species previously Endangered, Vulnerable or Rare, but now considered secure; and finally ENDEMIC for those taxa not known to occur naturally outside Britain (which for the purposes of this Red Book excludes the Channel Islands and the whole of Ireland). No Diptera are listed in either of these categories. There are, of course, a few flies as yet known only from Britain, for example Rhaphium gravipes Haliday, but this is probably a reflection of more intensive study of Diptera here than in continental Europe.

C E Dyte

#### **BRC SITE-VISIT CARDS**

Newsheet No 4 (November 1987) included a note under the above heading, setting out details of the recently produced cards for Empids and Dolis. The stock is held by BRC at Monks Wood and a Business Reply label is enclosed for use in ordering supplies.

Over twenty people collected cards at the Annual Dipterists' Meeting last October, but it is hoped that more dipterists will now obtain a supply in anticipation of the forthcoming field season.

Roy Crossley

## SPECIMENS WANTED!

We have received a request from Marc Pollet of Gent for the loan of specimens of Hercostomus assimilis. Dr Pollet believes that there are at least three species masquerading under this name, and he plans a complete revision of the complex to include also the closely related H. aerosus and H. metallicus.

He asks that loan material be preferably in alcohol, but dry mounted specimens are also acceptable. Full data will be helpful, including habitat description. Specimens will be returned at the conclusion of the study and if you wish material not to be dissected, please say so.

The address to which specimens should be sent is:-

Dr Marc Pollet, Lab Animal Ecology, Zoogeography and Nature Conservation, State University Ghent, K.L.Ledeganckstraat 35, 9000 Gent (Belgium).

Roy Crossley

## DOLICHOPODIDAE IN BELGIUM

The following paper has been received:- Pollet, M., Verbeke, C., & Gootaert, P., 1987. Preliminary results of the investigation on the distribution of dolichopodid flies (Diptera: Dolichopodidae) in Western Flanders (Belgium). Bull. Annls Soc. r. belge Ent 123:338-345.

In Britain we are just starting to collate records so it is interesting to see what has already been achieved in Belgium. Apart from museums, field sampling entailed sweeping, together with some use of Malaise traps, water traps and pitfall traps. Data from most of the 96 UTM 2.5km squares has been analysed. 184 species are listed, the commonest being Dolichopus unguatus, D. plumipes, Sympycnus pulicarius, D. brevipennis and Campscinemus curvipes in that order. Comments are given on the more frequent species for various habitats and genera.

Alan Stubbs

## EMPIDIDAE IN THE NETHERLANDS

Dr van der Goot, known to many of us for his book on hoverflies, is currently working on empids. Excerpts from two recent letters will be of interest.

"I do faunistics about Empis in our country and the original number of species (31) has been brought up to 40 with two more species in the waiting room yet (material present but their names are still a problem). I have also the unknown female of E. laminata Collin and found hundreds of males in malaise trap material. Of this species, as far as I know, only the male holotype was known from Czechoslovakia (not Hungary as published by Collin). Several Empis species are rather common in our country, and in Belgium but are absent in GB which is peculiar (ao E. albopilosa De Meijere)."

"It is remarkable several species have a very different frequency in GB compared to NL. Some examples: Empis digramma Meigen is common in every deciduous wood in the Netherlands. Collin (1961) mentions eight localities for GB and commented 'X. digramma is by no means a common species'. Of Empis prodromus Loew Collin mentioned only four localities in Suffolk for all GB. I have from our country of the last three years only far over 200 specimens. With the specimens of other collections incorporated there are about fifty localities!"

Should you have any comments, I am sure he will be please to hear from you (V S van der Goot, N Anslijnstraat 42, 1068 WN, Amsterdam, NL. Tel 020-103942).

Alan Stubbs

### Three Campsicnemiinae recently discovered in Britain and Ireland

Some preliminary notes can be given on some Dolies new to the fauna of the British Isles. Two of them have so far turned up in Ireland only and these notes are offered to alert collectors to the possibility of finding them in Britain also.

In news sheets no. 3 Peter Dyte drew attention to a third British species of Xanthochlorus and mentioned the male characters which were illustrated by Negrobov (1978, Vest, Zool., 1978 (2): 17-26). When sorting the genus I found two males which agree with X. tenellus in the largely yellow thorax, but which have the gonopods straight and broadened apically as in ornatus. They differ from tenellus in having the green restricted to the prescutellar depression only while all tenellus males I have seen, have the green area vaguely extended forward at least as far as the suture. The gonopods are longer and more slender before the enlarged tips than in ornatus and the genitalia differ in several other respects.

These specimens are from Cuckoo Wood, Downe, Kent, 20. vii. 1985, in beech woodland on the Chalk, and from Black Cliff, Gwent, 9.vii. 1986, in woodland on limestone. A female from the first locality with the thorax entirely yellow is probably conspecific. The male genitalia agree most closely with ultramontanus Becker, of which Negrobov only reproduced Becker's figure but had not seen any examples. However, only the third antennal segment is dark while ultramontanus is said to have the two apical segments dark. Further work is necessary to confirm the identity of our fourth Xanthochlorus.

Of the two Irish species one is certainly identified, Campsicnemus dasyncnemus (Lowe), while the other is still of very dubious identity. One male C. dasyncnemus (wing length 1.9mm) was collected in extensive open marsh/fenland, surrounded by cattle grazed fields with much Juncus and Iris at Glen Lough, Co. Westmeath, 28. vi. 1987. It is easily recognised from the figure of the male mid leg given in Parent's Faune de France volume. In Fonseca's Handbook it runs to curvipes from which it differs in the mid metatarsus being longer than the second segment. Femur 2 has a series of strong spines ventrally (longer towards the base), tibia 2 has a semicircular ventral flange near the base, a series of long blunt bristles along its length ventrally and 3 similar bristles in the middle third dorsally. Tibia 3 has rows of long fine anteroventral and posteroventral hairs along most of its length. Parent records dasyncnemus from France including Pas de Calais, Germany and Denmark, so it should be sought in Britain in similar habitats to the Irish one.

The third new species (wing length 2.7-3mm) runs to Campsicnemus in Fonseca's generic key because the face is broadened below but the upper two thirds are nearly parallel sided and rather narrow in the male, broader in the female. It has entirely simple legs in the male and is distinguished from the Campsicnemus species with this character by the straight parallel cubital and discal veins and the entirely dark antennae. It resembles Micromorphus in the dark thoracic bristles and hairs but is larger than the British species with the body obscurely dark greenish and the wings grey shaded with the posterior cross-vein and surrounding membrane contrasted whitish. The legs are yellow with dark shades on the femora.

This species has occurred at four localities in Ireland, found by sweeping along shaded woodland streams and was certainly in large numbers at one locality, Crawfordsburn near Belfast so it is surprising that Haliday, who lived nearby at Holywood, did not find it. Peter Dyte is currently investigating the identity of this species, but it is mentioned here to encourage collectors to seek it in similar habitats in Britain.

I am grateful to Peter Dyte for his views on the specimens of these three species and for his continuing research into the identity of the third species.

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