

Newsletter No. 26 Autumn 2021

Editorial

This year's newsletter has some welcome snippets on the empid and hybotid front, but lacks my usual round-up of interesting dolichopodids at the annual summer field meeting that was postponed to this year. I am probably not alone in having had trouble finding the usual abundance of dolichopodids this year, even in the wet west, which is perhaps due to the exceptionally dry April hammering wetland species at a critical point in their larval development. We are unlikely to ever have sufficient data in the E&D scheme to be able to analyse the effects of climatic extremes but low-key anecdotal data is probably sufficient to build up a picture of how weather affects this group. So, more records please!

Microphor woes

Martin Drake

This genus of tiny dark flies is the sister group of all other dolichopodids, and looks far more like a hybotid than a dolichopodid. Sweeping low tree foliage seems to be a productive way of finding them. In earlier days when Microphor was an 'empid', Collin (1961) included three species in his British Flies - Empididae and all seemed hunky-dory. Plant and Cole (2005) added strobli, which is fairly distinctive, and hinted at another species lurking under crassipes. In my own collection, I recently unearthed two distinct forms of *crassipes* that are clearly different species. In the meantime, Miroslav Barták had found several more western Palaearctic species, and recognised my two forms of crassipes in the collection of the Czech University of Life Sciences in Prague. He considers that they are probably Meigen's crassipes and Collin's intermedius which Collin uncharacteristically described rather poorly but I need to confirm this by checking the type specimen in Oxford University Museum. Now Patrick Grootaert and Jürgen Kappert have found at least two types of holosericeus, and molecular data suggests even more forms.

So *Microphor* is a taxonomic nightmare. Do keep your specimens although it may be difficult to name them on external features alone, and you do need to make a good genitalia mount. Chvála's (1983) figures are not as detailed or accurate as we now find necessary and, even if you reach a name using his key, it may refer to more than one species.

Corrections to keys to British Platypalpus

Stephen Hewitt

I am grateful to Rob Zloch for pointing out a couple of errors in the keys to British *Platypalpus* that are in circulation. The corrections are given in **bold** below.

The first correction concerns the key produced by Adrian Plant and published in Issue 17 (2012) of this newsletter. The first part of Key I, couplet 13 should read:

This mistake was repeated in the updated version of the key that I produced for attendees at the Dipterist Forum workshop on Empids and Hybotids in 2019, except that here it appears in couplet 14 in Key I.

The second correction only concerns the updated version of Adrian's key that I produced in 2019, where for some inexplicable reason I managed to corrupt the couplet concerning *P. infectus*. Key E, couplet 13 should read:

Vt setae closer together (hardly 1.5X width of frons by anterior ocellus); F_2 **much** stouter than F_1 ; legs otherwise yellow with conspicuous black 'knees'. infectus (Collin)

Swarming over umbels by male *Hilara* longivittata

Nigel Jones

Most Dipterists are used to finding Hilara species by looking for swarms over running and standing water or beneath and to the side of markers such as trees. Just a few species have been noted swarming in dry biotopes (Chvála, 2005), one of which is *H. longivittata*. Chvála mentions that Adrian Plant "observed both sexes visiting umbels and described large swarms of several hundreds of individuals formed at 1-2 cm in the lee of higher cover". On 23 June 2021, at Quina Brook, Shropshire (SJ5232) I noted three small swarms of around twenty H. longivittata tightly spaced over umbels of hogweed Heracleum sphondylium. The individuals in the swarm circled over the umbels, mostly in a clockwise direction, but the odd individual circled anti-clockwise. At the same time the flies moved a short distance up and down. Swarming was quite close to the flower umbel at about 2-3cm. For anyone wishing to view this swarming activity, I have uploaded a short video to my Flickr pages at:

https://www.flickr.com/photos/insectman/51266663138/in/photostream/, but rather than typing all that out, go to the Flickr website and search for photos (videos are included in search returns) using the term "hilara longivittata swarm".

Courtship in Poecilobothrus principalis

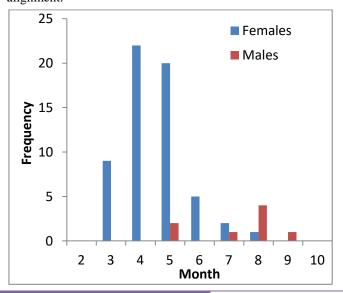
Martin Drake

I'm sure this will have been published already, but here is my observation on the behaviour of one of the less common Poecilobothrus. On the short grassy sward of some upper saltmarsh at Chichester Harbour, West Sussex, there were frequent small shallow pools with sparse margins of 'rush' (probably sea club-rush – I didn't check). On one pools about a metre across, which was about half wet mud and half open shallow water, Poecilobothrus were doing their usual courtship. Closer inspection showed that mixed with the common nobilitatus was principalis, in similar proportions and both species actively courting. The dance of principalis was perhaps slightly less refined than that of *nobilitatus* but it had the same elements of the male wing-waving, hopping over the female and circling. Both species were also probably feeding on the abundant larvae of mosquitoes and probable limoniids. (18 July 2019 at SU765041).

Syntormon macula phenology

Martin Drake

I received a surprise parcel from Mike Paskin of two males of Syntormon macula and several records, having written recently that I knew of only seven male specimens (Drake 2021, see Recent Literature). Mike's records were from the Welsh border at Hereford / Radnorshire, and north Somerset. The few extra dates have allowed a basic analysis of flight period for records where a sex has been allocated. The data support J.E. Collin's suggestion to d'Assis Fonseca (1949) that males may occur later in the year (Fig. 1). So not only does this species have a bizarre over-representation of females, it also has a curious difference flight period between the sexes, females occurring mainly in spring and males mainly in midsummer. This is the opposite flight pattern to that found in most flies, in which males emerge before females, and the two sexes are also way out of temporal alignment.



Oleg Negrobov

Roy Crossley

In January 2021 Dr Igor Grichanov (St Petersburg) notified dolichopodid workers of the death of Dr Oleg P. Negrobov at the age of 79, accompanied with a brief account of his life and work. He had spent his entire career at Voronezh University where he had been a student and where he held the Chair of Zoology and Parasitology, but to most of the dipterological community he will be remembered as a prolific writer of papers on dolichopodid taxonomy and ecology. It is in this connection that his name will be familiar to readers of 'D.D.'

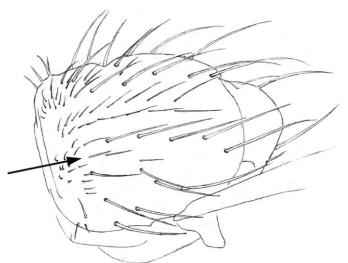
I had the pleasure of meeting Oleg at the 1990 Congress of Dipterology at Bratislava and I have pleasant memories of his cheerful friendliness. I still treasure the traditionally decorated spoon he gave me as a token of his friendship, and from time to time since then we corresponded on matters to do with dolichopodid taxonomy. He was invariably helpful and we managed somehow to communicate satisfactorily in spite of his difficulties with English and my non-existent Russian.

He will be much missed.

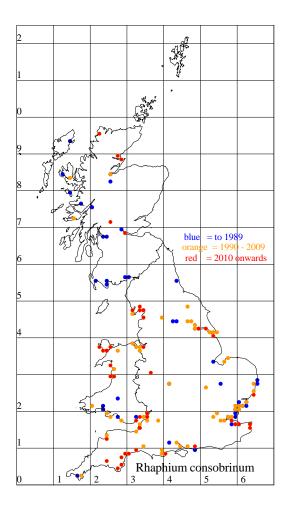
Confusion in Rhaphium consobrinum and laticorne

Martin Drake

While I was preparing a new key to female *Rhaphium*, I found plenty of errors in my collection. Some of these may have originated from Jon Cole's suggestion in E&D Study Group Newsheet 3 (1987) that the alternative key provided by d'Assis Fonseca (1978) worked better. I now think that you are more likely to go wrong using the alternative key, particularly with the *consobrinum / laticorne* pair. The figure



shows where these little extra hairs are, used first by Parent (1938) and repeated by d'Assis Fonseca, and they are not too difficult to see. Here are maps of these two species based on the E&D dataset. I think that nearly all those inland consobrinum records will turn out to be laticorne, since consobrinum seems to be a specialist of saltmarsh where it can be frequent, whereas laticorne is a freshwater species. Some inland sites for consobrinum may perhaps have saline influence, in which case this confirms the habitat requirement. If you have genuine inland consobrinum records, please let me know as I will need to alter my draft Handbook text.



Thrypticus work in progress

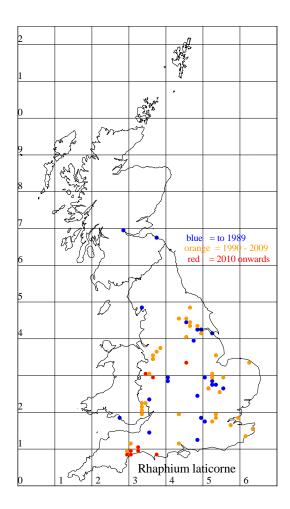
Martin Drake

Together with David Gibbs and Andy Godfrey, I am working on nearly doubling the number of species of *Thrypticus* mentioned by d'Assis Fonseca, from 7 to 13 species. No-one will thank us for this as it makes a tricky group even worse. I am happy to look at anyone's *Thrypticus* which could well contain some of the 'new' species, or maybe a species that we've not encountered ourselves. Females will continue to be a problem.

Some interesting dolichopodid records in 2020 Martin Drake

Chrysotimus flaviventris — I previously pointed out that this species occurs sparingly in Scotland where the 'common' C. molliculus is absent (E&D Newsletter 20, 2015). This genus is most often found by sweeping low tree foliage. Murdo Macdonald made two records by beating the foliage of yew (Taxus) and lime (Tilia), which is not a method dipterists tend to use. (Dundreggan NH331146, 23.vii.2020; Brahan Estate NH5154, 9.vii.2020).

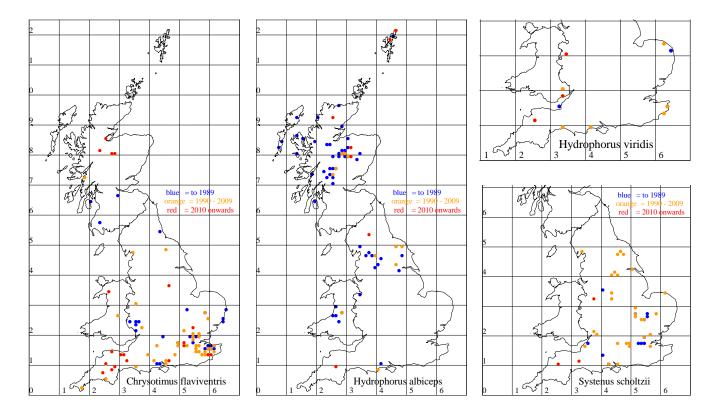
Hydrophorus albiceps – Karl Graham added two northern records in 2020 for this predominantly northern species, at the



tip of Shetland close to an earlier 1987 record by Brian Laurence. Karl's records are almost as far north as you can get. I produced a map of this species in E&D Newlsetter 19 (2014) in an note that highlighted the few southern records, so this species spans 1100km in Britain. I have records for only 14 dolichopodids from Shetland.

Hydrophorus viridis — Most records of this uncommon species are from coastal habitats including soft cliffs, dunes and saline scrapes, but a few verified records come from inland localities. The latest inland records were made by Rob Wolton from exposed river sediments (ERS) of the R. Torridge (SS548134, 1.vi.2020) and by Nigel Jones a few years ago from a gravel pit (Gonsal Quarry, SJ480, 6 & 21.vi.2016). The only other inland record is from Welsh ERS. The common factor in many of the records appears to be well-drained course material.

Systenus scholtzii – Trapping and rearing are often cited as the methods to find this genus. Rob Wolton twice caught single females in bottle trap placed over small water-filled ash rot hole (Scadsbury Copse and Moor, SS519014, 29.v. & 1.vi.2020), although I had previously found it (and leucurus) by sweeping up-and-down trunks while searching for Medetera and Neurigona.

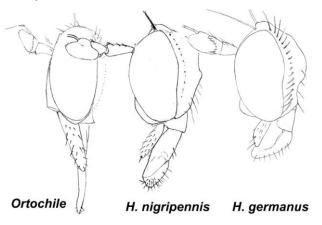


Hercostomus nigripennis on umbels

Martin Drake & John Walters

Not to be outdone by Nigel with his *Hilara* at hogweed, John posted a short film of *H. nigripennis* on wild carrot (*Daucus carota*). The males are courting females and, of greater interest, the flies are feeding on the flowers. Both sexes are poking their mouthparts well down into the florets. Flowerfeeding is rare in this family as the males, at least, are not morphologically equipped for this. *H. nigripennis* has a most unusual long proboscis in both sexes. The other regular flower-feeding dolichopodids are *H. germanus*, whose females have a slightly longer-than-normal proboscis, and the probably extinct *Ortochile nigrocaerulea* whose proboscis is as long as the head's depth. Take a look before the film escapes to the ether:

www.youtube.com/watch?v=2xS25i_NkSE



Recent literature (dolichopodids)

Alexander, K.N.A. 2020. Recent records of *Australachalcus melanotrichus* Mik (Diptera, Dolichopodidae) and observations on its habitat and range in Britain and Ireland. *Dipterists Digest (Second Series)* 27, 181-184.

Alexander, K.N.A. 2020. Confirmation of a Herefordshire population of *Systemus tenur* Loew (Diptera, Dolichopodidae). *Dipterists Digest (Second Series)* 27, 142.

Drake, C.M. 2020. Two species of *Chrysotus* (Diptera, Dolichopodidae) new to the British list. *Dipterists Digest* (Second Series) 27, 127-137.

Drake, C.M. 2020. The identity of *Syntormon pseudospicatum* Strobl (Diptera, Dolichopodidae). *Dipterists Digest (Second Series)* **27**, 61-82.

Drake, C.M. 2021. Comments on the taxonomic status of some British species of Syntormon Loew, 1857 (Diptera, Dolichopodidae). Dipterists Digest (Second Series) 28, 17-44.

References

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Microphor Macq. Acta Entomologica Bohemoslovaca 83, 432-454.

Chvála, M. 2005. The Empidoidea (Diptera) of Fennoscandia and Denmark. IV Genus *Hilara*. Fauna Entomologica Scandinavica 40, 1-233.

Collin, J.E. 1961. *British flies. VI: Empididae*. Cambridge University Press, Cambridge.

d'Assis Fonseca, E.C.M. 1949. The male of *Syntormon macula* Par. (Dipt., Dolichopodidae) from Blaise Woods, near Bristol. *Entomologist's Record and Journal of Variation* **61**, 114-115.

d'Assis Fonseca, E.C.M. 1978. Diptera Orthorrhapha Brachycera Dolichopodidae. *Handbooks for the Identification of British Insects* **9** (5), 1-90.

Parent, O. 1938. Diptères Dolichopodidae. Faune de France 35. Lechevalier, Paris.

Plant, A.R. & Cole, J.H. 2005. *Microphor strobli* Chvála, 1986 (Diptera: Empidoidea: Microphoridae) new to Great Britain. *Dipterists Digest* (Second Series) 12, 141 – 142.

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