Micropezids & Tanypezids

Stilt & Stalk Fly Recording Scheme

Newsletter 1 1999 to 2019

A compilation of news items published in Dipterists Forum Bulletin

Recording Scheme background

One of a group of UK Diptera Recording Schemes developed within Dipterists Forum. This scheme began with the author's interest in various Acalypterate Families in 1999. Thanks to the support and cooperation of many members of Dipterists Forum these groups of interest coalesced into just the two Superfamilies Nerioidea & Diopsoidea and so became a Study Group in 2001. The odd name derives from "Stilt-legged flies" and "Stalk flies". That cooperation involved not just the sending of specimens to me, but also many records and papers. Consequently in 2002, species occurrences began to amass and it became a Recording Scheme, with occurrences managed using Recorder.

As Editor of the Dipterists Forum Bulletin it was relatively straightforward to insert short notes into this magazine, a tactic that has helped popularise many of the other 23 Recording Schemes and to encourage Diptera recording in the UK.

As this Recording Scheme progressed, several landmarks were achieved. In 2003 the accumulated records were submitted to the UK's Global Biodiversity Gateway, the NBN Gateway. In other words they were made publicly available to all for research. In 2017 that system changed to the NBN Atlas, records from which are uploaded to the world's GBG - the Global Biodiversity Information Facility.

In 2004 this scheme featured in a workshop organised by Dipterists Forum at Preston Montford Study Centre. Identification keys were prepared by the author..

These Families comprise a fairly small group with only 43 species in the UK, many of them hard to find; the European list is 90. Consequently geographical scope began to broaden as a result of expeditions abroad and mention of exotic species in papers from European authors.

In 2018 therefore, when the author set up a research site for these Families using the Natural History Museum's Scratchpad system, that geographical scope became Europe.

As before, recording in the UK is a primary focus of this Recording Scheme but similar recording throughout Europe, though much trickier to publish online, is of great interest.

Keys to the identification of European species have also been developed and are to be found on the site below.

This Newsletter is a compilation of the notes published in Dipterists Forum Bulletin since 1999.

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European Micropezids & Tanypezids at http://micropezids.myspecies.info/

Darwyn Sumner

Small Acalypterate Families Study Group

Dipterists Forum Bulletin 48
August 1999

(NERIODEA: Pseudopomyzidae, Micropezidae. DIOPSOIDEA: Tanypezidae, Strongylophthalmidae, Megamerinidae & Psilidae)

Darwyn Sumner

There has been an encouraging response to my suggestion that such a group be formed. As Martin Drake pointed out, however, it is a study group rather than a recording scheme. Suggestions were made at Preston Montford as to who might be interested in such a scheme. In June I wrote to DF members from that list who were likely to attend the Summer Field Week, providing some sort of progress report and begging specimens off them. Many thanks to those people who have responded. Peter Chandler has been particularly generous with specimen loans and copies of relevant papers; Jon Cole and Ivan Perry have also been kind enough to loan me some material and Lita Greve sent me some very useful European articles. I now have access to a fairly useful reference collection which I am able to study with a view to producing a key, it is missing only *Strongylophthalmia ustulata* (I'm told the Malloch Society have bred out lots of these so I'm hopeful that I can borrow a pair from them) and some Psilidae (*Loxocera nigrifrons* & *Chamaepsila buccata* and Peter was only able to loan me one sex of *L.fulviventris, C.clunalis, C.limbatella, C.luteola, C.nigricornis, C.persimilis* & *Chyliza nova*)

Chris Spilling took M*egamerinia dolium* at Gait Barrows and was kind enough to give me the specimen and surprisingly had the very similar looking *Loxocera* at the same site. Peter Chandler relates: "One of the highlights of my week in Scotland was finding two more females of *Pseudopomyza* at Craigmore woods in Perthshire." and in response to my request for information about catches on last year's Summer Field Week: "I only collected *M.corrigiolata* in Dorset (at The Spittles)."

Dipterists Forum Bulletin 50
August 2000

Finally I've taken my first *Megamerinia dolium* at Oaks-in-Charnwood near some ancient woodland managed by Leicestershire and Rutland Wildlife Trust. Rather than bagging it through random sweeping I got a brief chance to observe the behaviour of the thing first. In pretty intense sunlight where insects are most active on well-illuminated bramble and fern there were several aculeates of the small, narrow and black variety. *M.dolium* was amongst these, tending to remain in the lower canopy and lacking the typical aculeate "jizz" - not as strong a flier. Easily recognised when captured since there are so few Diptera with that aculeate body form (the rest are probably Loxocera) and the hind femora have the spines illustrated in the old Key to Families.

Stilt & Stalk Fly Study Group

Dipterists Forum Bulletin 51 February 2001

(NERIODEA: Pseudopomyzidae, Micropezidae. DIOPSOIDEA: Tanypezidae, Strongylophthalmidae, Megamerinidae & Psilidae)

Darwyn Sumner

There is a paucity of readily available literature regarding these two Superfamilies in Britain and the little there is actually introduces new Families which are not keyed out in the usual keys to British Families. This somewhat thwarted my plan to put together a decent key to what otherwise would be a fairly manageable small group of flies. I have thus taken a step back and begun researches into the World fauna in order to gain a broader picture of the group, from which point I shall later be able to narrow in on the British fauna, brimming with information. This task will also be made somewhat easier after the kind loan by Cardiff Museum of a couple of *Strongylophthalmyia spp*. Several additional things of interest have now crept into my purview; a handful of Family identification keys and several more Diptera, notably the Diopsidae (namesake of the Superfamily) those fascinating stalk-eyed flies, a few of which I picked up in South Africa. From this new perspective the Family groupings take on the following aspect (British families are underlined):

Acalyptratae

Nerioidea

Pseudopomyzidae
Micropezidae (stilt-legged flies, Stelzfliegen)
Neriidae (Stalk flies)
Cypselosomatidae

Diopsoidea

Tanypezidae
Strongylophthalmyiidae
Somatiidae (precious few references to this and **no Family key so far)**
Megamerinidae (Schenkelfliegen)
Nothybidae
Gobyridae (Hinge flies)
Syringogastridae
Diopsidae (stalk-eyed flies, Stielaugenfliegen)
Psilidae (rust flies, Nacktfliegen, and including the carrot rust fly, not the carrot fly - which is a beetle)

Stalk talk

It would take a bit of a stretch of the imagination to expect see any of the currently non-British Family members getting to these islands, perhaps a Diopsid hitch-hiking in a bit of plant material (some are minor pests in Graminae stems). Similarly, if John Maunders (New Scientist, 17th Feb 2001) is getting reports of things as big as black widow spiders and scorpions coming in on imported organic produce (Californian grapes, Australian bananas, guava, dodgy tomatoes, China pear, pumpkin) then a hunt for decaying stalk ends and fruit in the supermarkets might add a Neriid to our collections. Finding additional species in some of our indigenous Families seems a better prospect, particularly the phytophagous Psilidae.

Sharp-eyed readers will notice the new snappy title to the study group, even more sharp-eyed ones might have suggested "The rusty hinge" or how about joining forces with a Bracket Fungus Gnat group and we'll have a Hinge & Bracket Study Group. I notice that English, German and Dutch writers are prepared to give colloquial names to the Families which least need them, can I suggest "Ant flies" for the Strongylophthalmyiidae since Oosterbroek informs us that the New Guinea collectors observed that they mimicked the behaviour of ants - or is this name already taken?

Regarding the British fauna, I have an enquiry from David J. Gibbs who tells me "I have taken *Micropeza lateralis* in vc 34 Bristol this year and would be interested to know if there are any records of this species from Somerset or Gloucestershire. Any idea of its habitat/ecological requirements?" Oosterbroek summarises Micropezidae habits by stating that they are found on low foliage and are attracted to broken fruit and faeces, larvae have been found in ginger and other rhizomes and, confusingly, oviposition has been observed on borer holes in fallen logs. A high moisture content seems to be a common thread (lake edges, seepages) so I would suggest that some sort of rhizome search might be rewarding - Overstrand Cliffs in Norfolk has a good colony, is there anything growing there that fits the bill?

No luck so far on the distribution front, Steve Falk's 1985 "Provisional review ..." suggests there was a trawl for records during the heyday of the Invertebrate Site Register but this group wasn't included in the final 1991 report, I shall know more when I've obtained a facsimile of the as-yet-unpublished report.

References

To keys to Families only:

Oldroyd, H. 1970. Diptera 1. Introduction and key to families (3rd edition). Handbooks for the Identification of British Insects. IX (1)

Unwin, D. 1981. A key to the families of British Diptera. Field Studies. 5: 513-553

Grimshaw, P.H. 1933. Introduction to the Study of Diptera, with a Key for the Identification of Families. Proceedings of the Royal Physical Society. (4) XXII: 187-215

Oosterbroek, P. 1998. The families of Diptera of the Malay Archipelago. Fauna Malesiana Handbook. 1

McAlpine, D.K. 1981. Key to Families - adults in Manual of Nearctic Diptera 1: 89-124

(also try the Manual of Palaearctic Diptera - but I don't have that yet)

Readers are welcome to my current full lists of World species (insofar as my current investigations have determined) and the relevant references, only by email and only as Snapshot files (see www.microsoft.com/accessdev/a-prodinfo.htm), please specify the taxon (Superfamily or Family). Contributions of offprints would also be gratefully received, especially those of Shatalkin, McAlpine and Iwasa (my skills in Japanese are about the same as my Russian ones)

Dipterists Forum Bulletin 52
August 2001

There has been a gratifying response to my notes on this group in the last Bulletin. Amongst them a very kind offer from a Dipterists Forum member to carry out a small amount of translation from Russian. Mike Hackston put together some keys and checklists of Afrotropical Diopsidae and Psilidae which he collected whilst on a visit to Pietermaritzburg museum when he was teaching in Zambia and has very generously sent me copies

Dipterists Forum Bulletin 53
Spring 2002

Mark Telfor of BRC has placed all our Recording Schemes on the BRC's website. On that site I noticed that the status of this study group had been raised to that of a recording scheme. The simple distinction between the two would be that for a recording scheme the organiser should have some form of access to the national dataset and additionally have some useful identification keys available. Thanks to John Ismay I now have a summary of the records of the more scarce species taken from the national dataset which formed part of the Invertebrate Site Register initiative and was the source of all the hard work that Steve Falk put into turning the huge stack of data into the "Reviews of scarce and threatened ...". Speaking of which, the one for the Acalypterates is not yet published but I now have access to a draft copy of that, also from John Ismay. So I'm now in a much more informed position regarding the scarcer species, their distribution and ecology.

Whilst a major launch of a call-in for records is a little premature, since I can provide little in the way of useful identification guidance at the moment, this season would be a good opportunity to begin looking for them. So far I've 323 records and most of them are in my house (thanks to loans from Peter Chandler & Ivan Perry). Keep an eye open for relatively hairless, glistening orange flies (*Psila*, *Chamaepsila, Psilosoma*), flies that look like small ichneumons (*Loxocera, Megamerina, ?Chyliza*) and anything spherical-headed and/or very leggy (all Micropezidae) in your sweep nets this season and you should accumulate a few records (and lots of Sepsids as well but I'm sure Adrian Pont won't object to that). You'll be disappointed that you haven't when you find keys in the next bulletin. I would be very pleased to receive such records from the handful of people who record in this group.The Scottish field week this year may present an opportunity to find some of the more scarce species, I say "may" since I lack dates from the summary list of scarce species and I suspect that we will have to be very lucky with the weather prior to our visit for them to be actually flying about.

Species to look out for in the regions we seem likely to be visiting, will be:

Cnodacophora stylifera (earliest record 16-Jun),

Micropeza lateralis (22-Jul),

Strongylophthalmyia ustulata (no data), Graham Rotheray has records for this from Scotland

Loxocera sp. - a wide range of dates depending on species - fingers crossed they are double brooded!

L. aristata occurs there (11-Jun) and whilst I only have information about Peter Chandler's EIRE records and Alan Stubbs' Leicestershire catch, the mid to late May dates for Loxocera sylvatica promise some success with this genus

Chamaepsila clunalis (no date - last record 1982). "Probably marshy areas and margins of rivers and ponds ... Larvae probably phytophagous though host plant unknown"

Chyliza annulipes (April to June) will be interesting to look for, it is recorded from Speyside and its larvae "develop within the viscous resin exudations around wounds of various conifers"; a challenge for the larvae hunters here: "Resin containing *C. annulipes* larvae has a distinctive red brown or pinkish colour due to the many frass particles scattered through it. Evidence of *C. annulipes* occurring in previous

years can be found in the old resin nodules on trunks of spruce trees. Those nodules that are a dirty yellow colour and with a honeycombed centre will sometimes contain empty puparia just below the surface.", in Scotland the association is presumed to be with Scots pines.

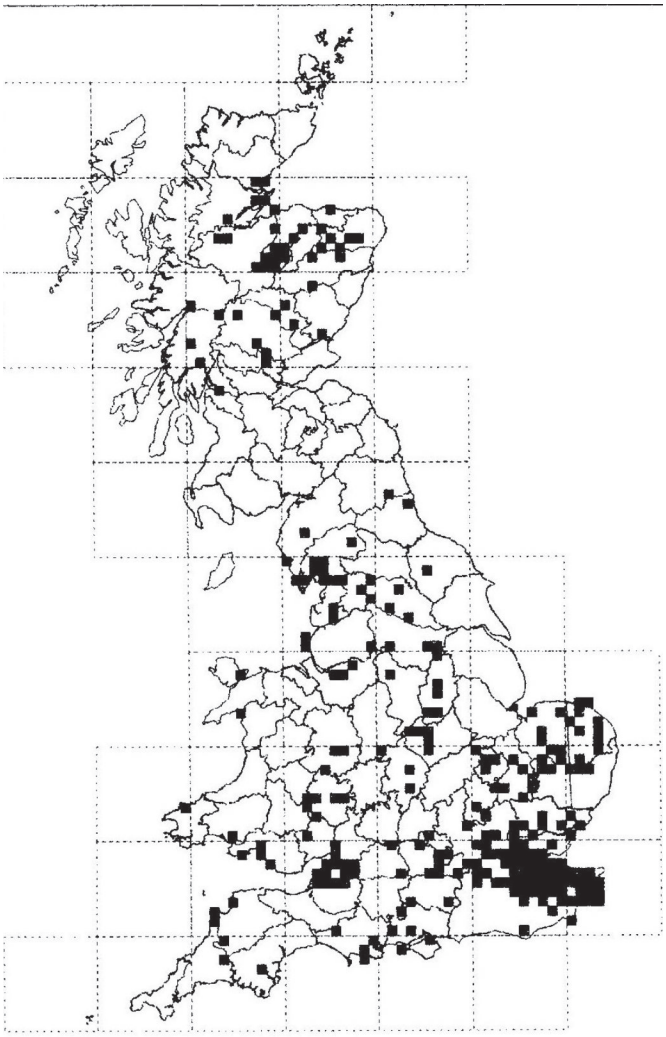
Dipterists Forum Bulletin 54

Spring 2002

Mark Telfer of CEH categorised the Stilt & Stalk Fly recording group as a full recording scheme recently. Probably a good idea since it coincides with quite a flood of records (now totalling 949) and has allowed me to get involved in the national conferences (see above). In response to my request for records in the last bulletin, data has been received from Laurence Clemons, Del Smith (various collectors), David Gibbs, John Ismay (Invertebrate Site Register records, lacking dates) and Phil Withers together with Dipterists Field Week data (note that the records sent in for this field week are now being used) and data extracted from a few recent articles, notably Jonty Denton's. Museum collections still need looking at, I've extracted some information from the Edinburgh collections but I know of material in Oldham, Liverpool, Cardiff and BMNH which need data extraction and I would be grateful for suggestions of other sources. Records are welcome in any format, of course, but if you have them in electronic form it's quicker to convert directly rather than via printouts. No testkeys available for the moment, the sandpaper emulation mode on my hard disk kicked in recently and set me back several weeks. Progress is being made, however; Alan Stubbs has made helpful suggestions after seeing a draft at the Autumn Field Meeting. My habit scrounging specimens of everything off everyone is paying off (latest is a loan of *Strongylophthalmyia ustulata* from Graham Rotheray - many thanks); one rainy morning Alan pounced upon the drawer I took to Scotland and constructed a key for the British *Chamaepsila*. Peter Chandler has helped out with some more offprints, he's quite amused by the fact that I've picked a group in which all the key authors are Russian (A.L. Ozerov this time). I'm looking for a good Russian dictionary now.A new representative of the Calobatinae (Micropezidae) has been found in Britain this year, a species of *Neria* will be announced shortly. The available keys are very sparse and not one of them covers all of the species adequately. The possibility that others might turn up seems reasonably high, now that our 6 has gone up to 7 and Ozerov lists 19 in the USSR. Many thanks to Phil Withers for help with a translation and Bernhard Merz for comments which helped confirm the new *Neria*.

Recorded 10Km squares

Maps of the current recording status provide a useful feedback to contributors to the Recording Schemes and Study Groups. They stimulate recording effort in areas which are poorly covered. For example, as a Lancastrian I am embarassed to note how poorly my county is covered for Empids in comparison with Yorkshire. If you have anything approaching a national dataset on computer and are unsure about how to set about making a map then I shall be happy to do it for you, all that's needed is a list (e.g. spreadsheet) of 10Km square names (e.g. "SD90").



Darwyn Sumner

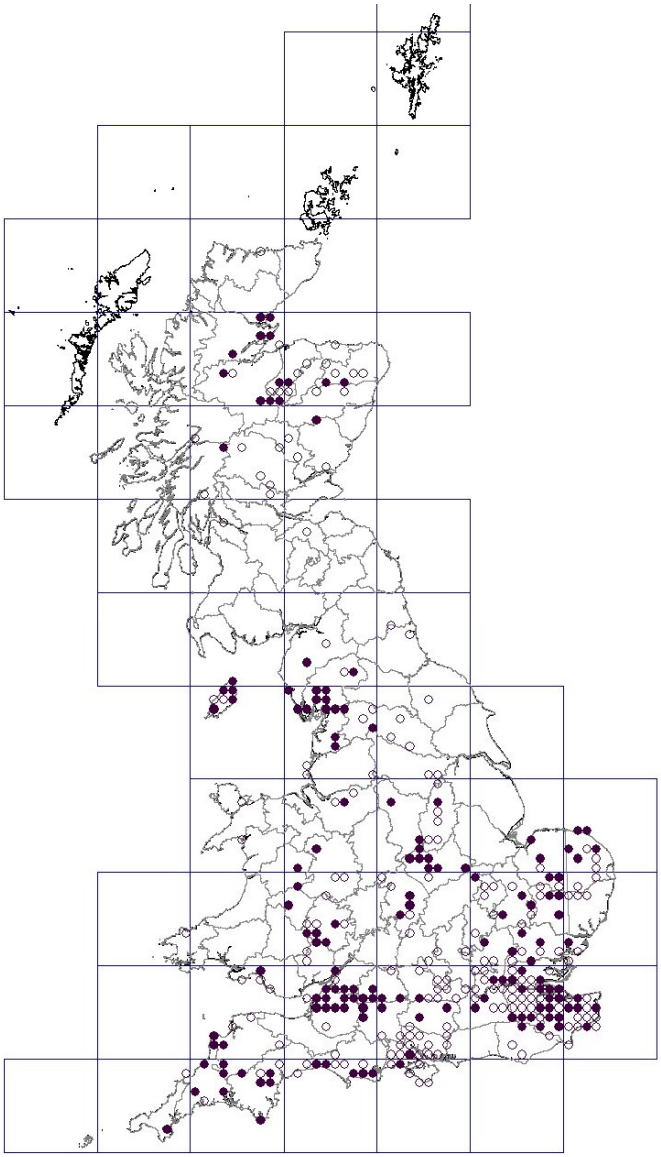
Dipterists Forum Bulletin 55 Spring 2003

The group as a whole does not lend itself to a cohesive collecting strategy and it is unsurprising that this fact is reflected in the records which I am currently receiving, with a skew towards the larger Micropezidae. The list of recorders in this group grows; Martin Harvey, Peter Boardman, Mike Pugh, Steve Crellin & Chris Palmer have sent records whilst Geoff Hancock tells me there are lots in the Glasgow collections. One or two people are finding the more obscure species and I would dearly like to hear from Andy Godfrey and Jonty Denton who must have lots since they have both published their more interesting records, whilst the indefatigable Laurence Clemons apologises for not having recorded more.

Chasing up the literature has proved interesting, many thanks to Lita Greve Jensen and Mihaly Foldvari for help with reprints. The biology of many species is currently unclear but two clues which might help us track this down have emerged from recent observations. Rohacek (1990) tells us that our new British species, *Neria femoralis*, occurs in lowlands along rivers and large brooks; the site where it was found fits this description but Steve McWillam adds that "all the streams into and out of the flash are heavily polluted" and the area receives drainage from old lime beds and calcareous flashes/settling grounds. This might suggest that the species has a high tolerance to or preference for such "pollution" so do make a special note to look for *Neria* spp. if you find yourself in such areas. The other clue comes from Rohacek's observations of *Micropeza* spp., *M.corrigiolata* has been reared from root nodules of several leguminous plant species (Ferrar, 1987) and Steve Falk tells me to look for *M.lateralis* under Broom (*Cytisus scoparius*). This species also has root nodules caused by Rhizobium and the new British Plant Gall book tells us that "recording these nodules on wild plants in Britain is unusual". An examination of unhealthy Broom nodules might well prove rewarding

Dipterists Forum Bulletin 58
Autumn 2004

The following map shows the curent recording status. Filled circles indicating records made in the past 10 years. Last published in the 2002 (DF Bulletin #54), the more obvious changes are due to Manx records from Steve Crellin, a trawl through Hampshire Museum records by Chris Palmer and a bit of general wandering around by the usual contributors. Improved coverage can be seen in the areas where we held our Field Weeks over the past few years. This is still not the full picture of the records that are held by dipterists, I know lots of people were fired with enthusiasm following the Preston Montford meeting and the keys that were distributed there. If you are keen on filling in a square or two then just look out for *Psila merdaria* (distributed from the Midlands towards the South East) or *Psila fimetaria* (widely distributed) on vegetation in damp ar-eas of woodland in the spring. The large greasy orange beasts are very easy to spot. If you are in the Cheshire region, do keep looking out for *Neria femoralis*, as



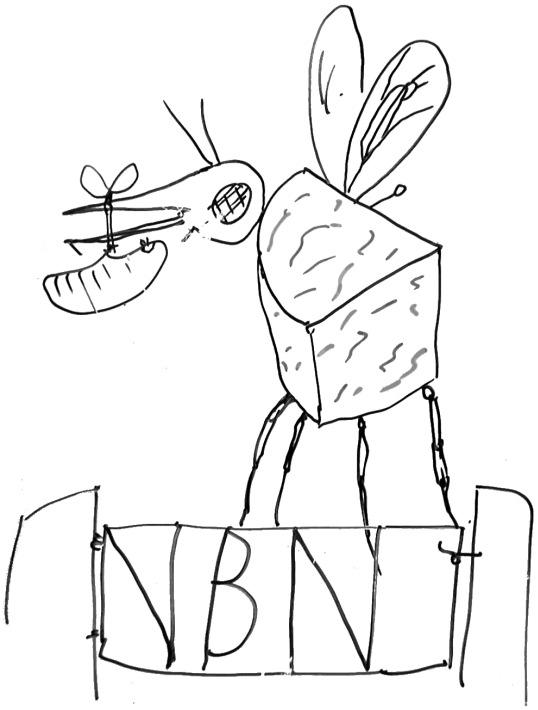
Bill Hardwick's letter shows, its only known location might have been severely damaged this year

An account of the Preston Montford workshop in which these diptera were studied is also in this Bulletin.

Dipterists Forum Bulletin 59
Spring 2005

Neria femoralis didn't make it to the BAP list, I guess because we don't know enough about its distribution or biology. My focus this year will be on trying to pick up a little more detail about the habitats, behaviour and biology of a handful of species. The more common *Neria* are to be found amongst the patches of creeping buttercup which inhabit the permanently wet, semi-open situations in deciduous woodlands. Slinging the net around these patches will sometimes get results but sit and watch for a little while; they'll come out from nearby vegetation and pose well enough to grab photographs. Dipterists Forum members who attended the Suffolk field week in 2003 will now be relieved to learn that I've finally broken my duck on *Micropeza lateralis* ("Why can't you find it?". "It was here in scores last year.", "Why are you crawling about under that Broom thicket?") which I took in Sherwood Forest last year. I make no excuses for my rotten descriptions, the phrase "large greasy orange beasts" was enough to prompt someone to use the *Psila* keys on their material and record a few of these beasts. Not quite ready as I wrote this item but I'm assured that the entire dataset for the Stilt & Stalk Flies will be avaliable on the NBN Gateway by the time this Bulletin is published. Do try to fill in a few gaps this year

Dipterists Forum Bulletin 60
Summer 2005



Studia Dipterologica occassionally comes up trumps with items of interest for this group. Volume 11 (2004), heft 2 contains some interesting articles. Andreas Arnold discusses his finds of *Neria spp. (cibaria, commutata, femoralis* and *longiceps)* in the eastern district of Bitterfeld, Saxony-Anhalt. Steve Marshall (Guelph, Canada) reviews the genus *Metasphen* Frey, a member of the Micropezidae: Taeniapterinae (we only have *Rainieria calceata* in the UK but there are related species in other parts of the world) and erects a new genus *Globopeza* from material collected in Ecuador and Venezuela. Attempts to put together an expedition in Warwickshire with Steve Falk this year failed to come about, there simply isn't enough time in the key flying season to get everywhere one wants. I did manage a trip alone to Oxhouse Farm, Steve's good spot for *Tanypeza longimana* and waded through a field of butterbur leaves but failed to find it (a nice place though, well worth a future visit). A few days later, though, at R. Gine, La Carneille in France (N48 46 36.4 W0 26 42.8) I came across a group of *Populus* spp. by a stream with lush undergrowth. A single long-legged fly was observed hopping over the surface of broad leaf surfaces. Needless to say I hadn't my net to hand but it was obliging enough to await my return and I had my first *T. longimana*. Two items of interest cropped up in Durham this year. Both of these at North Gare Sands (NZ 53696 27900). *Loxocera aristata* was taken by several people, Malcolm Smart managed to find a malformed one which initially flummoxed our attempts at identification (many thanks to Jon Cole for redirecting us onto the right path). The description I have for this species tells of a median frontal triangle reddish with dull black triangles on each side but all the specimens had completely black frons. Bear this in mind when you use the Psilidae key I distributed at Preston Montford, it seems possible there may be an error in this couplet as the description is the same for both this and L. albiseta. *Neria ephippium* was taken by several people at the same spot but I failed to refind it on a subsequent (drizzly) visit despite Malcolm Smart's detailed grid reference (many thanks to Keith Alexander for his specimen). The site was a sheltered spot behind a sand dune ridge and adjacent to a marshy area. I have previously noticed Micropezids sheltering inside shrubs during hot periods and so found myself lying full length on the ground with my head inside a small bush. Recent records for this species are confined to this one spot (check the NBN Gateway for the distribution map) and its a pity there was no opportunity to observe its behaviour. I consider that it is a suitable candidate for the forthcoming "Species status reviews #4", I have a review copy from John Ismay and *Neria ephippium* is not included - perhaps it should be. If anyone has any distribution information to the contrary I would be grateful for these records

Dipterists Forum Bulletin 65
Spring 2008

There's now a discussion group for this scheme (and all the others) on the the new Dipterists Forum website. I've started the SSF discussions with a short introduction and a checklist linked to UK distribution maps. After a few checks on some of the incoming data from the last couple of years, the dataset published on the NBN Gateway is about to be updated. For those who find the Gateway a little tricky to use I'm pleased to tell you that the discussion group on the Dipterists Forum (http://www.dipteristsforum.org.uk/df/f20-Stilt-Stalk-flies.html) now makes viewing these maps supremely straightforward. Please take the time to register on this site, it's a superb means of exchanging comments and exchanging little snippets of information

Dipterists Forum Bulletin 67
Spring 2009

My efforts in 2008 were devoted largely to photography, giving me opportunities to observe behaviours of several species. The results of some of this effort was presented in the form of an unattended PowerPoint presentation at the Cardiff AGM showing *Tanypeza longimana* and *Cnodacophora stylifera*.

Cnodacophora stylifera amongst *Carex rostrata* growing on a bank of sand at Tromiebridge Meadows, the intersection of the Rivers Spey and Nethy.

Tanypeza longimana seems to like semi-shade (avoids direct sunlight although it is not active in overcast conditions) on tall herbs or the low leaves of trees (esp. Hazel) in ungrazed herb-rich meadows (or other tall vegetation) adjacent to black anaerobic muds and tree shade.

Cnodacophora stylifera is only to be found in Scotland but there is a good chance you will find *Tanypeza longimana* in the coming season if you find yourself in suitable habitat (look around the perimeter every time you visit a decent marshland). It sprints for deep shade when it is disturbed so use your eyes before you use your net. The prominent flat black palpi and the broad shimmer stripe on the thorax are a good guide to field identification.

Our knowledge of the larvae of the Calobatinae is poor.

Observations of them ovipositing provides a useful starting point to such research.

This *Neria cibaria* (probably) seems to be ovipositing in sand (the same *Carex rostrata* bed as the above *Cnodacophora stylifera*) but would more often be found near anaerobic muds in woodlands, frequenting bulbous buttercup stands.

One could speculate that the larvae favour these nutrient-rich muds and perhaps utilise the aerenchymatous roots (both *Ranunculus* and *Carex* have them) for their oxygen supply. We shall find out.

Dipterists Forum Bulletin 75
Spring 2013

Such a wet year that any specimens proved difficult to find, hopefully they take advantage of the rare brief periods of adequate weather to emerge and do their stuff but simply don't persist as adults for any length of time under the onslaught, I guess that's an adaptation which accounts for their distribution in these latitudes. A few snippets of information have come my way, Judy Webb reported once having reared a psilid (*Chyliza* sp.) from a corky gall on ash - so it seems some of these might be at risk from ash dieback too. Peter Chandler sent me references to a couple of papers:

Buck, M. & Marshall, S. A. Revision of New World Loxocera (Diptera : Psilidae), with phylogenetic redefinition of Holarctic subgenera and species groups. Eur. J. Entomol. 103, 193–219 (2006).

Shatalkin, A. I., Merz, B., Museum, Z. & Nikitskaja, B. The Psilidae (Diptera, Acalyptrata) of Switzerland , with description of two new species from Central Europe. 117, 771–800 (2010).

He tells me that the outcome is some nomenclatural change in *Loxocera* and that *nigrosetosa* and *unilineata* are now good species. Only Collin thought they occurred in Britain but we'll now have to use the key in those papers to check that out. Contact me if you want to go through your *Loxocera* specimens yet again.Peter also "rescued" *Chyliza vittata* recently when a detailed phylogenetic analysis based on DNA resulted in a "new genus nesting within the subfamily Delininae", but from the colour photos of the fly it was clearly *Chyliza vittata*. Peter has fixed the issue now with a counter-submission to Zootaxa.

Kato, M., Tsuji, K. & Kawakita, A. Pollinator and Stem- and Corm-Boring Insects Associated with Mycoheterotrophic Orchid Gastrodia elata Pollinator and Stem- and Corm-Boring Insects Associated with Mycoheterotrophic Orchid Gastrodia elata. Annals of the Entomological Society of America 99, 851–858 (2006).

I've set up a Micropezidae group using Mendeley which allows collaborators to share papers and citations securely online. Chris Raper has tried it out and other collaborators are welcome to join, only 50/hundreds added so far; a job for me during the year.

Dipterists Forum Bulletin 76
Autumn 2013

Seems that some people have had a good year, Jindřich Roháček had a stroke of luck in 2012 when he came across huge numbers of *Pseudopomyza atrimana* in Muránska planina National Park (Slovakia), not only that but he was armed with some decent macrophotography gear and his article in Čas. Slez. Muz. Opava is filled with stunning pictures - this is a must-have article if you want to know what these beasts look like (both the following are freely downloadable online).

Roháček, J. A new record of mass occurrence of Pseudopomyza atrimana (Meigen), with notes on probable breeding habitat of the species (Diptera : Pseudopomyzidae). Casopis slezského zemského muzea (A) 61, 3–10 (2012).Roháček, J.

The fauna of Pseudopomyzidae , Micropezidae , Megamerinidae and Psilidae (Diptera) in the Gemer area (Central Slovakia) Synopsis of species. Casopis slezského zemského muzea (A) 61, 131–142 (2012).

Similarly Dave Slade (Records Officer at SE Wales LRC, a lepi-dopterist) found several *Rainieria calceata* skipping on a *Salix* trunk at Bryn Garn, Glamorgan (SS964833 on 13/6/13) a region I passed through only a couple of days later - if only I'd known!*

For those of you who like to browse the internet for their favourite Diptera can I suggest you try a different search engine, Duck-Duck Go is being developed in order to get you very precisely to the thing you want. It's proving very effective at finding Stilt & Stalk fly resources, (e.g. http://www.elisanet.fi/jere.kahanpaa/diptera/micropezidae/ for a North European Micropezid key by Jere Kahanpää.) Theoretically there should be less junk when using this search engine and it will improve over time.

Rune Bygebjerg and his colleagues from Lund University advise us that a Nearctic species of psilid, *Chyliza leguminicola*, has recently been discovered in Jutland (Denmark) and seems to be establishing itself in Europe via the Garden Lupin (native of North America). It may be here too, so keep an eye open for a very dark *Chyliza* (with the typical bent wings due to the wing crease), dark wing edges and a small eye.

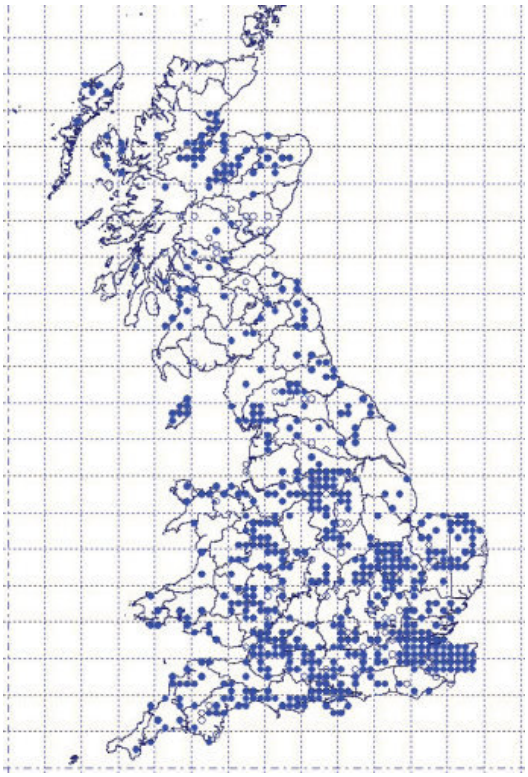
Bygebjerg, R., Munk, T. & Elnif, J. Chyliza leguminicola Melander, 1920 (Diptera: Psilidae) new to the Palaearctic fauna. Entomologiske Meddelelser 79, 73–84 (2011).

We've also had interesting catches this year of *Chamaepsila buccata* by Rob Wolton at Roudsea and *Chyliza extenuata* photographed by myself at Freshwater East in Pembroke, look out for articles in Dipterists Digest

*this turned out to be an incorrect identification

Dipterists Forum Bulletin 78
Autumn 2014

I've caught up a little bit on managing records for this scheme.The following rough map shows everything I've got in Recorder 6 at the moment.



Unsurprisingly for a small scheme it shows the recording effort of the contributors very well. It's as comprehensive as the Tephritid scheme only in Kent - since those records mostly came from Laurence Clemons. The Northants patch will be John Showers then those from Jon Cole across Hunts. Cambs. and on to Sussex. Derek Whiteley is very much in evidence in Derbyshire and South-east Yorkshire. Nigel Jones is responsible for a lot of the Shropshire records and Martin Drake has surveyed over a wide area in the South West and some spots in north east England. Steve Crellin is responsible for the Isle of Man and Chris Palmer for Hampshire. Roger Morris is Surrey and lots of places in the south of Scotland plus Outer Hebrides. Some Dipterists Forum field weeks feature strongly, Devon, Cornwall, Dorset, Wiltshire, south Wales, north-west England and Easterness + Moray. One LRC has sent a large batch of records, many thanks to Murdo MacDonald from the Highland Biological Recording Group, as indeed thanks to all the above. It looks pretty good when you map every taxon but individual species maps don't really tell us too much, especially for species that are tricky to identify

So I'm appealing for more records, even steady trickles of small numbers like those from Howard Bentley and John Kramer (and me!) are valuable in filling in gaps. I suspect there are one or two experts who might have a good collections of records too, so if you've got anything then I'll be glad to receive them

Dipterists Forum Bulletin 79 Spring 2015

2014 was not a particularly good year, I've seen only a handful. Bear in mind I try to photograph them so my success rate is low, perhaps 1/20th of the "netters". Even the good netters report only a couple of records though. I've evidence from Malaise trapping in previous years to suggest that at least some species exhibit mass emergence so if they're allowed just a short time to do the necessary before the weather turns bad then hunting down the few survivors becomes difficult. Records are flowing in nicely, many thanks to all those contribut-ing, don't be shy if you've only found 2. I get mixed lists containing Sciomyzidae (many more records of those) and I pass them along to Ian McLean.

Dipterists Forum Bulletin 80 Autumn 2015

I've been contacted recently by Dave Heaver regarding "Assessments" for both this group and Sciomyzidae, couldn't make head nor tail of it all until I read Rob Wolton's summary. More on this in the next Bulletin

Dipterists Forum Bulletin 81
Spring 2016

There are currently 3094 "taxon squares" in the database. An upload to the NBN Gateway is planned as soon as I complete this Bulletin. Many thanks to all the people who have sent me records. Don't worry if you think you've missed the boat, I've taken a brief look at the iRecord system recently. According to the list in this Bulletin there are just 4 Megamerinidae, 34 Micropezidae and 84 Psilidae, so far I've only looked at the Psilidae. There's an outside chance some may be verifiable from photographs, if you can see the base of the arista on *Psila*, otherwise I don't expect much to be possible from pictures. For *Loxocera* I'd like to see indications that the new keys have been used on actual specimens. Paul Beuk is the only person in the world prepared to have a stab at these from photographs - and he only seems to attempt a small fraction of the postings on Diptera.info. It seems one or two dipterists are testing iRecord out and there's signs of an LERC or two uploading batches which may have come from a survey. I've got the same issues with keys and photographs that Michael Ackland and David Gibbs report. I've only a dozen or so contributors sending me records for this scheme so if you have a handful of records, don't be shy about emailing spreadsheets or even post a single record to me. Happy to deal with LERC records too, Leics. and Worcs. are working with me at the moment. Exchanging and sharing data using Recorder 6 is pretty easy (as Steve Crellin will attest as he and I have been working together), just set up a taxon filter, run the search and email the resulting file. I'm looking forward to getting to grips with Tombio tools in QGIS so don't be surprised if a few maps crop up somewhere.There were many records of *Micropeza lateralis* during our Notts meeting and I have a report in preparation but otherwise there's nothing of special interest to report this year

Dipterists Forum Bulletin 82
Autumn 2016

Silly Psilids

"*That should be straightforward, I'll have it done by next week!*"

That was my naive response to Darwyn's request for my micropezid and psilid records. The micropezids were straightforward, but not the psilids, so two months later I've got them all databased, but still unable to identify two species. The troublesome group is the *Chamaepsila nigra/atra/clunalis* aggregate – all black body, darkened legs (not all yellow, like *rosae*), and three or four dorso-centrals. All the species have 3 verticals (vt). According to all the keys, *nigra* has 3 dc and 1 ors (upper orbital), and *atra* and *clunalis* have 4 dc and 2 ors. The two latter species are separated by the structure of the male genitalia and the female ovipositor.

Should be a doddle ...

- Sort by the number of dc bristles, then by ors.
- Admittedly the absence of a head on some specimens leads to a bit of guesswork, but my specimens separated quite readily into 30 of *nigra* (3 dc 1 ors), and 26 of *atra/clunalis* (4 dc 2 ors).
- But then there were the 5 specimens with 4 dc and 1 ors. Mmmm ...
- Male genitalia – that will clear things up ... bring a bit of certainty to this project.
- The 14 male *nigra* all look the same, and do look a bit like one of Shatalkin's (1986) three drawings of nigra, so that's OK.

The 8 male *atra/clunalis* are evidently two species, but neither of them is *clunalis* according to Shatalkin's drawing or Collin's (1944) description. So what other all black Chamaepsila with 4 dc and 2 ors could they be? Several dozen pdf's from the Ent. Soc. library later ... none.

Well, one of them has to be *atra* ... but there don't appear to be any consistent differences apart from the genitalia ... maybe in the original description? ... Meigen (1826) writes that he only had males, and that the legs are reddish-yellow with the femur (excluding its tip) and apical half of the tibia black. Perturbingly mine have the tibiae darkened, with a pale base and tip.

Next up is Becker (1902) who looked at Meigen's psilid types. He notes that there is a male type in Paris, a bit damaged, but still possible to see that it has 4 dc. No mention of leg colour.

Then Séguy (1934) who describes Meigen's type [which has mysteriously changed sex, and is now a female] – completely black. Halteres, knees and first segment of tarsus red. [Different yet again!]

Hennig (1941) helpfully suggested that the interpretation of the species is not in doubt because Séguy has looked at the type [even though the sex was wrong], and the combination of 3 vt, 4dc, 2 ors is unique.

Collin (1944) then describes *clunalis*, but does not say how he decided which of his two species was *atra*. [He may have seen Meigen's type, and hopefully it's changed back to a male.]

And all the other keys since – *atra* and *clunalis* are distinguished by black body, dark legs, 3 vt, 4 dc and 2 ors.

Wang (1988) did suggest that the number of dc may have

little diagnostic value – noting that the position of the anterior dc in atra can be unstable, but she still produced a key using number of dc as a character. Her figures of *atra* genitalia are difficult to match to either of my species.

I agree with her that the number of dc (or ors) are unreliable characters – I have specimens in which the number of dc differs on each side (and similarly with ors). The 5 specimens with 4 dc and 1 ors are all females, so I'm getting nowhere with those!

The next thing I guess is a trip to Paris to see Meigen's type. If it's a female, then problem solved – it's not the type, and we can find a nice new dissected German *atra* to be a neotype. If it is a male (and thus the type) will I get permission to clear the abdomen (if it hasn't been done already)? Or should we try X-ray microtomography, or DNA analysis, if there are enough spare legs?

In the meantime, it would be good to assess the distribution of *atraA* and *atraB* in Britain, so if anyone has any all black *Chamaepsila* with 4 dc, I'd love to have a look at them, or I can send photos of the genitalia for you to compare. Any with 3 dc and two ors would also be interesting. There's no rush – I have quite a bit of other stuff to catch up on thanks to these silly psilids!

References

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Collin J.E. 1944 The British species of Psilidae (Diptera), Entomologists monthly Magazine 80: 214-224

Hennig W. 1941 Psilidae, In: Lindner Fliegen der Palearktischen Region 5 (41): 1-38

Meigen, J.W. 1826 Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten. Hamm: 5: XII + 1-412

Séguy. E. 1934 Diptères (Brachycères) (Muscidae Acalypterae et Scatophagidae). In Fauna de France 28: IV + 1-832

Shatalkin A. I . 1986 [Review of the east Palaearctic flies of Psila Mg. (Diptera, Psilidae), with the key to the Palaearctic species.]. Proc. Zool. Inst. Leningrad 146: 23-43. (In Russian).

Wang X. 1988 Bestimmungstabelle der westpaläarktischen Chamaepsila-Arten (Diptera: Psilidae). Stuttgarter Beiträge zur Naturkunde. Ser. A. 417: 1–13

Tony Irwin 15 April 2016

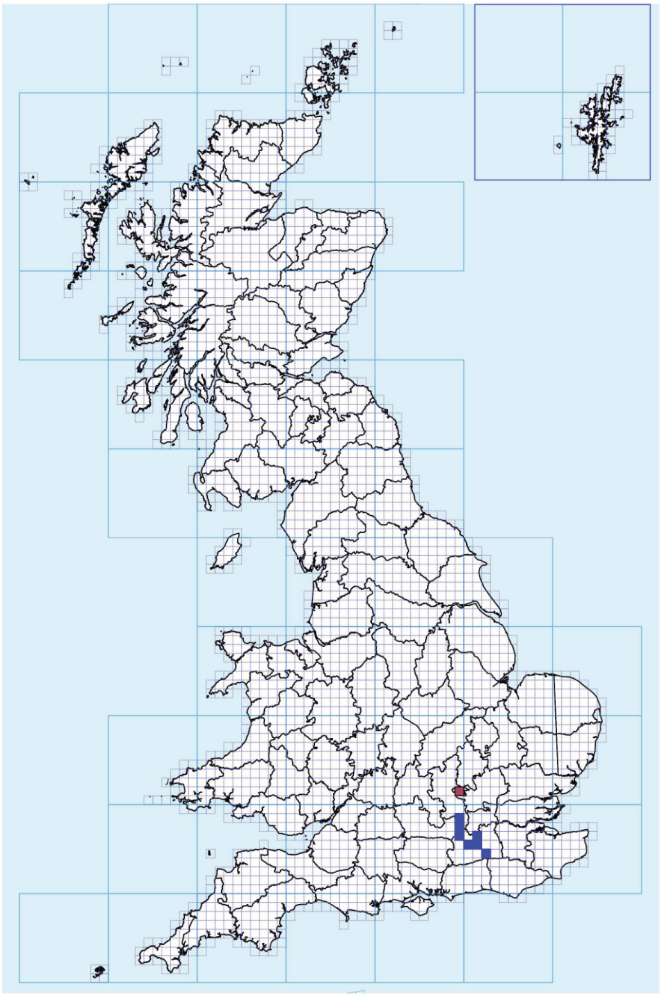
Dipterists Forum Bulletin 84 Autumn 2017

Species occurrence records from the scheme were transferred to the NBN Atlas on 1st April. Details are to be found at: (2017). Dipterists Forum - Recording Scheme - Stilt & Stalk Flies. Dipterists Forum. Occurrence Dataset https://doi.org/10.15468/mwjnku accessed via GBIF.org on 2017-07-26.The usage statistics on the NBN Atlas are of interest, a total of 781 downloads to date. The data was also used in an article on *Megamerina dolium* recently published in Dipterists Digest.Dipterists Forum Bulletin 85, Spring 2018

Dipterists Forum Bulletin 86
Autumn 2018

My guess about *Rainieria calceata* extending its range this year proved to be correct. Some time after my prediction (see above, Phenology) I received photographs from Lawrence Trowbridge who lives near the Ashridge Estate (National Trust) in Buckinghamshire.

The distribution map is now as follows (the red square is Lawrence's observation):



Lawrence tells me that the estate is good for saproxylics and that it has a "lovely dead beech tree and dead beech logs everywhere".

Prime *Rainieria* habitat then, let's hope it establishes itself successfully there.

Rainieria calceata [Lawrence Trowbridge]

Dipterists Forum Bulletin 87
Spring 2019

New Scratchpad at http://micropezids.myspecies.info/ as European Micropezids & Tanypezids. The site is beginning to take shape, contributions very welcome

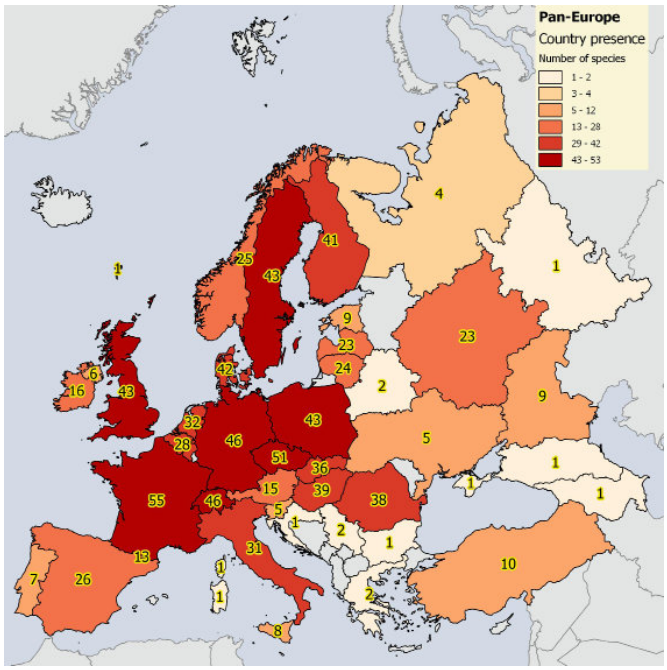
Dipterists Forum Bulletin 88
Autumn 2019

My Scratchpad at http://micropezids.myspecies.info/ for European Micropezids & Tanypezids is now fairly mature.

The major item I worked on was the development of **a Checklist for every European Country** using all available published georeferenced occurrence information (thus excluding Fauna Europaea). Something of a task as not many countries have published Diptera checklists. After working through all the published papers, the next good source (though few in number) are the online collections lists uploaded by national museums. The richest sources though are the images uploaded to online sites by various photographers.

New country records arise from time to time on Diptera.info and the French, Spanish and Russian sites are invaluable. For example these are the main source for the list of 23 species from Central European Russia (the area around Moscow.) The absence of records from some regions is irksome though, in the Balkan countries one would hope to see some kind of pattern in the zone transition from the biogeographic regions Anatolian to Mediterranean and Mediterranean to Continental (sensu Mücher et al., 2010) and records from Northwest European Russia (St. Petersburg region) might give some idea as to dispersal routes via the Baltics or Central European Russia to Finland and beyond.

European Checklists (July 2019)



France comes top of the list with 55 species, thanks to information from Phil Withers. Others with long traditions of recording are not far behind (Czech Republic, Germany) whilst some are just getting off the mark (Slovenija, Turkey, Austria) thanks mainly to photographers. In the British Isles we're bit lower down the list with just 43, competing with Denmark, Sweden, Finland and Poland.

Not a new UK species

We got very close to a new UK species this year but quite rightly Peter Chandler says it doesn't count. So if you happen to find a dark form of *Loxocera aristata* as Ian Andrews did in Scotland then you've got something that may be recorded as *L. maculata*

The authors of the paper (Shatalkin & Merz, 2010) say it's not real but Chris Raper has kindly given it a UKSI so you can record it in iRecord as such.

The Black Reed (*Loxocera maculata*), a melanic form of the Black-faced Reed (*Loxocera aristata*) Photo Ian Andrews

Contributions are very welcome, photographs in particular (illustrations would be marvellous), but if you come across published Diptera Checklists for Austria, Crete, Greece, Macedonia, Albania through to Croatia then I would be very eager to hear from you

Common Strider (*Neria cibaria*) female. Watermead Country Park. Photo Darwyn Sumner

Online keys

I have also constructed online FSC Identikit keys to species in this scheme. I'm unfortunately unable to upload these as I'd have to pay for a site and domain (as well as improve my web skills.)

Mücher, C. A., Klijn, J. A., Wascher, D. M., & Schaminée, J. H. J. (2010). A new European Landscape Classification (LANMAP): A transparent, flexible and user-oriented methodology to distinguish landscapes. Ecological Indicators, 10(1), 87–103.

Shatalkin, A. I., & Merz, B. (2010). The Psilidae (Diptera, Acalyptrata) of Switzerland , with description of two new species from Central Europe. Revue Suisse de Zoologie, 117(4), 771–800.