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Editorial

Adrian Plant & Martin Drake

Welcome to the revived Empid and Dolichopodid Newsletter.

Roy Crossley and Anthony Bainbridge started the study group in 1986 and wrote newsheets 1 to 15 (1999), and Adrian later wrote several articles for the Bulletin. After a long break and change of management, we decided to get the newsletter running again. We feel that the venture is a fully fledged recording scheme rather than a 'study group' since there are 120,000 records in the database, so have changed the title from Newsheet to Newsletter to bring it into line with other schemes' publications, but have continued the numbering to reduce confusion.

The scheme is run between us, with Adrian taking responsibility for the empids, and Martin running the dolichopodid side. You may send your records to either of us, preferably including both empids and dolichopodids together as this makes inputting more efficient. Send as a spreadsheet or Mapmate sync file, as indicated in the Bulletin.

If you have them tucked away, we recommend re-reading the first 15 newsheets as they contain some essential information and are a good read. For instance, in 1987, Jon Cole discussed several problems in the identification of dolichopodids (*E&D Newsheet* **3**). A few have been resolved, such as *Achalcus* (Pollet, 1997), the *Argyra argyria* group (Cole, 1992) and the acceptance of at least *Chrysotus microcerus* and *C. varians* as synonyms of *C. gramineus*, although *C. angulicornis* has been established as a good species (Negrobov & Pont, 2005). But other issues that Jon raised remain in limbo, such whether the *Sympycnus* that we call *desoutteri* is the same as *pulicarius* (see note 14 in Peter Chandler's checklist), and the identity of our several (at least three) types of *Micromorphus*. Way back in 1986, Peter Chandler gave *Notes on empids additional to Collin (1961)*, which is still useful although now needs supplementing by another 25 years of progress.

Data inputting

The E&D Recording Scheme now has nearly 120,000 records for the Empidoidea. We have not checked them for duplications and errors (some occur in the sea). I have entered many of the dolichopodid records handed to me by Roy Crossley but some were on computer print-outs which I'd rather re-capture from the authors than input by hand. You'll see from the ranking of the 20 most frequently recorded dolichopodids and empids that dolis are lagging behind. To goad recorders into submitting records, the map below shows the density of records, highlighting numerous gaps and sparsely recorded areas. Your patch needs you!

References

Cole, J. 1992. The male genitalia of some *Argyra* species (Diptera, Dolichopodidae). *Dipterists Digest (First Series)* **12**, 3-4

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

Pollet, M. 1997. Systematic revision and phylogeny of the Palaearctic species of the genus *Achalcus* Loew (Diptera: Dolichopodidae) with the description of four new species. *Systematic Entomology* (1996) **21**, 353-386.

Negrobov, O.P. & Pont, A.C. 2005. Some lectotype designations in the family Dolichopodidae (Diptera) from the collections of Ferdinand Kowarz and Hermann Loew. *Dipterists Digest (Second Series)* **12**, 13 – 20.

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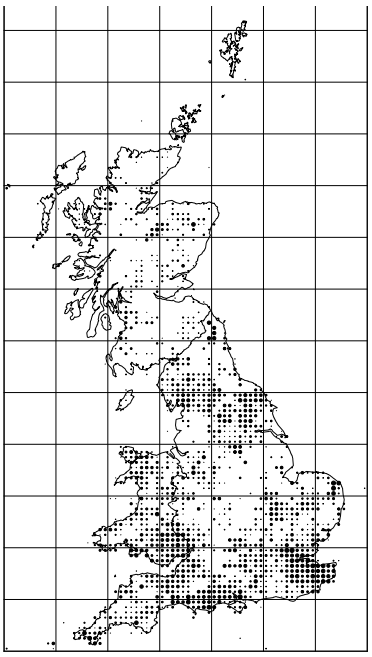
Species league table - number of 10km records in 2011 and density of records

Dolichopodids	Records	Empids sensu lato	Records
Campsicnemus curvipes	477	*Empis livida*	613
Dolichopus ungulatus	423	*Platypalpus pallidiventris*	587
Dolichopus plumipes	387	*Ocydromia glabricula*	530
Chrysotus gramineus	360	*Empis tessellata*	496
Sympycnus desoutteri	360	*Hybos culiciformis*	478
Syntormon pallipes	293	*Hilara chorica*	462
Poecilobothrus nobilitatus	288	*Bicellaria vana*	460
Sciapus platypterus	275	*Hybos femoratus*	442
Dolichopus trivialis	270	*Hilara maura*	420
Dolichopus griseipennis	250	*Platypalpus longicornis*	409
Dolichopus popularis	242	*Empis aestiva*	405
Campsicnemus scambus	239	*Hilara litorea*	385
Argyra leucocephala	221	*Phyllodromia melanocephala*	384
Medetera truncorum	211	*Empis nuntia*	362
Sybistroma obscurellum	203	*Platypalpus notatus*	355
Rhaphium appendiculatum	201	*Platypalpus longiseta*	350
Dolichopus festivus	199	*Empis nigripes*	342
Rhaphium caliginosum	194	*Tachypeza nubila*	342
Syntormon denticulatum	192	*Platypalpus minutus* agg.	337
Campsicnemus loripes	188	*Platypalpus agilis*	326



What's in a name?

Martin Drake

Doli, dolie, dolly. It really doesn't matter once you've anglicised a 'Latin' name, but the Greek means something like long-footed, not a toddler's toy. But we now have the Biodiversity Action Plan's Broads Dolly-fly (JNCC have it as Broads Long-legged Fly), which gives the wrong message to the uninformed public.

As well as my querying the first part of the name, Roy Crossley coincidentally investigated the last bit. He rightly points out that the Greek refers to foot, not leg. So the occasional rendering of with long-headed flies is way off beam, and nearly everyone else is only approximately accurate with long-legged flies. But in the interest of stability, we really ought to stick with this.

Expanding Ranges?

Adrian Plant

Rhamphomyia marginata was discovered in Britain on 14/6/1973 by ***Chandler*** (Proc. Brit. Ent. Nat. Hist. Soc 73-6 [1973]) from material coming to a light trap in Kent. The species is remarkable for exhibiting very striking sexual dimorphism with the females having enlarged wings with blackish marginal bands, while the wings of males are of normal size and do not have darkened margins. Females form conspicuous swarms at dusk, continuing until darkness falls, with males flying in from separate aggregations to mate with the females. The swarming habit of the females is an interesting example of 'role reversed' mating behaviour (it is usually males which display and females select the one they want to mate with); a habit of great interest to those studying the influence of behaviour on evolution. *R. marginata* is now well established and often common in East Kent (VC15) but has so far failed to expand much further. The situation may now be changing as lepidopterist Keith Tailby caught a female in a light trap operated in a ride in mixed woodland in the New Forest (SU182074) during April 2009 providing the first evidence for long distance dispersal from the founder population. Most British records come from light traps so anybody running light traps in broad-leaved woodland (or even conifer woodland as it has been reared from stumps of *Pinus* and *Abies* on the Continent) should be on the look out for it.

Another species which may be expanding its range is *Rhamphomyia physoprocta*. Originally recorded from the New Forest, there is now a scattering of records across England as far north as Yorkshire. In Wales is has been found on the River Usk and may be spreading along the South Wales coast, being reported from Methyr Mawr (VC 41) in 2004 and from Kenfig this year. This last site has been much worked by Dipterists for more than 100 years and it is unlikely that such a conspicuous species (it has brilliant white wings which positively shine when it displays in bright sunshine) would have been overlooked. A range extension may be the answer to its turning up at Kenfig recently.

Malcolm Blyth has recently found *Empis limata* from two localities in and around the Wyre Forest in Worcestershire (VC37) and Shropshire (VC41) thus

extending its known range northwards from Welsh border lands along the rivers Monnow, Usk and lower Severn. The capture sites were warm sunlit situations at the edge of or in a clearing in the forest. The species appears to like hot sunlit sites on easily warmed sandy soils and, although currently known only from near the Welsh borders, the fact that its European range shows an enormous disjunction (UK and Romania) suggests that it might just turn up elsewhere in Britain where appropriately warm sandy habitats persist.

Help with *Bicellaria*

Adrian Plant

The hybotid genus *Bicellaria* Macquart with 11 British species can present considerable identification challenges. Miroslav Bartak is preparing a new key to all European species but for the time being probably the most workable key is that in Chvála (The Empidoidea (Diptera) of Fennoscandia and Denmark. II. *Fauna Entomologica Scandinavica* 12, 281 pp. [1983]) but care is needed when comparing the all important facial width characters in the illustrations with dry mounted specimens as shrinkage and distortion can occur.

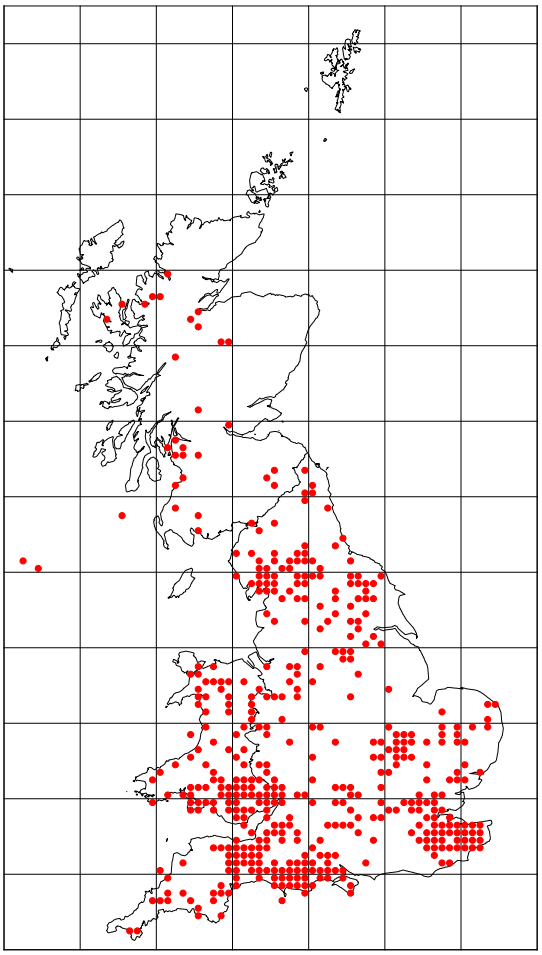
When setting out to identify a specimen it is best to first eliminate some of the more distinctive species - *B. simplicipes* (Zett.) has obviously slender legs and vein M_1 does not usually fade at its base so this is the only British *Bicellaria* with a complete fork in the wing. It is widespread but rather local throughout Britain.

In *B. nigra* (Mg.), *B. nigrita* Collin and *B. halterata* Collin, the basal two segments of the hind tarsi are distinctly dilated. The commonest of these is *B. nigra;* it is very obviously long-legged, the hind tibia is *abruptly* dilated near the tip and there are usually 2 very conspicuous long dorsal bristles basally on the mid tibia. *B. nigrita* and *halterata* have shorter legs with shorter bristles above the mid tibia and the hind tibia swells more gradually from base to apex; *halterata* can be told from *nigrita* by having the larger setae of the thoracic dorsum yellowish, and (in males) yellowish halters. *B. nigrita* is most frequent in southern England and shows some preference for calcareous localities whereas *B. halterata* is scare northern species, more or less confined to Scotland.

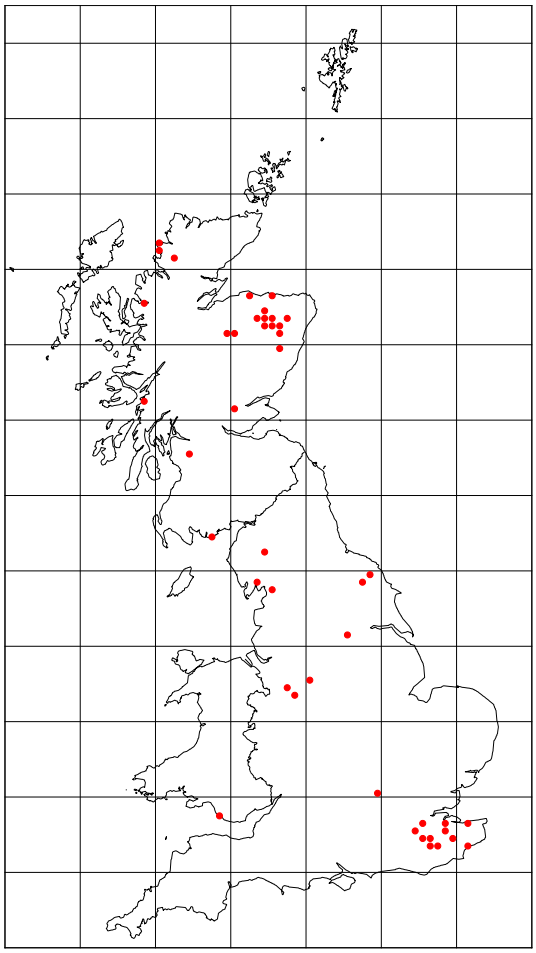
The presence of small but distinct bristles dorsally on the third antennal segment usefully separates *B. pilosa* Lundbeck and *B. intermedia* Lundbeck from other *Bicellaria* but do look carefully as they sometimes become flattened against the third segment and can be difficult to see; *pilosa* is a very bristly fly with a very wide face and at least three strong black setae on the palp whereas *intermedia* is less bristly and has only 1-2 much weaker bristles on the palp. Both are widespread throughout Britain and are generally but by no means confined to damp, rather acidic grasslands, bogs and moors. I have seen two British females which key to *B. austriaca* Tuomikoski, a continental species similar to *intermedia*, but without examination of male genitalia it is not possible to add this species to the British list.

Having eliminated these 'easy' species, the remainder falls into two groups separated on the width of their faces. The narrow-faced group includes *B. vana* Collin and *B. sulcata* (Zett.) which are extremely difficult to separate from each other and although differences in thoracic dusting and length of fine hairs on the front tibia are used in keys, I find them ambiguous. Fortunately male genital characters are much better and should always be used when separating the two; the hypandrial prongs are longer and more slender in *vana* than in *sulcata* and it is often possible to see the differences without dissection. *B. vana* is a very common species whereas *sulcata* appears to be widespread but local and most common in Scotland. Dissection of supposed specimens of *sulcata* often reveals them to be *vana* and Bartak informs me that even Collin's syntype series contains both species! (a taxonomic problem he hopes to resolve in his forthcoming revision).

The broad-faced group includes three species - *B. subpilosa* Collin is largely confined to the north and west of Britain. It is a very bristly fly recalling *pilosa* but lacking that species' distinctive bristles on the antenna and palp; it usually has 6 scutellar bristles which usefully distinguish it from *B. spuria* (Fallén) and *B. mera* Collin which generally have four only. *B. mera* is an insect of freshwater grazing marshes; the apical narrowing of its 3rd antennal segment is relatively short compared with *spuria* and its hind tibia is more slender although it is always best to confirm identification of these two species by male genital characters.



Bicellaria vana



Bicellaria sulcata

Syndyas nigripes in Devon

Martin Drake

This small hybotid has the IUCN status of Lower Risk (near threatened) and a sparse distribution in a few southern English counties and Norfolk. Falk & Crossley (2005, A review of the scarce and threatened flies of Great Britain. Part 3. Empidoidea. *Species Status* **3**, JNCC) say that most records are from heathland bogs, although the Norfolk record is from a fen. During the dipterists' summer meeting in 2011, we found two specimens (the first we were unaware of, the second took 10 man-hours of searching on the following day). They were from part of the Yarner Wood NNR complex south-east of Dartmoor, Devon. The record extends its range westward from Shapwick Heath in the Somerset Moors. One reason for its scarcity may be the habitat it lives in. The Devon site was *Molinia* tussocks set in runnels of 10-15cm of ochre-rich water. The National Vegetation Classification is *Molinia caerulea – Potentilla erecta* mire (M25) but this doesn't begin to describe the exceedingly trying terrain that caused much undesirable language and water-filled wellingtons. Few other flies were found here and most of us would not have bothered even trying to tackle such ground, hence the suggestion that *Syndyas* could be overlooked.

Syndyas nigripes female. Adrian Plant

On-line information on dolichopodids

Martin Drake

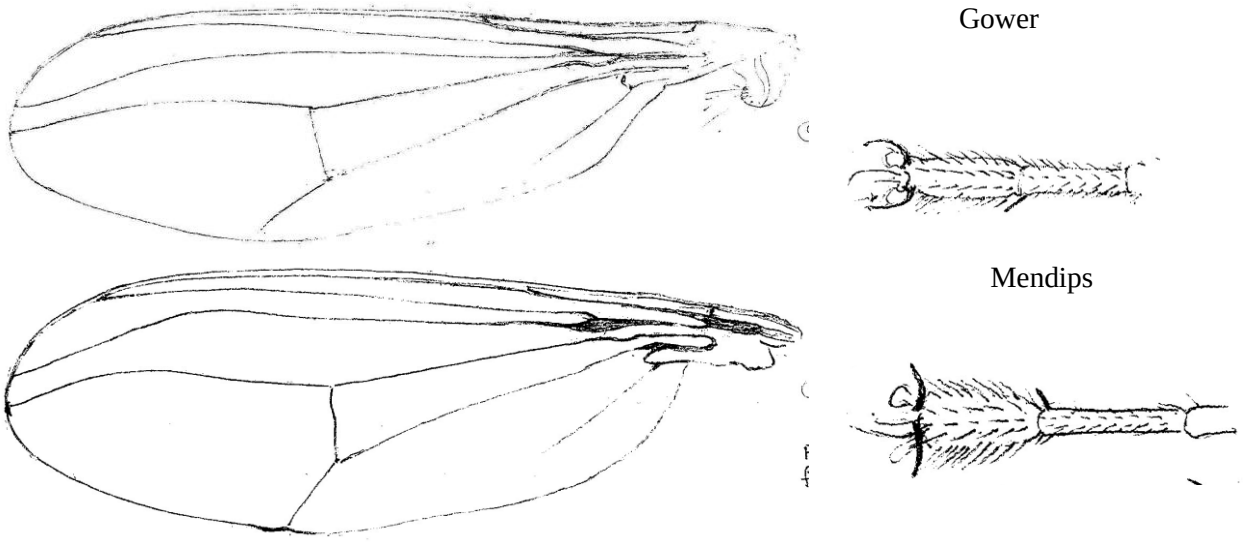
Faune de France is the French equivalent of the handbooks of the Royal Entomological Society and Ray Society. The society has decided to make many early works available as pdf files that can be downloaded from www.faunedefrance.org. These include Parent's invaluable *Diptères Dolichopodidae*. Faune de France 35 (1938), which has many illustrations and full descriptions. It is more than a useful adjunct to d'Assis Fonseca's RES Handbook since several of the species recorded new to Britain since the Handbook were traced using Parent.

Dolichopodidae Home Page by Igor Grichanov (www.grichanov.fortunecity.com/). With links to many other Diptera sites, keys to Swedish dolichopodids, publication lists of dolichopodid workers and further general information.

Does *Hercostomus nigriplantis* include two species?

Martin Drake

On the short Dipterists Forum field meeting based at Wells in Somerset in 2010, we visited a Mendips woodland where I collected a couple of male *Hercostomus* that key with no trouble to *nigriplantis* in all the usual European keys (d'Assis Fonseca 1976, Parent 1938, Stackelberg 1933). However, they differed from specimens that I collected from Gower on the DF meeting based as Swansea in 2009 and donated by Roy Crossley from a Yorkshire site. The differences are in the size of the front 'hands' which are markedly wide in the Mendips specimens, and in the wing venation (see Figures below). The limited data on the recording scheme database shows most records to be coastal, and just a few from inland. Could there be two species here, with different habitat affinities?



Changes in the dolichopodid fauna

Martin Drake

A long-term plan is a revision or completely new set of keys to Dolichopodidae. Two reasons for a new work are that the keys in the Handbook by d'Assis Fonseca (1978) are off-putting as they contrive to place rare species near the beginning rather than use obvious characters in a logical order irrespective of a species' status, and more importantly that there have been many name changes.

The RES Handbook included 267 species in 1978. Since then there have been 32 published additional species, 22 of which were included in Peter Chandler's 1998 *Checklist of Insects of the British Isles*. The actual total is complicated by the following changes since the RES Handbook and the 1998 Checklist: *Xanthochlorus luridus* - added but then deleted; *Systenus tenur* and *Chrysotus angulicornis* - synonymised and since restored; *Systenus pallidus* synonymised with *S. pallipes*; *Systenus alpinus* - raised from synonymy; *Medetera striata* may not be British. We also know that *Micromorphus* contains at least three species in Britain, and there is further species in a new genus to be added. Microphoridae (four species) was recently given subfamily rank and transferred to Dolichopodidae. The total for the British Isles is therefore at least 303 species. Of these, three are still known only from Ireland (*Campsicnemus dasycnemus*, *Syntormon setosum*, *Systenus alpinus*), the specific status of *Sympycnus pseudospicatus* has yet to be confirmed, and two are oriental species recorded from glasshouses so

may not become established in the wild (C*hrysotus longipalpus*, *Medetera grisescens*).

References to the 22 species added up to 1998 can be found in Chandler's checklist, and the few exceptions are listed below. Those since 1998 are given in the regular *Dipterists Digest* checklist updates and are summarised here. In future newsletters I will include couplets and figure to supplement the Handbook.

Species	**Reference**	**Identification help**
Achalcus nigropunctatus	Drake, C.M. 2008. *Achalcus nigropunctatus* Pollet & Brunhes, 1997 (Diptera, Dolichopodidae) new to Britain. *Dipterists Digest (Second Series)* **15**, 41-43. Pollet, M. 1997. Systematic revision and phylogeny of the Palaearctic species of the genus *Achalcus* Loew (Diptera: Dolichopodidae) with the description of four new species. *Systematic Entomology* (1996) **21**, 353-386.	description. See Pollet 1997 for all European *Achalcus*
Campsicnemus umbripennis hispanicus	Perry, I. 1999. *Campsicnemus umbripennis hispanicus* Strobl (Diptera, Dolichopodidae) new to Britain. *Dipterists Digest (Second Series)* **6**, 118-120.	leg illustrated (diagnostic)
Dolichophorus kerteszi (name incorrectly spelt in reference)	Drake, C.M. 2005. *Dolichophorus kerteszii* Lichtwardt (Diptera, Dolichopodidae) new to Britain. *Dipterists Digest (Second Series)* **12**, 1-2.	description. See Parent 1938 for figures
Dolichopus excisus	Gibbs, D. 2006. *Dolichopus excisus* Loew, 1859 (Diptera, Dolichopodidae) new to Britain discovered in southern England. *Dipterists Digest (Second Series)* **13**, 5-10.	modification of Assis-Fonseca key; genitalia, wing and antennae illustrated
Medetera freyi (*M. setiventris* and *M. fasciata* were included in Chandler but without a formal publication source)	Macgowan, I. 2001. *Medetera freyi* Thuneberg, *M. setiventris* Thuneberg and *M. fasciata* Frey (Diptera, Dolichopodidae) new to Britain with notes on the status of *Medetera striata* Parent. *Dipterists Digest (Second Series)* **8**, 85-90.	description and comparison with similar species; genitalia and wing (*freyi* only) illustrated
Medetera grisescens	Halstead, A.J. 2003. 2002 Annual Exhibition, Diptera. *British Journal of Entomology and Natural History* **16**, 179. Bickel, D.J. 1987. A revision of the Oriental and Australasian *Medetera* (Diptera: Dolichopodidae). *Records of the Australian Museum* **39**, 195-259.	an oriental tramp species: see Bickel 1987 (figure and description on pp 246-247)
Medetera insignis	Gibbs, D. 2007. *Medetera insignis* Girschner, 1888 (Diptera, Dolichopodidae) new to Britain. *Dipterists Digest (Second Series)* **14**, 95-97.	genitalia illustrated
Rhaphium suave	Drake, C.M. 2007. *Rhaphium suave* (Loew) (Diptera, Dolichopodidae) new to Britain. *Dipterists Digest (Second Series)* **14**, 1-4.	genitalia illustrated
Xanthochlorus galbanus *Xanthochlorus silaceus*	Chandler, P.J. & Negrobov, O.P. 2008. The British species of *Xanthochlorus* Loew, 1857 (Diptera, Dolichopodidae), with description of two new species. *Dipterists Digest (Second Series)* **15**, 29-40.	keys to genus, genitalia illustrations
Syntomon silvianum	Parvu, C., 1989. New contribution to the knowledge of Dolichopodidae (Diptera) of Romania (VI) with the description of two new species: *Syntormon silvianus* n. sp. and *Asyndetus negrobovi* n. sp. *Travaux du Museum d'Histoire Naturelle "Grigore Antipa"*, **30**: 57-65. Parvu, C., 2000. New data on two Dolichopodidae species (Diptera): *Syntormon silvianum* (Parvu, 1989) (description of the female) and *Hercostomus plagiatus* (Loew, 1857), from Romania (XVIII). *Travaux du Museum National d'Histoire Naturelle "Grigore Antipa"*, **42**: 157-165.	1989 paper - male illustrated 2000 paper – female illustrated