Empid and Dolichopodid Study Group

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Dipterists FORUM

Editorial

Newsheet No 13 was published in August 1994 and although this present issue is a trifle slim, it has been thought appropriate to publish at this time because a number of interesting small items have been building up over the past year or so and ought now to see the light of day!

Contributions to further issues will be gladly received by myself or Anthony Bainbridge, and hopefully we may be able to again publish an annual Newsheet if sufficient support is forthcoming.

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Dipterist eats humble pie

I am glad to take this opportunity to correct a typographical error (or, rather, a series of related errors) which have only recently come to light in my 'Index of Papers on the Empidoidea' which I made available at the November 1994 meeting. I am grateful to Peter Hodge for pointing it out. Some readers may already have spotted that in the fourth column, headed 'PUBL', some references to issues of E & D News lack a second digit. For dates from 1991 to 1994 inclusive the issue numbers should of course read 10, 11, 12 and 13 respectively. Pity the poor editor trying to cope with strings of data which, at their collective maxima, exceed the available print width on the page. In future I may have to adopt landscape format or reduce the font even further; *or* insist that authors with long names submit only papers with short titles, and *vice versa*.

I hope that some readers will nevertheless have found the Index to be of interest. It is my intention at present to update and reissue it every three years or so. I'd welcome your comments on content and format (and mistakes!).

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Records please! *Platypalpus bilobatus* Weber (Hybotidae)

This species was introduced to the British List by D A Smith in 1990 (*Ent.mon.Mag.***126**:59) on the basis of specimens taken at Grays Chalk Quarry, Essex, in 1981/82.

I collected several examples of this distinctive species at Forge Valley Woods NNR, North Yorkshire in 1995 and I shall be interested to learn if it has been found elsewhere in Britain since the original discovery.

Chelifera astigma Collin (Empididae)

There are few British records for this species, the most recent being by Adrian Plant in 1989 in the Brecon Beacons. Adrian reported this and included a drawing of the male genitalia, (which is not illustrated in Collin), in Empid and Dolichopodid Newsheet No 8 (February 1990).

I found small numbers of this species in Forge Valley Woods NNR during 1995 and I shall be interested to know if it has been taken elsewhere in Britain in recent years.

In due course I hope to publish a formal note on these two, and other species, found at this prime empid and dolie site. During the 1995 season, 170 species of Empidodidea were recorded there, and no doubt there are still more to be found.

Roy Crossley

Atelestus and other odd empids wanted for DNA research

A recent visit to Britain was made by Brian Wiegmann of the University of North Carolina, to seek *Atelestus* which was the subject of a phylogenetic study undertaken by him a few years ago. Now this and other critical genera of the Empidoidea and primitive Cyclorrhapha are being investigated in DNA studies as an aid to elucidating their relationships. The flies need to be collected into 95 per cent or absolute ethanol and then frozen within a few days to preserve their DNA intact.

From 22 - 24 July 1995, I accompanied Brian Wiegmann on visits to several sites in Kent, Hampshire and Berkshire where *Atelestus* had been recorded. This was admittedly towards the end of the recorded flight period but before the date of my finding of *A. dissonans* Collin in Kent in August 1979. The season was, of course, well advanced in 1995 and *Atelestus* was not found. I later made visits on 5 August to sites in Northumberland and Durham where I had found *A. pulicarius* (Fallén) in late July in previous years, but again without success.

Brian's visit was not, however, entirely fruitless as a good range of other empidoids including *Microphor* were collected. I was also able to supply him with suitably preserved specimens of *Opetia*, *Microsania* and *Gloma* found during the summer field meeting at Ayr and a few other platypezids during his visit. It seems probable that *Atelestus* will have to wait for next year to be included in the research which is ongoing. Brian had previously been successful in finding specimens of a North American species of *Meghyperus*, thought to be a close relative of *Atelestus*, and it will be interesting in future to see if DNA work confirms this relationship.

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An Irish dolie of antipodean extraction turns up in Scotland

During the summer field meeting at Ayr, I recognised two small female dolichopodids obtained on the wet afternoon of 5 July at Culzean Castle Country Park as of the same unidentified "campsicnemine" reported from Ireland in the Empid and Dolichopodid Study Group Newsheet No 5 (March 1988). The distinguishing characters of the species were stated in that Newsheet; this is a small rather nondescript dark greenish insect and is most easily recognised by the whitish patch over the posterior crossvein found in both sexes.

I had to leave Ayr on the following day but the fly was found in large numbers around Swan Lake at Culzean Park by Roy Crossley on that day. Several other collectors found it later in the week at other sites in Ayrshire. On 16 July I returned to Culzean Castle and although I couldn't find the insect around Swan Lake I did find it in numbers locally in other parts of the park, notably by sweeping rhododendrons by the path above the cliff and by ditches near the Carse Walk.

This species does appear to be well established in Ayrshire and should be sought elsewhere in the west of Scotland. Its identity had yet to be established. It runs in the keys by d'Assis-Fonseca to *Campsicnemus* but apart from having simple legs in the male has some other structural differences that suggested it was more closely related to *Sympycnus*. Both genera are now placed in the Sympycninae.

These further finds of the species and the preparation of the new Diptera Check List currently in progress, stimulated the need to establish its identity. As it was known that Dan Bickel (an American specialist in the Dolichopodidae who is based at the Australian Museum in Sidney) was revising the genera around *Sympycnus*, specimens were forwarded to him.

The local abundance of the species and its absence in older collections were stressed. As mentioned in the previous note on the species, one of the Irish sites (Crawfordsburn Country Park in County Down) was very near to the former residence of A H Haliday, who would hardly have overlooked even such an insignificant dolie so close to home. These factors suggested that it might be a recent introduction (although more than twenty years ago - I found it at Howth Woods near Dublin in 1975) and possibly (like the terrestrial flatworms which have taken up a similar distribution in the wetter parts of the British Isles) from the southern hemisphere.

Dan Bickel has confirmed these suspicions and has identified the species as *Micropygus vagans* Parent, a native of New Zealand. The genus *Micropygus* includes 16 known species and is endemic to New Zealand. It can only be assumed that the species came here like the planarians in soil around imported plants. It is unlikely that the time or place of the first introduction can now be established, but any further information on its present distribution would be of assistance in assessing how far it has spread. Although some of the sites are landscaped parks with gardens associated, it has evidently spread to native deciduous woodland and is clearly already a well established member of the British fauna.

An illustrated account of the species will be published in due course.

Peter Chandler

Euthyneura inermis Becker (Hybotidae): an identification tip

This species was added to the British List by Jonathan Cole in 1987 on the basis of specimens taken by him at Hartslock Wood, Oxfordshire (*Ent.mon.Mag.*: **123**:33). In recent years I have seen specimens taken at other Oxfordshire sites and also from Wiltshire and Bucks. In addition, I have myself found the species at three ancient woodland sites in North Yorkshire.

Clearly it is widespread in England, and with care it is easy enough to separate from the other British species. However, there have been times when I have experienced difficulty in deciding the colour of the thoracic bristles depending upon the angle of illumination. I have now realised that there is a much simpler way of separating *inermis*, especially from *myrtilli* to which specimens will most readily run. This is the shape and length of the third antennal segment to which Jon Cole drew attention in his note, and which I had overlooked.

The third segment of *inermis* (both sexes as far as I can judge), is similar to that of an *Oedalea* species, being long and fairly narrow. This is demonstrated in the rough sketch below. None of the other *Euthryneura* species are like this.

♂ ♂

inermis *myrtilli*

Roy Crossley

Medetera bispinosa Negrobov new to Britain

On re-examining some large male *Medetera* from Cornwall which I identified as *M. nitida* (Macq.) some years ago, I found that they were in fact referable to a related species, *M. bispinosa*, which was described by Negrobov (1967), and later redescribed in Die Fliegen (Negrobov and Stackelberg, 1971-7). The species runs to *M. nitida* in the handbook by d'Assis Fonseca (1978), but the male differs from that species in the form of the male hypopygium (which is figured for both species by Negrobov and Stackelberg *l.c.*), and in having two curved, closely approximated, spine-like bristles at the apex of the hind tibia instead of the single curved spine found in *M. nitida*. Unfortunately, I have not seen any specimens of the true *M. nitida*, but Negrobov reports that the male has conspicuous pollen at the sides of the clypeus, at the suture, and below the antennae, whereas in *M. bispinosa* the pollen in these areas is barely perceptible. Grootaert *et al.* (1987) have pointed out that in the original description of *M. bispinosa* the figures of the hypopygia of this species and that of *M. stackelbergiana* have been interchanged. Previous records of *M. nitida* from Britain need to be re-assessed and the presence of this species in this country needs confirmation.

The type material of *M. bispinosa* was reared from larvae found in bark-beetle passages in elm (Negrobov, 1967). Larvae have also been reported from under beech and elm bark in the burrows of the Scolytids *Taphrorychus bicolor* (Hbst.) and *Scolytus scolytus* (F.), and occasionally in the passages of *Xyloterus domesticum* (L.) and *X. signatum* (F.) (Krivosheina, *scolytus, S. multistriatus* (Marsham), the Tenebrionid *Corticeus bicolor* (Oliv.) and the Cucujid *Uleiota planata* (L.).

Some biological information published on *M. nitida* Macq. before 1967 when *M. bispinosa* was described may refer to the latter species. In particular this appears to be the case with the studies by Beaver (1966a, 1966b, 1967a, 1967b). Through the kindness of Joan Morgan I have been able to examine reared material of *Medetera* presented by Beaver to the University College of North Wales, Bangor, and it is clear that his specimens from Wytham Wood near Oxford reported as *M. nitida* should be referred to *M. bispinosa*. (Jonathan Cole has kindly confirmed this identification). Beaver (1966a) found that in elm *M. bispinosa* was largely restricted to Scolytid galleries in branches of more than 7-8 cm diameter, and this resulted in association almost entirely with *Scolytus scolytus*. His studies are important because they present a quantitative account of the impact of *Medetera* on the Scolytid. Grootaert *et al.* (1987) suggested that Beaver's studies might relate to *M. bispinosa*, and Krivosheina (1974) said that she could not indicate any differences between the larva of *M. bispinosa* which she described, and the larva described by Beaver (1966a) as that of *M. nitida*.

Material examined: CORNWALL: Boscastle, site of Bottreaux Castle (SX 099907), 5m 8.vii.1984 (C.E.D.). ESSEX: Basildon, 1m, 2f, 28.vi.1973 (C. Walker). GLOUCS: Kites Nest, Bulley (SO 7519)

1m, 26.vi.1973 (C. Walker). OXON: Wytham Wood, 1m, 10f, 30.v.-25.ix.1962, and 5m, 3f, 21.v.-25.vi.1963. WORCS: Grafton Flyford, Libbery, 27m, 21f, 21.vi.-10.ix.1973. FRANCE: Finistère, Manoir Kernorvan near Pont-de-Buis, 1m, 23.vi.1986 (C.E.D.). All the material of Dr Beaver and Dr Walker was reared from elm logs or elm bark, so the dates indicate when insects emerged in captivity. Beaver (1966a) states that at Wytham Wood adults occurred in the field from mid-June to the end of August. Females listed were associated with the males. The French specimen appears to be the first record for that country. One of Beaver's specimens which emerged in September 1962 was named as *M. nitida* by Negrobov, but the determination label is undated. Clearly it was seen by Negrobov before he was aware of the existence of *M. bispinosa*.

I am grateful to Joan Morgan and Jonathan Cole for their help.

References

d'Assis Fonseca, E.C.M., 1978, *Handb. Ident. Brit. Insects* **9** (5) i-iv+1-90.

Beaver, R.A., 1966a, *Proc. R. ent. Soc. Lond. (A).* **41**: 145-154.

Beaver, R.A., 1966b, *J. Anim. Ecol.* **35**: 27-41.

Beaver, R.A., 1967a, *Ent. mon. Mag.* **102**: 163-170

Beaver, R.A., 1967b, *J. Anim. Ecol.* **36**: 435-451.

Grootaert, P., Haghebaert, G. & Pollet, M., 1987, *Bull. Annls. Soc. R. Belge Ent.* **123**: 380-382.

Krivosheina, N.P., 1974, *Ent. obozr.* **53**: 309-323. (English Transl. *Ent. Rev.* **53** (2): 49-59).

Negrobov, O.P., 1967, *Ent. obozr.* **46**: 890-908. (English Transl. *Ent. Rev.* **46** (4): 533-544).

Negrobov, O.P., and Stackelberg, A.A., 1971-77, Dolichopodidae, Medeterinae. *Die Fliegen der palaearktischen Region* **29**: 238-354.

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Recent publication

Speight, M.C.D., Blackith, R.M., and Blackith, R.E., 1995. *Bathycranium*: synonymised with *Syntormon*, distinction between *Parasyntormon* and *Syntormon* discussed and *S. bicolorellus* and *S. luteicornis* (Diptera: Dolichopodidae) redescribed. *Insecta Mundi* **9**: 3-4, Sept - Dec 1995, 351-362).

The characteristic thumb-like projection of the second antennal segment into the third segment of *Syntormon* is also shared by *Bathycranium* which has led to difficulties of identification in the past. In the words of the Abstract of this important paper, 'It is demonstrated that there is no valid basis on which to sustain the monotypic genus *Bathycranium* Strobl and concluded that *Bathycranium* should be recognised as a junior synonym of *Syntormon* Loew (new status). The

species *Syntormon bicolorellus* Zetterstedt (new combination) falls into a natural grouping of *Syntormon* species with downcurved facial hairs in females. This species and *S. luteicornis* Parent are redescribed. Distinctions between *Syntormon* and *Parasyntormon* (a Nearctic genus (R.C.)) are discussed,'

The paper contains a correction of the record of *S. luteicornis* from Ireland, published by the same authors in *Dipterists Digest* 7: 24-47, which was erroneously based on specimens of *S. bicolorellus*.

R.C.