

Fungus Gnats Recording Scheme

Newsletter 2 Spring 2009



Progress on Distribution Maps. As previously reported BRC processed much of the data held by the Scheme during 2007 and produced provisional maps. Errors on these maps have now been corrected and electronic copies supplied so that interim distribution maps are now available where required to assist with ecological studies. The maps of most species with conservation status are relatively complete, although many records from the past 4 years, including the field meetings during that time, have yet to be input.

Some further input of data has now been done by BRC, who moved to Wallingford in 2008, and this will begin again and hopefully be completed in 2009. All specimens received by me during 2008 have now been checked. These and other records received have been passed to BRC and will be included on the final maps. I am grateful to all who have submitted specimens and records that have contributed towards the preparation of these maps.

Fungus Gnats of the Channel Islands. As the Channel Islands are included on the maps I have now also passed to BRC the fungus gnat data for these islands, nearly all obtained on Jersey by Tony Warne, so they can be covered. So far there are records of 94 species and no doubt many others still to be found. Among these are five species not known from the British Isles, although one of them *Leia arsona* has been recorded as an introduction and was included in the 1980 RES Handbook (Hutson *et al.*) on that basis. The other four species are *Keroplatus reaumurii*, which is widespread in Europe including northern France; *Sciophila corlutea*, a close relative of our *S. lutea*, otherwise known from the south of France, Corsica and Switzerland; *Clastobasis loici*, also known from Switzerland, the Czech Republic and Hungary and *Zygomyia matilei*, otherwise found in Germany, Austria, the Czech Republic and Switzerland.

Handbook to Mycetophilinae planned. I have started the preparation of keys to the subfamily Mycetophilinae, the only group not covered by the existing RES Handbook (Hutson *et al.* 1980). Since 2003 Zaitzev's keys to the Russian species of this subfamily, published in English, have been available and enable most British species to be determined. In Bulletin No 60 (2005, pp 7-9) I drew attention to these keys, pointing out that 45 British species were not included and listed the additional papers required for their determination, but keys including all British species are still needed. Including the newly found species mentioned below there are 310 British species of this subfamily.

Draft keys have now been compiled and will be tested against specimens before making them available to other testers. A list of known fungus association records for this subfamily has also been compiled and cross-referenced to a systematic list of the fungi involved. I am grateful to Judy Webb and Brian Spooner for assistance with the latest fungus nomenclature. Judy should also be congratulated on her continuing success at obtaining new rearing records from her extensive samples obtained on field meetings.

***Mycetophila cingulum* needs to be re-examined.** Since preparing the above mentioned draft keys three more species of Mycetophilinae new to Britain have been discovered in material collected by Martin Drake, David Gibbs and Ivan Perry. These will be published in

due course but one species found by all three of these recorders should be mentioned here, i.e. *Mycetophila sigmoides*, which has been found at 7 localities in 6 counties in southern England since 2004. Although four of these records are from 2008, when it was first recognised in Britain by David Gibbs, a few specimens collected in earlier years, by Martin, Alan Stubbs and myself, have also been identified. This may, like *Greenomyia mongolica* reported last year, be a recent arrival here but there is a possibility that it has been confused with the widespread species *M. cingulum*, which it closely resembles. Apart from small differences in the genitalia, including a smaller ventral lobe to the gonostylus, *M. sigmoides* differs in having slender fore tarsi in both sexes while *M. cingulum* has the front tarsi with segments 2 and 3 a little enlarged below in both sexes. Having slightly swollen fore tarsi is not uncommon in the genus *Mycetophila* but usually restricted to females.

While *M. cingulum* is mainly specific to dryad's saddle *Polyporus squamosus* and has also been reared recently in the Czech Republic from another soft polypore *Grifola frondosa*, *M. sigmoides* develops in tougher brackets. According to Zaitzev (2003) it has been reared from *Fomitopsis*, *Daedaleopsis* and *Trametes* species in Russia, where it is only known in Siberia and the Far East. Both *M. cingulum* and *M. sigmoides* are Holarctic species but *M. sigmoides* has only been recognised to occur in Europe in recent years. It was first reported from the Czech Republic in 1996, Hungary in 2002 and more recently has been found in northern Italy, so it is now known to be widely distributed in central Europe and may be spreading.

Most earlier specimens identified as *M. cingulum* that I have so far re-examined (including some from Belgium, northern France and Croatia) have been found to be correctly determined, but other specimens in collections should be checked. Could anyone who has specimens of *M. cingulum* please check the tarsal character and let me know the result.

Nursery Gnats. In the previous Bulletin, No. 66, I mentioned in an article about the 7000th British fly that some fungus gnats of South American origin had been found in association with cultivated plants in nurseries in the Netherlands. These sometimes accompanied *Leia arsona* mentioned above, which is now a widespread species in regions with a Mediterranean climate. It had been suggested to be Afrotropical in origin though there has been no confirmation of this and it is equally possible that it originally came from South America. The latter is certainly true of the other four species concerned which belong to the genera *Lyprauta*, *Proceroplatus* (both Keroplatidae) and *Sciophila* although one of the two *Lyprauta* species is apparently new to science. A paper on these species has now been submitted and should appear in 2009. Given the proximity and the considerable trade in plants with the Netherlands it is highly likely that one or more of these species will be found to occur in the British Isles, if they are not already here.

References

- Hutson, A.M., Ackland, D.M. & Kidd, L.N. 1980: Mycetophilidae (Bolitophilinae, Ditomyiinae, Diadocidiinae, Keroplatinae, Sciophilinae and Manotinae). Handbooks for the Identification of British Insects, London, 9, 3, 111 pp.
- Zaitzev, A.I. 2003: Fungus Gnats (Diptera: Sciaroidea) of the fauna of Russia and adjacent regions. Part II. International Journal of Dipterological Research 14: 77-386.

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