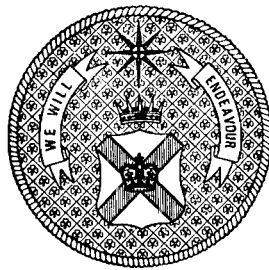


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P. J. CHANDLER

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MYCETOPHILIDAE) OF IRELAND**



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By P. J. CHANDLER

Weston Research Laboratories, 644 Bath Road, Taplow, Maidenhead, Berks

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ABSTRACT

An account is given of the present information available on the occurrence of Mycetophilidae in Ireland. This is based on material in museum and private collections, principally that of the author, while existing published records referring to about fifty species are evaluated. One hundred and sixty-five species are accepted as Irish but the limited data even for common species precludes any conclusions on distribution within Ireland. Although many additional species will probably be found in Ireland with further collecting, this is considered the time to give an introductory account. A general account of the habits and biology of fungus-gnats and a summary of taxonomic works relevant to the Irish fauna are also included by way of an introduction. The name *Leia nasuta* Haliday, previously unrecognised, is shown to be the valid name for the species misidentified as *Boletina lundbecki* Lundström by Edwards.

Introduction

The fungus-gnats are a relatively large and diverse group of Nematocerous Diptera with 410 species already recorded from the British Isles and about a further ten awaiting publication. The Sciaridae, once placed as a sub-family of the Mycetophilidae are excluded from the present list because of the unsatisfactory taxonomic state of the group. Little has been published hitherto on the Irish species of Mycetophilidae and there is great scope for study of this part of the Diptera in Ireland.

Most fungus-gnats are woodland insects, stockily built gnats with large coxae and often strong bristles on the legs and body. Although easily recognised as a group they exhibit a wide range in form and habits. An association with fungi and/or rotten wood, however, runs through most of the taxa (sub-families and tribes) into which the family is divided. They are collected in the greatest numbers by sweeping in damp, densely-shaded spots such as the overhanging banks of woodland streams or around rotting logs and stumps; most species tend to shelter in such spots in dry periods or during hot days. In humid weather or at night they range more widely and some species are attracted to light. Ovipositing females may be found about the fruiting bodies of the larger fungi, in which the larvae may also be easily obtained. Fungus-gnats may be collected at any time of the year but are most abundant in the autumn months when fungi are more prolific, while there is an earlier flush in late May – early July.

Some Mycetophilidae have more specialised habits. The species of *Leia* usually shelter amongst the foliage of broad-leaved trees from which they may be beaten,

while both they and several other genera commonly visit flowers. The well-known flower feeders are diurnal and usually visit Umbelliferae but sometimes Compositae or other families. Certain Keroplatines (e.g. *Asindulum flavum* and *Antlemon servulum*, which are often observed on umbels at woodland margins in diffuse sunlight) have a long proboscis modified for probing flowers but some relatives without this advantage also feed at flowers. Some species not normally thought of as flower visitors are recorded below from ivy flowers.

Many of the British fungus-gnats have been reared by Edwards (1925), Buxton (1960) and others, but only about a quarter of the British fauna are known to feed in fungus fruiting bodies. Many others develop in rotten wood, probably feeding on fungal mycelium while others feed on bark encrusting fungi. A few (*Platurocypta* species and *Mycetophila vittipes*) develop in Myxomycetes and at least one *Boletina* develops in liver-worts. The larvae of the Keroplatinae form silk webs over the surface of fungi, bark, etc., and are known to supplement their diet of fungal spores with small insects caught in their webs. Many Sciophilinae also form webs on the surface of hard Polypores but they probably feed only on spores. A few of the latter sub-family develop in the nests of birds and mammals.

The larvae of Bolitophilinae and most of the Mycetophilinae do, however, develop internally in fungi, affecting any part of the tissue. Development is rapid especially where the fungus is itself ephemeral and there may be several generations of the gnats per year, according to the weather conditions. Rearing is, however, best accomplished when the larvae are mature as they often require living fungus tissue; pupation (frequently in a silk cocoon) may be in the fungus but where the fungus is deliquescent it takes place in the ground. Few fungus-gnats appear to be monophagous, i.e. restricted to a single fungus food-plant, and many common species are certainly polyphagous although often selecting only soft or hard fungi. The development of a large proportion of the family, including some entire genera, is still unknown and there is much opportunity for adding to knowledge in this field.

The first person to devote much attention to the study of Mycetophilidae in Britain was F. Jenkinson who (1908) published some results of his investigations. It was under his influence that F. W. Edwards took up the group and brought knowledge of the British fauna up to date in 1913. In 1925 he published a thorough revision of the world sub-families and genera which has remained the basis for all later work on the family; the excellent account of the British species incorporated in the latter work was supplemented by some of Edwards' later papers (1929a, 1940 *re* taxonomic changes; 1926, 1927, 1932, 1933 and 1941 *re* additions to the British list). Since Edwards' death work on the British fungus-gnats has been progressing slowly, although more workers are now taking an interest in the group. Papers including additions to the British list after 1941 are as follows: Freeman (1956), Kidd (1955, 1969), Kidd and Ackland (1969, 1970a, 1970b) and Hutson and Kidd (1971, 1974). Kidd (1962) also deals with some points of taxonomic importance. With respect to the genus *Mycetophila* the Nearctic revision by Laffoon (1957) and papers relating to species-groups by Laštovka (1963, 1972) and Matile (1963) are important. The generic revision of the Tribe Exechiini by Tuomikoski (1966) has been generally adopted and is followed here. The recent works by Matile on the

French fauna are also useful although not directly relevant; the revision of *Dia-docidia* (Laštovka and Matile 1972) should, however, be mentioned.

Identification can be made with comparative ease as far as the generic level or to species groups within the larger genera, using the keys published by Edwards in 1925 in conjunction with his supplementary notes published posthumously in 1941. Within species groups, however, identification is often dependent solely on the structure of the large and complicated male genitalia, which are highly characteristic for each species. Female genitalic structure is also useful but less work has been done on it and differences are usually smaller between closely related species.

Illustrations of male genitalia of many species are provided in the works of Edwards but where a good figure existed already in the continental literature he did not provide one. Consequently it is necessary to consult a large number of papers scattered in continental journals. The account of the Palaearctic species by Landrock (1927) includes many figures but these are poorly reproduced and the work is now well out of date; his later work on the German fauna (1940) included species described in the intervening period and better figures of many but there is no up-to-date comprehensive work on the western European species. Nevertheless, despite all these difficulties reasonably accurate determinations may be made of the majority of British species at least in the male.

Previous and Current Work on the Irish Mycetophilidae

Although more than fifty species of this family have previously been recorded from Ireland, most of these are due to the works of Haliday (1833) and of Walker (1856), the latter based chiefly on Haliday's material. There is also a MS list of Irish insects compiled by Haliday *circa* 1855, of which Dr. C. E. O'Riordan of the National Museum of Ireland, Dublin, kindly allowed me to make a copy. These three works include mention of eighteen, thirty-nine and forty-one species from Ireland respectively, but in the MS list only twenty-eight are indicated as certainly Irish and some species recorded by Walker are omitted altogether. Differences between the three accounts are discussed under the species concerned.

The state of knowledge of Mycetophilidae at the time Haliday was working was very unsatisfactory and while Haliday was a careful worker with a good appreciation of specific distinctions no work had then been done on the genitalic structure. It has not, therefore, been possible in all cases to decide accurately the species to which a name used by these authors refers. Fortunately a large part of Haliday's collection survives in the National Museum of Ireland, Dublin (hereafter referred to as Dublin Museum), and study of this has been helpful in assessing the value of his records. Jenkinson (1908) and Edwards (1925) commented on Haliday's material with respect to particular species and the Haliday collection was studied by Edwards prior to his revision of the British species. Where Irish specimens exist in the Haliday collection (although in most cases only the name of the country is given) they are mentioned under the relevant species below.

A few more recent authors have contributed records of Irish fungus-gnats (Yerbury 1902, Grimshaw 1912, Morley 1920, Edwards 1929b, Edwards 1941, Hazelton 1974) but only six species were added by them. Museum collections do not contain many specimens of Irish origin but an endeavour has been made to

take all available material into consideration. The Dublin Museum contained fifty-six species of Mycetophilidae, chiefly unlocalised Haliday specimens but also some collected by J. N. Halbert, W. Rutledge and others. The British Museum (Natural History) also contained few Irish Mycetophilids but these belonged to thirty-eight species; the largest part of these were collected by F. W. Edwards in the Killarney district, v. 1929 (referred to in his 1929 paper cited above) but specimens originating with B. P. Beirne, R. L. Coe, J. J. F. X. King and most recently (vi. 1970) R. I. Vane-Wright were also present. A handful of specimens collected by A. W. Stelfox were kindly made available by the Smithsonian Institution, Washington, D.C. A few specimens have been sent to the author by Dr. M. C. D. Speight and one interesting addition to the Irish list was provided by miscellaneous Diptera collected by Dr. M. G. Morris in the Burren, vii. 1971 (*Exechia pseudofestiva* Lack.).

Another batch of recent material of Irish Diptera which the author has been able to examine is being assembled at the Ulster Museum, Belfast, where R. Nash, A. Irwin and C. Reid are actively forming a Diptera collection; this included twenty-seven species of Mycetophilidae, among them the first Irish specimens of *Orfelia (Urytalpa) ochracea* Mg., *Coelosia flava* Stg, *Trichonta melanura* Stg. and *Platurocypta testata* Edwards. The largest material of Irish Mycetophilidae available for examination was, however, collected by the author during a series of visits to various parts of the country from 1968 to 1973. Although most of these visits were during or after dry spells when fungi were few and conditions were often not propitious for fungus gnats, at least 127 species were obtained and these naturally provide many additions to the Irish list as well as confirmation of the occurrence of some species recorded by earlier authors.

From his examination of specimens from all the sources listed above the author has been able to include 165 species in the present list, i.e. about 40% of the British fauna. As so many of these species are being recorded on the basis of very few specimens, it appears probable that many additions leading to a much larger total Irish fauna can be expected.

The Localities Sampled during the Author's Visits to Ireland

The author has made six collecting visits to Ireland, of which the dates and principal regions visited are as follows:—

19.ix. – 21.ix.1968	Wicklow only.
27.vi. – 12.vii.1969	Waterford, Cork, Kerry (until 4.vii). Wicklow, Kildare, Wexford (5.vii onwards).
5.v. – 24.v.1970	Down, Antrim, Tyrone (5 – 9.v). Leitrim, Roscommon, Sligo, Westmeath (10 – 15.v). Clare, Galway (16.v. – 22.v). Wicklow (24.v).
10.x. – 17.x.1970	Wicklow (collecting only on 11.x).
8.vii. – 18.vii.1971	Wicklow, Dublin (10.vii). Leix, Kildare, Wicklow (11.vii). Dublin (12.vii and 17.vii). Louth, Meath, Monaghan, Armagh (15 – 17.vii).
13.x. – 20.x.1973	Cork (14.vii). Kerry (15 – 17.vii). Kildare (18.vii). Wicklow, Wexford (20.vii).

In all 142 locality samples (including duplication on different dates) were taken. Although concentration was given to wooded sites wherever possible, many areas collected were more or less open ground, often heavily grazed and unsuitable for Mycetophilidae. Also some localities which might have been productive for this family were visited at unfavourable times either due to date or to weather conditions. Of the 142 samples only sixty-five included fungus-gnats (these relating to fifty localities which are listed and briefly described below). Only forty-four samples (relating to thirty-five localities) included more than one species of mycetophilid. Certain localities were evidently rich in species of this family and these are usually deciduous woodland sites relatively undisturbed by grazing and are the same areas which are also rich in other groups of woodland insects. It should be noted, however, that most dipterous families were collected during these visits and concentration was given to fungus-gnats only when they were noted to be numerous so that they were probably under-collected in most localities.

Glendalough stands out as the most productive locality (fifty-seven species) and this may be due in part to the author's several visits to that area at differing times of the year but he has usually returned there whenever possible because of its high productivity in most groups of Diptera. The Killarney district has the second best list (forty species) but these are from diverse areas, no one locality producing more than eighteen species. The only other localities worth noting are Ardscull Mote in County Kildare and two woods in the Kenmare district of Kerry. Ardscull Mote is particularly interesting as it is a small entirely dry woodland site and has produced several dry woodland species not yet found elsewhere in Ireland.

WICKLOW : 76 species (W1)

(1) Glendalough (GL) : oak forest both around the Lugduff brook, above and below the Poll an Easa waterfall (PE) and along the Green Road at the base of a slope clad with forest (GR). In the first area sweeping boggy ground by the stream and about ferns, boulders, etc., in the second flushes and overhanging ledges providing shelter (57 species). (All figures in brackets refer to numbers of species obtained).

Visits on 16.ix.1968 (PE, 15); 20.ix.68 (GR, 11); 8.vii.69 (PE, 8; GR, 9); 24.v.70 (PE, 6; GR, 13); 11.x.70 (PE, 4; GR, 6); 10.vii.71 (PE, 13); 20.x.73 (PE, 12).

(2) Glendalough State Forest (GSF) : slopes above the Avoca river on east side of road just before fork to Glenmalure when approaching Laragh from Arklow. Mature oak woodland with ground flora mainly *Vaccinium* with some bracken. Sweeping the *Vaccinium* was very productive of Diptera. 17.ix.68 (9); 10.vii.71 (1).

(3) Glenmalure (GM) : scrub on rocky ground below waterfall behind ruined farmhouse on N.E. side of road opposite small conifer plantation. 16.ix.68 (5).

(4) near Aughrim river (AR) : deciduous woodland by foot-path off road from Aughrim to Woodenbridge opposite Aughrim river from which mature ash woods rise up a steep slope. 16.ix.68 (6).

(5) Glenmacnass (GN) : open ground by waterfall. Sweeping marsh and bog vegetation around runnels and grass amongst large boulders strewn about at head of glen. 17.ix.68 (2).

- (6) Glen of the Downs (GD): mixed deciduous woods, oak, beech, rowan on eastern side of this densely wooded defile. Steep, fairly dry slopes. 18.ix.68 (1); 11.vii.69 (1); 11.x.70 (3).
- (7) near Redcross (RC): mixed deciduous woods, sweeping about a woodland stream flowing under the road. 18.ix.68 (5).
- (8) by Lacken Reservoir (BLR): on shore immediately north of Blessington Bridge. Reed beds grading to grass heath and meadow on higher ground, a few willows near shore. 15.ix.68 (1 species, *Brevicornu griseicolle*).
- (9) Glencree (GC): vicinity of the Grotto, with shady corners and wooded surroundings, near banks of the Glencree river below St. Kevin's Barracks, 7.vii.1969 (1 species, *Macrocera vittata*).
- (10) Poulaphouca (PP): beechwoods on steep slope overlooking river. 11.vii.69 (1 species, *Mycetophila curviseta*).
- (11) Powerscourt Deer Park (PD): mixed deciduous woods by a stream (the more open ground here and nearer the waterfall produced no fungus-gnats). 10.vii.71 (11).
- (12) near Dunlavin (DL): mature beechwoods, sweeping around dead wood and beating bushes. 11.vii.71 (1 species, *Mycetophila signatoides* group ♀).

WATERFORD: 1 species (WA)

- (13) near Dungarvan (DG): hawthorn hedge bordering cattle-grazed meadow, 2-3 miles east of town. 27.vi.69 (1 species, *Leia fascipennis*).

CORK: 10 species (CO)

- (14) Tobar Ghobnatan (TG): marshy field grading into open wooded ground close to stream below St. Gobnat's shrine. 28.vi.69 (2).
- (15) Glengarriff State Forest (GG): mixed deciduous woods, mainly oak forest with marshy flushes and plenty of ferns. 4.vii.69 (4).
- (16) Dunamarc Falls (DF): clumps of mixed deciduous woods and scattered trees leading down to waterfall. 14.x.73 (6).

KERRY: 61 species (KE)

- (17) Rossacroonahoo Wood (RL): mixed deciduous woods near River Loo, sweeping near wooded stream banks. 29.vi.69 (1 species, *Acnemia nitidicollis*).
- (18) Killarney district (KI): 40 species, collected in six separate areas as follows:—
- Ross Island (RI): mixed planted woodland; marshy on lower ground near castle; higher and drier on lakeside of peninsula. 30.vi.69 (2); 17.x.73 (3).
- Monk's Wood, Muckcross (MW): mature deciduous woodland, mainly beech, surrounding Muckcross Abbey end of Dinis Road. 30.vi.69 (none found); 2.vii.69 (1); 16.x.73 (13); 17.x.73 (2).
- Dinis Road, Muckcross (DR): partly wooded, partly marshy ground, in great part choked with *Rhododendron*. 2.vii.69 (2).
- Torc Cascade (TC): lower slopes below the waterfall, more or less clothed with deciduous woodland, bouldery ground with ferns. 30.vi.69 (none found); 16.x.73 (7).

Woods north of Lough Leane (LL): rather dense mixed woodland with boggy patches. 17.x.73 (4).

Derrycunihy (DC): lane bordered with *Rhododendron* leading to bridge over link between lakes; deciduous woodland with some clearings and overhanging banks, beyond bridge. 16.x.73 (18).

(19) Dromore Forest (DF): beechwoods impinged upon by conifer plantations. Plenty of fungi about under beech trees. 15.x.73 (18).

(20) Drominahassig waterfall woods (DH): mixed deciduous woods, oak and birch with many flushes. Plenty of fungi observed. 15.x.73 (18).

(21) near Kenmare (KM): old hedges overhanging a sheltered bank in an area otherwise composed of grazing meadows on hillside. Some fungi present on the bank. 15.x.73 (6).

KILDARE : 26 species (KD)

(22) Ardscull Mote (AM): a large earth mound with ditch around summit, the site of a Norman fort, now clothed with mature beech trees, contained by a low stone wall at base, in otherwise typically-Irish undulating country composed of hedged grazing fields. The fringes of the beechwood have a shrub layer of privet and hawthorn; plenty of hogweed and herb robert in parts of herb layer but wood sanicle dominating a large part of ground; stone wall at the base ivy-clad and ivy flowers attractive to some Mycetophilidae on 18.x.73 when fungi were also plentiful under beech. 10.vii.69 (1); 11.vii.71 (6); 18.x.73 (23) (in all 26 species).

ANTRIM : 12 species (AN)

(23) Glenariff (GA): mixed woodland, conifers dominant in upper parts, sweeping overhanging banks above stream. 7.v.70 (12).

TYRONE : 3 species (TY)

(24) Gortin Glen Forest Park (GFP): open coniferous forest, mixed vegetation beside Pollan Brook. 8.v.70 (2).

(25) Baronscourt (BC): wooded estate with variety of habitats, rides in plantations and amongst *Rhododendron*, etc. 9.v.70 (only *Boletina trispinosa*).

LEITRIM : 8 species (LE)

(26) Lough Rinn Estate (LR): hedged bridle-path above east side of lake. 10.v.70 (1 species, *Mycomya winnertzi*).

(27) Dromahaire (DH): conifer plantations between village of Dromahaire and Lough Gill. 13.v.70 (2).

(28) Glencar Waterfall (GW): mixed deciduous woodland of an open nature on slopes leading up to the waterfall. 15.v.70 (6).

SLIGO : 14 species (SL)

(29) Glen of Knocknarea (CK): a steep-sided limestone gorge without a stream, only muddy track along floor. Rich in insects. 13.v.70 (12).

(30) Tobernalt Holy Well (TH): formalised waterfall with planted trees and flower-beds just outside Sligo town. Sweeping garlic abundant by stream flowing from well. 13.v.70 (1 species, *Phronia humeralis*).

(31) Lissadell Demesne (LD): planted mixed woodland near house, with a rich ground flora containing exotics but insects very sparse. 15.v.70 (2).

ROSCOMMON : 2 species (RO)

(32) Lough Key National Forest Park (formerly Rockingham Estate) (LK): wooded shores of Lough Key. Beechwoods being felled and replaced by conifers. Very little about but some insects swept from bamboo and snowberry by lake below burnt-out house. 11.v.70 (2).

WESTMEATH : 2 species (WM)

(33) Lough Derravaragh (LDV): birchwoods on steep slopes above lake shore. 14.v.70 (2).

CLARE : 22 species (CL)

(34) Cratloe Wood (CW): mature oakwood with uncoppiced hazel shrub layer, unfortunately of not very great extent and becoming surrounded by conifer plantations. 18.v.70 (1 species, *Mycomya maura* ♀).

(35) Lough Derg (LDG): small deciduous wood with brambles, etc., on ground on shore of lake north of Killaloe. 18.v.70 (1 species, *Boletina nitida*).

(36) Ennistymon (ET): wooded gorge above Falls Hotel, access from bridge over stream just outside town, way eventually barred by fallen trees and disintegration of track into river below steep slopes. Brief evening visit but very productive of small Diptera. 19.v.70 (10).

(37) Lough Inchiquin (LI): wooded hillside overlooking the Lough, track between mossy hedge banks with some shaded overhanging spots, ascending through young mixed woodland to conifer plantations at top of hill. 20.v.70 (9).

(38) Lisdoonvarna (LV): dense alderwood by the river. Insects very numerous and various. 22.v.70 (5).

GALWAY : 9 species (GY)

(39) Coole Park (CP): mixed woods around the remains of Coole House, evening visit. 21.v.70 (1 species, *Allodia ornaticollis*).

(40) Clarinbridge (CB): varied woods including conifer plantations but plenty of beech, oak, etc. Rich dipterous fauna. 21.v.70 (9).

LEIX : 1 species (LX)

(41) Emo Park (EP): mixed woods and open ground but only fungus-gnat obtained in conifer plantation. 11.vii.71 (1 species, *Boletina dubia*).

ARMAGH : 4 species (AR)

(42) Newry Forest (NF): mainly conifer plantations but some admixture of other trees. 15.vii.71 (4).

MONAGHAN : 1 species (MO)

(43) Lough Muckno (LM) : marsh vegetation and coarse herbage on shore of a backwater of lough. 15.vii.71 (1 species, *Boletina dubia*).

DUBLIN : 3 species (DU)

(44) Howth woods (HW) : mixed woods, mainly deciduous, on slopes of Ben Howth, summit of Howth Peninsula. 17.vii.71 (3).

WEXFORD : 1 species (WX)

(45) Tagoat (TA) : hedges surrounding small overgrown fields. 20.x.73 (1 species, *Brevicornu griseicolle*).

Species List

Abbreviated locality references for which no collector's name is cited refer to specimens collected by the author.

DITOMYIINAE

The two British species of this sub-family have not been found in Ireland.

BOLITOPHILINAE

The records of *Bolitophila cinerea* Hoffmanssegg and *fuscus* Meigen given by Haliday (1833) could refer to any species of the genus. Walker (1856) gave only *cinerea* from Ireland and Haliday in his MS list says *fuscus* was recorded in error for *cinerea*; *B. fuscus* is a synonym of *B. hybrida*.

Bolitophila cinerea Meigen

WI/GL (GR & PE); GD; PD. CO/DF. KE/KI (LL). CL (ET).

LX/Slieve Bloom, 6.vi.70 (R.I. Vane-Wright, B.M.). Common. Unlocalised Irish specimens in Haliday collection.

B. saundersi Curtis

WI/GL (GR & PE); GM. KE/KI (DC); DF.

Probably common. Males difficult to separate from those of *B. spinigera*. One unlocalised Irish female in Haliday collection.

B. spinigera Edwards

CO/DF, 15.x.73 ♀.

Few British records although widespread.

B. hybrida Meigen

WI/GL (GR), 20.ix.68 ♀.

Common in Britain and should be so in Ireland.

DIADOCIDIINAE

Diadocidia ferruginosa Meigen

CO/TG, 28.vi.69 ♂.

Should be common. Females collected at WI/GL and PD but these cannot be separated easily from *D. spinosula* Tollef. Recorded from KE/KI by Walker (1856) and Hogan and Haliday (1855).

KEROPLATINAE

Asindulum flavum Winnertz

DOWN/Tullymore Park, vi.1846 (Haliday; Walker 1856; one ♂ in Dublin Mus.).

KE/Parknasilla, 17.vii.1901 (J. W. Yerbury; Yerbury 1902; in B.M.). Killarney, Cromaglan. Gortroc, 5.viii.1940 (B. P. Beirne, B.M.). Common in Britain on hogweed flowers in diffuse sunlight at wood edges.

Antlemon servulum Walker

KD/AM, 10.vii.69, 3 ♂ 1 ♀; 11.vii.71, 4 ♂.

One female labelled "Killina" in Haliday collection.

Another umbel visitor but usually less frequent than *A. flavum*.

Cerotelion lineatus Fabricius

KE/KI (RI), 30.vi.69, 1 ♂ on fungus covered log.

Rather local in Britain, usually found in the situation described.

Orfelia (Isoneuromyia) semirufa Meigen

WI/ Clara (Haliday) and two unlocalised specimens in Haliday collection (labelled respectively *adusta*, *vitripennis* and *brunnipennis*). Recorded by Walker (1856) from Ireland under name *Platyura vitripennis* Stephens MS.

O. (Pyratula) zonata Zetterstedt

One unlocalised Irish specimen in Haliday collection (labelled *flavipes*?), which was recorded from Ireland by Walker (1856) as *Platyura flavipes* Mg.; the latter name is a synonym of *O. nemoralis* below.

O. (Urytalpa) ochracea Meigen

DOWN/ Bangor, 3.iii.73 ♀ on garage window (C. Reid).

Not common but found throughout Britain.

O. (Neoplalyura) flava Macquart

DOWN/ Newcastle, 4.vii.1912 (J. J. F. X. King, B.M.).

O. (Orfelia) nemoralis Meigen

KD/AM, 11.vii.71 ♂; WI/GL (GR), 8.vii.69 ♂; KE/KI (DR), 2.vii.69 ♂.

AR/ Lough Neagh, Oxford Island, 6.vi.73 ♂ (A. Irwin).

Probably quite frequent. Five of the seven specimens in Haliday's collection are labelled "Ireland". Walker's *flavipes* Mg. may have included both this and *O. zonata* above.

O. (O.) unicolor Staeger

AR/NF, 16.vii.71 ♂; KD/AM, 11.vii.71 ♀.

One male labelled "Ireland" in Haliday's collection.

O. (O.) discoloria Meigen

WX/ Wexford, 8.vii.1902 ♂ (J. J. F. X. King, B.M.).

Walker (1856) recorded this from Ireland but the single female labelled *discoloria* in Haliday's collection is a *Neoplalyura* species.

O. (O.) fasciata Meigen

WI/ GL (PE), 10.vii.71 ♂.

O. (O.) pallida Staeger

WA/ Cappoquin, 25.vii.1902 ♀ (J. J. F. X. King).

Macrocera aterrima Stackelberg

KE/KI (TC), 16.x.73 ♀.

Otherwise known only from Scottish Highlands (see Hutson and Kidd 1974; Chandler, in press).

M. parva Lundström

LX/ Slieve Bloom mountains, 6.vi.1970 ♂ (R. I. Vane-Wright, B.M.).

M. fasciata Meigen

WI/ GL, 16.ix.68 ♀; 8.vii.69 ♀; 24.v.70 ♂.

KE/ KI, vi.1913 ♂ ♀ (Morley 1920); 25-27.v.1929 ♂ (F. W. Edwards, B.M.).

DOWN/ Holywood (Haliday 1833) (Walker 1856 gives Ireland). It is probably fairly frequent.

M. vittata Meigen

WI/ GL (PE); GC.

Two males labelled "Ireland" in Haliday's collection; this species was recorded by Haliday (1833) and Walker (1856) under the name *lutea* Meigen. It is usually one of the commonest *Macrocera* in marshy woods.

M. centralis Meigen

One female in Haliday's collection, labelled "Ireland". This species is more characteristic of drier woods, where it is often common in Britain.

M. stigma Curtis

DU/ HW, 16.vi.1910 ♂ (Dr. Hungerford, Dublin Mus.). CO/ GG; LX/ Slieve Bloom; W1/ Kippure Bog (several specimens, vi.1970) (R. I. Vane-Wright, B.M.). TIPPERARY/ Killaloe, 16.vi.1913 ♀ (Morley 1920).

Generally common.

M. stigmoides Edwards

W1/ GL; AU. DU/ HW. CL/ ET. KE/ KI (DC).

LX/ Slieve Bloom, 6.vi.70; Atorick, 7.vi.70 (R. I. Vane-Wright, B.M.).

Some Irish males differ in some respects from British males but no characters of specific importance have been discovered.

M. phalerata Meigen

Two Irish specimens in Haliday's collection (it was recorded from DOWN/ Holywood by Haliday (1833) and by Walker (1856) from Ireland). It is quite common in Britain and may be so in Ireland.

SCIOPHILINAE

MYCOMYINI

Mycomya marginata Meigen

The author has only seen females which probably represent this species from Ireland. It was recorded by Haliday (1833) and Walker (1856) (in the genus *Sciophila*) and there are two Irish females in Haliday's collection. The author has females from W1/ GD; KE/ KI and LE/ GW.

M. hyalinata Meigen

AR/ NF, 15.vii.71 ♂.

M. wankowiczi Dziedzicki

W1/ GD (PE), 10.vii.71 ♂.

This and the previous species are probably frequent.

M. winnertzi Dziedzicki

AN/ GA. W1/ GL (PE & GR). LE/ DH; LR. WM/ LDV. RO/ LK. KE/ DH. CL/ ET. KE/ KI (Cromaglan) (B. P. Beirne, B.M.).

Common generally in woods. Above records refer to males only; females from several localities could be this or *M. wankowiczi*. One male labelled "Ireland" in Haliday's collection.

M. cinerascens Macquart

KE/ KI (TC). W1/ GD.

W1/ Lough Dan, ix.1909 ♂ (J. N. Halbert, Dublin Mus.).

A very common species everywhere in Britain.

M. incisurata Zetterstedt

LE/ DH. CL/ LI. GW/ CB. KE/ KI (DC). KD/ AM. W1/ GSF; AU; GD.

KE/ KI (TC) (R. I. Vane-Wright, B.M.), (Cromaglan) (B. P. Beirne, B.M.). W1/ Lough Dan, 30.ix.1909 (J. N. Halbert, Dublin Mus.); Enniskerry (B. P. Beirne, B.M.).

Very common everywhere in the British Isles.

M. flavicollis Zetterstedt

KD/ AM, 11.vii.71, 3 ♂; 18.x.73, 3 ♂ on ivy flowers.

An uncommon species restricted to a few localities in southern England on present information, all dry woods.

M. circumdata Staeger

KD/ AM. 18.x.73 ♂.

C. fasciata Meigen

WI/ GL (GR), 20.ix.68 ♂; 11.x.70 ♀ on oak trunk.

Haliday (1833) recorded this species from DOWN/ Holywood and there are two females labelled "Ireland" in his collection. Infrequent but widespread in England.

C. flaviceps Staeger

WI/ GL (PE), 16.ix.68, 2 ♀; AU, 16.ix.68 ♂.

MAYO/ Hollymount, 27.ix.22 ♀ (W. Ruttledge, Dublin Mus.).

Scattered records in southern England; both this and *C. fasciata* develop in *Russula* species. Walker (1856) recorded *C. flaviceps* from Ireland but no old specimens survive.

MYCETOPHILINI

Trichonta stereana Edwards

KE/ KI (DC), 16.x.73 ♂.

Uncommon but generally distributed in Britain. The larvae develop in *Stereum* encrusting rotten logs.

T. melanura Staeger

DOWN/ Stormont, 13.v.1969 ♂ (A. Irwin).

Uncommon but widespread in Britain.

T. vitta Meigen

WI/ GM, 16.ix.68 ♂.

The commonest British *Trichonta*, its larvae feeding in *Poria* encrusting damp bark. Several other *Trichonta* species should occur in Ireland but they are an elusive group.

Phronia exigua Zetterstedt

KE/ KI (MW), 16.x.73 ♂.

Widespread in Britain although it is not as common as some other *Phronia* species.

P. humeralis Winnertz (= *forcipula* Winnertz of Edwards)

WI/ GL (PE, GR); GSF. AN/ GA. GY/ CB. CL/ LI. SL/ TH. CO/ TG.

DOWN/ Bangor, 3.iii.73 ♀ (C. Reid); Tollymore, 14.iv.74 ♀ (A. Irwin).

Generally abundant in damp woodlands throughout the British Isles. Larvae feed on wood encrusting fungi, which is the habit of all *Phronia* whose development is known.

P. braueri Dziedzicki (= *annulata* Winnertz of Edwards)

GY/ CB, 21.v.70 ♂.

Common in damp woods in Britain, probably so in Ireland also. Several females collected in Ireland are probably this species but they cannot be adequately separated from other related species.

P. forcipata Winnertz

KE/ KI (DC), 16.x.73 ♂.

WI/ Lough Dan, 30.ix.1904 ♂ (Dublin Mus.).

Frequent and generally distributed in Britain.

P. cinerascens Winnertz

WI/ GSF. KE/ KI (RI). LE/ GW. CL/ ET.

Generally common in damp woods.

P. tenuis Winnertz

KD/ AM, 18.x.73 ♂.

Frequent and generally distributed in Britain.

P. conformis Walker

KE/ DF, 15.x.73 ♂.

Quite common in southern England.

P. nigricornis Zetterstedt (= *dubia* Dziedzicki of Edwards)

WI/ GL (GR), 24.v.70 ♂. KE/ DH, 15.x.73 ♀.

Fairly common throughout Britain.

P. triangularis Winnertz

KE/ KI (DC), 16.x.73 ♂.

Not common but widespread in Britain.

