

The 'Ffungi' of Welsh Botany, H. Davies 1813

R. W. G. DENNIS

The Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB.

'Valleys he saw and steeps, and rocks of wondrous height and rugged precipices... and thence he beheld an island in the sea, facing this rugged land'.

The Dream of Maxen Wledig*

In these few terse dramatic phrases Lady Charlotte's translation of the mediaeval *Llyfr Coch Hergest* (Guest, 1849) vividly evokes the scene and it seems perverse for such a secluded island to be the site of the first comprehensive list of fungi in a British county flora and for this then to lapse into oblivion. But the island was Môn mam Cymru and the Rev. Hugh Davies 1739? - 1821 (Fig 1) was no conventional rural parson with a casual interest in natural history. This intensely patriotic Welshman and dedicated student of the ancient language was also acutely aware of the diversity of the natural world and appreciative of its sensual appeal by colour and scent. He was a critical botanist and mycologist, a close friend of Hudson and Sowerby, whose herbarium was eventually deposited at the British Museum from which such of his fungi as survived were devolved to Kew. As such he must have been familiar with the first printing in 1806 of Breiddyd Maxen Wledig, especially as it is focused on events in 4th century Segontium, Caer Seint (Rivet & Smith, 1979) just across the Menai from his home.

With Hudson he 'passed a good deal of time and had much conversation' during a visit to London in 1791 and he expected a return visit from him in the following year so 'that he should experience fewer interruptions in a retirement in Wales' had it not 'in the month of May pleased Heaven by means of a paralytic attack to summon him to happier climes'. One infers that it was with the encouragement of the author of *Flora Anglica* that he felt 'a desire to make some guess at the number of vegetables of spontaneous growth on the island of Anglesey, the country which gave me birth and education'. In fulfilment of this ambition the first 110 pages of *Welsh Botany* (Davies, 1813) contain a

* Magnus Maximus, 'Gallie' emperor 383 - 388 A. D., claimed as progenitor of the princely line of Powys, in the famous inscription in Valle Crucis.

catalogue, by the system of Linnaeus, of the phanerogams, vascular cryptogams and bryophytes of Anglesey, mostly localised and with occasional critical comments. But Davies was also a regular correspondent of Sowerby who dedicated to him in 1809 the fourth supplementary volume of *English Fungi*. Thus, to complete the vegetational survey of the island there follows a catalogue of species in Ordo IV Algae, which includes lichens and the genus *Tremella*, and in Ordo V Fungi. The latter occupying pages 122 - 132, mostly a bare list of names in genera arranged alphabetically from 364 *Aecidium* to 385 *Xylostroma*. These were named mainly by reference to the coloured figures in Sowerby's four volumes, supplemented by the works of Bolton (1788 - 91), Schaeffer (1762 - 1770), Scopoli (1772) and Withering (1801). He made no reference to Bulliard or Persoon, and Fries, of course, had yet to come. Though 1813 was the year of Leipzig, isolation from continental authors had been temporarily ended by the truce of Amiens in 1802, so access to French writings had been possible for a short time.

This comprehensive list of 336 names of fungi, covering all groups from agarics to moulds, seems to have been completely ignored by modern mycologists. The flowering plants, vascular cryptogams, bryophytes, marine algae and lichens of Anglesey were revised by J. E. Griffith (1895) but he made no reference to the non-lichenised fungi. Perhaps it was too difficult for him to relate Davies's pre-Friesian names to those current in his day.

The second part of *Welsh Botany*, significantly referred to by the author as the principal part, is an 'Alphabetical catalogue of all the British names of plants and to each species, most remarkable for its qualities, either

economical or medicinal, is subjoined an account of its uses or virtues, with the means of preparing it and the proper dose, all taken from the best writers on these subjects: this is intended particularly for the use and relief of such of my countrymen who are so distantly situated or so circumstanced as not to be able "on every occasion" to apply to professional men'.

In this context 'British' means the indigenous language of *Ynys Prydain*, the tongue of Aneurin and Taliesin, of Helen Luyddawc and Maxen Wledig. In his own country and addressing his own people the term 'Welsh' (A. S. Weala, an alien, a foreigner) would naturally be highly offensive. Entitled *Llysieuath Cymrëig* and illustrated by an explanatory plate of floral analyses, it is necessarily inaccessible to the average monoglot Sais. A primary source was a manuscript attributed to the Meddygon Myddfai, a family of hereditary physicians at Myddfai in Dyfed from 1236 to the beginning of the eighteenth century, supplemented by a compilation made by a namesake, a Rev. John Davies, in 1632. Davies actually cites a verse from Taliesin in deciding the correct application of the name Cadafarth. The textual dichotomy embodies the paradoxical requirement of educated Cymri down the ages, to sustain the prophecy of Taliesin while being fully receptive of contemporary European thought.

It may be thought reckless and even to risk raising the 'war that sleeps on Severn side', (Houseman, 1896) for a Sais, even one born in sight of Severn but on the wrong bank, to venture revision of a text of this character and status. However, it is not the Cymric names that are involved but the pre-Friesian Latin names which are accessible to all. Just as he endeavoured to update the Meddygon Myddfai to the circumstances of his own day I seek only to relate that section of Davies' text ignored by Griffith to post-Friesian nomenclature and modern classification.

The first step is to collate his list of names with the text of *Systema Mycologicum* (Fries, 1821), not very difficult as a rule because Fries had full cognizance of Sowerby (1797-1809) and Bolton and some of Withering. This yields a fully intelligible catalogue which can be redispensed in accordance with contemporary taxonomic concepts. There is no modern list of

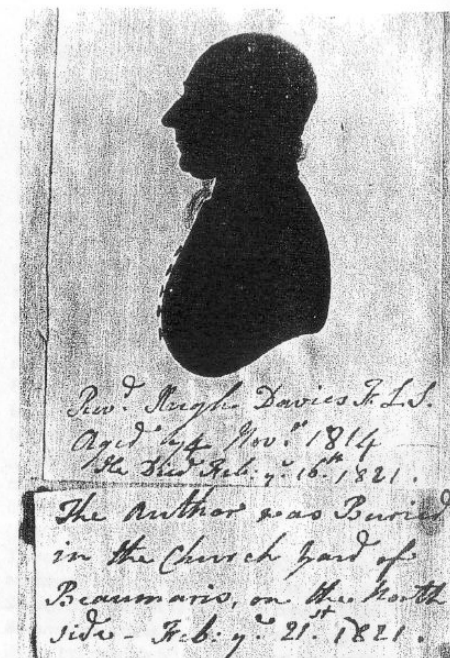


Fig. 1 Rev. Hugh Davies, age 74, November 1814.

the fungi of Anglesey alone and no mycological foray has been devoted to the island, apart from a few day trips, but there are ample modern records from the adjacent mainland with which to compare the result and assess the credibility of Davies' work. His scientific integrity is indicated not only by his high standing as a mycologist in Sowerby's estimation, but by his scrupulous treatment of his text. His generation had perhaps an undue veneration for antiquity and the classical authors and it was with an eye to Caesar, Tacitus and the bloody events on the Menai in 60 - 61 A.D. that Davies included *Viscum album* in the Anglesey Flora, because 'We can scarcely suppose that the Druids had fixed upon as a favourite residence a spot that did not produce this highly venerated plant'. However, he made it clear he had not seen it there in his own day. Nearly a century later Griffith recorded it only on apple in gardens at Beaumaris and Menai Bridge. As it was not there in 1813 the inference is of recent

introduction. Baseless fantasies about Druids have been the bane of Celtic studies in Britain from Stukeley to the Eisteddfodau. Today we may see more reason to associate them with *Fistulina* than *Viscum* but that does not appear in Davies' list.

His original text contains a number of observations and comments which enhance its credence. *Agaricus aureus* is 'Elegant at the root of an aged oak'. This was surely *Gymnopilus junonius* rather than the rare *Phaeolepiota aurea*, an error common to many later authors including Quélet and M. C. Cooke.

Boletus velutinus = *Inonotus hispidus* is 'on aged ash' as one would expect.

B. imbricatus = *Meripilus giganteus* is 'near two feet in diameter'.

Sphaeria fraxinea = *Daldinea concentrica* is 'abundant on a dead standing ash'.

Llangadwaladr church was in trouble, for it had 'an elegant variety of *Boletus lachrymans* (= *Serpula lacrymans*) on its wall'. On the other hand *B. ignarius* must be suspect. I find no recent record from the region and as no name referable to a *Ganoderma* is listed, a misidentification seems very probable. *A. giganteus* should be *Leucopaxillus giganteus* but there is a problem with the record. There is a specimen so labelled in Davies' herbarium which looks at first sight to be correct and is accompanied by a reference to the correct E. F. plate and date XII (17) 99 but it yields no amyloid spores and the species is not recently confirmed from Gwynedd. Neither *A. maximus* = *Clitocybe geotropa*, also absent from modern lists, nor *C. clavipes* recorded commonly, offers an acceptable alternative.

Auricularia papyracea 'on old stump of gorse' is in my experience of the host more likely to have been *Byssomerulius corium* than *B. serpens*. *Tuber cibarium* 'formerly in considerable plenty in the deer park at Penmon' should nominally be *T. brumale* but was more probably the very similar and more common *T. aestivum*, well attested from Vaynol Park and Abergele, but *T. solidum* is *Scleroderma citrinum*. *T. radicum* W. was not recognized by Fries but Palmer (1968) assigns it tentatively to *S. cepa*, treated by most authors as a variety of *S. verrucosum*, to which the epithet '*radicum*' well applies.

Like de Candolle before him, Davies was foxed by the puffballs and reduced to recording

only '*Lycoperdon proteus* and all the varieties'. This must be assumed to cover *Calvatia* and *Vascellum* as well. Nearly two centuries on, the latest monograph (Pegler, Laessle & Spooner, 1995) credits Anglesey with five species of *Bovista*, three of *Calvatia*, five of *Lycoperdon* and *Vascellum pratense*, plus three *Cyathus*, six *Geastrum*, one *Mutinus*, two *Phallus*, three *Scleroderma* and one *Tulostoma*. Davies's tally of one *Bovista*, two *Cyathus*, two *Geastrum*, one *Phallus*, two *Scleroderma*, one *Tulostoma* and 'all the *Lycoperdons*' is thus not only fully vindicated but a great credit to the observations of one man working in such isolation. His second *Phallus* was, of course, a *Morchella*. There is nothing to suggest he had a microscope and for him, and his contemporaries, *Trichoglossum hirsutum* was inevitably a *Clavaria*, while *Auricularia auricula-judae* and *Craterellus cornucopioides* were species of *Peziza*.

Like any sound field mycologist Davies was very sensitive to odours. '*A. confluens* I once found on the decaying stump of a fir but my plants emitted a most pleasant aromatic fragrance, so as to scent a whole room in a few minutes'; clearly he had *Lentinellus cochleatus*. As to *A. fragrans*, 'this small plain plant emits a most pleasant ratifia scent'. Of *A. violaceus* = *Lepista nuda* there are 'beautiful varieties, one of which has the smell of *Phallus impudicus* but not so strong'. One thinks of *Lepista irina* though there is not enough additional information to enter it in the list.

Evidently *P. impudicus* was not offensive to him anymore than to others who attributed to it a concentrated odour of violets, but *A. sulfureus* (= *Tricholoma sulphurum*) did not please, 'this pretty entirely yellow species emitted the most horribly fetid carrion smell of any substance I ever saw'. A comparison with gas tar was for a later generation and itself is now obsolete.

On the other hand he makes no reference to flavour or taste nor, at least in English, to edibility. He seems rather to have been obsessed with toxicity, as befits Wasson's concept of the mycophobic Britons. In this, too, he followed Sowerby, to whose plate 407 of *A. virosus* Davies had contributed two specimens. This is generally regarded today as depicting more than one species including I suspect, as spore colour is not stressed, *Agrocybe praecox* as well as *Stropharia semiglobata*. Ironically he seems not

to have encountered any really dangerous species in Anglesey.

Nor in so earnest a work is there any hint of the former employment of fungi in sorcery in Welsh legend. Yet when, years ago, I enquired of the University of Bangor, 'what fungus did Gwydion ap Don use to cheat Pryderai Pwyll out of the swine of Annwyn'? it was largely on Davies they relied in replying confidently 'It was a *Boletus*'. For Davies that included all polypores but where magical properties are concerned one inevitably thinks of something with a total instantaneous colour change, especially as 'The illusion will not last but from the one hour to the same tomorrow'. *Boletus luridus* duly figures in the Anglesey list, without comment.

Many complex genera had not been unscrambled by 1813. Thus, of *Mycena* we have only '*A. polygrammus varius* W. and very many varieties', though *A. galericulatus* is listed separately. For *Russula* most of the brightly coloured species other than *R. emetica* are covered by '*A. integer* and very numerous beautiful varieties', *Hygrocybe* similarly by '*A. psittacinus* and a number of beautiful varieties'.

So, memories linger long on the Sarn Helen* and with the fertile bardic imagination they burgeon into myth. A rebellious roman governor becomes a folk hero and a founder of dynasties.

* A roman road, because 'the men of the Island of Britain would not have made these great roads for any save for her'.

FUNGI OF ANGLESEY (DAVIES) CONFIRMED IN GWYNEDD

| AGARICALES | |
|---|--|
| <i>Agaricus campestris</i> L. | 1988 Coedydd Aber |
| <i>Agrocybe praecox</i> (Pers.) Fayod | 1979 Gregynog |
| <i>Amanita muscaria</i> (L.) Hook | 1988 Coedydd Aber &c. |
| <i>A. rubescens</i> Pers. | 1988 Coed Gorswen, Gwydir Forest |
| <i>Armillaria mellea</i> (Vahl) Kummer | 1988 Coedydd Aber |
| <i>Asterophora parasitica</i> (Bull.) Fr. | 1988 Coed Gorswen, Llyn Syberri |
| <i>Bolbitius vitellinus</i> (Pers.) Fr. | 1988 Coedydd Aber |
| <i>Boletus bovinus</i> L. | 1988 Gwyder Forest |
| <i>B. calopus</i> Fr. | 1988 Coed Dolgarrog; Gwydir Forest |
| <i>B. luridus</i> Schaeff. | 1988 Bryn Pydew |
| <i>B. luteus</i> L. | 1988 Newborough Warren |
| <i>B. rubellus</i> Kromb. | 1950 Newborough |
| <i>B. subtomentosus</i> L. | 1988 Coedydd Aber |
| <i>Cantharellula cyathiforme</i> (Bull.) Singer | 1988 Coedydd Aber &c. |
| <i>Cantharellus cibarius</i> Fr. | Coed Mor, Anglesey: <i>BMS Bull.</i> 18:45 |
| <i>C. infundibuliformis</i> (Scop.) Fr. | Newborough <i>BMS Bull.</i> 15: 98 |
| <i>Clitocybe cernusata</i> (Fr.) Gillet | 1988 Newborough Warren |
| <i>C. dealbata</i> (Sow.) Fr. | 1988 Newborough Warren |
| <i>C. flaccida</i> (Sow.) Kummer | 1993 Maeshafn |
| <i>C. fragrans</i> (Sow.) Kummer | 1950 Bangor |
| <i>C. infundibuliformis</i> (Schaeff.) Quél. | 1988 Coed Dolgarrog |
| <i>C. odora</i> (Bull.) Kummer | |

Until even the sceptical Gibbon was 'not unwilling to find some evidence' for the legend. But the genuine solid accomplishment of a nation's pioneer mycologist lapsed into total oblivion, though he is not without honour on other grounds. Even the species named for him by his friend, *Hydnum daviesii* Sow., was consigned to synonymy by Fries under *H. ochraceum*, probably wrongly. More likely it was a good species of *Steccherinum* but the small surviving type may be scarcely sufficient for its reinstatement now after a lapse of over 200 years. His own species, *Clavaria fabae* Davies, devaluated prior to 1981 but potentially reinstated, though accepted as a fungus by Sowerby and figured by him, has been shown to be an artefact, more bean than has been in fact.

Worst of all, his book is perhaps unique among major printed texts in having escaped the indefatigable and meticulous Lindau & Sydow (1908 - 9) when they compiled their magisterial *Thesaurus*. Of Davies they knew only two papers on lichens in the *Transactions of the Linnaean Society*. It is difficult to believe no copy of *Welsh Botany* exists in any central European library but possibly it may have been filed under Celtic philology and so escaped the notice of mycologists.

- Collybia dryophila* (Bull.) Kummer 1988 Llanfairfechan, Bryn Pydew
Conocybe tenera (Schaeff.) Kühner 1988 Aber Falls
Coprinus atramentarius (Bull.) Fr. 1924 Betws y Coed
C. cinereus (Schaeff.) Gray 1913 Dolgelly
C. comatus (Müll.) Gray 1950 Vaynol
C. disseminatus (Pers.) Gray 1976 Snowdonia
C. ephemerus (Bull.) Fr. 1988 Coedydd Aber &c.
C. micaceus (Bull.) Fr. 1988 Coedydd Aber &c.
C. plicatilis (Curtis) Fr. 1950 Bangor
Cortinarius cinnamomeus (L.) Fr. 1950 Bangor
C. collinitus (Sow.) Fr. 1950 Newborough; 1988 Coedydd Aber
C. glaucopus (Schaeff.) Fr. 1950 Bangor
C. sanguineus (Wulf.) Fr. 1924 Betws y Coed
C. spilomeus (Fr.) Fr. 1924 Betws y Coed
Craterellus cornucopioides (L.) Fr. 1988 Coedydd Aber &c.
Crepidotus mollis (Schaeff.) Kummer 1988 Coed Dolgarrog
C. variabilis (Pers.) Kummer 1988 Gwydir Forest &c
Cystoderma amianthinum (Scop.) Fayod 1913 Dolgarrog
Flammulina velutipes (Curtis) P. Karst. 1988 Coedydd Aber
Galerina hypnorum (Schrank) Kummer 1988 Gwydir Forest &c
Gymnopilus junonius (Fr.) Orton 1913 Dolgarrog
G. penetrans (Fr.) Murr. 1988 Coedydd Aber
Hebeloma fastibile (Pers.) Kummer Newborough B.M.S. Bull. 6: 16
Hygrophorus ceraceus (Wulf.) Fr. 1988 Gwydir Forest &c.
H. conicus (Scop.) Fr. 1960 Llandrindod Wells (Powys)
H. pratensis (Pers.) Fr. 1988 Aber Falls; Great Orme
H. psittacinus (Schaeff.) Fr. 1988 Coedydd Aber; Great Orme
H. virginicus (Wulf.) Fr. 1988 Coedydd Aber; Great Orme; Coed Mor
Hypholoma fasciculare (Huds.) Kummer Anglesey BMS Bull. 18: 45
Inocybe geophylla (Sow.) Kummer 1989 Snowdonia
Inocybe geophylla (Sow.) Kummer 1988 Coedydd Aber &c.
Inocybe geophylla v. *ilacina* Gillet 1988 Llyn Syberri
Kuehneromyces mutabilis (Schaeff.) 1993 Maeshafn
 Singer. & Smith. 1988 Gwydir Forest
Laccaria amethystea (Bull.) Murrill 1988 Coedydd Aber &c.
L. laccata (Scop.) Cooke 1988 Coedydd Aber &c.
L. tortilis (Bolton) Cooke 1988 Aber valley
Lachrymaria velutina (Pers.) Konr. & Maubl. 1988 Coedydd Aber
Lactarius acris (Bolton) Gray 1988 Newborough Warren (as *L. deterrimus*)
L. deliciosus (L.) Gray 1988 Newborough Warren
L. hygginus (Fr.) Fr. 1924 Betws y Coed
L. piperatus (Scop.) Fr. 1988 Gwydir Forest &c.
L. rufus (Scop.) Fr. 1988 Coedydd Aber &c.
L. subdulcis (Pers.) Gray 1988 Coedydd Aber, Aber Falls
Lentinellus cochleatus (Pers.) Karsten 1988 Coedydd Aber, Aber Falls
L. flabelliformis (Bolton) Orton
Lentinus tigrinus (Bull.) Fr. 1988 Newborough Warren
Lepiota cristata (Fr.) Kummer 1988 Coedydd Aber
Lepista nuda (Bull.) Cooke (L. *muscigenum*. Newborough 1950)
Leptoglossum lobatum (Pers.) Ricken ? 1950 Vaynol Park
Leptonia chalybaea (Pers.) Kummer
L. griseocyanea (Fr.) Orton
Leucopaxillus giganteus (Sow.) Singer 1988 Great Orme
Macrolepiota procera (Scop.) Singer 1988 Coed Gorswen
Marasmiellus ramealis (Bull.) Singer 1988 Newborough Warren
Marasmius androsaceus (L.) Fr. 1988 Newborough Warren
M. candidus (Bolton) Fr. 1988 Coed Gorswen &c.
M. epiphyllus (Pers.) Fr. 1988 Newborough Warren
M. oreades (Bolton) Fr. 1988 Coedydd Aber
M. rotula (Scop.) Fr. 1988 Coedydd Aber
Micromphale foetidum (Sow.) Singer 1988 Coedydd Aber &c.
Mycena epipterygia (Scop.) Gray 1988 Coedydd Aber &c.
M. (Richenella) fibula (Bull.) Kühner

- M. galericulata* (Scop.) Gray 1988 Coedydd Aber &c.
M. galopus (Pers.) Kummer 1988 Coedydd Aber &c.
M. polygramma (Bull.) Gray 1988 Coedydd Aber &c.
Omphalina erictorum (Fr.) Lange 1988 Coedydd Aber
O. pyxidata (Bull.) Quéf. 1950 Newborough Warren
Oudemansiella radicata (Relhan) Singer 1993 Maeshafn. 1989 "Snowdon"
Panaeolus campanulatus (Bull.) Quéf. 1988 Coedydd Aber
P. semiovatus (Sow.) Lundell 1988 Coedydd Aber &c.
Panellus stipticus (Bull.) Karsten 1988 Llyn Gwynant
Paxillus involutus (Batsch) Fr. 1988 Coedydd Aber &c.
Pholiota squarrosa (M. L.) Kummer 1988 Coedydd Aber
Phyllotopsis nidulans (Pers.) Singer
Pleurotus lignatilis (Pers.) Kummer
Pleurotus ostreatus (Jacq.) Kummer
P. ulmarius (Bull.) Kummer
Pluteus cervinus (Schaeff.) Kummer
Psathyrella gracilis (Fr.) Quéf.
Russula adusta (Pers.) Fr. or
R. albonigra (Kromb.) Fr. 1988 Coed Gorswen R. *albonigra*
R. emetica (Schaeff.) Gray or R. *mairei* Sing. 1988 Coed Dolgarrog
R. nigricans (Bull.) Fr. 1988 Coedydd Aber &c.
R. ochroleuca (Pers.) Fr. 1988 Coedydd Aber &c.
Stropharia aeruginosa (M. A. Curtis) Quéf. 1988 Great Orme
S. semiglobata (Batsch) Quéf. 1988 Coedydd Aber &c.
Tricholoma album (Schaeff.) Kummer 1993 Coed-y-Felin
T. flavovirens (Pers.) Lundell
T. (Calocybe) gambosum (Fr.) Kummer 1988 Bryn Pydew, Llyn Syberri
T. sulphureum (Bull.) Kummer 1950 Vaynol Park
T. terreum (Schaeff.) Kummer 1988 Bodnant, Gwydir Forest
Tricholomopsis rutilans (Schaeff.) Singer 1988 Coed Gorswen, Gwydir Forest
Tubaria furfuracea (Pers.) Gill. 1988 Red Warfe
Volvariella speciosa (Fr.) Singer

APHYLLOPHORALES

- Auriscalpium vulgare* Gray 1950 Vaynol Park
Bjerkandera adusta (Willd.) Karst. 1988 Coedydd Aber
Byssomerulius corium (Fr.) Parm. 1988 Coed Gorswen
Clavaria vermicularis Fr. 1988 Great Orme
Clavariadelphus pistillaris (L.) Donk 1988 Coedydd Aber
Clavulina cristata (Holmsk.) Schroeter 1988 Coedydd Aber
C. rugosa (Bull.) Schroeter 1988 Great Orme
Clavulinopsis corniculata (Schaff.) Corner 1988 Coedydd Aber, Great Orme
C. fusiformis (Sow.) Corner 1988 Coedydd Aber
C. helvola (Pers.) Corner 1988 Coedydd Aber
Coltricia perennis (L.) Murrill 1950 Bangor
Coriolus versicolor (L.) Quéf. 1988 Coedydd Aber &c.
Daedalea quercina (L.) Fr. 1988 Llyn Syberri
Daedaleopsis confragosa (Bolt.) Schroet. 1988 Coedydd Aber &c.
Hapalopilus nidulans (Fr.) Karst. 1913 Dolgelly
Hymenochaete rubiginosa (Schrad.) Lévl. 1988 Coed Gorswen, Llyn Gwyant
H. tabacina (Sow.) Lévl.
Hydnum repandum L. 1988 Coed Dolgarrog, Llyn Gwyant
Inonotus hispidus (Bull.) Karst. 1988 Coedydd Aber
Laetiporus sulphureus (Bull.) Bond. & Singer
Meripilus giganteus (Pers.) Karst. 1988 Llyn Syberri
Peniophora quercina (Pers.) Cooke 1988 Cwm y Llan
Perenniporia medullapanis (Fr.) Donk
Pheleous ignarius (L.) Quéf.
Polyporus squamosus (Huds.) Fr. as *Ganoderma* is not listed there may be confusion
Pulcherricium caeruleum (Schrad.) 1976 Snowdonia
 Parm. 1958 Llanrwst
Ramaria striata (Pers.) Quéf.

Rigidoporus ulmarius (Fr.) Imazeki
Serpula lacrymans (Wulf.) Schroet.
Steccherinum ochraceum (Pers.) Gray
Stereum hirsutum (Willd.) Gray
Tyromyces sp.

1988 Coedydd Aber &c.

GASTEROMYCETES

Bovista nigrescens Pers.
Cyathus olla Batsch.
C. striatus (Huds.) Pers.
Lycoperdon ericetorum Pers.
Gastrum corollinum (Batsch) Hollos
Phallus impudicus L.
Scleroderma citrinum Pers.
Tulostoma brumale Pers.

1988 Coedydd Aber, Great Orme
 Pegler et al 1995
 1973 Corregiwyd, Anglesey [Herb. Kew]
 1988 Newborough Warren
 Pegler et al 1995
 1988 Coedydd Aber &c.
 1988 Coedydd Aber &c.
 1948 Red Wharf Bay [Herb. Kew]

AURICULARIALES

Auricularia mesenterica (Dicks.) Pers.
Hirneola auricula-judae (Bull.) Berk.

1988 Coedydd Aber

TREMELLALES

Eichleriella deglubens
 (Berk. & Broome) Lloyd
Exidia albida (Huds.) Bref.
E. glandulosa (Bull.) Fr.
Tremella mesenterica Retz.

1993 Coed y Felen & Wepre Wood
 1988 Coedydd Aber
 1988 Coedydd Aber
 1988 Coedydd Aber. Pwllheli [Herb. Kew]

UREDINALES

Melampsora spp.
Melampsorella caryophyllacearum
 Schroet.
Phragmidium fragariae (DC.) Karst.
P. mucronatum (Pers.) Schlecht.
Puccinia caricina DC. var
pringsheimiana
P. graminis Pers.
P. recondita Rob. & Desm.
P. poarum Niels.
Tranzschelia anemones (Pers.) Nannf.

1988 M. caprearum Red Wharf
 1932 Abersoch
 1985 Cwmllynfell 1969 Dolwyddelan [Herb. Kew]
 1979 Gregynog (Powys) 1969 Dolwyddelan [Herb. Kew]
 1913 Penmaenpool
 1932 Corris Forest [Herb. Kew] Betwys y Coed
 1988 Llyn Gwynant
 1988 Cors Goch, Betwys y Coed
 1979 Gregynog

USTILAGINALES

Ustilago longissima (Sow.) Meyen

PEZIZALES

Aleuria aurantia (Fr.) Fuck.
Ascobolus furfuraceus Pers.
Coprobicia granulata (Bull.) Boud.
Helvella crispa Fr.
H. elastica Bull.
H. (Macroscyphus) macropus (Pers.)
 Karst.
Morchella esculenta (L.) Pers.
M. (Mitrophora) semilibera DC.
Otidea bufonia (Pers.) Boud.
Peziza vesiculosa Bull.
Sarcoscypha coccinea (Jacq.) Lamb.
Scutellinia scutellata (L.) Lamb.
Sowerbyella radiculata (Sow.) Nannf.

1988 Betwys y Coed
 1988 Coed Gorswen; Nant Gwynant
 1988 Coed Gorswen
 1988 Coed Dolgarrog
 1988 Newborough Warren
 1988 Coed Gorswen; Coed Dolgarrog
 1988 Coedydd Aber &c.

Tarzetta cupularis (L.) Lamb.
Tuber aestivum Vitt. or *T. brumale* Vitt.

1993 Coed y Felin
T. aestivum, Vaynol Park in Herb. Kew

HELOTIALES

Ascocoryne sarcooides (Jacq.)
 Groves & Wilson
Bisporella citrina (Batsch.)
 Korf & Carpenter
Bulgaria inquinans (Pers.) Fr.
Lachnum virgineum (Batsch.) Karst.
Leotia lubrica Pers.
Mollisia cinerea (Batsch.) Karst.
Rutstroemia firma (Pers.) Karst.
Sclerotinia tuberosa (Hedw.) Fuck.
Spathularia flavida Pers.
Trichoglossum hirsutum (Fr.) Bond.
Trochila ilicina (Nees) Greenhaugh

1988 Coedydd Abe
 1988 Coedydd Aber
 1988 Bryn Pydew
 1988 Aber Falls
 1988 Coedydd Aber
 1988 Gwydir Forest
 1988 Coedydd Aber
 1986 Nant Gwynant

PHACIDIALES/RHYTISMATALES

Ascodichaena rugosa Butin
Hypoderma hederiae (Mart.) de Not.
Rhytisma acerinum (Pers.) Fr.

1988 Dolgarrog, Coed Gorswen &c.
 1988 Red Wharf
 1988 Coedydd Aber &c.

CLAVICIPITALES

Apiocrea chryso sperma (Tul.) Syd.
Claviceps purpurea (Fr.) Tul.
Cordyceps militaris (L.) Link
Epichloe typhina (Pers.) Tul.

1988 Newborough Warren
 1988 Coedydd Aber
 1988 Coedydd Aber
 1966 Myherin Forest

ERYSIPHALES

Erysiphe asperifoliorum Grev. on *Lithospermum arvense*

HYPOCREALES

Nectria cinnabarina (Tode) Fr.
N. coccinea (Pers.) Fr.
N. episphaeria (Tode) Fr.

1988 Coed Dolgarrog; Coed Gorswen
 1988 Coed Gorswen
 1988 Coedydd Aber

SPHAERIALES

Coniochaeta pulveracea (Ehrh.) Munk
Daldinia concentrica (Bolt.)
 Ces. & de Not.
Hypoxylon fragiforme (Scoop.) Kickx
H. fuscum (Pers.) Fr.
H. multiforme (Fr.) Fr.
Lopadostoma gastrinum (Fr.) Trav.
Melomastia mastoidea (Fr.) Schroet.
Poronia punctata (L.) Fr.
Rosellinia mammaeiformis (Pers.) Ces. & de Not.
Ustilina deusta (Hoffm.) Lind.
Xylaria hypoxylon (L.) Grev.

1988 Coedydd Aber
 1988 Llyn Gwynant
 1988 Coed Gorswen &c.

Gwyder Forest [Herb. Kew]

DIATRYPALES

Diatrype bullata (Hoffm.) Fr.
D. stigma (Hoffm.) Fr.
Eutypa lata (Pers.) Tul.
E. maura (Fr.) Fuch.

1988 Coedydd Aber &c.
 1988 Coed Dolgarrog

DIAPORTHALES

- Diaporthe oncostoma* (Duby) Fuck.
Hypospilina bifrons (DC) Trav.
Melanconis stilbostoma (Fr.) Tul.

DOTHIDEALES

- Hysterium pulicare* Pers.
Leptosphaeria acuta (Fuck.) Karsten
L. arundinacea (Sow.) Sacc.
Platychora ulmi (Schleich.) Petrak
Rhopographus filicinum (Fr.) Nits.

1988 Coed Dolgarrog

PYRENULALES

- Pyrenula nitida* Ach.

MUCORALES

- Mucor mucedo* L.
Pilobolus crystallinus Tode

MITOSPORIC FUNGI

- Aspergillus glaucus* Link
Botrytis cinerea Pers.
Ceuthospora lauri Grev.
Oidium aureum
Penicillium crustaceum Fr.
Trichothecium roseum (Pers.) Link

MYXOMYCETES

- Arcyria denudata* (L.) Wettst.
Fuligo septica (L.) Wigg
Leocarpus fragilis (Dicks.) Rostaf.
Lycogala epidendrum (L.) Fr.
Mucilago spongiosa (Leys.) Morg.
Stemonitis fusca Rich.
Trichia varia (Pers.) Pers.

1988 Coedydd Aber

1988 Coedydd Aber &c.
 1988 Coed Dolgarrog, C. Gorswen
 1988 Coedydd Aber &c.
 1988 Coedydd Aber &c.

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It is a pleasure to thank Ms. H. E. Fraser of Amgueddfa genedlaethol for informing me that a portrait of Hugh Davies is in Llyfrgell genedlaethol at Aberystwyth and the staff of the latter for so promptly supplying the photograph of it reproduced as Fig. 1, together with photocopies of Sowerby's letters to Davies.

References

- Bolton, J. (1788-91) *An history of funguses growing about Halifax*. 4 vols. Huddersfield.
 Davies, H. (1813). *Welsh Botany*. London.
 Fries, E. M. (1821-32) *Systema Mycologicum*. Gryphiswaldiae.
 Gibbon, E. *The History of the Decline and Fall of the Roman Empire*. Chapter 27.
 Griffith, J. E. (1895). *The Flora of Anglesey and Carnarvonshire*. Bangor.
 Guest, Lady C. E. (1849). *The Mabinogion*. London.
 Revised Jones G. & Jones T. (1948).

- Housman, A. E. (1896). *A Shropshire Lad*. London.
 Lindau, G. & Sydow, P. (1908-9). *Thesaurus litteraturae mycologicae et lichenologicae*. 2 vols. Lipsii.
 Palmer, J. T. (1968). *A Chronological Catalogue of the Literature to the British Gasteromycetes*. *Nova Hedwigia* 15: 65-178.
 Pegler, D. N., Laessle, T. & Spooner, B. M. (1995). *British Puffballs, Earthstars and Stinkhorns*. Kew: Royal Botanic Gardens.
 Rivet, A. L. F. & Smith, C. (1979). *The Place-Names of Roman Britain*. London.
 Schaeffer, J. C. (1762-1770). *Fungorum qui in Bavaria et Palatinatu circa Ratisbonam nascentur icones*. Regensburg, Ed. nova 1800. Erlangen.
 Scopoli, J. A. (1772). *Flora Carniolica*. Ed. II, 2 vols. Vindobonae.
 Sowerby, J. (1797-1809). *Coloured Figures of English Fungi or Mushrooms*. 4 vols. London.
 Withering, W. (1801). *A systematic arrangement of British Plants*. Ed. 4, 4 vols. London; Ed. 5 Birmingham 1812.

NEW BRITISH RECORDS

164. *Cystobasidium fimetarium* (Schum.) P. Roberts, comb. nov.

Tremella fimetaria Schum., *Enum. Pl. Sael.* 2: 440 (1803).

Platygløea fimicola J. Schröt. in Cohn, *Kryptog. Fl. Schles.* 3: 384 (1887).

Helicobasidium fimetarium (Schum.) Boud. in *Journ. Bot.* 1: 332 (1887).

Iola lasioboli Lagerh. in *Bih. K Svenska Vet.-Akad. Handl.* 24 (afd III), 4: 15 (1898).

Achroomyces fimicola (J. Schröt.) Mig., *Krypt. Fl. Deutsch.* 3, 1: 191 (1910).

Platygløea fimetaria (Schum.) Höhn. in *Ann. Mycol.* 15: 293 (1917).

Cystobasidium lasioboli (Lagerh.) Neuhoff in *Bot. Ark.* 8: 274 (1924).

Achroomyces fimetarius (Schum.) Wojewoda, *Gryzby* 8: 248 (1977).

Basidiomes viscid-gelatinous, effused to pustular, said to be pink or violaceous and discoid, 1 - 4 mm diam. (fide Boudier, 1887) when well-developed. *Hyphae* 2 - 3.5 µm diam., hyaline; walls thin or distinct, refractive, slightly thickened, with occasional clamp-connexions, often also with irregular, nodulose projections. *Conidiophores* none seen. *Conidia* none seen. *Basidia* auricularioid, laterally septate, becoming four-celled at maturity, arising apically from probasidia; *probasidia* typically ovoid, 7 - 20 x 3.5 - 10 µm, but often constricted, elongated, or distorted, thin-walled, stalked or not, with clamp-connexion at base; mature, sterigmata-producing epibasidia 25 - 55 µm long, having a tendency to recurve so that the laterally produced sterigmata (3 - 10 µm long) are perpendicular to host hymenial surface. *Basidiospores* 6 - 11.5 x 3 - 5 µm (Q = 1.8 - 2.1), amygdaliform to fusiform, with comparatively wide, blunt hilar appendix. *Germination* by yeast-like cells, very variable in form and size, subglobose to cylindrical, 1 - 7 x 0.5 - 3.5 µm forming bright pink colonies in culture.

Specimen examined: Scotland, Lothian, Bonaly, with *Thelebolus crustaceus*, on grouse dung, 22 Mar. 1998, M. Richardson, K(M)57135.

Cystobasidium fimetarium is characterized by its occurrence on dung in the company of various ascomycetes, on which it is presumed to be parasitic. The species produces abundant, and quite conspicuous, hyphae, the septa only occasionally clamped. Laterally septate epibasidia arise apically from probasidia and give rise to comparatively large, ellipsoid basidiospores, which germinate by yeast-like cells.

Tremella fimetaria was originally described from Denmark on cow dung (Schumacher, 1803). The name was taken up by Boudier (1887) for an auricularioid fungus found on goat dung in France which had pinkish, pustular basidiomes, 1 - 4 mm diam., and basidiospores measuring 9 - 11 x 4 - 8 µm. Schröter (1887) redescribed the species from Poland on rabbit dung under the new name *Platygløea fimicola*. The basidiomes were said to be pink or violaceous, 2 - 4 mm diam., the basidiospores 11 x 7 µm. Lagerheim (1898) provided a further redescription of the species, on cow dung from Norway, under the new name *Iola* (subgen. *Cystobasidium*) *lasioboli*. He recognized that it occurred in association with ascomycetes, specifically *Lasiobolus equinus* (Müll.) P. Karst. and possibly *Ascophanus* spp, citing this (and the presence of probasidia) as the main point of differentiation between his new species and *Helicobasidium fimetarium*. Lagerheim's careful illustration showed basidia and basidiospores, the latter giving rise to

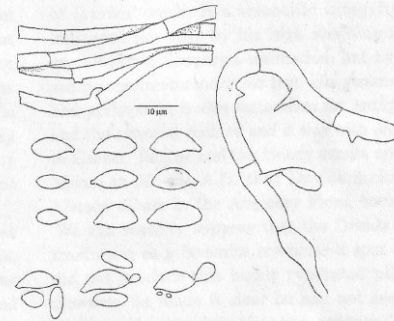


Fig 1. *Cystobasidium fimetarium*. Basidium, clamped and unclamped hyphae; basidiospores, some producing yeast-like cells (M. Richardson, K(M)57135).