

## The Mycetozoa of West Somerset

BY NORMAN G. HADDEN, with a short introduction and some Further Notes on their Distribution in Somerset by W. WATSON, D.Sc.

### INTRODUCTION.

THE Mycetozoa are organisms which have a somewhat doubtful position in the scale of nature as they lie on the border between the animal and vegetable kingdoms. They have often been grouped with the Fungi under the name of Myxomycetes or, as this name signifies, Slime-fungi. It is certainly true that, at one stage in their life-history, they form reproductive bodies (sporangia) very similar in many respects to those of fungi and that these sporangia are what the naturalist searches for on decaying damp sticks and logs. Some of these sporangia are often beautifully coloured and ornamented, and their characters form the chief means by which the various genera and species are distinguished from one another. The spores, on germination, usually produce small cells which are able to move in the surrounding fluid by the lashings of very minute threads (cilia or flagella) of protoplasm protruding from their surfaces. Eventually these cilia are withdrawn and any further movement is of an amœboid nature. Finally the cells coalesce and from the jelly-like mass (plasmodium) so-formed the sporangia are segregated. The cells which form the plasmodium, as well as the plasmodium itself, move and feed like the Amœba. It is therefore more usual, nowadays, to consider the organisms as low forms of animal life, hence the name of Mycetozoa which signifies Fungus-animals.

All the frequency notes for West Somerset refer to the Porlock and Minehead district for which Mr. Hadden has an unrivalled knowledge in regard to these organisms. The general distribution in Somerset is given according to the botanical method. The county is divided by the river Parret into two vice-counties, S. or W. Somerset (5) and N. or E.

Somerset (6). The division between 5 and 6 is continued from the river Parret by a line curving round to the northern extremity of Dorset. For most of the records taken from the *Victoria County History* (V.C.H.), C. E. Broome, of Batheaston, is responsible, and they are mostly first records for the county. Cedric Bucknall's records for the Somerset portion of the Bristol district are indicated by B. and the year of collection is usually given, not only for reference to his list, but also because many of them are first records for Somerset. Miss Agnes Fry (F.) collected many 'myxos' near Failand and a list was published in the *Proc. Bristol Naturalist's Soc.*, 1913. Bucknall's articles on the *Fungi of the Bristol district*, which includes the 'myxos', were published in the same journal from 1878-91. Much later (1929) *The Mycetozoa of the Bristol District*, by W. R. Ivimey Cook, gave a useful summary of the work.

The records marked M. are those made during the Mycological Forays of the British Mycological Society for the year given, their publication in the Transactions of that Society being a year later. M, 1911 refers to the Taunton Foray of 1911. M, 1923 and M, 1929 refer to the Bristol Forays of 1923 and 1929. No references are necessary to the finds of the Minehead Foray of 1920, as they are included with the records for W. Somerset. When the Foray localities are repetitional of earlier records they are often omitted, but are sometimes given for confirmatory reasons. A few localities from notes and materials in the Somerset County Museum from Dr. H. F. Parsons are included.

#### SYSTEMATIC.

- Ceratiomyxa fruticulosa** Macbr. 5. Common in W. Som., Taunton district (M, 1911).
6. Leigh Wood (V.C.H.). Failand (F.). Ball Wood, Clevee W., Leigh W. and Ashton Court (M, 1929).
- Badhamia affinis** Ros. 5. Rare on living ash tree, Porlock district.
- B. capsulifera** Berk. 6. Claverton (V.C.H.). Leigh Wood (B, 1877, as *B. hyalina* Berk.). Ashton Court (M, 1923).
- B. macrocarpa** Rost. 6. Ashton Court (M, 1923).

- B. nitens** Berk. var. *reticulata* G. Lister. 5. Rare in Porlock district.
- B. panicea** (Chev.) Rost. 5. Uncommon on rough bark in the Porlock district.
6. Batheaston (V.C.H.). Failand (F.). Ashton Court (M, 1929).
- B. rubiginosa** Rost. var. *globosa* Lister. 5. Rare in Porlock district.
- B. utricularis** Berk. 5. Common in W. Som., Dunster (M, 1911).
6. Batheaston (V.C.H.). Failand (F.). Bucknall's record in 1877 was in error.
- Physarum bitectum** Lister. 5. Uncommon in W. Som.
- P. cinereum** Pers. 5. Uncommon in W. Som.
6. No certain record for this vice-county, but it was recorded for the Bristol district by Bucknall as seen in 1872.
- P. citrinum** Schum. 6. Portishead Wood (V.C.H., and B., 1879 as *P. schumacheri* Spreng.).
- P. compressum** Pers. Alb. & Schw. 5. Uncommon in W. Som.
6. Failand (F.). Cleeve Combe (M, 1923). Ashton Court (M, 1929).
- P. conglomeratum** Rost. 5. Rare, Porlock Parks, Nov., 1918 and Dec., 1920.
6. Yatton (V.C.H.).
- P. contextum** Pers. 5. Rare, Porlock Parks, Feb., 1918.
- P. leucopus** Link. 5. Uncommon in Porlock district.
6. Batheaston (V.C.H.).
- P. luteo-album** Lister. 5. Very rare, West Porlock, Jan., 1919.
- P. nucleatum** Rex. 5. Alderman's Barrow, Dec., 1920. A very rare species which was previously (Aug., 1915) obtained from Lynton.
- P. nutans** Pers. 5. Very common in W. Som., Taunton (M, 1911).
6. Common. Batheaston and Leigh Wood (V.C.H.). Failand (F.). Ball and Cleeve Woods (M, 1929).  
Var. *leucophaeum* Lister is common in W. Som. It was recorded for the Bristol area by Bucknall in 1878.  
Var. *robustum* Lister. Rare, Porlock Parks, May, 1923.
- P. ovisporum** G. Lister. 5. Rare in W. Som.

- P. psittacinum** Ditm. 5. Rare in Porlock district.  
6. Failand (F.). Cleeve (M, 1929).
- P. pusillum** Lister. 5. Common in W. Som.
- P. sinuosum** Weinm. 5. Common in Minehead and Porlock districts.  
6. Portbury as *P. bivalve* Pers. (V.C.H.). Failand (F.).
- P. straminipes** Lister. 5. Rare on old manure in W. Som., March, 1923.
- P. vernum** Somm. 5. Uncommon in Porlock-Minehead area.  
6. Leigh Wood (B, 1876). Cleeve Combe (M, 1923).
- P. virescens** Ditm. 5. Rare, Horner Hill.
- P. viride** Pers. Common in W. Som., Triscombe (M, 1911).  
6. Tyntesfield (V.C.H.). Failand (F.). Cleeve and Leigh Woods (M, 1929).
- Fuligo cinerea** Morg. 5. Rare on old hedge clippings. Porlock Parks.
- F. muscorum** Alb. 5. Uncommon in W. Som. on Sphagnum in late autumn.
- F. septica** Gmel. 5. Abundant in W. Som.  
6. Freshford (V.C.H.). Failand (F.). Ball and Cleeve Woods and Ashton (M, 1929).
- Craterium aureum** Rost. 5. Rare in W. Som.  
6. Batheaston (V.C.H.). Failand (F.). Cleeve (M, 1929)
- C. leucocephalum** Ditm. 5. Uncommon in W. Som. Dunster (M, 1911).  
6. Batheaston (V.C.H.). Failand (F.).
- C. minutum** Fr. 5. Very common in W. Som. Dunster (M, 1911). Near Bridgwater.  
6. Batheaston (V.C.H.). Leigh Wood (B, 1886, as *C. vulgare* Ditm.). Ashton Court and Cleeve Combe (M, 1923).
- Leocarpus fragilis** Rost. 5. Common in W. Som.  
6. Leigh W. (B, 1876). Failand (F.), as *L. vernicosus* Link. in V.C.H.
- Diderma asteroides** Lister. 5. Rare in Porlock district.
- D. effusum** Morg. 5. Common in W. Som.  
6. Batheaston (V.C.H.). Failand (F.).
- D. floriforme** Pers. 5. Rare in W. Som.
- D. hemisphericum** Horn. 5. Common in W. Som.  
6. Batheaston (V.C.H. as *Chondrioderma michelii* Rest.). Failand (F.). Cleeve Combe (M, 1923).

- D. niveum** Macbr. subspecies *deplanatum* Lister. 5. Uncommon in W. Som.
- D. ochraceum** Schroet. 5. Rare in W. Som., on wet Sphagnum.
- D. radiatum** Lister. 5. Uncommon in Porlock district.  
6. Failand (F.).
- D. spumarioides** Fr. 5. Common in W. Som.  
6. Bristol district (B, 1890). Failand (F.) Cleeve Combe (M, 1923).
- Diachaea cerifera** G. Lister. On moss on a bank of a stream at West Porlock, Nov., 1923. First British record.
- D. leucopoda** Rost. 5. Uncommon in Porlock district.  
6. Leigh Wood (B, 1880 and M, 1929). Failand (F.).
- Didymium clavus** Rabenh. 5. Uncommon in W. Som.  
6. Batheaston (V.C.H.). Yatton (B, 1888). Failand (F.).
- D. difforme** Duby. 5. Very common in W. Som.  
6. Leigh Down and Batheaston (V.C.H.). Leigh Wood (B, 1882 as *Chondrioderma*). Cleeve Combe (M, 1923, and var. *comatum* Lister).
- D. dubium** Rost. 5. Uncommon in W. Som.
- D. melanospermum** Macbr. 5. Common in W. Som.  
6. Ashton Court (M, 1923).
- D. nigripes** Fr. 5. Common in Porlock and Minehead district. Taunton district (M, 1911).  
6. Leigh W. (B, 1880, as *D. microcarpon*) also M, 1929. Failand (F.). Cleeve (M, 1929). Var. *xanthopus* Lister.  
5. Uncommon in W. Som.  
6. Batheaston (V.C.H.). Failand (F.).
- D. squamulosum** Fr. 5. Very common in W. Som.  
6. Failand (F.). Ashton Court and Cleeve Combe (M, 1923).
- Mucilago spongiosa** Morg. 5. Common in W. Som., sometimes abundant on Porlock marsh. Taunton district.  
6. Leigh Wood (B, 1878, as *Spumaria alba* DC.). Failand (F.).
- Lepidoderma chailletii** Rost. 6. Failand (F.).
- L. tigrinum** Rost. 5. Uncommon in W. Som., often associated with *Diderma ochraceum* on Sphagnum.
- Colloderma oculatum** G. Lister. 5. Common on wet logs and rotten stumps in W. Som.

- Leptoderma iridescens** G. Lister. 5. Rare in Porlock district.
- Stemonitis confluens** Cooke. 5. Rare. A very large development in Horner Wood, Oct., 1941.
- S. ferruginea** Ehr. 5. Uncommon in W. Som. 6. Leigh Wood (B, 1884). Failand (F.); var. *smithii* Lister. 6. Claverton (V.C.H.).
- S. flavogenita** Jahn. 5. Uncommon in W. Som. 6. Failand (F.).
- S. fusca** Roth. 5. Common in W. Som. 6. Leigh W. (B, 1878). Failand (F.). Cleeve and Ashton Court (M, 1929); var. *flaccida* Lister. 5. Horner, Nov., 1920; var. *rufescens* Lister. 6. Batheaston (V.C.H.).
- S. herbatica** Peck. 5. Uncommon in W. Som. Culbone Woods. 6. Ashton Court (M, 1929).
- S. hyperopta** Meyler. 5. Rare in W. Som. Porlock Parks on sawdust, Oct., 1920.
- S. splendens** Rost. var. *flaccida* Lister. 5. Rare in W. Som. 6. Failand (F.); var. *webberi* Lister. Rare in W. Som. Horner, Nov., 1920.
- Comatrachia elegans** Lister. 5. Rare in W. Som.
- C. laxa** Rost. 5. Uncommon in W. Som.
- C. lurida** Lister. 5. Uncommon in W. Som.
- C. nigra** Schroet. 5. Abundant in W. Som. Staple Fitzpaine (M, 1911). 6. Leigh Woods and Brockley Combe (B, 1878 as *Stemonitis obtusata* and *C. friesiana*); var. *alta* Lister. 5. Uncommon.
- C. pulchella** Rost. 5. Rare. On hedge clippings, Bossington.
- C. rubens** Lister. 5. Uncommon on old holly leaves in W. Som.
- C. tenerrima** Lister. 5. Uncommon in W. Som.
- C. typhoides** Rost. 5. Common in W. Som. 6. Failand (F.).
- Enerthenema papillatum** Rost. 5. Common in W. Som. 6. Batheaston (V.C.H.). Leigh Wood (B, 1877, as *E. elegans*). Failand (F.).
- Lamproderma arcyrionema** Rost. Rare in W. Som.
- L. columbinum** Rost. 5. Common in W. Som.
- L. scintillans** Morg. 5. Common in W. Som. 6. Failand (F., as *L. irideum* Mass. in V.C.H.).
- L. violaceum** Rost. 5. Rare in W. Som. Luccombe Allers. 6. Batheaston (V.C.H.). Failand (F.).

- Clastoderma debaryanum** Blytt. On dead gorse, Porlock Parks, Dec., 1918. First British record of this very minute species.
- Amaurochaete fuliginosa** Macbr. 5. Rare in W. Som. 6. Halse House (V.C.H. as *A. atra* Rost.). Failand (F.).
- Brefeldia maxima** Rost. 6. Claverton (V.C.H.).
- (**Lindbladia effusa** Rost. This was recorded by Bucknall in 1878 as *Reticularia maxima* Fr. from the Bristol district but the locality was just on the Gloucestershire side.)
- Cribraria argillacea** Pers. 5. Common in W. Som. 6. Abbot's Leigh (V.C.H.). Failand (F.).
- C. aurantiaca** Schrad. 5. Common in W. Som. Staple Fitzpaine. 6. Failand (F.).
- C. intricata** Schrad. 6. Claverton (V.C.H.). Leigh Wood (B, 1877).
- (**C. microcarpa** Pers., is given for Clevedon (B, 1889) but is not recorded as British by Lister.)
- C. pyriformis** Schrad. 5. Rare in W. Som., on old sawdust. 6. Road (H. F. Parsons); var. *notabilis* Rex. 5. Rare in W. Som. Porlock Parks, July, 1924.
- C. rufa** Rost. 5. Common in W. Som. 6. Ashton Court (M, 1929).
- Dictydium cancellatum** Macbr. 5. Uncommon in W. Som. Taunton district (M, 1911). 6. Charlton (V.C.H.). Failand (F.): var. *fuscum* Lister. 5. Rare in W. Som.
- Licea flexuosa** Pers. 5. Common on dead coniferous wood in W. Som. 6. Failand (F.).
- Orcadella operculata** Wing. 5. Rare. On living oak, Weir Wood, Nov., 1920.
- Tubifera ferruginosa** Gmel. 5. Uncommon in W. Som. 6. Failand (F.) as *Tubulina fragiformis* Pers. in V.C.H.
- Dictydiaethalium plumbeum** Macbr. 5. Uncommon in W. Som. 6. Batheaston (V.C.H.). Leigh Wood (B, 1877, as *Clathroptychium rugulosum* Wallr.).
- Enteridium olivaceum** Rost. 5. Rare in W. Som. Its variety *liceoides* G. Lister, is also rare. Taunton district (M, 1911). 5. Yarnor Moor, Jan., 1918.
- Reticularia lycoperdon** Bull. 5. Common in W. Som. Dunster (M, 1911). Taunton, Norton Fitzwarren. 6. Leigh

- Wood (B, 1887 as *R. umbrina* Fr.). Near Frome (H. F. Parsons). Failand (F.).
- Lycogala epidendrum** Fr. 5. Very common in W. Som. Dunster (M, 1911). 6. Leigh Wood (B, 1887). Lullington (H. F. Parsons). Failand (F.). Cleeve Combe (M, 1929).
- Trichia affinis** De Bary. 5. Common in W. Som. Taunton district (M, 1911). 6. Failand (F.). Bruton. Ball, Cleeve and Leigh Woods (M, 1929).
- T. botrytis** Pers. 5. Abundant in W. Som. Hestercombe, near Taunton. 6. Leigh and Failand (V.C.H.). Ashton Court (M, 1929); var. *cerifera* G. Lister and var. *munda* Lister, uncommon in W. Som.; var. *flavicans* Lister. 5. Rare, Allerford and Bossington. 6. Failand (F.).
- T. contorta** Rost. 5. Uncommon in W. Som. Orchard Portman. 6. Leigh Wood (B, 1881), Yatton (B, 1888), Failand (F.); var. *inconspicua* Lister. 5. Rare, Minehead Warren.
- T. decipiens** Macbr. 5. Abundant in W. Som. Taunton district (M, 1911). 6. Batheaston (V.C.H.). Leigh Wood (B, 1878; as *T. cerina* Ditm., 1887). Cleeve and Ashton (M, 1929).
- T. favoginea** Pers. 5. Rare in W. Som., Porlock Parks, Sep., 1920. 6. Leigh Wood (B. as *T. chrysosperma* DC.). Laverton (H. F. Parsons).
- T. floriformis** (Schwein.) G. Lister. 5. Rare in W. Som. Sweetery, Dec., 1920. 6. Failand (F. as *T. botrytis* var. *lateritia*).
- T. lutescens** Lister. 6. Abbot's Leigh as *Oligonema furcatum* Bucknall (B, 1890).
- T. persimilis** Karst. 5. Very common in W. Som. Dunster (M, 1911). 6. Batheaston (V.C.H.). Failand (F.). Ball and Cleeve Woods (M, 1929).
- T. scabra** Rost. 5. Uncommon in Porlock district. 6. Bath (V.C.H.). Failand (F.).
- T. varia** Pers. 5. Abundant in W. Som. Taunton area (M, 1911). Trull. 6. Batheaston (V.C.H.). Leigh Wood (B, 1877, also as *T. nigripes* Pers.). Failand (F.).
- Oligonema nitens** Rost. 6. Abbot's Leigh (B, 1889).



- Hemitrichia clavata** Rost. 5. Rare in W. Som. 6. Bath-easton (V.C.H.). Clevedon (B., as *Hemiarcyria clavata* Pers.). Failand (F.).
- H. karstenii** Lister. 5. Uncommon in W. Som.
- H. minor** G. Lister. 5. Rare in W. Som. Porlock Parks (first English record), Horner; var. *pardina* Minakata. 5. On hedge clippings, Bossington, Jan., 1919 (first English record).
- H. vesparium** Macbr. 5. Uncommon in W. Som. 6. Bath-easton as *H. rubiformis* List. (V.C.H.). Failand (F.).
- Arcyria cinerea** Pers. Common throughout the county. 5. Dunster, etc. (M, 1911 and 1920). 6. Leigh Wood (B, 1877). Failand (F.). Cleeve and Ashton (M, 1929).
- A. denudata** Wettst. 5. Abundant in Porlock district. Dunster, etc. (M, 1911). 6. Beckington (H. F. Parsons). Failand (F.). Ball Wood, Cleeve Combe and Ashton Court (M, 1929).
- A. ferruginea** Sauter. 5. Uncommon in W. Som. 6. Failand (F.).
- A. incarnata** Pers. Common throughout the county. 5. Porlock district. Staple Fitzpaine and Taunton district (M, 1911). 6. Leigh Wood (B, 1879). Failand (F.). Ball W. Cleeve and Ashton (M, 1929).
- A. nutans** Grev. 5. Uncommon in Porlock district. Dunster, etc. (M, 1911). 6. Leigh Wood (B, 1878). Failand (F.). Cleeve and Ashton (M, 1929).
- A. oerstedtii** Rost. 5. Rare in Porlock district on old sawdust. Oct., 1920. 6. Failand (F.).
- A. pomiformis** Rost. 5. Uncommon in W. Som. Taunton district (M, 1911). 6. Leigh Wood (B, 1879). Failand (F.).
- Lachnobolus congestus** Lister. Halse House as *L. circinans* Fr. (V.C.H.).
- Perichaena chrysosperma** Lister. 6. Batheaston (V.C.H.). Woolverton (Parsons).
- P. corticalis** Rost. 5. Common near Porlock. Taunton district (M, 1911). 6. Batheaston (V.C.H.). Leigh Wood (B, 1882). Berkeley (Parsons). Failand (F.); var. *liceoides* Lister. 5. Rare in Porlock district on old hedge clippings, Jan., 1919.

- P. depressa** Libert. 5. Rare in Porlock district. Dunster.  
6. Claverton (V.C.H.). Clevedon (B, 1888). Failand (F.).
- P. vermicularis** Rost. 5. Uncommon in Porlock district.  
6. Yatton (B, 1890, as *Ophiotheca umbrina* Berk.). Failand (F.) as *P. variabilis* Lister in V.C.H.
- Margarita metallica** List. 5. Common in Porlock district.  
6. Batheaston (V.C.H.). Leigh Wood (B, 1877).
- Dianema corticatum** List. 5. Rare on dead coniferous wood near Porlock.
- D. depressum** List. 5. Uncommon in W. Som. 6. Bath-easton and Claverton (V.C.H.).
- D. harveyi** Rex. 5. Rare. Hacketty Way near Porlock.  
6. Batheaston (V.C.H.).
- D. repens** G. List. & Cran. 5. Very rare, Ashley Combe, Nov., 1920.
- Prototrichia metallica** Mass. 5. Rare, Porlock Parks, Dec., 1920.

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