

## The Mosses of Somerset.

BY W. WATSON, B.SC.

THE county of Somerset is one of the richest counties, considered botanically, in the British Isles, its varied geological soils, and its profusion of woodland, combining together to make its surface prolific with various forms of plant-life. The flowering plants now form the dominating influence in the vegetation, but at some period in the history of the world the lower forms of life were prevalent, and even now,

“When chill November’s surly blast  
Makes field and forest bare,”

they form a conspicuous part of the vegetative mantle clothing the earth. Only those people who have lived in thickly-populated industrial districts can realise how the brownness and greyness of the winter surface of the earth is relieved by the varied tints of greens and golds, purples and whites, with which our mosses and lichens colour the soil, trees, walls and rocks of our county.

The comparative absence of smoke is an important factor in the distribution and development of the lower forms of vegetation, in as high a degree as with the seed-bearing plants. In smoky districts many mosses and lichens are absent, and those which remain often show the effects of their environment by an incomplete development, the spore-bearing organs being sparingly produced, or entirely absent.

The county has been examined by many good botanists, but the majority of these have confined themselves to the in-

vestigation of vascular plants, and the floristic results have been given by the Rev. R. P. Murray in "The Flora of Somerset," by Mr. J. W. White in "The Flora of the Bristol Coalfield," and by the Rev. E. S. Marshall in numerous lists published in the *Journal of Botany*. Dr. Moss has also devoted some time to the ecological side of the subject, his "Geographical Distribution of Vegetation in Somerset" having placed him in the front rank of observers on the relations between plants and their environments.

The fungi have had a fair amount of attention paid to them, several lists have been published, and the results of a fungus-foray, which was held in the Taunton district during September, 1911, have been given in the *Transactions of the British Mycological Society*, for 1912. Their chlorophyllose allies, the Algæ, have, as yet, been very incompletely investigated.

The group of Lichens has a long list of species given in the *Victoria County History*, but still much remains to be done in regard to their distribution.

The remaining and intermediate great group of plants, the Bryophyta, include the mosses and liverworts. These have been incompletely investigated, but sufficient work has been done to justify the publication of a list containing the records of all the true mosses occurring in Somerset. Thwaites, as long ago as 1843, did some work in the county, but his herbarium, which used to be in the Clifton College Museum, has unfortunately been lost. In 1886-7 the Rev. C. H. Binstead was resident in the county at Wells, studied the moss-flora of that district, and has since contributed a list of mosses and liverworts to the *Victoria County History, Somerset*. This list is a very incomplete one, containing only about 80 species of the 300 or more known to occur. The work of extending it has largely been due to the work of three members of this Society, Sir Edward Fry of Failand, Dr. H. Franklin Parsons of Croydon, and myself.

Dr. Parsons, who formerly resided at Beckington, near Frome, examined the mosses of that district, and published some of his results in the *Botanical Record Club Reports* of 1873-9, whilst Sir Edward Fry investigated the mosses of the Failand district.

The Moss Census Catalogue of 1907 gives the records of these and other bryologists, but, in spite of the care exercised in its compilation, a few species have been given as occurring which have little or no claim to be ranked as Somerset mosses.

The following list gives the sources of the records for the mosses of Somerset, the names of museums in which collections of Somerset mosses exist, and the literature on the subject.

Professor Leipner, "List of the Mosses of the Bristol District," *Proc. Bristol Naturalists' Soc.*, 1868.

W. W. Stoddart, "List of Mosses in the Bristol District," *Proc. Bristol Naturalists' Soc.*, 1874.

H. F. Parsons, M.D., "Preliminary List of Somerset Mosses," *Botanical Record Club Reports*, 1873-9.

Rev. C. H. Binstead, M.A., "*Bryum provinciale* in Somerset," *Journal of Botany*, 1887; "List of Somerset Mosses," *Victoria County History*, 1906.

W. Watson, B.Sc., "The Distribution of Bryophytes in the Woodlands of Somersetshire," *New Phytologist*, 1909; "New Records of Mosses in Somerset" (with W. Ingham, B.A.), *Journal of Botany*, 1909.

MS. lists by Miss Roper, Miss Armitage, Miss Agnes Fry (for Sir Edward Fry), Messrs. W. B. Waterfall, H. N. Phillips, H. Darton, A. Wilson, and H. H. Knight, Rev. C. H. Binstead, and Dr. Parsons.

Bristol Museum. Herbarium of Mosses collected by Leipner, Stoddart, Green, etc.

Weston-super-Mare Museum. A Collection of Mosses presented by Mrs. Lainson of Clevedon, and arranged by the Curator, Mr. W. H. Palmer.

Sexey's School Museum, Bruton.

Taunton Museum.

Herbarium Green and Herbarium Wheeler ; in private hands.

Herbarium Boswell ; at Oxford.

Herbarium Thwaites (formerly at Clifton College Museum, now lost).

Herbarium Fry ; at Failand.

Herbarium Hunt ; at Kew.

A few records by E. M. Holmes, Miss Gifford, Mrs. Hopkins, A. Loydell, Rev. H. Boyden.

Some critical species examined by Messrs. Dixon and Ingham, whose help has been very valuable to me.

The county of Somerset is divided botanically into two vice-counties, numbers 5 and 6 of *Topographical Botany* (H. C. Watson's "Cybele Britannica," 1859). Vice-county 5 (S. Som.) extends from the western border, and is separated from V.C. 6 (N. Som.) by a line along the River Parret from Bridgwater to Ilchester, thence curving round to the northern extremity of Dorset. Murray divided the county into ten botanical districts, but this method has not been followed in the moss list. A good map of Somerset, showing the dividing line between vice-counties 5 and 6, is given in Murray's "Flora of Somerset."

In this list of mosses, localities for which I am not personally responsible have the authority for the record given in brackets. In many cases overlapping of authorities for the records occur ; in such cases I have usually taken the first record known to me, and that occasionally happened to be my own. The order followed is that of the *Moss Census Catalogue*, 1907.

The Sphagnales (Bog-mosses) and Hepatics (Liverworts) are not included in the list, as their distribution is very incompletely known. It is intended to give a list of these at some future time.

## LIST OF ABBREVIATIONS USED IN THE LIST.

A. Miss Eleanor Armitage.	P. Dr. H. F. Parsons.
B. Rev. C. H. Binstead.	R. Miss I. Roper.
D. Mr. H. Darton.	S. Mr. W. W. Stoddart.
F. Sir Edward Fry.	W. Mr. W. B. Waterfall.
G. Herbarium Green.	Wh. Herbarium Wheeler.
L. Professor Leipner.	

\* indicates that the record is not given in the *Moss Exchange Catalogue*, 1907.

V.C. 5, or 5 = Vice-county 5 (South Somerset).

V.C. 6, or 6 = Vice-county 6 (North Somerset).

V.C. 8, or 8 = Vice-county 8 (South Wiltshire).

*teste* = tested by.

com. = common.

*sec.* = according to.

c. fr. = with capsules.

## ORDER TETRAPHIDIALES.

## FAMILY TETRAPHIDIACEÆ.

This family consists of few species having a peristome formed of four solid teeth derived from the fission of the internal surface of the lid.

**Tetraphis pellucida**, Hedw. (*Georgia pellucida*, Rab.). On peaty soil, rotten tree stumps, sometimes on rocks. This pretty little moss is interesting because of its gemmiferous cups and frondiform primary leaves of the protonema.

6. Leigh Wood. Stourhead. Gare Hill (P.). Failand (F.).

5. Exmoor. Horner (W.).

## ORDER POLYTRICHALES.

## FAMILY POLYTRICHACEÆ. THE URN- OR HAIR-MOSSES.

A family characterised by their hair-like leaves, the urn-shaped capsule with its peristome teeth joined together by a basal disc, the bonnet-like calyptra which covers the capsule, and the peculiar lamellæ on the surface of the leaf which in-

crease the assimilating surface. The vascular cylinder in these plants is of a much higher type than in any other family of mosses.

**Catharinea undulata**, W. and M. Frequent throughout the county, usually in shady or damp situations, especially in peaty woods.

Var. *minor*, W. and M., has been recorded from Clevedon, but the record is a doubtful one, (V.C. 6\*).

**Polytrichum nanum**, Neck. On sandy ground, on banks and heaths.

6. In Census catalogue (locality unknown to me, Winscombe?).

5. Castle Neroche. Minehead (W.).

**P. aloides**, Hedw. Frequent on dry banks, etc. The protonema is often very conspicuous on clay banks.

6. Woodlands, near Frome (P.). Failand and Clevedon (F.).

5. Cothelstone and Quantock Hills. Broomfield. Minehead. Exmoor. Timberscombe. Blackdowns.

**P. urnigerum**, L. On dry or stony places, especially in mountainous districts. This and the two following species are rare in the calcareous districts of Somerset (P.).

6. Clevedon (Mrs. Lainson). Chilcompton (P.).

5. Simonsbath. Exmoor. Aisholt.

**P. piliferum**, Schreb. Frequent on dry heaths, and walls.

6. Clevedon (G.). Coleford and Masbury (P.). Failand (F.).

5. Cothelstone and Quantock Hills. Minehead. Dunkery.

**P. juniperinum**, Willd. Common on heaths and waste places, especially abundant on the edges of coniferous plantations.

6. Shapwick (abundant). Little Elm (P.). Failand (F.). Clevedon (Mrs. Lainson).

5.\* Castle Neroche. Buncombe. Quantocks. Minehead. Dunkery.

- P. gracile**, Dicks. On peaty soil in woods and on dry heaths.  
 6. Masbury. Shapwick (P.).  
 5.\* Castle Neroche. Blackdowns.
- P. formosum**, Hedw. This large Urn-moss is common in nearly all the woods of the county.
- P. commune**, L. This is the largest of the Urn or Hair-mosses, and is sometimes used for stuffing mattresses and for brooms. It is abundant throughout the county in peaty and marshy places.  
 Var. *minus*, Weis. In Census catalogue. Probably fairly frequent.

## ORDER EUBRYALES.

## FAMILY DICRANACEÆ.

- Archidium alternifolium**, Schp. (*A. phascoides*, Brid.). In wet fields and bare spaces.  
 6. Portishead and south side of Avon opposite Cook's Folly, near Bristol (S.). Confirmation desirable.
- Pleuridium axillare**, Lindb. (*P. nitidum*, Rab.). In fallow fields and on pool sides.  
 6. In Census catalogue (locality unknown to me). Confirmation desirable.
- P. subulatum**, Rab.  
 6. Clevedon (Mrs. Lainson). Winscombe. Leigh Wood (Wh.). Failand (F.). Berkley Hill (P.).  
 5. Bossington, near Porlock (W.).
- P. alternifolium**, Rab. Wet places, borders of fields, etc.  
 6. Failand (W.). Said to have been recorded by Sir E. Fry from Failand, but he does not give it in his latest list of Failand mosses, and does not know of its occurrence there.
- Ditrichum tortile**, Lindb. On wet sandy ground.  
 6. Leigh Wood (S.). A doubtful record.

**D. homomallum**, Hampe. A subalpine plant.

6. Clevedon (Wh.). Near Shipham, Mendip (S.).
5. Exmoor (A.). Cothelstone?

**D. flexicaule**, Hampe. Frequent on limestone rocks and earth.

6. Yatton. Weston. Cheddar. Clevedon. Winscombe. Claverton (P.). Downhead and Holwell (P.). Leigh Wood (R.). Bath (W.).

5. Pickeridge.

Var. *densum*, B. and S., is a densely tufted form.

6. Clevedon (Wh.).

**Seligeria pusilla**, B. and S. On damp rocks, especially in crevices.

6. Hampton Rocks, Bath (Hunt 1867).

**Ceratodon purpureus**, Brid. A variable and cosmopolitan moss, often with a tinge of red, abundant throughout the county except on the Oolite, and common in fruit.

**Dichodontium pellucidum**, Schp.

6. Whatley (P.). Clevedon.
5. Cothelstone. Horner (W.).

**D. flavescens**, Lindb. (*D. pellucidum* var. *serratum*, Schp.). On beds of mountain streams.

5. Horner (W.).

**Dicranella heteromalla**, Schp. A common moss on banks, etc., throughout the county.

Var. *sericea*, Schp.

- 6.\* Cogley Wood.

**Dicranella cerviculata**, Schp. On peaty banks and sides of ditches.

6. Bruton and Shapwick (P.). Chelvey (S.). Flax Bourton (S.).
- 5.\* Cheddon Fitzpaine. Stoke St. Mary. Aisholt. Cocker Combe.

**D. secunda**, Lindb. (*D. subulata*, Schp.) Stony ground on mountain sides. See under *D. curvata*.



- D. curvata**, Schp. A plant found by the Rev. C. H. Binstead at Chipstable, Wiveliscombe (V.C. 5) may be this plant but was referred at the time to the commoner moss *D. secunda*. Neither are recorded for V.C. 5.
- D. rufescens**, Schp. On wet clay, etc.  
5.\* Merridge, near Taunton.
- D. varia**, Schp. Usually on damp clayey grounds, by stream sides, in woods and shady places.  
6. Bruton. Weston. Loxton. Berrow. Failand (F.).  
5.\* Aisholt, (approaching var. *tenella*, Schp.). Chard.
- D. Schreberi**, Schp. Ditch-sides, margins of streams, usually on clay.  
6. Near Wells (B. 1886).
- D. squarrosa**, Schp. This moss often forms conspicuous green patches in or near mountain streams. Rare in the county.  
5. Horner (W.).
- Dicranoweisia cirrata**, Lindb. Forming small cushions on trees, pales, and thatch, occasionally on rocks.  
6. Weston. Asham Wood. Beckington and Black Down (P.). Failand (F.).  
5. Curland. Culmhead.
- Campylopus subulatus**, Schp. Dry sandy spots. Rare.  
5. Wiveliscombe (B. 1888).
- C. flexuosus**, Brid. A common plant on turfy ground and rocks in woods or shady places.  
6. Roddenbury, near Frome (P.). Downhead Common (P.). Burrington Combe (R.).  
5. Dunkery.
- C. pyriformis**, Brid. (*C. turfaceous*, B. and S.) Common on peaty moorlands and heaths.  
6. Downhead Common, Mendip. (c. fr., P.).  
5.\* Minehead. Dunkery.

**C. fragilis**, B. and S. On turfy soil and rocks.

6. Flax Bourton (S.). Confirmation desirable.

5.\* Minehead. Dunkery.

**C. brevopilus**, B. and S. (*C. polytrichoides*, De Not.). Moist heath and bogs.

6. Shapwick (W.).

**Dicranum Bonjeani**, De Not. (*D. palustre*, B. and S.). In shady places on heaths and in marshes.

6. Axbridge. Berkley and Frome (P.). Burrington Combe (R.).

Var. *juniperifolium*, Braithw.

6. Wookey (B. 1887, in grass).

**D. scoparium**, Hedw. Common throughout the county, in woods, on heaths, thatch, etc.

Var. *orthophyllum*, Brid.

6. Cogley Wood.

5.\* Taunton. Dunkery.

Var. *paludosum*, Schp.

5.\* Castle Neroche. A form found at Triscombe (5) closely approaches this variety.

Var. *spadiceum*, Boul. (Var. *turfaceum*, Milde.).

5.\* Dunkery.

**D. majus**, Turn. A large moss, frequent in mountainous woods.

6. Clevedon. Weston. Whatley (P.).

5. Cothelstone. Aisholt. Quantocks. Minehead. Horner Wood. Exmoor.

**D. fuscescens**, Turn. On the ground or rocks in mountainous districts. The specimen in the Bristol Museum collection is *Ditrichum flexicaule* (H.H.K.).

6. In Census catalogue, but is of doubtful occurrence in Somerset.

**Leucobryum glaucum**, Schp. Forms whitish tufts on turfey ground, on heaths and in woods.

6. Dolebury on Mendip (R.). Leigh Wood (R.). Nettlebridge (P.). Shapwick (W.).
5. Minehead. Cocker Combe. Exmoor.

FAMILY FISSIDENTACEÆ.

This family is characterised by the lower part of the leaf being of a double nature on one side of the nerve.

**Fissidens exilis**, Hedw. A minute plant growing in shady places.

6. Winscombe (W.).
5. Stoke St. Mary.

**F. viridulus**, Wahl. On banks and shady rocks.

6. Yatton. Frome.
- 5.\* Taunton. Bishop's Lydeard. Aisholt. Stoke St. Mary.

**F. pusillus**, Wils. A small plant with narrower leaves than the last. It is usually found on shaded sandstone rocks, and is probably commoner than its records imply.

6. Bristol district (L.). Leigh Wood (W.).
5. Aisholt. Buncombe. Horner (W.).

**F. incurvus**, Starke. On clay banks, etc. This is probably a frequent moss but as the fruit is the only constant character distinguishing it from the commoner *F. viridulus* it is often overlooked.

6. Woolverton (P.). Bath (W.) Loxton.
5. Stoke St. Mary. Dodhill.

Var. *tamarindifolius*, Braithw. (*F. tamarindifolius*, Wils.).

6. In hollows of grassy slope, Wells (B. 1887).

**F. bryoides**, Hedw. Common on clay banks and in woods throughout the county.

Forma *inconstans*. (Var. *inconstans*, Schp.).

- 6.\* Bruton.
- 5.\* Stoke St. Mary.

**F. crassipes**, Wils. On stones in streams, especially in calcareous districts.

6. Whatley (P.). Weirs in river Frome (P.).

**F. adiantoides**, Hedw. One of the largest *Fissidens* species, it is not infrequent in wet places.

6. Yatton. Weston. Near Bristol. Kewstoke. Clevedon. Goblin Combe. Beckington and Murtry (P.). Farleigh Hungerford (P.).

5. Hatch. Exmoor (A.). Horner (W.).

A plant of drier ground is var. *collinus*, Mitt. I have seen this plant or a near approach to it at Kewstoke and Yatton. (V.C. 6\*).

**F. decipiens**, De Not. Usually on wet rocks in mountainous districts, but occasionally in drier places at lower levels.

6. Gurney Slade (P. teste T. Barker.). Kewstoke.

**F. taxifolius**, Hedw. This is the commonest *Fissidens*. I have met with it on banks (especially clay) and in woods in almost every part of the county.

FAMILY GRIMMIACEÆ.

**Grimmia apocarpa**, Hedw. (*Schistidium apocarpum*, Bry. eur.)  
Common on walls and rocks throughout the county.

Var. *rivularis*, W. and M. (*S. alpicolum* Limpr. var. *rivularis*, Wahl.).

6. In streams. Leigh Wood (R.).

**G. maritima**, Turn. (*S. maritimum*, Bry. eur.).

5. On rocks by the sea-coast. Bossington, near Porlock (W.).

**G. pulvinata**, Smith. Forms small rounded cushions hoary with the hair points of the leaves. Common throughout the county in the lowland districts, on walls, rocks, tiles, and slates.

**G. orbicularis**, Bruch. A similar plant to the last, but the cushions are less definite; it is usually found on calcareous walls and rocks.

6. Bruton. Wells. Near Bristol. Near Beckington (P. 1869).

**G. trichophylla**, Grev. On rocks and walls.

6. In Census catalogue (locality unknown to me).

**Rhacomitrium aciculare**, Brid. On rocks in streams in mountainous districts.

5. Horner (W.).

**R. fasciculare**, Brid. Usually on subalpine rocks.

5. Horner (W.).

**R. heterostichum**, Brid. Rocks and walls in mountainous districts.

5. Dunkery (W.). Dunkery Beacon rocks (P.).

Var. *gracilescens*, B. and S.

5. Dunkery Beacon (P.). Horner (W.).

**R. lanuginosum**, Brid. The hoary masses of this moss are very conspicuous on wall-tops, heaths, and rocks, especially in mountainous districts. The hair point of the leaf forms a very pretty microscopic object.

6. Leigh wood (W.). Bristol district (L.). Confirmation desirable.

5. Dunkery district.

**R. canescens**, Brid. On heaths, wall-tops, etc.

6. Asham Wood (scarce, P.). Leigh Wood (L.). Stanton Drew (S.).

5. Dunkery. Horner.

Var. *ericoides*. B. and S. In the detritus of the beds of streams or drainage water.

- 5.\* Dunkery. Horner.

**Ptychomitrium polyphyllum**, Fuernr. Siliceous rocks and walls in mountainous districts.

6. Clevedon (G.). Cheddar (Wh.). Bleadon Hill.

5. Exmoor (A.). Horner (W.).

**Hedwigia ciliata**, Ehrh. On siliceous rocks and walls.

6. Recorded from Cheddar (S.), but almost certainly wrongly so, the district being a calcareous one.

5. Exmoor (W.).

FAMILY TORTULACEÆ.

This family contains a large number of our winter-fruiting species.

**Phascum cuspidatum**, Schreb. This minute moss is common on clay banks, waste places, fallow fields, and garden soil. It is probably common throughout the county, but has not been observed in many localities owing to its small size and its unstalked capsule.

6. Wells (B.). Pill (W.). Bristol district (L.). Frome (P.). Failand (F.).

5.\* Taunton. Staplegrove (abundant). Cocker Combe.

Var *piliferum*, H. and T. (*Phascum piliferum*, Schreb.).

6. Bath (W.).

**P. curvicolle**, Ehrh. Bare earth, usually in calcareous districts.

6. Bare earth, Wells (B. 1887; associated with *P. recta*, *P. bryoides*, and *Phascum cuspidatum*). Ashton, near Bristol (Wh.).

**Pottia recta**, Mitt. (*Phascum rectum*, With.). On bare places, usually in limestone districts.

6. Bare earth, Wells (B. 1887).

5.\* Aisholt.

**P. bryoides**, Mitt. (*Mildeela bryoides*, Limpr.). Bare places and fallow fields.

6. Bare earth, Wells (B. 1887). Leigh Wood (Wh.).

- P. Heimü**, Fuern. Muddy and sandy ground near the sea.
6. Burnham (Wh. and W. and D.). Near Bristol (S.). Recorded for Failand in Vict. Co. Hist., but not in Sir Edward Fry's list. The habitat is an unlikely one, and Miss Agnes Fry informs me that the plant has not been found at Failand.
- 5.\* Minehead (Loydell).
- P. truncatula**, Lindb. Usually on banks or in fallow fields. Probably common throughout the county.
6. Brean. Leigh Wood (Wh.). Failand (F.). Wall-tops at Road, Vobster, etc. (P.).
- 5.\* Frequent in Taunton Deane, sometimes on soilcaps of walls. Aisholt.
- P. intermedia**, Fürnr. In quarries, on walls, and on bare places in fields, on little-used lanes, etc.
- 5.\* Aisholt.
- P. crinita**, Wils. On the rocks and walls of the sea-coasts.
6. This plant is said to have been recorded for Failand (F.). It is not given in Sir E. Fry's list and must be eliminated from Somerset moss list.
- P. Wilsoni**, B. and S. A plant of sandy ground, chiefly near the sea.
6. In Census catalogue (locality unknown to me). This is probably a mistake, the record being for V.C. 5.
- 5.\* Recorded for Minehead by Miss Gifford in 1867, but not given in the *Moss Census Catalogue* of 1907.
- P. minutula**, Fuernr. This minute plant is probably frequent but has been overlooked in many localities.
6. Brean (bare place in field). Clifford, near Beckington (P.). Failand (F.). Cheddar (S.).
5. Stoke St. Mary (on bank). Thurlbear. Taunton (soil of flower-pot). Aisholt.

**P. Starkeana**, C.M. Fallow fields and bare ground.

- 6.\* Near Bristol (Thwaites, 1843). Mr. Waterfall informs me that this is common on the Gloucester side.

**P. lanceolata**, C.M. Dry places and wall-tops.

6. Bruton. Leigh Wood (Wh.). Clevedon (Wh.). Cheddar (W. and D.). Road, etc. (P.).

**Tortula pusilla**, Mitt. (*Pterygoneuron cavifolium* Jur.). Walls and banks.

6. Frome district (freq.). Woolverton (P.).  
5. In Census catalogue (locality unknown to me).

**T. lamellata**, Lindb. (*Pterygoneuron lamellatum* Jur.).

6. Combe Down, Bath (Mrs. Hopkins, 1860). Confirmation desirable.

**T. ambigua**, Angstr. (*Aloina ambigua*, Limpr.). On soil over mortar or other calcareous matter.

6. Bruton. Frome. Wincanton. Winscombe. Clevedon. Nettlebridge (P.). Buckland Dinham (P.). Bleadon.  
5.\* Common in Taunton district. Exmoor (A.). Stoke St. Mary.

**T. aloides**, De Not. (*Aloina aloides*, Koch.). Similar situations to the last. This and the last species have special outgrowths from the leaf for assimilating purposes.

6. Bruton. Wincanton. Bristol. Kewstoke. Wells (D.).  
5.\* Taunton. Stoke St. Mary. Aisholt.

**T. atrovirens**, Lindb. On earth and walls, usually near the sea.

- 5.\* Minehead (reported by Mr. Loydell).

**T. cuneifolia**, Roth. Banks usually near the sea. Confirmation is very desirable for these records.

6. Portishead (S.).  
5.\* Minehead (*sec.* E. M. Holmes). Not in Census catalogue.



- T. marginata**, Spruce. Stones and walls.  
6. Bath (Mrs. Hopkins, 1861). Near Bristol (S.).
- T. muralis**, Hedw. Very common on walls and stones throughout the county.  
Var. *rupestris*, Wils., is a more robust plant.  
6. Bruton. Brislington (A.). Leigh Wood (A.). Wells (D.).  
5.\* Taunton.
- T. subulata**, Hedw. Common on sandy banks, sometimes on rocks or encroaching on the bases of trees.  
6. Bruton. Wincanton. Kewstoke. Hadspen and Berkeley Hill (P.). Wells (D.). Winscombe (W.).  
5. Common in Taunton district. Chard.
- T. mutica**, Lindb. (*T. latifolia*, B. and S.). In spots liable to flooding, on roots of trees.  
6. Bruton. Bath (W.).
- T. laevipila**, Schwaeg. Trunks of trees.  
6. Bruton. Cole. Clevedon (Mrs. Lainson). Farleigh Hungerford (P.). Bleadon.  
5. Common in Taunton district.  
Var. *laevipiliformis*, Limpr.  
5.\* West Monkton (on a wall, *teste* W. Ingham). Curland.
- T. intermedia**, Berk. (*T. montana*, Lindb.). Frequent on calcareous rocks and soil.  
6. Bruton. Yatton. Wincanton. Worlebury Hill (A.). Clevedon. Cheddar (D.). Kewstoke. Priddy (D.). Gurney Slade and Asham Wood (P.). Bleadon.  
5.\* Near Taunton. Cushuish.
- T. ruralis**, Ehrh. This moss is well distinguished from other blunt-leaved Tortulas by its recurved leaves. It is common on stony ground, thatched roofs, walls, slate roofs, etc.  
6. Cole. Wincanton. Near Bristol. Failand (F.). Laverton, etc. (P.).  
5. Taunton. Curland. Cushuish. Dodhill.

**T. ruraliformis**, Dixon. (*T. ruralis*, var. *ruraliformis*). This moss is abundant on some of our seaside sandhills, often being the dominant moss present.

6. Burnham. Berrow.

**T. papillosa**, Wils. On trunks of trees.

5.\* Norton Fitzwarren.

**Barbula lurida**, Lindb. (*Didymodon luridus*, Hornsch.). On rocks and stumps, usually in calcareous districts and near water.

6. Bruton (on calcareous wall). Clevedon (Rev. H. Boyden).

**B. rubella**, Mitt. (*Didymodon rubellus*, B. and S.). Usually on rocks or stony ground, especially in mountainous districts. Common.

6. Bruton. Wincanton. Frome. Weston. Kewstoke. Failand (F.). Beckington and Vallis (P.). Howell, etc. (P.).

5. Taunton. Cheddon Fitzpaine. Aisholt (c. fr.). Mer-ridge (c. fr.). Orchard Portman.

**B. tophacea**, Mitt. (*D. tophaceus*, Jur.). On wet or damp limestone walls or rocks, sometimes on mortar of sandstone walls.

6. Burnham (D. 1905). Berrow. Portishead (S. and W.). Frome and Faulkland (P.). Clevedon (G.). Bourton (Wh.).

5.\* Hatch.

**B. fallax**, Hedw. Common on banks, waste places, walls, etc.

6. Bruton. Frome. Weston. Yatton.

5.\* Taunton (com.). Aisholt. Quantocks.

Var. *brevifolia*, Schultz.

6. Berrow. Cheddar (Boswell, 1873).

**B. recurvifolia**, Schp. (*B. reflexa*, Brid.). On sand, earth, soilcap of rocks.

6. In Census catalogue (locality unknown to me).

- B. rigidula**, Mitt. (*Didymodon rigidulus*, Hedw.). A frequent dweller on walls and rocks, especially in the east end of the county. It has not yet been recorded for V.C. 5, but this omission is probably due to the fact that it is often passed over for other *Barbulæ*.
6. Bruton. Hadspen. Wells (B. 1887). (Near Rudge, but just in S. Wilts, V.C. 8. P.).
- B. cylindrica**, Schp. On walls, soilcaps of rocks, shady or damp banks, etc., chiefly in calcareous districts.
6. Bruton. Leigh Wood (R.). Wells (D.).
- 5.\* Aisholt. Selworthy. Near Chard.
- B. vinealis**, Brid. In similar situations to the last.
6. Bruton. Near Bristol (G.). Wells (B. 1877). Beckington (P.). Norton St. Philip (P.).
- B. sinuosa**, Braithw. (*Didymodon sinuosus*, Schp.). Rather uncommon on calcareous walls and stones.
6. Yatton. Wells (stones in damp places, B. 1887). Vallis (P.). Woolverton (P.).
- 5.\* Merridge, near Taunton.
- B. Hornschuchiana**, Schultz. Infrequent on walls and ground, especially in limestone districts. This moss is the host of a small Ascomycete fungus (*Enchnosphaeria muscicola*) which was first discovered in 1912 in the Taunton district.
6. Frome district. Wells (B. 1887, not uncommon on stony ground).
- 5.\* Taunton (not uncommon on limestone walls).
- B. revoluta**, Brid. Frequent on limestone walls and rocks.
6. Bruton. Failand (F.). Leigh Wood (Wh. and W.). Clevedon (Wh. and W.).
5. Taunton district (not uncommon). Horner (W.).
- B. convoluta**, Hedw. Frequent on wall-tops and ground, more especially in limestone districts.
6. Frome district. Near Bristol. Leigh Wood. Clevedon. Ashton (Wh.). Wells (D.). Failand (F.).
- 5.\* Taunton. Stoke St. Mary. Aisholt.

**B. unguiculata**, Hedw. Very common on walls, banks, and bare earth throughout the county.

Var. *cuspidata*, B. and S.

6. Bruton.

5.\* Chard.

**Leptodontium flexifolium**, Hampe. On peaty and gravelly soil, especially in damp places; rare in the county.

6. Brockley Combe (L.).

**Weisia crista**, Mitt. (*Astomum crispum*, Hpe.). Chiefly on calcareous ground.

6. Leigh Wood (Wh.). Said to have been recorded from Failand, but the plant is *Dicranoweisia cirrata* (F.).

**W. microstoma**, C.M. (*Hymenostomum microstomum*, R.Br.). On banks and bare ground.

6. Wells (B. 1887). Weston-super-Mare (L.).

5.\* Trull. Taunton. Buckland St. Mary. Buncombe.

**W. tortilis**, C.M. (*Hymenostomum tortile*, B. and S.). This is given in the Census catalogue as being present in V.C. 6, and I have a record for it, but it may be the commoner plant, *W. crispata*, which at the time the record was made was included under *W. tortilis*.

6. Leigh Wood (S.).

**W. crispata**, C.M. A plant of limestone rocks and banks. It is commoner than the last species in the neighbouring county of Gloucester, and though it is not given in the *Census Catalogue for Somerset*, the locality given under the last species probably refers to this plant. I have not seen either of the specimens.

6.\* Wells (B.).

**W. viridula**, Hedw. The most abundant *Weisia* species found in the county. It is common on banks and sandy or loamy ground.

6. Wells (B. and D.). Clevedon (G.). Limeridge Wood, Tickenham (R.). Burrington Combe (R.). Leigh Wood (R.). Beckington (P.). Gare Hill (P.). Failand (F.).
- 5.\* Staplegrove. Taunton. Aisholt. Broomfield. Buckland St. Mary.
- W. mucronata**, B. and S. (*W. rutilans*, Lindb.). Shaded clay banks.
5. Bossington (W.). Cothelstone (doubtful, as it is without fruit).
- W. tenuis**, C.M. (*Gyroweisia t.* Schp.). A small plant found on the inclined faces of rocks.
6. Bath (E. M. Holmes). Failand (S.).
- W. calcarea**, C.M. (*Gymnostomum calcareum*, N. and H.). A small and rare moss of shaded limestone rocks.
6. Burnham (W.).
- W. curvirostris**, C.M. (*Hymenostylium curvirostre*, Mitt.). Recorded for V.C. 6 from Leigh Wood by Thwaites, but until its existence is proved it must be eliminated from Somerset moss lists. The locality given by Thwaites is an unlikely one for this mountain species to be found.
- W. verticillata**, Brid. (*Eucladium verticillatum*, B. and S.). An infrequent plant of wet calcareous rocks, often found in shady and moist situations. I have not seen it with capsules in Somerset.
6. Hadspen. Bruton. Cogley Wood. Cheddar (W.). Rudge (P.).
- Trichostomum crispulum**, Bruch. A common plant of calcareous rocks and banks, but not confined to limestone districts.
6. Yatton. Bruton. Kewstoke. Wells (B.). Worlebury Hill (A.). Mells (P.). Leigh Wood (Thwaites, 1844). Brean Down (A. Wilson, 1911).
- 5.\* Aisholt.

Var. *elatum*, Schp., is not given in the *Census Catalogue for Somerset*, but was recorded for Cheddar (V.C. 6) by Boswell, in 1873. I have a specimen approaching this variety from Aisholt (V.C. 5).

**T. mutabile**, Bruch. Usually found on rocks and banks near the sea-coast.

6. Kewstoke. Cheddar (Boswell). Leigh Wood (in abundant fruit, which is rare, E. M. Holmes. Also Wilson, 1860, R.). Portishead (S.). Winscombe and Brean Down (A. Wilson, 1911).

Var. *cophocarpum*, Schp.

6. Kewstoke. Leigh Wood (W.).

**T. tenuirostre**, Lindb. (*Didymodon cylindricus*, B. and S.).  
On wet rocks near streams.

6. Near Mells (P.).

**T. flavovirens**, Bruch. On sandy grounds and banks of the sea-coast, often found just above high tide marks. It is always sterile in this country.

6. Common on the sands from Burnham to Berrow.

5. Bossington (W.).

**T. nitidum**, Schp. A not uncommon plant on the rocks and walls of our calcareous districts. Like the last, it is invariably without capsules.

6. Yatton. Kewstoke. Cheddar. Mendip Hills (com. B.). Clevedon (G.). Worlebury Hill (A.). Leigh Wood (R.). Gurney Slade (P.). Brean Down (A. Wilson, 1911).

**T. tortuosum**, (L.), Dixon. (*Tortella tortuosa*, Limpr.). The rounded tufts of this moss are often conspicuous on the rocks and mountain slopes of limestone regions.

6. Kewstoke. Clevedon. Cheddar. Worlebury Hill (A.). Vallis (P.). Mells and Frome district (P.).

5. In Census catalogue. I have no record of this, and am very doubtful of its occurrence in this vice-county.

**Pleurochæte squarrosa**, Lindb. (*Tortella s.* Limpr.). A rare moss in the north, but not uncommon on stony banks in our limestone districts.

6. Kewstoke. Clevedon (Wh.). Tor Hill and Wells (B.).

5.\* Minehead (Boswell, 1867, *sec.* Braithwaite's "Flora").

**Cinclidotus Brebissoni**, Husnot. On or near tree-stumps by water, occasionally on rocks.

6. Frome. Farleigh Hungerford (P.). Nr. Bristol (L.). Wells (B.). Bath (W.).

**C. riparius**, Arnott. This is given by Pr. Leipner in his list of Bristol district mosses, but the plant must be referred to a form of the following species.

**C. fontinaloides**, P. Beauv. A frequent plant on stones and wood in streams.

6. Bruton. Frome district. Shapwick. Wincanton. Lullington, etc. (P.). Bristol district (L.).

5. West Sedgemoor. Badgworthy Water. Horner Wood (Loydell).

#### FAMILY ENCALYPTACEÆ.

**Encalypta vulgaris**, Hedw. Frequent on walls and banks, especially in calcareous districts.

6. Bruton. Batcombe. Crocombe. Frome. Wincanton. Wells (D.). Clevedon and Bristol district (G.). Farleigh and Ammerdown (P.). Bleadon Hill.

**E. streptocarpa**, Hedw. (*E. contorta*, Lindb.). Rather frequent on banks and walls, especially in limestone mountainous districts. It is occasionally found with capsules, which are rare.

6. Bruton. Batcombe. Kewstoke. Yatton. Clevedon. Cheddar. Ebbor Rocks (D.). Worlebury Hill (A.). Frome district (P.).

5. Pitminster. Cothelstone. Aisholt.

FAMILY ORTHOTRICHACEÆ.

**Zygodon viridissimus**, R. Brown. Frequent, usually on trees, but occasionally on rocks.

6. Batcombe. Weston. Clevedon (G.). Nailsea (G.). Mells (c. fr. P.). Bleadon.
5. Staplegrove. Taunton (c. fr.). Hopcott Wood (Loydell). Horner (W.).

**Z. Forsteri**, Mitt. This rare plant was recorded for Minehead (V.C. 5) by Miss Gifford. It is not given for V.C. 5 in the Census catalogue, but for V.C. 6, probably due to a mistake in the vice-county number.

**Ulota crispa**, Brid. The small dense round cushions of this moss are common, and often very fertile, on the trunks of trees, especially in damp mountainous woods.

6. Weston. Masbury (W.). Mells and Asham Wood (P.).
- 5.\* Tarr Steps. Horner. Castle Neroche. Orchard Portman. Wiveliscombe (B.).

Var. *intermedia*, Braithw.

6. Weston. Masbury (W.).
- 5.\* Tarr Steps. Castle Neroche.

**U. Bruchü**, Hornsch. Trees, rarely on rocks.

5. Horner (W.).

**Orthotrichum anomalum**, Hedw., var. *saxatile*, Milde. Not infrequent on limestone rocks and walls.

6. Bruton. Wincanton. Frome district. Brean Down. Cheddar. Priddy (D.). Clevedon and Bristol district (G.). Bleadon Hill.
- 5.\* Taunton. Cothelstone.

**O. cupulatum**, Hoffm. On stones and walls, chiefly on limestone.

6. Whatley (iron-grating in stream P.). Priddy (D. *teste* W.W.). Bath (W.). Cleeve (G.).

**O. leiocarpum**, B. and S. On trees.

6. Bruton. East Woodlands and Prattebury Hill (P.).
5. Horner (W.).



- O. Lyellü**, H. and T. This robust gemmiferous *Orthotrichum* is often found on our trees, and capsules are occasionally present.
6. Bruton. Shapwick. Wincanton. Witham. Red Lynch (P.). Laverton and Farleigh Hungerford (c. fr. P.). Bleadon.
5. Taunton. Cothelstone and Quantock Hills. Castle Neroche. Selworthy. Exmoor.
- O. speciosum**, Nees. This is recorded by Dr. Parsons as occurring on a thatched roof at Blackslough, near Stourton (V.C. 6 or 8?). It is a rare species in Britain, is not given for either of these vice-counties in the Census catalogue, and its usual habitat is on trees in more mountainous districts than the Blackslough station.
- O affine**, Schrad. The commonest *Orthotrichum* in the county; it usually occurs on trees, but is sometimes found on stones.
6. Common.
- 5.\* Taunton, etc. Common.
- O. tenellum**, Bruch., is a rare moss in the county; it occurs in short dark-green tufts on trees.
6. Wells (on an elm, B. 1887).
- O. diaphanum**, Schrad. Not uncommon on tree-trunks and wooden pales, occasionally on walls.
6. Bruton. Yatton. Frome district (P.). Road (P.). Berkley (P.). Clevedon (Mrs. Lainson). Burnham (W.). Bleadon.
5. Taunton. Cothelstone. Orchard Portman.

FAMILY SCHISTOSTEGACEÆ.

This family only contains one species, which is not common in the British Isles.

**Schistostega osmundacea**, Mohr. This pretty little fern-like moss occurs in clefts and caves of sandstone rocks, the darkness of which is relieved by the greenish light from the highly refractive protonema.

6. Pill (S.). A somewhat questionable record.

5.\* Yards, near Kingston.

FAMILY FUNARIACEÆ.

**Ephemerum recurvifolium**, Lindb. (*Ephemerella recurvifolia*, Schp.). Fallow fields and bare ground.

6. Brockley (S.). Cheddar (S.). Confirmation of these records is greatly desirable.

**Physcomitrium pyriforme**, Brid. Common on heaps of mud thrown out of ditches, and on clayey banks, occasionally on soil of flower-pots.

6. Frome. Bristol district (G.). Beckington (P.). Failand (F.).

5.\* Taunton. Trull. Aisholt.

**Funaria fascicularis**, Schp. (*Entosthodon f.* Cke.). On fallow fields, bare field tracks, soil of flower pots, etc.

6. Blagdon. Pensford (R.). Failand (F.).

5.\* Taunton (c. fr.). Aisholt (c. fr.).

**F. ericetorum**, Dixon. (*Entosthodon e.* C.M.). On shady banks, etc., chiefly in mountainous country.

6. Berkley (very scarce, found once only, P.). Leigh Wood (fruit immature but with characteristic border to leaves, R.). Both localities given are rather low-lying for this species.

**F. calcarea**, Wahl. Infrequent on limestone rocks and walls.

6. Gurney Slade (scarce, P.). Cheddar (W.). Priddy (D.).

**F. hygrometrica**, Sibth. Heaths, banks, walls, cinders, sewage works, burnt ground, etc. The commonest *Funaria* of the county, and producing capsules during every season of the year.

6. Bruton. Shepton Mallet. Midsomer Norton. Yatton. Shapwick. Wincanton. Clevedon. Bristol district. Berrow. Frome district (P.). Bleadon.
5. Taunton. Aisholt. Minehead (P.).

## FAMILY MEESIACEÆ.

**Aulacomnium palustre**, Schwaeg. A common moss in bogs and on wet heaths.

6. Bruton. Shapwick. Priddy (P.).
5. Dunkery. Exmoor. Selworthy. Castle Neroche (a form approaching var. *imbricatum*, B. and S., is found on the drier places of the wet heath).

**A. androgynum**, Schwaeg. This is smaller than the preceding, is less common, is usually found on banks and rotten tree-trunks, and possesses leafless stalks with clusters of gemmæ at their apices.

6. Ashcott (B.). Shapwick (W.).
- 5.\* Minehead.

## FAMILY BARTRAMIACEÆ.

The plants of this family are sometimes known as apple-mosses, because the capsules are more or less spherical or apple-shaped.

**Bartramia pomiformis**, Hedw. This is the commonest of the apple-mosses, and is often found on sandy banks and in rock-crevices in the county.

6. Failand (Wh.). Clevedon (G.).
5. Blackdowns. Cothelstone. Minehead. Horner. Exmoor.

**Philonotis fontana**, Brid. Frequent in boggy places and springs in mountainous districts.

6. Black Down, Mendip (R.). Berkley (P.). East Woodlands and Gare Hill (P.).
5. Castle Neroche. Exmoor. Horner (W.).

**Philonotis caespitosa**, Wils. This Apple-moss is not common in Britain and is rare in the county. It grows on wet heaths and in bogs.

5.\* Selworthy (probably var. *laxa*, L. and W.).

**Philonotis calcarea**, Schp. As its name implies this is usually a plant of calcareous bogs.

5. Exmoor (A.). I have seen this specimen and agree with Miss Armitage as to its determination.

**Breutelia arcuata**, Schp. On damp rocks in mountain districts, especially near waterfalls and streams.

6. Dulcote Hill (B.). Mendip Hills (B.). Cheddar (B.). Wells (B.). South Brent (L.). Near Burrington (P.).

FAMILY BRYACEÆ.

The plants of this family usually have large cells in the leaf and a well-developed peristome to the capsule.

**Leptobryum pyriforme**, Wils. On sandstone rocks, cinders, soil of flower pots, etc., often in greenhouses.

6. In Census catalogue (locality unknown to me, but it is probably frequent).

5\* Taunton.

**Webera elongata**, Schwgr. A *Webera* found on Cothelstone (V.C. 5) may be this species, but as it has no capsules it is very doubtful. It is not given for V.C. 5 in the Census catalogue.

**W. nutans**, Hedw. Not uncommon on peaty or sandy soil in mountainous districts.

6. Masbury. Black Down, Mendip (P. and R.). Shapwick (W.). Bleadon.

5. Quantocks (common). Dunkery. Exmoor. Castle Neroche. Chard.

**W. annotina**, Schwgr. On siliceous rocks and soil.

6. Failand (Wh.). Burnham (W.).

5.\* Broomfield. Taunton.

**W. carnea**, Schp. (*Mniobryum carneum*, Limpr.). Frequent on the clayey banks of ditches and streams.

6. Bruton. Wincanton. Kewstoke. Brent. Portbury (W.). Beckington (P.). Faulkland (P.).

5.\* Kingston. Aisholt. Stoke St. Mary.

**W. albicans**, Schp. (*Mniobryum albicans*, Limpr.). Frequent on clayey banks, near ditches, stream-sides, especially in the hilly portions of the county.

6. Bruton. Wincanton. Failand (F.).

5.\* Taunton. Cushuish. Aisholt.

**W. Tozeri**, Schp. (*Epipterygium Tozeri*, Lindb.). A rare plant by the sides of streams. It has been recorded for Minehead (V.C. 5.) by Mr. E. M. Holmes, but is not given in the Moss Census catalogue. Confirmation of the record is much to be desired.

**Bryum pendulum**, Schp. This little moss of walls and dry places is probably much rarer in Somerset than was formerly supposed to be the case. I have examined many specimens referred to it, and in nearly every case they have turned out to be the much commoner *B. inclinatum*.

6. Bruton. Near Bristol. Clevedon (Mrs. Lainson.) Yatton. Whatley (P.).

5.\* Taunton.

**B. Warneum**, Bland. A rare moss found on sandy ground in moist situations.

6. Damp places in hollows of sandhills, Berrow (*teste* Mr. Dixon).

**B. lacustre**, Brid. It is doubtful whether this plant of sandy ground has any right to a place in our list. It has been recorded by Stoddart from Portbury (V.C. 6), but it is probable that the plant was a borderless form of *B. pallens*, such as I have collected in various places in the N. of England, and which Messrs. Dixon and Ingham have so named.

**B. inclinatum**, Bland. A frequent plant of walls and dry places, especially in limestone districts.

6. Bruton. Wincanton. Wells. Near Bristol. Kewstoke. Christon (F.).

5.\* Aisholt.

**B. pallens**. Usually in moist places.

6. Clevedon (Mrs. Lainson). Leigh Wood (R.). Shapwick (R.). Winford (F.).

**B. turbinatum**, Schwaeg. This is doubtfully included amongst Somerset (V.C. 6) mosses in the Census catalogue, but must be eliminated unless evidence of its existence in the county can be adduced.

**B. pseudotriquetrum**, Schwaeg. A large Bryum found in bogs and wet places, especially by the sides of mountain springs and rivulets.

6. Berrow. Bourton (Mrs. Lainson). Near Priddy (P.). Berkley (c. fr.) and East Woodlands (P.). Burnham (W.).

5. Exmoor. Horner (W.).

**B. bimum**, Schreb. In similar situations to the last, and often even more robust.

6. Berrow. Shapwick (W.). Black Down, Mendip (R.).

5. Recorded in the Census catalogue, but on what authority I have no information.

**B. intermedium**, Brid. On wet ground and damp shady walls especially in siliceous districts.

6. Vallis, near Frome (P.).

**B. caespiticium**. One of the common Brya which inhabit our dry banks, rocks and walls.

6. Bruton. Leigh Wood. Brent. Clevedon (Mrs. Lainson). Wraxall (F.). Beckington, etc. (com. P.). Bleadon.

5.\* Taunton. Stoke St. Mary. Haydon. Selworthy. Chard.

- B. provinciale**, Philib. A rare Bryum of dry calcareous hills. Occasionally fertile on the earth about limestone rocks (B.).
6. Cheddar (B.). Wells (B.). Mendip (B.). The sterile cushions of this moss are very large and their dark colour makes it easy to know from other species (B.).
- B. capillare**, L. Common throughout the county, on walls, rocks, tree-trunks, banks, ground in woods, etc. A form growing in oak-hazel and other woods is a very robust one. Another robust form with a hair point, but with the nerve disappearing below the apex has been noticed at Bruton (V.C. 6) and Chard (V.C. 5).
- Var. *torquescens*, Husn. (*B. torquescens*, B. and S.).
6. Wookey (B.).
- Var. *macrocarpum*, Hübn.
- 6.\* Leigh Wood.
- 5.\* Hatch. Cothelstone. Broomfield.
- B. Donianum**, Grev. On stony ground and banks.
- 6.\* Frome.
- 5.\* Tetton. Cothelstone.
- B. erythrocarpum**, Schwaeg. On sandy heaths, soil caps of walls, sides of sandy lanes, etc.
6. Bruton. Wincanton. Ashcott (B.).
- 5.\* Pitminster. Cothelstone. Bathpool, Taunton.
- B. atropurpureum**, W. and M. A infrequent Bryum found on clay banks, roadsides, etc.
6. Failand (F.). Burnham (W.).
- B. murale**, Wils. On the mortar of walls.
6. Wells (B.). Leigh (Wh.). Near Bristol (Berkley). Portbury (W.).
- 5.\* Bishops Lydeard. Nailsbourne.
- B. argenteum**, L. The silvery tufts of this little moss are found on cinder paths, walls and other dry places, and are common throughout the county.

Var. *majus*, B. and S. is a larger and greener form occurring in moister and shadier situations, as in wall crevices, and amongst larger mosses.

5.\* Staplegrave. Dodhill. Haydon. Loxton.

Var. *lanatum*, B. and S. Is a smaller and more hoary form of scorched places.

5.\* Bishops Lydeard.

**B. roseum**, Schreb. (*Rhodobryum r.*, Limpr.). A rare plant, found in shady places.

6. Nettlebridge (P.). Wells (B.). Portishead and Portbury (? S.).

**Mnium affine**, Bland. A not uncommon moss of damp shady ground and banks.

6. Croscombe. Yatton. Goblin Combe. Weston-super-Mare. Wells (B.).

5.\* Taunton. Buncombe. Broomfield.

Var. *rugicum*, B. and S. (*M. rugicum*, Laur.).

6. Recorded in Census catalogue, but I do not know on what authority.

**M. cuspidatum**, Hedw. Commoner than the preceding, but in similar situations.

6. Ham wood. Goblin Combe. Weston. Leigh Wood. Wells (B. and D.).

5. Taunton. Blackdowns. Cothelstone Hills. Minehead. Exmoor.

**M. rostratum**, Schrad. On rocks and shady banks, more frequent in limestone districts.

6. Bruton. Frome. Ham Wood. Kewstoke. Clevedon (Mrs. Lainson). Wells (B.). Ebbor Gorge (D.). Weston (F.). Brewham, etc. (P.).

5.\* Pitminster. Taunton. Kingston. Aisholt.

**M. undulatum**, L. This handsome *Mnium* with undulated leaves is common in woods and shady places throughout the county.



**M. hornum**, L. This is more abundant than the last, and is seen in its best condition on shaded Greensand or Midford sand banks, where its swan-necked capsules appear abundantly. The life-history of this moss is better known in detail than that of any other moss.

**M. stellare**, Reich. Infrequent in shady places.

6. Creech Hill. Norton St. Philip (P.). Wells (B.).  
Leigh Wood (R.).

5.\* Culmhead. Bagborough.

**M. punctatum**, L. This pretty, large-leaved moss is usually found in damper places than the preceding species of *Mnium*, and is common throughout the county.

**M. subglobosum**, B. and S. A plant of wetter ground than the preceding, with which it is often confused. It is given in the Census catalogue for both North (V.C. 6), and South Somerset (V.C. 5), but I have not seen any fruiting specimens from the county and the thin margin of the leaf is not a sufficiently reliable character to separate the two species. Many specimens with an unthickened border to the leaves (suggestive of *M. subglobosum*) have their antheridia and archegonia on distinct plants and so must be referred to *M. punctatum*. The following localities must therefore be accepted with reserve.

6. Cogley Wood. Leigh Wood.

5. Cothelstone.

#### FAMILY FONTINALACEÆ.

**Fontinalis antipyretica**, L. A large dark-coloured moss which is common in ponds, rivers, streams, by-washes, etc. throughout the county.

#### FAMILY CRYPHÆACEÆ.

**Cryphæa heteromalla**, Mohr. "Like some other tree-mosses this species has a decided preference for the elder" (B.).

6. Wells (B.). Burnham (W.). Beckington (P.). Creech Hill, etc. (P.). Loxton (Hedges, A. Wilson, 1903).  
5.\* Norton Fitzwarren.

FAMILY NECKERACEÆ.

**Neckera crispa**, Hedw. Common on the Carboniferous limestone rocks and banks of the Mendip region but infrequent or absent elsewhere in the county.

6. Kewstoke. Yatton. Weston. Clevedon. Goblin Combe. Cheddar (D.). Mells (P.). Asham Wood (P.). Nettlebridge, etc. (P.).

Var. *falcata*, Boul., is only a form of the plant.

- 6.\* Kewstoke.

**N. pumila**, Hedw. Usually on tree-trunks.

6. Bruton. Laverton and Mells (c. fr. P.). Wells (B.).  
5. Castle Neroche. Cothelstone Hills. Cocker Combe. Wiveliscombe (B.). Horner (W.).

Var. *Philippeana*, Milde, is only a form and is often intermixed with the type. It is frequent on the hills around Taunton.

- 5.\* Castle Neroche. Buncombe. Cocker Combe. Broomfield.

**N. complanata**, Hübn. Abundant on tree-trunks and branches, less frequently on rocks and walls, throughout the county.

**Homalia trichomanoides**, B. and S. Usually in shadier situations and less common.

6. Cogley Wood. Frome. Laverton, etc. (P.). Brockley Combe (R.). Leigh Wood (Wh.).  
5. Horner (W.).

FAMILY HOOKERIAEÆ.

**Hookeria læte-vivens**, H. and T.

6. Census catalogue. I do not know any Somerset locality for this rare plant.

- Pterygophyllum lucens**, Brid. In moist situations. The leaf-cells of this plant can almost be seen by the naked eye.
6. Cogley Wood. Failand (F.).
  5. Bossington (W.).

## FAMILY LEUCODONTACEÆ.

- Leucodon sciuroides**, Schwaeg. Frequent on tree-trunks.
6. Bruton. Yatton. Shapwick. Wincanton. Beckington (P.). Farleigh, etc. (P.). Near Bristol. Frome.
  5. W. Sedgemoor. Taunton. Aisholt. Hopcott Wood (Loydell).
- Pterogonium gracile**, Sw. A plant of mountain districts, found on rocks or trees.
5. Hornèr (W.).
- Habrodon Notarisü**, Schp. (*H. perpusillus*, Lindb.). A rare and minute moss found on tree-trunks especially in hilly districts.
6. Tor Hill, Wells (B.).
- Antitrichia curtispindula**, Brid. On rocks and trees in mountainous districts.
5. Ebbor Gorge, Wells (B. 1887).
- Porotrichum alopecurum**, Mitt. (*Thamnium a.*, B. and S.). A pretty fir-like moss common throughout the county on shady rocks, rocks by falling water, shady banks, etc. Both forms *terrestre* and *rupestre* are abundant, the former often fruiting.

## FAMILY LESKEACEÆ.

- Leskea polycarpa**, Ehrh. On tree bases near water.
6. Berkley and Vallis (P.). Near Bristol (L.). Ebbor Gorge (B.). Bath (W.).
  - 5.\* Norton Fitzwarren (c. fr.).

**Anomodon longifolius**, Harkm. I have seen the plant collected by Binstead in 1887 from Ebbor Gorge, near Wells (V.C. 6.). The branch leaves are those of this species, but the leaves of the primary stems are like those of the following. Whether the plant is a growth form of *A viticulosus* or not, the finely pointed branch leaves place it with this species. The relationship between the two species is quite another matter.

6. Ebbor Gorge (B. teste H. N. Dixon). This is the most southern station for the plant in Britain.

■ **A viticulosus**, H. and T. A robust moss common throughout the county on tree roots and surrounding soil, rocks, soil-caps of rocks, especially in calcareous districts. When it grows on branches of hedges it is less tufted than when it is on tree roots or rocks.

**Leptodon Smithü**, Mohr. A rare moss, growing on trees, rocks and surrounding soil. It is peculiar in the crozier-like form it assumes when dry, owing to the rolling up of its shoots. It is very seldom found in the North of England.

6. North Cadbury (P.). Clevedon Court (on felled tree, G.). Winscombe. (A. Wilson, 1907).  
5. Horner (W.).

**Heterocladium heteropterum**, B. and S. On wet rocks by falling water. It probably occurs in both vice-counties, but has only been recorded for S. Somerset (V.C. 5). Mr. Waterfall informs me that the var. *fallax*, Milde., occurs at Bristol, but on the Gloucestershire side of the Avon.

5. Horner (W.).

**Thuidium tamariscinum**, B. and S. This plant, which resembles a small tamarisk tree, is one of the most beautiful of the mosses, and when placed in a dish of water makes a lovely table decoration. It is common throughout the county, especially in woods, and occasionally bears capsules.

**T. delicatulum**, Mitt. This resembles a slender form of the last species, is rarer, and prefers shaded ground in calcareous districts.

6.\* Cheddar (D. teste W.W.).

5.\* Aisholt (on Devonian limestone ground).

#### FAMILY HYPNACEÆ.

The family of the Feather-mosses include some of the largest and prettiest mosses.

**Climacium dendroides**, W. and M. Damp or wet ground, especially in the marshy places of calcareous districts. It is even more tree-like in appearance than *Porotrichum alopecurum*.

6. Claverham (G.). Banwell (Wh.). Tadhil, Mendip (on igneous rock, P.). Winscombe (D.).

**Cylindrothecium concinnum**, Schp. (*Entodon orthocarpus*, Lindb.). Amongst grass, etc., on calcareous soil.

6. Cheddar (B. 1887 also A. Wilson, 1903). Winscombe (A. Wilson, 1907).

**Orthothecium intricatum**, B. and S. On damp mountain rocks.

6. Near Wells (crevices of rocks, B., 1887.).

**Camptothecium sericeum**, Kindb. (*Homalothecium s.*, B. and S.). On trunks of trees and walls, especially abundant in calcareous districts. In the Oolite district it is the commonest moss on walls, and is often found in fruit. It is abundant throughout the county.

**C. lutescens**, B. and S. Dry hedgebanks, quarries, golf-links, etc., especially in limestone regions. It is almost as abundant on the sand-dunes between Berrow and Burnham as the dominant *Tortula ruraliformis*.

6. Berrow and Burnham. Kewstoke. Lullington (P.). Great Elm, etc. (P.). Cheddar. Longleat (Somerset side). Near Bristol. Clevedon. Leigh Wood (E. M. Holmes). Brean Down (A. Wilson, 1911).

5.\* Pickeridge golf links. Stoke St. Mary. Aisholt Quarries.

**Brachythecium glareosum**, B. and S. Not uncommon on banks and quarries in calcareous districts.

6. Frome. Near Bristol (G.). Leigh Down (R.). Brean (R.). Laverton and Murtry (P.).

**B. albicans**, B. and S. Usually on wall tops and stony places in siliceous districts, also on sand-hills.

6. Berrow, Burnham. Near Bristol (G.).

- 5.\* Cothelstone. Buckland St. Mary. Taunton.

**B. salebrosum**, B. and S. On stones, rock and tree bases, etc. I have not seen the type in Somerset, and it is possible that the following records refer to the variety.

6. Failand (F. This is not given in the list sent to me by Miss Agnes Fry). Burnham (W.). My specimens obtained in this locality were the variety.

Var. *palustre*, Schp. (*B. Mildeanum*, Jrr.). In damp clayey meadows and wet hollows of sand-dunes.

6. Frome. Berrow.

**B. rutabulum**, B. and S. This plant, as well as the variety *robustum*, B. and S., is very common throughout the county. It is very variable both in its characters and in its habitat.

**B. rivulare**, B. and S. Almost as variable as the preceding species and also common throughout the county, in or near streams.

**B. velutinum**, B. and S. On roots of trees, rocks, etc., common throughout the county.

**B. populeum**, B. and S. On sandy ground, walls, and occasionally on trees.

6. Hadspen. Frome. Vallis (P.). Leigh Wood. Clevedon (A.). Cheddar (A.).

5. Exmoor (A.).

**B. plumosum**, B. and S. A robust plant found on rocks, in or near streams.

6. Leigh Wood (Thwaites). Clevedon (G.).

5. Horner (W.).

**B. caespitosum**, Dixon. (*Scleropodium c.*, B. and S.). Found on stones, tree-roots, wall-tops, etc., but not common.

6. Bruton. Weston-in-Gordano (S.).

5.\* Cheddon Fitzpaine, near Taunton.

**B. illecebrum**, De Not. (*Scleropodium i.*, B. and S.). On banks over rocks, and on ground. The leaves are often very wide, and capsules have not been found in the county. It is most frequently found near the sea.

5.\* Below Cothelstone Beacon. Hestercombe.

**B. purum**, Dixon. (*Hypnum purum*, L.). This is an abundant plant throughout the county, on the ground or amongst grass in woods, and on heaths and banks. It is the moss most frequently employed by anglers for scouring worms. Above Triscombe (V.C. 5) it is the dominant plant of the heath.

**Hyocomium flagellare**, B. and S. On rocks near streams and falling water, especially on siliceous formations. It is recorded in the Census catalogue for S. Somerset, and though I have little doubt of its occurrence there, it cannot be common as I have never seen the moss in Somerset, and it is usually such a robust plant that it is not liable to be overlooked.

5. Census catalogue (locality unknown to me).

**Eurynchium piliferum**, B. and S. Not uncommon in woods and on grassy banks and heaths.

6. Cogley Wood. Leigh Wood (Thwaites, L. and A.). Clevedon (G.). Brockley Combe (L.). Cleeve Combe (R.). Rudge (P.). Road and Farleigh Hungerford (P.).

5.\* Buncombe Wood.

**E. crassinervium**, B. and S. On stony ground in shady places.

6. Bruton. Yatton. Leigh Wood (Thwaites). Weston-in-Gordano (G.). Cleeve Tor (Wh.). Whatley (P.).

- E. praelongum**, Hobk. Very common on shaded or damp soil throughout the county. It is sometimes found on tree stumps but is most abundant on clayey soil. Some of the Somerset forms approach the variety *Stokesii*, Brid., and I am personally inclined to refer some of our plants to the variety.
- E. Swartzii**, Hobk. Not so common as the last and usually in more open situations.
6. Creech Hill. Frome. Clevedon (G.). Beckington, etc. (P.).
- 5.\* Taunton. West Monkton. Combe St. Nicholas.
- E. pumilum**, Schp. On stony ground, etc., in shady places.
6. Belmont Hill, Failand (R.). Clevedon (W.). Walls at Laverton, Lullington, Frome, etc. (P.). Loxton.
- 5.\* Taunton. Stoke St. Mary. Hestercombe. Buncombe.
- E. curvisetum**, Husn. (*Rhyncostegiella curviseta*, Limpr.). On rocks and stones near streams. This small *Eurynchium* is seldom found in the north of England.
6. Wells (Stones on margins of streams, and under damp walls, B ; 1887).
- E. Teesdalei**, Schp. (*Rhyncostegiella Teesdalei*, Limpr.). In similar habitats to the preceding but commoner.
6. Kewstoke. Wookey Hole (B. 1886).
- E. tenellum**, Milde. (*Rhyncostegiella tenella*, Limpr.). On rocks and stones in calcareous districts, especially in rock crevices.
6. Bruton. Goblin Combe. Kewstoke. Clevedon (W.). Cheddar (D. and W.).
- 5.\* Aisholt Quarries. Merridge (rock on calcareous bank).
- E. myosuroides**, Schp. (*Isothecium myosuroides*, Brid.). On rocks and sometimes on tree-stumps or hedge-branches.
6. Cogley Wood. Laverton (P.). Gare Hill, etc. (P.). Clevedon (Mrs. Lainson).
5. Broomfield. Cothelstone. Selworthy. Exmoor. Badgworthy. Buckland St. Mary.



- E. myurum**, Dixon (*Isothecium myurum*, Brid.). Trunks of trees, especially at the base, occasionally on rocks or earth.
6. Bruton. Cogley Wood. Vallis (P.). Asham Wood, etc. (P.). Bristol district (L.).
5. Taunton. Castle Neroche. Cothelstone. Aisholt. Timberscombe. Exmoor. Blackdowns.
- E. circinatum**, B. and S. A rare moss found on the Carboniferous limestone rocks of the Mendip region.
6. Rocks about the Mendips (B.). Cheddar (H. H. Knight, 1910, and D.). Asham Wood (shady limestone rocks, P.). Bleadon.
- E. striatum**, B. and S. A robust moss with deeply striated leaves, abundant throughout the county, on the ground and rocks in woods and other shady places.
- E. meridionale**, De Not. It is very questionable whether this moss has any right to be included amongst British mosses. It was said to have been found in 1886 on sun-baked limestone rocks in sheltered situations at Wells (V.C. 6) by the Rev. C. H. Binstead, who informs me that the specimen has been lost and that the original locality has been blasted away for quarrying. A form approaching this species, and referred to it by some bryologists, was found by me in Brockley Combe on sun-baked limestone rocks in 1908, but Mr. Dixon referred it to *E. striatulum* of which it is a peculiar form. It is possible that the supposed *E. meridionale* was a similar form.
- E. striatulum**, B. and S. On shady limestone rocks and with abundant capsules.
6. Yatton. Brockley Combe. Wells. Leigh Wood (E. M. Holmes). Cheddar (H. H. Knight, 1910).
- E. rusciforme**, Milde. (*Rhyncostegium rusciforme*, B. and S.). On rocks and stones in or near streams. Common throughout the county and often fruiting.

**E. murale**, Milde. (*Rhyncostegium murale*, B. and S.). In shady or damp situations on rocks, bases of walls, etc.

6. Bruton. Vallis. Blatchbridge. Laverton and Oldford (P.). Failand (F.). Bleadon.

5.\* Merridge, near Taunton (approaching var. *julaceum*, Schp.).

**E. confertum**, Milde. (*Rhyncostegium confertum*, B. and S.).

Common on stones, tree stumps, etc., usually in shady situations.

6. Bruton. Wincanton. Frome. Shapwick. Leigh Wood. Clevedon. Kewstoke. Failand (F.). Beckington, etc. (P.). Bleadon.

5.\* Taunton. Trull. Norton Fitzwarren. Kingston. Broomfield. Chard.

**E. megapolitanum**, Milde. (*Rhyncostegium megapolitanum*, B. and S.). On stony and sandy ground, rarely on walls. Rare.

6. Bruton. Burnham (sandhills, B. 1887).

**E. rotundifolium**, Milde (*Rhyncostegium rotundifolium*, B. and S.). "On stones by the road under a hedge amongst nettles and rubbish." (B.).

6. Between Wells and Wookey Hole (B. 1887).

**Plagiothecium depressum**, Dixon. (*Isopterygium depressum*, Mitt.). Foot of trees and shaded rocks.

6. Leigh Wood. Ashton, near Bristol (S.).

5.\* Kingston.

**P. elegans**, Sull. (*Isopterygium elegans*, Lindb.). On the ground in woods, rock crevices, etc., probably not uncommon in the mountainous parts of the county.

6. Masbury Ring. Vallis (P.).

5. Broomfield. Cothelstone. Aisholt. Horner. Dunkery.

**P. denticulatum**, B. and S. Common on the ground, tree roots, rocks, etc., chiefly in shady places.

6. Yatton. Cogley Wood. Masbury and Laverton (P.).  
Near Bristol.
5. Chard. Buncombe. Broomfield. Quantocks (com.).  
Minehead. Selworthy. Horner.

**P. silvaticum**, B. and S. In similar habitats to the last, often on peaty soil. Common.

6. Cogley Wood. Yatton. Hadspen (P.). Failand (F.).  
Bristol district (L.).
- 6.\* Chard. Near Taunton. Blackdowns. Quantocks.  
Minehead.

**P. undulatum**, B. and S. The most robust of the *Plagiothecia*, frequent on the ground and damp rocks of mountain woods.

6. Stourhead. Berkley Hill (P.). Mells (P.). Failand  
(F.). Norton Wood, Clevedon (Wh.).
5. Horner Wood. Dunkery. Exmoor. Timberscombe.  
Broomfield.

**P. latebricola**, B. and S. Rare, in moist situations on decaying wood, etc.

6. Near Wells, on a rotting log in a deep ditch surrounding  
a wood (B. 1887).

**Amblystegium confervoides**, B. and S. This minute plant is found on shady subalpine calcareous rocks, and is very rare in the south of England. It has been recorded on two occasions for Somerset, but confirmation of the records is very desirable.

6. Ebbor Gorge, near Wells (B. 1887). Leigh Woods  
(E. M. Holmes, "hardly a likely locality," W.W.).

**A. serpens**, B. and S. This small *Amblystegium* is the commonest, being abundant throughout the county on the ground, stones, decaying wood, etc. Sometimes the leaf is almost nerveless, as in a specimen found on a tree root near water at Merridge (V.C. 5).

**A. Juratzkanum**, Schp. In moist situations, as on the sides of stone water-troughs.

5.\* Staplegrove, near Taunton (c. fr.).

**A. Kochü**, B. and S. In moist situations. Rare.

6.\* Witham (*teste* W. Ingham).

**A. varium**, Lindb. An infrequent moss of moist places.

6.\* Ashcott (B.). Confirmation of this record is desirable.

**A. irriguum**, B. and S. On stones in streams, principally on siliceous formation, not infrequently submerged and floating with elongated shoots.

6. Whatley (P.).

5. Bathpool and Merridge, near Taunton. Horner (W.).  
Broomfield.

**A. fluviatile**, B. and S. Usually on stones in mountain streams.

5.\* Badgworthy Water.

**A. filicinum**, De Not. (*Cratoneuron f.*, Roth.). A common *Amblystegium* of the county and the most robust; it is common on moist rocks or ground, chiefly in limestone regions.

6. Bruton. Cogley Wood. Mells. Rudge, etc. (P.).  
Near Bristol.

5. Chard. Taunton. Aisholt (leaf-point longer than usual). Merridge. Bagborough. Porlock (W.).  
Exmoor (A.).

Var. *Vallisclausæ*, Dixon. (*C. Formianum*, Roth.). In calcareous springs.

6.\* Clevedon (A. 1899).

**Hypnum riparium**, L. (*Amblystegium riparium*, B. and S.). A variable and not uncommon plant of wet places.

6. Bruton. Wincanton. Shapwick. Berkley (P.). Near Bristol.

5.\* Taunton. Cothelstone. Staplegrove.

Var. *longifolium*, Schp. More or less submerged or floating in pools or running water.

6.\* Shapwick (*teste* W. Ingham). Bruton (*teste* H. N. Dixon; a floating plant with distant leaves).

5.\* Stoke St. Mary.

Var. *subsecundum*, B. and S.

5.\* Norton Fitzwarren (*teste* W. Ingham), on stump near level of water in stream.

**H. polygamum**, Schp. (*Campylium polygamum*, Bryhn.). In marshes and wet meadows.

6. Berrow. Burnham (wet grassy places in hollows of sandhills).

5.\* Chard (moist base of quarry).

**H. stellatum**, Schreb. (*Campylium stellatum* Bryhn.). In marshy meadows, etc. Common.

6. Bruton. Witham. Frome. Leigh Woods. Weston. Wells.

5. Alcombe (Loydell). Exmoor (W.).

Var. *protensum*, Röhl. On moist calcareous rocks, etc.

6.\* Kewstoke. Wells. Priddy.

**H. chrysophyllum**, Brid. Usually on damp stony ground in calcareous districts.

6. Kewstoke. Cheddar (Wh.). Leigh Wood (G. and W.). Clevedon (G.). Murtry (P.).

5.\* Alcombe (Loydell). Confirmation desirable.

**H. hispidulum**, Brid., var. *Sommerfeltü*, Myr. (*Chrysohypnum Sommerfeltü*, Hpe.). On tree bases and stones, especially in calcareous districts.

6. Recorded from Weston-super-Mare. I have examined this specimen and consider it to be a form of *Amblystegium serpens*, with the nerve rather fainter than usual.

**H. aduncum**, Hedw. non. L. (*Drepanocladus aduncus*, W.).

A common plant of marshes and pools in low ground.

6. Shapwick. Berrow (and form *falcatum*, Ren.).

5.\* W. Sedgemoor, Taunton.

Var. *gracilescens*, Schp.

6.\* Berrow.

Var. *aquaticum*, Sanio. (*Drepanocladus Kneiffü*, W., var. *aquaticum*, S.).

6. Burnham (W.).

Var. *polycarpon*, Bland. (*D. Kneiffü*, Warnst., chiefly).

6.\* Berrow.

Var. *attenuatum*, Boul.

6.\* Shapwick (P. teste, J. A. Wheldon).

Var. *intermedium*, Schp.

6.\* Berrow (form *laxifolium*, Ren.).

5.\* Durston. North Curry (teste W. Ingham).

Var. *paternum*, Sanio. (*Drepanocladus pseudofluitans*, Kling, to a great extent).

6\*. Berrow (in pool of hollow of sandhills. The shoots are often over a foot long, are submerged and maintain an erect position).

5.\* Old canal, Norton Fitzwarren (teste W. Ingham).

**H. fluitans**, L. In similar situations to the last, but at higher altitudes.

6. Burrington Combe (R.). Kenn Moor (R.). Rudge (P.). Shapwick (W. This district is a low-lying one in which to find this moss; *H. aduncum* is abundant there.).

5. Dunkery. Castle Neroche.

Var. *gracile*, Boul.

5. Horner (W.).

Other varieties are probably present on the hills.

**H. exannulatum**, Güm. Usually on still higher altitudes, but in similar situations to the preceding. It is a plant of still more rigid habit, and almost equally variable.

5.\* Dunkery.

**H. uncinatum**, Hedw.

6. Ashton, near Bristol (S.). This is a very doubtful locality for this mountain plant to be found, and unless some confirmation of the record can be given, the moss must be eliminated from our lists.

**H. vernicosum**, Lindb. As *H. pellucidum*, Wils., has recently been segregated from this plant, it is probable that the Somerset specimen belongs to it, but I have not seen the specimen. *H. pellucidum*, Wils., differs from *H. vernicosum* in the presence of a hyaline cortical layer, and the absence of a central strand in the stem. Some British specimens have been referred by Roth to *H. intermedium*, var. *tenellum* R. and v. B.

5. Exmoor (W.).

**H. pellucidum**, Wils. See note on *H. vernicosum*.

**H. revolvens**, Swartz. In bogs usually at high altitudes.

6. Blackdown, Mendip (Wh.).  
5. In Census catalogue. I have no locality but it is very probably found in the Exmoor district.

**H. intermedium** Lindb., var. *tenellum*. R. and v. B. See note on *H. vernicosum*.

**H. commutatum**, Hedw. A not uncommon plant of bogs and streams in limestone districts.

6. Bruton. Wincanton. Chatley, near Woolverton (P.).  
Near Clevedon.

**H. falcatum**, Brid. This is also an aquatic species, but is usually found on siliceous rock, and at higher altitudes, than the preceding species, though I have found them in the same stream in the North of England.

5. Horner (W.).

**Hypnum cupressiforme**, L. is the most abundant *Hypnum* in the county and is very variable both in habit and habitat, though seldom found in wet situations. Abundant throughout the county.

- Var. *resupinatum*, Schp. (*H. resupinatum*, Wils.). Common throughout the county.
- Var. *filiforme*, Brid. Common throughout the county on tree-trunks.
- Var. *ericetorum*, B. and S. Common throughout the county on heaths and in mountainous woods. It is the dominant moss on the heath at Bagborough Knoll (V.C. 5).
- Var. *tectorum*, Brid. On rocks, walls, roofs and stony ground.
- 6.\* Bruton. Burrington Combe (R.). Chelvey Batch (R.).
- 5.\* Cheddon Fitzpaine (*teste* W. Ingham). Aisholt.
- Var. *elatum*, B. and S. A robust yellowish form found on calcareous ground.
6. Bruton. Census catalogue locality unknown to me.
- 5.\* Castle Neroche. Aisholt (c. fr., which is rare).
- H. Patientiæ**, Lindb. (*Drepanium Lindbergü*, Lindb.). A plant of clayey soil, amongst grass and on ground or soil-capped rocks in shady places.
6. Cogley Wood. Leigh Wood (G.). Clevedon (G.).
- H. molluscum**, Hedw. (*Ctenidium molluscum*, Mitt.). A common plant of calcareous districts, often forming the dominant plant in the moss-carpet of shaded limestone quarries, and ash woods.
6. Cogley Wood. Croscombe. Wincanton. Yatton. Leigh Wood. Kewstoke. Cheddar. Asham Wood. Vallis (P.). Rudge, etc., (P.). Failand (F.). Winscombe (D.). Bleadon Hill.
5. Blackdowns (Castle Neroche to Wellington). Aisholt Quarries in Devonian limestone.
- H. palustre**, Hedw. (*Limnobium palustre*, Bry. eur.).
6. In Census catalogue. I have never noticed this moss in Somerset, though I have no doubt it is present in boggy places on the higher hills.



**H. scorpioides**, L. This is also a bog-plant of mountains, and is a very robust moss.

5. In Census catalogue (locality not known to me).

**H. stramineum**. Dicks. In bogs and marshes, usually on mountains.

5.\* Gare Hill.

**H. cordifolium**, Hedw. In marshes and pools.

5.\* Castle Neroche.

**H. cuspidatum**, L. (*Acrocladium cuspidatum*, Lindb.). Very common throughout the county in wet meadow, marshes, ditch sides, etc.

**H. Schreberi**, Willd. Common on woods and heathlands, perhaps more abundant on the siliceous formations; it is not common on the Oolite or in the lowland districts.

6. Near Longleat. Stourhead. Berkley Hill (P.). Gare Hill (P.). Kewstoke. Bristol district.

5. Blackdowns. Castle Neroche. Cothelstone and Quantock Hills. Minehead. Selworthy. Timberscombe. Horner. Dunkery. Exmoor.

**Hylocomium splendens**, B. and S. Common in mountain heaths and in mountain woods.

6. Kewstoke. Bristol district. Cheddar. Wells (B.). Great Elm (P.). Gare Hill, etc. (P.).

5. Castle Neroche. Cothelstone Hills. Minehead. Dunkery. Exmoor (c. fr.).

**H. brevirostre**, B. and S. In mountain woods.

6. Mells and Ebbor Gorge (P.). Wells (B.). Burrington Combe (R.). Leigh Wood (R.).

**H. loreum**, B. and S. On the ground and rocks in shady places, especially in mountain woods.

6. Gare Hill (P.). Asham Wood (P.). Wells (B.). Clevedon (G.).

5. Horner Wood. Dunkery. Exmoor (c. fr.). Broomfield.

**H. squarrosus**, B. and S. Common throughout the county, perhaps more abundant in limestone districts on grassy banks, in heathy pastures, hedgerows, etc. It forms a grass-like covering in a spruce plantation at Cothelstone (V.C. 5).

**H. triquetrum**, B. and S. Common throughout the county on the ground in woods and other shady places. It is rarely found with capsules, but sometimes fruits freely as in Aisholt Wood (V.C. 5.). This is one of the few mosses that is used economically, its rigid yet elastic texture rendering it useful for packing brittle articles. It is also sometimes used in wreaths.

Most of the mosses recorded for Somerset are of common occurrence in other parts of the British Isles, but a few are rare, being only occasionally met with. Amongst these may be especially mentioned *Eurynchium striabulum*, *E. megapolitanum*, *E. circinatum*, *Anomodon longifolius*, *Habrodon Notarisii*, *Bryum Donianum*, *B. provinciale*, *B. Warneum*, *Philonotis caespitosa*, *Funaria calcarea*, *Schistostega osmundacea*, *Zygodon Forsteri*, *Pleurochaete squarrosa*, *Weisia calcarea*, *Trichostomum mutabile* var. *cophocarpum*, *Barbula unguiculata* var. *cuspidata*, *B. sinuosa*, and *Campylopus subulatus*. The first British record of *Eurynchium rotundifolium* was a plant collected by Binstead at Wells, and there is no other claim of a British record for *E. meridionale*, save that founded on the lost Wells plant. On the other hand a few species which are generally distributed in England have not yet been recorded for Somerset, though such species as *Hypnum ochraceum*, *Thuidium recognitum*, *Orthotrichum pulchellum*, *O. stramineum*, *Grimmia decipiens*, *Campylopus atrovirens*, *Blindia acuta*, and *Diphyscium foliosum* are very likely to occur,—in fact I am almost certain that I have seen specimens of *H. ochraceum* in the Exmoor district, but have no notes on the subject, and therefore have not recorded it in the list.

Of the 619 known British species some 300 are found in Somerset, and the task of collecting the records, though somewhat difficult, has been rendered a pleasant one owing to the kindness of the bryologists mentioned in the list in supplying me with information, and my thanks are gratefully tendered to them, as well as to Messrs. Dixon and Ingham, who have kindly tested some of the more critical species for me.