

Begin here

Or Choose a group

Mosses

Acrocarpous

Pleurocarpous

Liverworts

Leafy

Thallose

Key to groups

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**1**

Key: *Key to groups*

Section: *NA*

Progress: *1*

**A**

Plant without distinct leaves

**B**

Plant with distinct leaves

Go to

**5**

*Key: Thallose liverworts & hornworts*

**2**

Go to

**Title page**

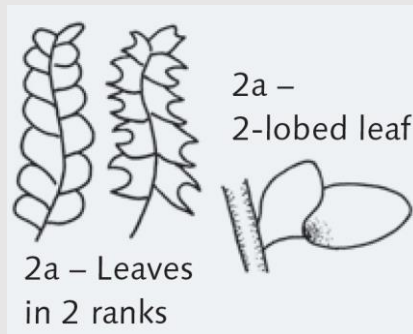
**Key to groups**

**Restart section**

**Go back one step**

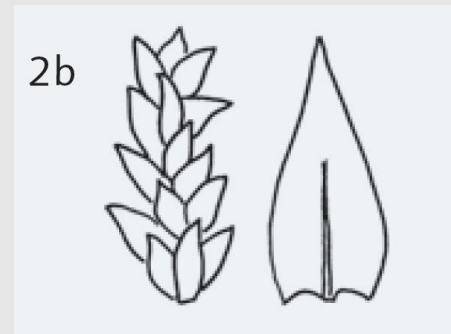
**A**

Leaves arranged either strictly in 2 ranks or in 3 ranks (one on each side of the stem and one in mid-ventral line); the leaves most commonly round or 2-lobed, without nerves (sometimes leaves are so deeply divided as to appear 4- or 5-ranked)



**B**

Leaves not arranged strictly in ranks (except in *Fissidens* and *Distichium*, which have nerved leaves, and *Schistostega*, which has a shining green protonema); the leaves never 2-lobed, most often tapering to an acute or rounded tip, with or without nerves



Go to

**24**

Key: Leafy liverworts

**3**

Go to

Title page

Key to groups

Restart section

Go back one step

3

Key: *Key to groups*

Section: *NA*

Progress: *1,2,3*

A

*Sphagnum* - plants consisting of numerous upright stems on which branches are in groups arranged spirally down the stem; all grow in bogs or wet ground, and look pale when dry, but are vivid green, orange-brown or purple-red when moist, and hold water like a sponge

3a



B

Plants never showing the regular, whorled branching of *Sphagnum*; habits and habitats various

4

Go to

Key: *Sphagnum*  
(Under construction)

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Separate, upright or ascending shoots which are simple, forked, or with a few short lateral branches; leaves very seldom like thin, glossy scales; seta arising from tip of shoots (except in some species of *Fissidens*, *Racomitrium*, etc.)



**B**

Mat-like growth of much-branched stems, which are irregularly intertwined and most often prostrate or arched; branching most often irregular or pinnate (occasionally growth is upright from a horizontal stolon, branched above to give plant a miniature tree habit, e.g. *Climacium*); leaves most often like thin, glossy scales; seta not arising from tip of stems

4b



Go to

**78**

Key: *Acrocarpous mosses*

**285**

Key: *Pleurocarpous mosses*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**5**

*Key: Key to Thallose liverworts & hornworts*

**Section: NA**

**Progress: 1,5**

**A**

Thallus with gemmae in very obvious receptacles

**B**

Thallus without gemmae in receptacles

Go to

**6**

**8**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**6**

*Key: Key to Thallose liverworts & hornworts*

**Section: NA**

**Progress: 1,5,6**

**A**

Gemmae visible in open-topped receptacles; no gemmae on thallus tips; upper surface of thallus with raised pores

**B**

Gemmae hidden in receptacles like flasks with a long neck; thallus tips with star-shaped gemmae on the surface; upper surface of thallus without raised pores

Go to

**7**

***Blasia pusilla***

*p. 240*

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

A

Gemmae in cup-shaped receptacles



B

Gemmae in crescent-shaped receptacles



Go to

***Marchantia polymorpha***

*p. 258*

***Lunularia cruciata***

*p. 252*

Go to

Title page

Key to groups

Restart section

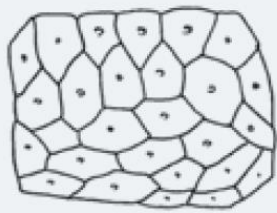
Go back one step



**A**

Upper surface of thallus with polygonal markings; a more or less raised pore in the centre of each polygon

8a



**B**

Upper surface of thallus without such markings and pores

Go to

9

11

Go to

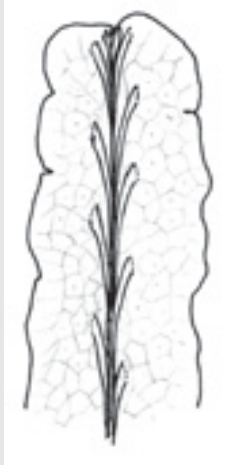
Title page

Key to groups

Restart section

Go back one step

**A**



Thalli usually >1 cm wide; plant strongly scented; pores on upper surface easily visible to naked eye; scales on lower surface not overlapping each other

**B**



Thalli always <1 cm wide; plant scentless; pores on upper surface hardly visible to naked eye; scales on lower surface overlapping one another

Go to

***Conocephalum spp.***

*p. 255*

10

Go to

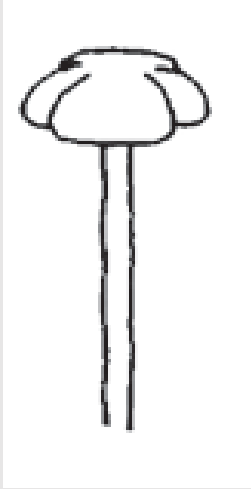
Title page

Key to groups

Restart section

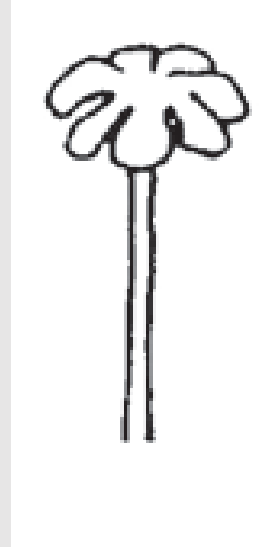
Go back one step

**A**



Diamond-shaped markings prominent; thallus tastes peppery; young female heads dull green and 4-lobed

**B**



Diamond-shaped markings very faint; thallus not peppery to taste; young female heads bright green and with 5–7 lobes

Go to

***Preissia quadrata***

*p. 257*

***Reboulia hemisphaerica***

*p. 256*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**11**

*Key: Key to Thallose liverworts & hornworts*

**Section: NA**

**Progress: 1,5,8,11**

**A**

Plants growing in pale green rosettes on bare soil, or floating in pools



**B**

Plants deep or vivid green; habit various

Go to

**12**

**15**

Go to

**Title page**

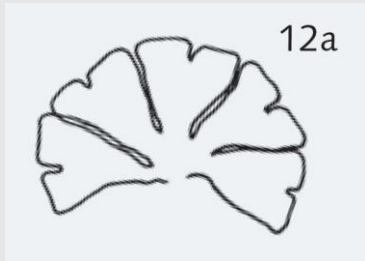
**Key to groups**

**Restart section**

**Go back one step**

A

Upper surface of thallus with round-topped cells and a spongy appearance; on wet mud



B

Upper surface of thallus with flat-topped cells, or some round-topped cells, not appearing spongy

Go to

***Riccia cavernosa***

*p. 263*

13

Go to

Title page

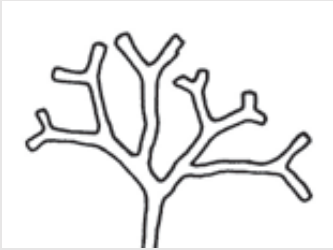
Key to groups

Restart section

Go back one step

A

Thallus narrow, forming mats of Y-shaped plants; either floating or on periodically flooded mud



B

Thallus with sort, wide branches, plants ±forming rosettes; on soil

Go to

*Riccia fluitans*

p. 261

14

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

V-shaped groove in upper surface of thallus; thallus edges curved up; clear margin of long, narrow cells along sides of thallus (hand lens)



**B**

Wide, shallow groove in upper surface of thallus; thallus edges curved down; no clear margin along sides of thallus (hand lens)



Go to

***Riccia sorocarpa***

*p. 266*

***Riccia glauca***

*p. 267*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**15**

Key: *Key to Thallose liverworts & hornworts*

Section: NA

Progress: 1,5,8,11,15

**A**

Thallus <2 mm wide (check in case of branches of *Pellia endiviifolia*, p. 237)

**B**

Thallus 3 mm wide or more

Go to

**16**

**19**

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**16**

Key: *Key to Thallose liverworts & hornworts*

Section: NA

Progress: 1,5,8,11,15,16

**A**

Midrib strongly differentiated from much thinner margins of thallus; growing on trees or rocks

**B**

Midrib lacking; growing in marshes, on wet soil, dead wood, etc

Go to

**17**

***Riccardia* spp.**

*pp. 243-244*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**17**

Key: *Key to Thallose liverworts & hornworts*

Section: *NA*

Progress: *1,5,8,11,15,16,17*

**A**

Entire plant covered with short hairs, making it look furry

**B**

Hairs restricted to margins and underside of plant

Go to

*Apometzgeria pubescens*

*p. 249*

**18**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Narrow shoot tip with abundant gemmae; tip sticking away from substrate



**B**

Shoot tip usually without gemmae (occasionally a few); tip not narrower than rest of thallus, not sticking away from substrate



Go to

*Metzgeria fruticulosa* p. 245  
*Metzgeria temperata* p. 245

Go to

*Metzgeria furcata*  
p. 246

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**19**

*Key: Key to Thallose liverworts & hornworts*

**Section: NA**

**Progress: 1,5,8,11,15,19**

**A**

Midrib well-defined (obvious when viewed from underside of thallus)

**B**

Midrib not well-defined

Go to

**20**

**23**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**20**

Key: *Key to Thallose liverworts & hornworts*

Section: *NA*

Progress: *1,5,8,11,15,19,20*

**A**

Thallus with narrow, forking branches at the tip

**B**

Thallus without forking branches at the tip

Go to

***Pellia endiviifolia***

*p. 237*

**21**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**



Plant monoicous (female part in a flap on upper side of thallus; male parts in small volcano-like hollows on same thallus; non-fertile plants should be recorded as *Pellia* sp.)

**B**

Plant dioicous (female part in a short tube on upper side of thallus; male parts in small volcano-like hollows on separate thallus; non-fertile plants should be recorded as *Pellia* sp.)

Go to

***Pellia epiphylla***

*p. 237*

22

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Female plants with tubes that have fringed mouths

**B**

Female plants with tubes that have mouths which are slightly wavy

Go to

***Pellia endiviifolia***

*p.237*

***Pellia neesiana***

*p. 236*

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**

Plants vivid mid-green, with a greasy appearance; thalli parallel-sided; margins curved upwards; fertile parts on thallus sides; capsules egg-shaped, held on a colourless seta

**B**

Plant forming dark green rosettes; margins not curved upwards; fertile parts in pits on upper surface; capsules long, horn-like and green

Go to

***Aneura pinguis***

*p. 241*

***Anthoceros* spp. *p. 272***

***Phaeoceros* spp. *p. 273***

Go to

Title page

Key to groups

Restart section

Go back one step



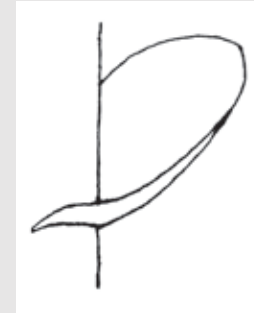
**A**

Leaves divided into 2 unequal lobes, the smaller one lying more or less flat on or under the larger one, thus sometimes giving impression that leaves are in 4 ranks

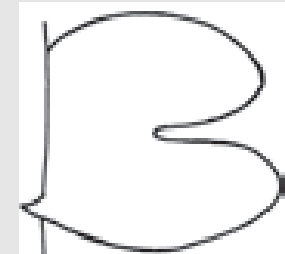


**B**

Leaves not divided into 2 unequal lobes, may be 2-toothed



OR



Go to

30

25

Go to

Title page

Key to groups

Restart section

Go back one step

A

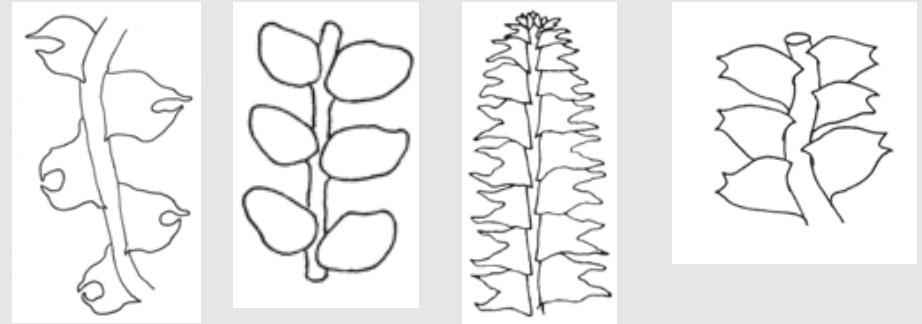
Leaves irregular, wavy, not distinctly separated from each other or from the stem; appearance like a small lettuce



B

Leaves in regular rows and quite distinct from stem

for example:



Go to

26

27

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**26**

Key: *Key to Leafy liverworts*

Section: *Initial key to sections*

Progress: *1,2,24,25,26*

**A**

Plant pale or dark green; rhizoids purple; on soil (only identifiable to species using spores – collect ripe, black capsules)

**B**

Plant bright green; rhizoids pale; in dune slacks

Go to

***Fossombronia spp.***

*p.228-233*

***Petalophyllum ralfsii***

*p. 234*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**27**

*Key: Key to Leafy liverworts*

*Section: Initial key to sections*

*Progress: 1,2,24,25,27*

**A**

Leaves split into many finely divided parts, sometimes appearing almost furry

**B**

Leaves not finely divided; may have toothed or entire margins

Go to

**28**

**29**

Go to

**Title page**

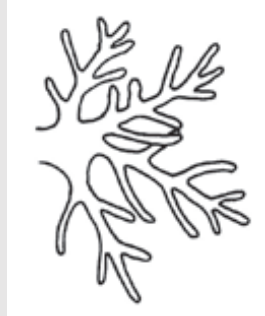
**Key to groups**

**Restart section**

**Go back one step**

**A**

Plant forming strikingly pale whitish-green patches, with bi- or tripinnately branched shoots 5–12 cm long



**B**

Plant reddish-brown (or yellow, orange, or olive-green), with once pinnate to bipinnate shoots; leaf lobes fringed with long teeth



Go to

***Trichocolea tomentella***

*p.84*

***Ptilidium ciliare***

*p. 204*

Go to

Title page

Key to groups

Restart section

Go back one step

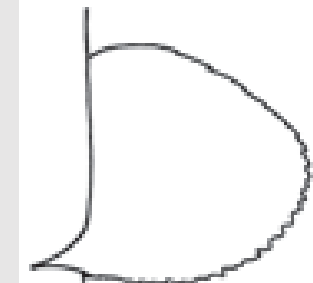
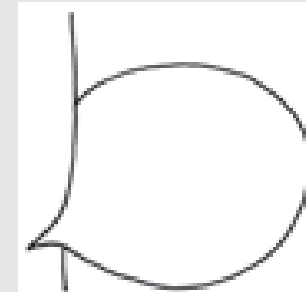
**A**

Leaves 2-, 3-, or 4-cleft, more or less symmetrical



**B**

Leaves simple and rounded, the margins either entire or with numerous, minute teeth



Go to

45

65

Go to

Title page

Key to groups

Restart section

Go back one step

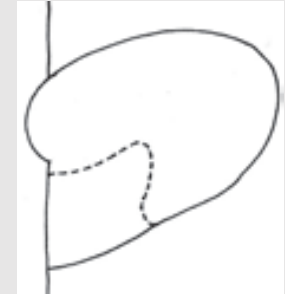
A

Smaller lobe lying on top of larger lobe, distinct when plant *in situ*



B

Smaller lobe under larger lobe, not visible when plant *in situ*



Go to

31

38

Go to

Title page

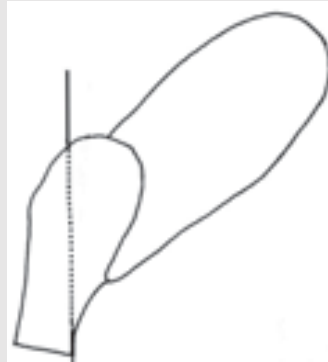
Key to groups

Restart section

Go back one step

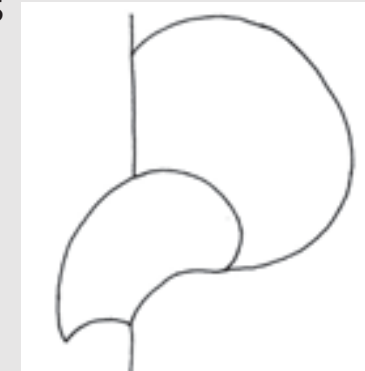
**A**

Each leaf divided to near base into 2 narrow oblong segments; very common on acidic banks, rocks, etc



**B**

Each leaf divided to about 1/3 or less, the segments round or nearly so, not narrowly oblong; habitats various



Go to

*Diplophyllum albicans*  
p.166

32

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**32**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with 2 unequal lobes to each leaf*

**Progress:** *1,2,24,30,31,32*

**A**

Smaller lobe only marginally smaller than larger one

**B**

Smaller lobe <3/4 of the size of the larger one

Go to

***Scapania compacta***  
*p.168*

**33**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**33**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with 2 unequal lobes to each leaf*

**Progress:** *1,2,24,30,31,32,33*

**A**

Shoot tip bearing conspicuous clusters of red or brown gemmae

**B**

Gemmae green, or absent

Go to

**34**

**35**

Go to

**Title page**

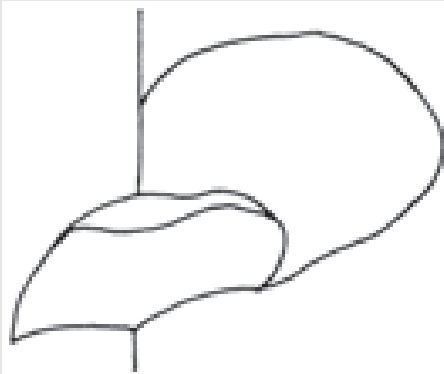
**Key to groups**

**Restart section**

**Go back one step**

**A**

Leaf lobes rounded or sometimes pointed, not tapering to a point; gemmae brown



**B**

Leaf lobes tapering to a sharp point; gemmae bright red



Go to

***Scapania nemorea***

*p. 172*

***Scapania umbrosa***

*p. 171*

Go to

Title page

Key to groups

Restart section

Go back one step

A

Larger leaf lobe with base running down stem  
(hand lens, view from behind); smaller leaf lobe  
with base not running down stem

B

Either both leaf lobes have bases running down  
the stem, or neither does

Go to

*Scapania undulata*  
p. 175

36

Go to

Title page

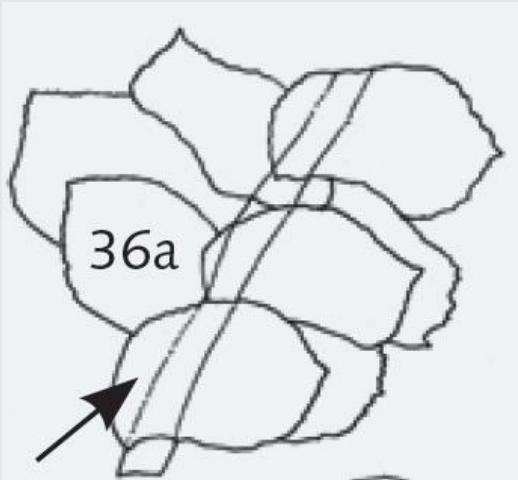
Key to groups

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Go back one step

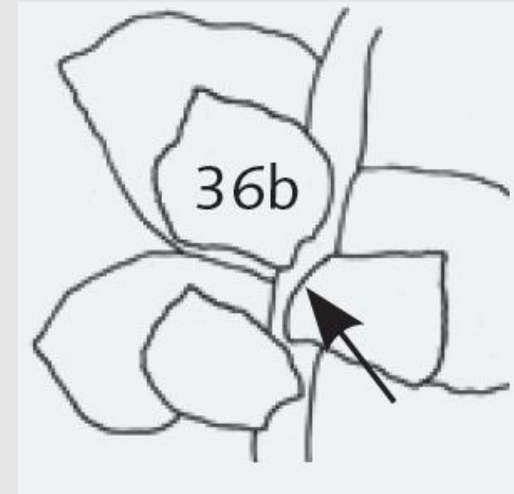
**A**

Smaller leaf lobe crossing beyond the stem by  
a long way



**B**

Smaller leaf lobe not crossing the stem



Go to

37

*Scapania irrigua*

p. 173

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**37**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with 2 unequal lobes to each leaf*

**Progress:** *1,2,24,30,31,32,33,35,36,37*

**A**

Tiny teeth visible at base of smaller lobe (×20 hand lens), just above junction with stem; acid-lover, typical of wooded valleys

**B**

No teeth at base of smaller lobe; lime-lover, typical of humid limestone or lime-rich sandstone

Go to

***Scapania gracilis***

*p. 180*

***Scapania aspera***

*p. 179*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**38**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with 2 unequal lobes to each leaf*

**Progress:** *1,2,24,30,38*

**A**

Colonies composed of red/purple, cylindrical worm-like shoots

**B**

Shoots not cylindrical and worm-like; usually tightly pressed to a substrate

Go to

***Pleurozia purpurea***  
*p. 201*

**39**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**39**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with 2 unequal lobes to each leaf*

**Progress:** *1,2,24,30,38,39*

**A**

Shoots forming black patches, tipped yellowish-green, on limestone or lime-rich rock

**B**

Shoots not black

Go to

***Marchensia mackii***  
*p.217*

**40**

Go to

Title page

Key to groups

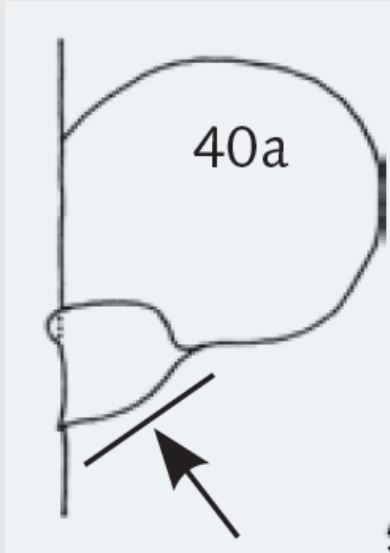
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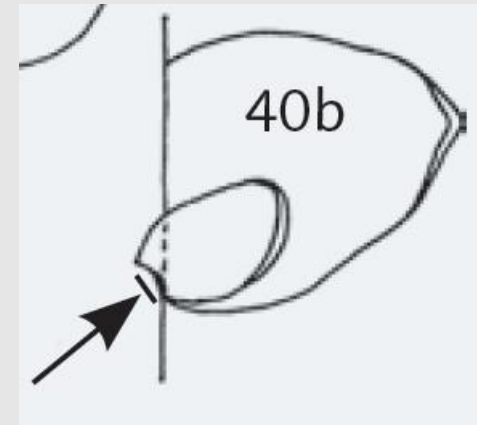
A

Plants yellowish-green; leaves with basal part folded over underneath, but without lobule



B

Plants dark green, brownish, reddish, etc.; leaves with a lobule on the lower surface, attached to the stem only at the base



Go to

41

43

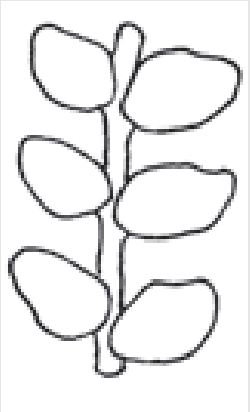
Go to

Title page

Key to groups

Restart section

Go back one step



A

Plants minute (shoots <0.5 mm wide); tiny, oval leaves spaced out along the stem like beads

B

Plants larger (shoots at least 1 mm wide)

Go to

*Cololejeunea minutissimum* (p. 226)  
*Microlejeunea* (p. 220)

42

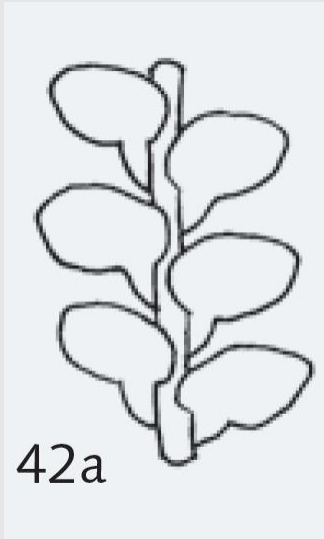
Go to

Title page

Key to groups

Restart section

Go back one step



42a

**A**

Shoots about 1 mm wide;  
leaves with angle on back  
edge; underleaves present



42b

**B**

Shoots about 2 mm wide;  
leaves round, with no angle;  
underleaves absent

Go to

***Lejeunea* spp.**  
pp. 221-223

Go to

***Radula complanata***  
p. 202

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**43**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with 2 unequal lobes to each leaf*

**Progress:** *1,2,24,30,38,39,40,43*

**A**

Plant deep green when dry, vivid green when moist; edges of many leaves curled upwards, giving shoots an untidy appearance from above

**B**

Plant usually reddish or brown, occasionally green; leaf edges not curled upwards, so leaves look like neat scales  
*Frullania species* – distinctive concave lobules on underside of plant

Go to

***Porella platyphylla***  
*p.206*

**44**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**

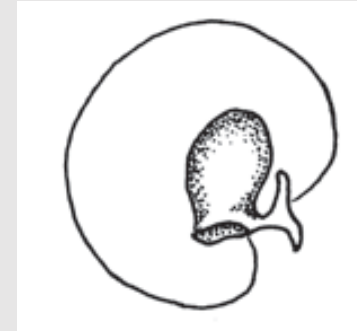
Lobule as wide as long; common on trees and branches, growing appressed to bark



Leaf underside:

**B**

Lobule much longer than wide; frequent on rocks, where often grows appressed; on trees and branches in western Britain, usually hanging loose from the bark



Leaf underside:

Go to

***Frullania dilatata***

*p.213*

***Frullania tamarisci***

*p. 211*

Go to

Title page

Key to groups

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Go back one step

# British Bryological Society

Interactive key to British Mosses and Liverworts

45

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** 1,2,24,25,27,29,45

**A**

Plants with a strong, peppery or musty smell (some people cannot detect it; if in doubt then look up these very common species); leaves 2-lobed

**B**

Plants with no distinctive smell; leaves 2-, 3- or 4-lobed

Go to

46

47

Go to

Title page

Key to groups

Restart section

Go back one step

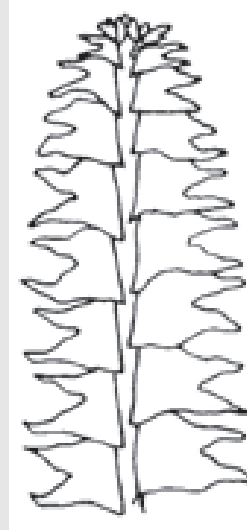
**A**

Some leaves entire, others  
with 2 sharp lobes.



**B**

All leaves with 2 sharp lobes



Go to

***Lophocolea heterophylla***  
p.184

***Lophocolea bidentata***  
p. 183

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**47**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47*

**A**

Individual leaves scarcely visible with the naked eye; like tiny hands, with 3 or 4 symmetrical lobes (×20 hand lens)

**B**

Individual leaves easily visible with the naked eye, or if not so then with 2 symmetrical lobes

Go to

**48**

**50**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**



A

Leaves with 3 or 4 'fingers' shorter than the 'palm'; branching pinnate



B

Leaves with 3 or 4 'fingers' clearly longer than the 'palm'; branching irregular

Go to

*Lepidozia reptans*

p.80

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Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**49**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,48,49*

**A**

Leaves composed entirely of 'fingers'; a species of dry but humid places

**B**

Leaves with a short but distinct 'hand'; species of bogs, peat or humus

Go to

***Blepharostoma trichophyllum***  
*p.77*

***Kurzia spp.***  
*p. 78*

Go to

Title page

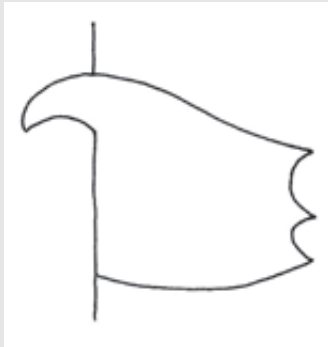
Key to groups

Restart section

Go back one step

**A**

Tip of each leaf split into 3 small but distinct teeth; leaf tapering from very wide base, asymmetrical; very robust, olive-green species of humid woods, etc. (shoots up to 5 mm across)



**B**

Leaves more or less symmetrical: either showing 2 shallow teeth at tip only, or more deeply divided into 2 or 3 lobes

Go to

***Bazzania trilobata***

*p.82*

51

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**51**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51*

**A**

Leaves almost flat, with the leading edge lying on top of the next leaf up the shoot; plants pale white- or blue-green

**B**

Leaves concave, usually obviously so, or if flat then the leading edge of each leaf tucked under the next leaf up the shoot; plants less obviously pale

Go to

**52**

**53**

Go to

**Title page**

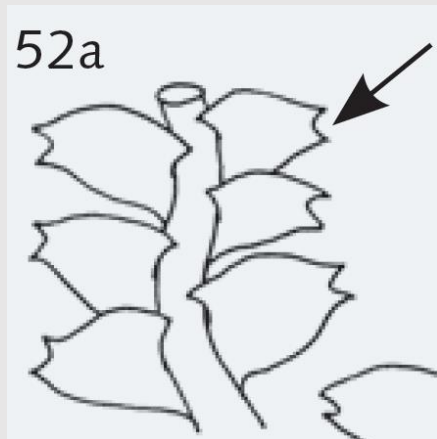
**Key to groups**

**Restart section**

**Go back one step**

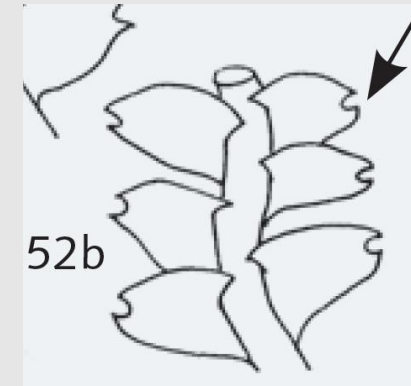
**A**

Tips of leaf lobes divergent, with a wide angle between them



**B**

Tips of leaf lobes ending close together, with an acute or rounded angle between them



Go to

***Calypogeia arguta***  
p.90

***Calypogeia fissa***  
p. 85

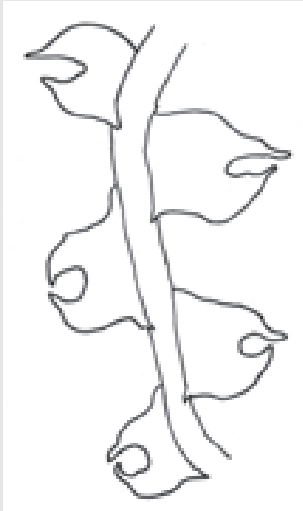
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Title page

Key to groups

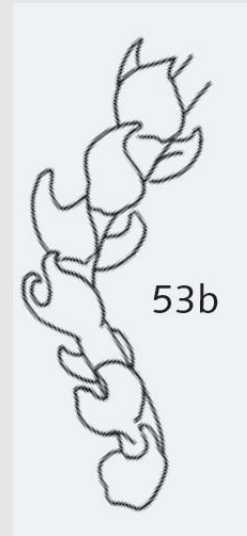
Restart section

Go back one step



**A**

Shoots almost flat; leaves with 2 lobes pointing towards each other and with a wide, crescent-shaped gap between them



**B**

Shoots with somewhat to strongly concave leaves; lobes usually not pointing towards each other; gap between lobes various

53b

Go to

*Cephalozia connivens* p. 94  
*Cephalozia lunulifolia* p. 96

54

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**54**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51,53,54*

**A**

Leaves divided more than halfway to the base into 2 lobes; plants very slender, with shoots <2 mm wide

**B**

Leaves divided to much less than halfway to the base into 2 or 3 lobes

Go to

**55**

**57**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**55**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51,53,54,55*

**A**

Very long leaf lobes curve so the tips nearly meet; shoots often bright red

**B**

Leaf lobes only slightly curved, tips more or less divergent; shoots never red

Go to

***Nowellia curvifolia***  
*p.97*

**56**

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**56**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51,53,54,55,56*

**A**

Stem translucent

**B**

Stem opaque

Go to

***Cephalozia bicuspidata***  
*p.92*

***Cephaloziella spp.***  
*pp. 104-108*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**57**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51,53,54,57*

**A**

Many leaves with 3 lobes

**B**

All leaves with 2 lobes

Go to

**58**

**60**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**58**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51,53,54,57,58*

**A**

Shoot tip clearly different from the remainder of the shoot, with tightly pressed, narrowed leaves, tipped with pale gemmae

**B**

Shoot tip not differentiated; gemmae absent or present

Go to

***Barbilophozia attenuata***  
*p.111*

**59**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

One leaf edge much longer than the other, so that the 3 lobes point 90° to the stem; gemmae occasionally present



**B**

Both leaf edges of similar length, so the 3 lobes point about 45° to the stem; gemmae absent



Go to

***Tritomaria quinquedentata***  
p.136

Go to

***Barbilophozia floerkei***  
p. 112

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**60**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51,53,54,57,60*

**A**

Gemmae conspicuous on leaf tip

**B**

Gemmae absent from leaf tip

Go to

**61**

**63**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**61**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51,53,54,57,60,61*

**A**

Gemmae green or very pale

**B**

Gemmae red or brown

Go to

**62**

*Lophozia sudetica* p. 119

*Lophozia excisa* p. 120

*Lophozia bicrenata* p. 121

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Underside of stem brown; plants bright mid-green; leaves with 2 lobes, but no extra teeth

**B**

Entire stem green; plants very pale green; leaves with 2 lobes, and with extra teeth on leaf margins (hand lens)

Go to

***Lophozia ventricosa***  
*p.116*

***Lophozia incisa***  
*p. 117*

Go to

Title page

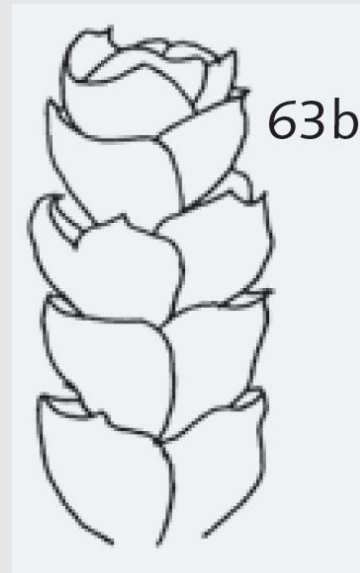
Key to groups

Restart section

Go back one step



**A**  
Leaves with broadly rounded lobes; leaf edges not recurved



**B**  
Leaves with sharply pointed lobes; ×20 hand lens shows that at least some leaves have recurved edges

Go to

64

***Marsupella emarginata***  
p. 155

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**64**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with more or less symmetrical 2-, 3- or 4-cleft lobes to each leaf*

**Progress:** *1,2,24,25,27,29,45,47,50,51,53,54,57,60,63,64*

**A**

Plant dark green, brown or black; inflated perianths <2 times as long as wide; mostly in acidic habitats

**B**

Plant pale green, often looking very translucent; perianths tubular, >2 times as long as wide; mostly in lime-rich habitats

Go to

***Gymnocollea inflata***  
*p.129*

***Leiocollea turbinata***  
*p. 128*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**65**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with unlobed, rounded leaves*

**Progress:** 1,2,24,25,27,29,65

**A**

Robust (shoot 3 mm wide), variegated red and yellow-green; forming conspicuous, erect cushions

**B**

Not red and not forming cushions

Go to

***Mylia taylorii***  
*p.141*

**66**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**66**

*Key: Key to Leafy liverworts*

**Section:** *Liverworts with unlobed, rounded leaves*

**Progress:** *1,2,24,25,27,29,65,66*

**A**

Shoots usually with obvious gemmae

**B**

Gemmae absent

Go to

**67**

**69**

Go to

**Title page**

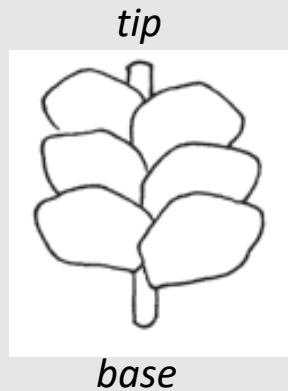
**Key to groups**

**Restart section**

**Go back one step**

**A**

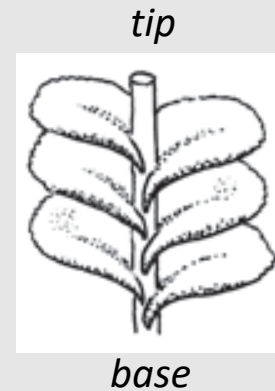
Leaves with the leading edge lying on top of the next leaf up the shoot



When looking at the shoot from above, the tip edge of each leaf lies **above** the base edge of the next leaf up the stem – Leaves **Incubous**

**B**

Leaves with the leading edge of each leaf tucked under the next leaf up the shoot



When looking at a shoot from above, the tip edge of each leaf lies **under** the base edge of the next leaf up the stem – leaves **succubous**

Go to

***Calypogeia* spp.**  
pp. 85-90

68

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**68**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with unlobed, rounded leaves*

**Progress:** *1,2,24,25,27,29,65,66,67,68*

**A**

Gemmae produced on leaves that are clearly longer and more pointed than those on the rest of the shoot

**B**

Gemmae produced on leaves that look the same as or smaller than those on the rest of the shoot

Go to

***Mylia anomala***

*p.142*

***Odontoschisma denudatum***

*p. 103*

Go to

Title page

Key to groups

Restart section

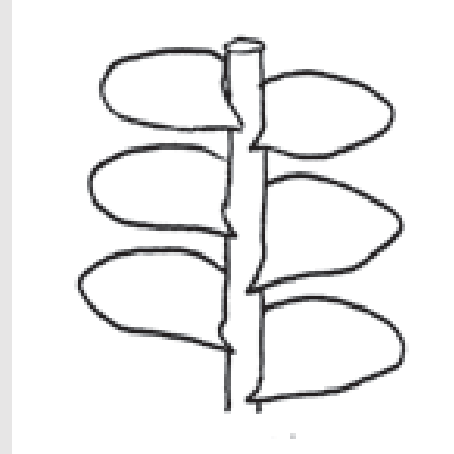
Go back one step

**A**



Shoot **laterally** compressed, especially near tip, so that there are 2 ranks of leaves on opposite sides of the stem and more or less appressed to it

**B**



Shoot **dorsi-ventrally** compressed, the 2 ranks of obliquely inserted leaves lying more or less flat, one on each side of the stem

Go to

70

74

Go to

Title page

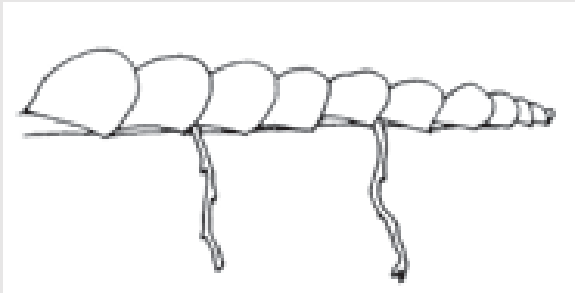
Key to groups

Restart section

Go back one step

**A**

In *Sphagnum* bogs; shoots usually orange-brown, with numerous very slender, thread-like branches that appear leafless and grow downwards from the stem



**B**

Not in *Sphagnum* bogs; very slender, thread-like, apparently leafless branches absent, any slender shoots not growing downwards

Go to

***Odontoschisma sphagni***  
p.102

71

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**71**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with unlobed, rounded leaves*

**Progress:** *1,2,24,25,27,29,65,66,69,70,71*

**A**

Plants usually with some very slender, creeping shoots with small leaves; leaf margins often with a border of enlarged cells (hand lens)

**B**

Very slender shoots absent; border absent

Go to

***Jungermannia gracillima***  
*p.147*

**72**

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**72**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with unlobed, rounded leaves*

**Progress:** *1,2,24,25,27,29,65,66,69,70,71,72*

**A**

Leaves very tightly appressed to each other, so shoots appear strongly flattened and the stem is scarcely visible from above

**B**

Leaves less tightly appressed; stem clearly visible

Go to

***Nardia compressa***  
*p.151*

**73**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**73**

**Key:** *Key to Leafy liverworts*

**Section:** *Liverworts with unlobed, rounded leaves*

**Progress:** *1,2,24,25,27,29,65,66,69,70,71,72,73*

**A**

Underleaves present (×20 hand lens; check carefully near the shoot tip)

**B**

Underleaves absent

Go to

***Nardia scalaris***  
*p.152*

***Jungermannia spp.***  
*pp. 143-150*

Go to

Title page

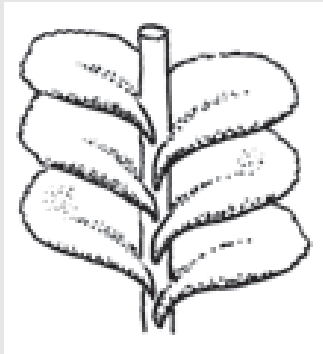
Key to groups

Restart section

Go back one step

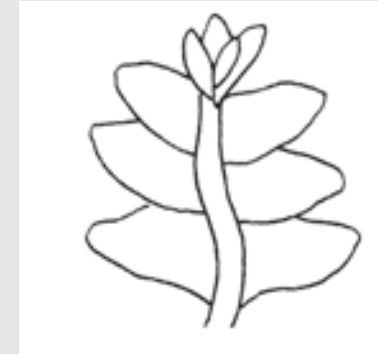
A

Leaves convex, with one margin extending down onto stem (decurrent)



B

Leaves flat, margin not running down along stem (not decurrent)



Go to

75

77

Go to

Title page

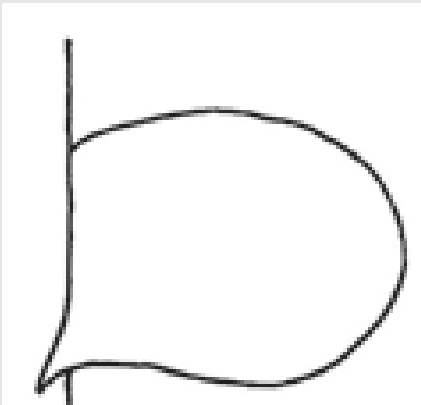
Key to groups

Restart section

Go back one step

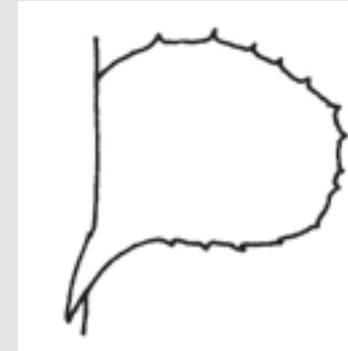
A

Leaves entire; plants of very wet places



B

Leaf margins toothed, although teeth may be very sparse; plants of humid but dry places



Go to

*Chiloscyphus spp.*  
p.187

76

Go to

Title page

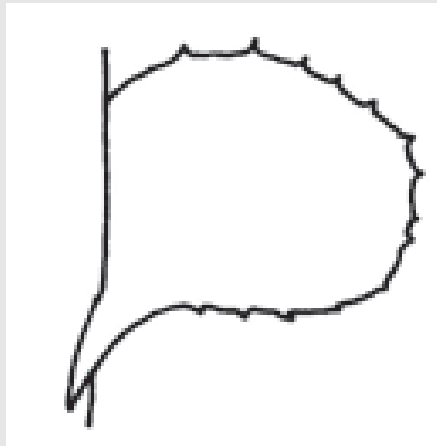
Key to groups

Restart section

Go back one step

A

Leaves broadly rounded; leaves not deciduous;  
plants unscented



B

Leaves tapering to a squared-off or 2-lobed tip;  
leaves often deciduous; plants scented when  
lightly crushed; restricted to western Britain

Go to

*Plagiochila asplenioides* p. 192

*Plagiochila porelloides* p. 193

Go to

*Plagiochila spinulosa* p. 194

*Plagiochila killarniensis* p. 195

*Plagiochila punctata* p. 198

Title page

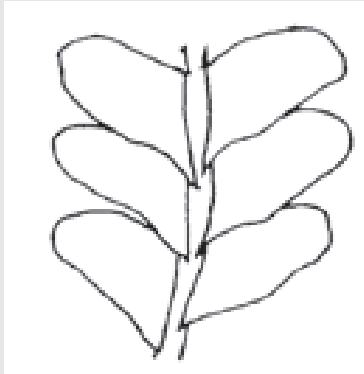
Key to groups

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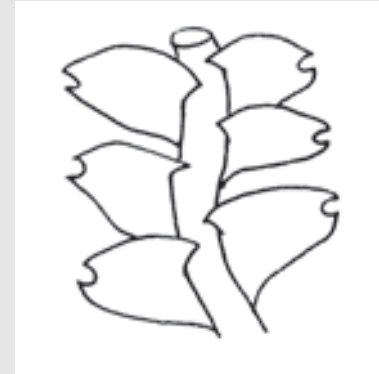
**A**

Leaves in opposite pairs on stem; relatively long and narrow; underleaves joined to lateral leaves (hand lens), and toothed along margin but not notched at tip



**B**

Leaves alternate along stem; relatively short and broad; underleaves free, broadly rounded, with (sometimes shallow) notch at tip



Go to

***Saccogyna viticulosa***  
p.190

Go to

***Calypogeia spp.***  
pp. 85-90

Title page

Key to groups

Restart section

Go back one step

A

Leaves with very obvious vertical plates of green tissue on upper surface of the nerve (hand lens), either closely packed, making the leaf appear opaque, or loosely packed



B

Leaves lacking vertical plates of green tissue on upper surface

Go to

88

79

Go to

Title page

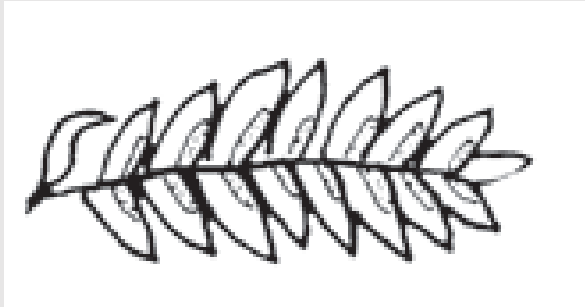
Key to groups

Restart section

Go back one step

A

Leaves arranged strictly in 2 ranks



B

Leaves not strictly in 2 ranks

Go to

80

81

Go to

Title page

Key to groups

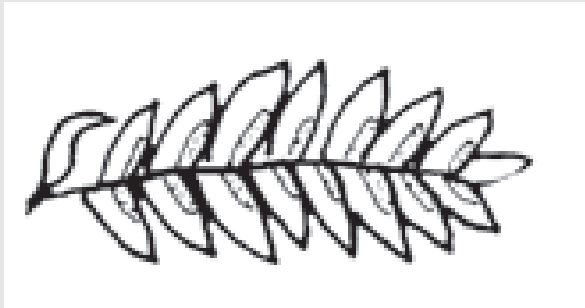
Restart section

Go back one step



A

Shoots look like miniature ferns



B

Shoots with very long, slender leaves, not looking like miniature ferns



Go to

96

*Distichum* spp.

pp. 352-353

Go to

Title page

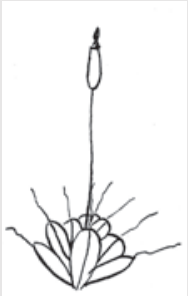
Key to groups

Restart section

Go back one step

A

Some or all of the leaves ending in almost white hair point



B

Leaves lacking almost white hair point

Go to

104

82

Go to

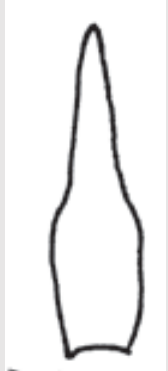
Title page

Key to groups

Restart section

Go back one step

**A**



Dense cushions whitish-green when dry; leaves broadly spearhead-shaped, blunt at tip, 6–8 mm long, appearing nerveless

**B**

Colonies not whitish-green when dry; leaves not appearing nerveless

Go to

***Leucobryum spp.***

*p. 403*

83

Go to

Title page

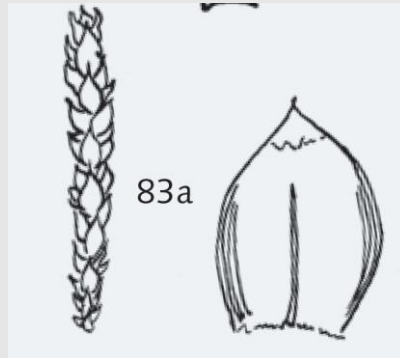
Key to groups

Restart section

Go back one step

**A**

Leaf tip almost white, making whole shoots appear silvery; shoots with appressed leaves, making them catkin-like



**B**

Whole leaf green, brownish, almost black, etc., but not looking silvery



***Bryum argenteum***  
p. 596

84



Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**84**

*Key: Key to Acrocarpous mosses*

*Section: Initial key to sections*

*Progress: 1,2,3,4,78,79,81,82,83,84*

**A**

Capsules disproportionately large compared with leafy parts

**B**

Capsules not disproportionately large, or absent

Go to

**85**

**86**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

A

Capsules on a long seta; leaves almost invisible

B

Capsules on a very short seta, looking like cereal  
grains surrounded by strap-like leaves

Go to

*Buxbaumia* spp.  
pp. 336-337

*Diphyscium foliosum*  
p. 338

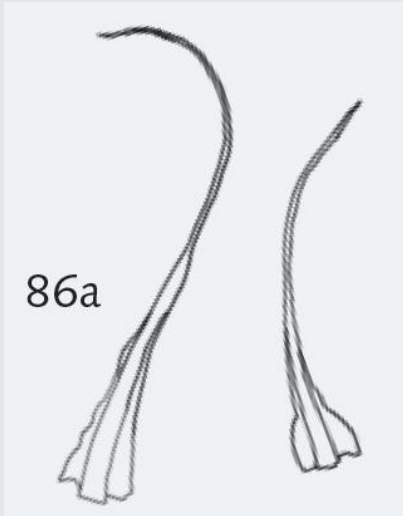
Go to

Title page

Key to groups

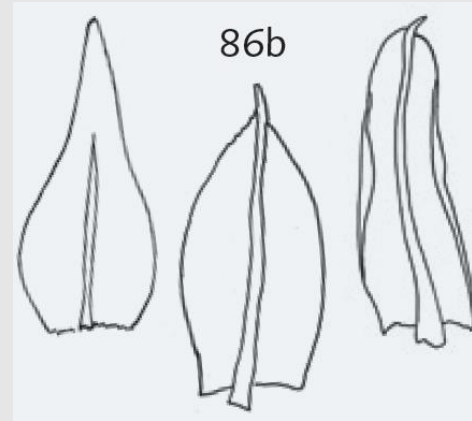
Restart section

Go back one step



**A**

Leaves narrowly spearhead-shaped, >5 times as long as wide; each leaf tapering to a long, fine point into which the nerve runs



**B**

Leaves either with rounded outlines, or parallel-sided, or if gradually tapering then not >5 times as long as wide

Go to

126

87

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves large to very large (largest leaves 3.5–10 mm long and 1–3 mm wide); plants mostly robust (sometimes bud-like or forming short rosettes), in wide patches rather than compact cushions

**B**

Leaves medium-sized to very small (3–5 mm long or less, most commonly 1–2 mm long and seldom as much as 1 mm wide); plants mostly small and slender (occasionally tall and small-leaved); habit various, often forming compact cushions, sometimes forming turfs or scattered shoots.

**Tarmac or concrete paths (172)**

**Walls in towns and villages, on bridge parapets, etc (181)**

**Rocks, including surfaces of boulders, cliffs and drystone walls (196)**

**Trees, logs, fence posts or decaying tree stumps (267)**

**Soil including gravelly detritus, sand, clay, loam, peaty humus, soil-capped walls, and thin soil on roadside paths (225)**

Go to

156

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**88**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with green plates of tissue on the nerve's upper surface*

**Progress:** 1,2,3,4,78,88

**A**

Margins of leaves inrolled and untoothed (hand lens); shoots 2 mm–7 cm tall

**B**

Margins of leaves plane and toothed (hand lens); shoots 1–25 cm tall

Go to

**89**

**92**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**

Scattered, tiny plants (2–4 mm across) on lime-  
rich soil

**B**

Scattered plants (>5 mm across) or dense patches  
on acidic soil

Go to

***Aloina spp.***  
*p. 471-473*

**90**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**



Longest leaves <3 mm; vertical plates of green tissue on upper surface of the nerve few, wavy and loosely packed; north-western

**B**

Leaves longer; vertical plates of green tissue on upper surface of the nerve dense, straight and crowded

Go to

***Oligotrichum hercynicum***  
p. 327

91

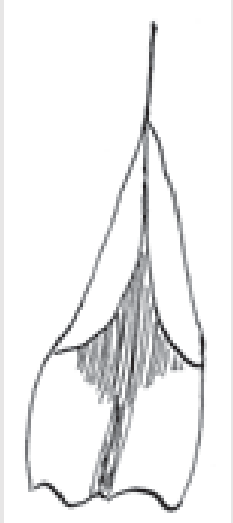
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves with almost white hair  
point

**B**

Almost white hair point lacking; leaves ending in  
short but acute, brown point

Go to

***Polytrichum piliferum***

*p. 324*

***Polytrichum juniperinum***

*p. 325*

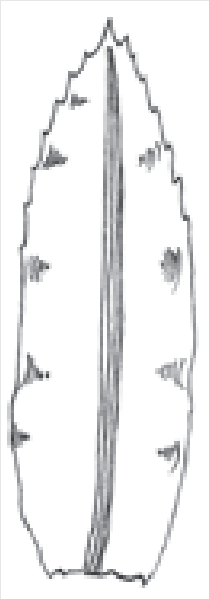
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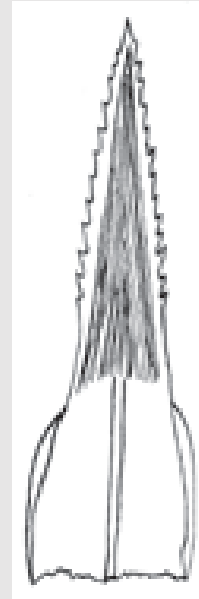
Restart section

Go back one step



**A**

Each leaf with fewer than 5  
loosely packed, vertical plates of  
green tissue restricted to the  
upper surface of the nerve



**B**

25+ densely packed plates  
covering almost entire leaf  
surface

Go to

***Atrichum undulatum***

*p. 330*

93

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and  
Liverworts

**93**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with green plates of tissue on the  
nerve's upper surface*

**Progress:** *1,2,3,4,78,88,92,93*

**A**

Plant pale bluish-green (glaucous) above

**B**

Plant mid-green or dark green above

Go to

***Pogonatum urnigerum***  
*p. 317*

**94**

Go to

Title page

Key to groups

Restart section

Go back one step

A

Shoots 0.5–1 cm tall, leaves forming a rosette

B

Shoots 3–25 cm tall, leaves along stem

Go to

*Pogonatum aloides*

*p. 316*

95

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Chiefly on wet moorland; leaf sheath glossy (visible when upper leaves are stripped off a stem); plants often >15 cm tall

**B**

Chiefly in woods; leaf sheath dull; plants rarely >9 cm tall

Go to

***Polytrichum commune***

*p. 322*

***Polytrichum formosum***

*p. 320*

Go to

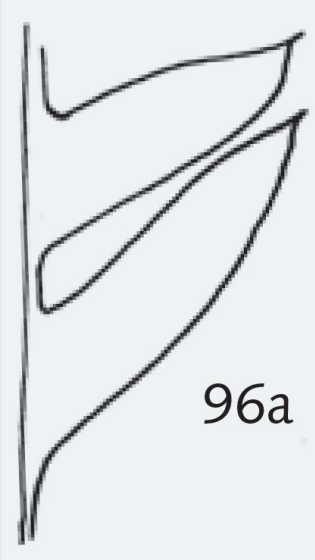
Title page

Key to groups

Restart section

Go back one step





**A**

Leaves nerveless;  
protonema shining green  
like glow-worm tails; scarce  
plant of caves, rabbit holes,  
etc

96a

**B**  
Leaves nerved to tip or near it; protonema not shining



***Schistostega pennata***  
*p. 419*

97



Title page

Key to groups

Restart section

Go back one step

**A**

Minute (shoots <5 mm long); fruiting plants with <5 pairs of leaves (non-fruiting plants unidentifiable)

**B**

Larger (shoots 5 mm or longer); fruiting plants with >5 pairs of leaves

Go to

*Fissidens viridulus* p. 404  
*Fissidens pusillus* p. 405  
*Fissidens exilis* p. 411

98

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**98**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with shoots like miniature ferns*

**Progress:** *1,2,3,4,78,79,80,96,97,98*

**A**

On rocks and masonry in rivers or streams

**B**

Not on rocks in rivers or streams

Go to

*Fissidens rivularis* p. 409  
*Fissidens crassipes* p. 410  
*Fissidens rufulus* p. 410

Go to

**99**

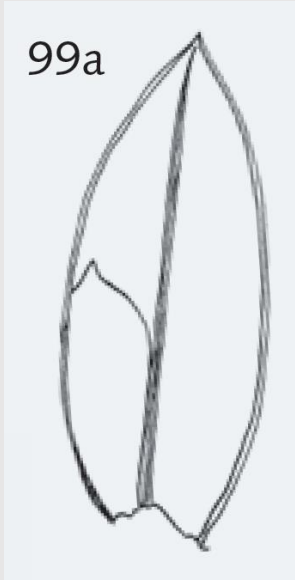
Title page

Key to groups

Restart section

Go back one step

99a



**A**

Leaves bordered with long, narrow cells (hand lens); small (stems 0.5–2 cm); seta terminal

**B**

Leaves not bordered (hand lens); larger (stems 1–8 cm); seta various

Go to

100

101

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Capsule upright

*not conclusively identifiable  
without capsules*

Go to

***Fissidens bryoides***  
*p. 407*

Title page

Key to groups

**B**

Capsule inclined, more or less horizontal

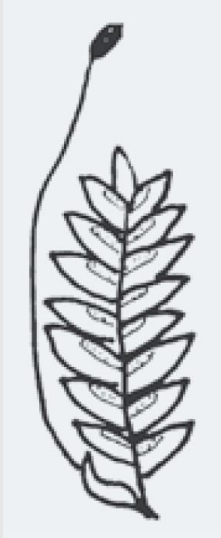
*not conclusively identifiable without capsules*

Go to

***Fissidens incurvus*** *p. 406*  
***Fissidens curnovii*** *p. 408*

Restart section

Go back one step



**A**

Nerve ending at leaf tip in a short, protruding point; seta basal

**B**

Nerve ending below leaf tip; seta terminal or lateral

Go to

***Fissidens taxifolius***  
*p. 415*

102

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Shoots about 4 mm wide; leaves down-curved at tip, giving shoots rounded backs; leaf margins untoothed; seta terminal

**B**

Shoots flat, about 8 mm wide; leaf margins irregularly toothed; seta lateral

Go to

***Fissidens osmundoides***  
p. 414

103

Go to

Title page

Key to groups

Restart section

Go back one step

103a



**A**

Leaves with very distinct pale marginal band; on dry, calcareous rocks (needs checking with microscope)

**B**

Leaves with indistinct or no pale marginal band; in flushes, fens or on wet, calcareous rocks (needs checking with microscope)

Go to

***Fissidens dubius***

*p. 416*

***Fissidens adianthoides***

*p. 416*

Go to

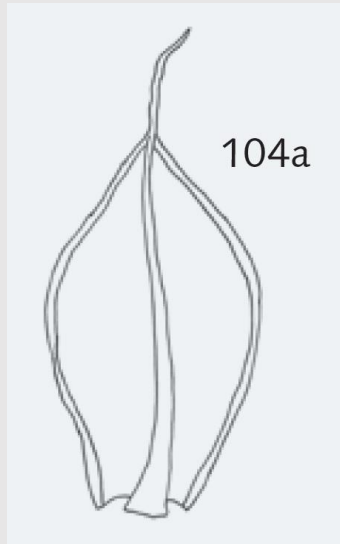
Title page

Key to groups

Restart section

Go back one step





**A**

Nerve projecting from leaf  
tip as a fine, greenish hair;  
leaves corkscrew-curved  
when dry

**B**

Nerve projecting as a colourless or white, very  
distinct hair point; leaves not corkscrew-curved  
when dry

Go to

***Bryum capillare***  
p. 586

105

Go to

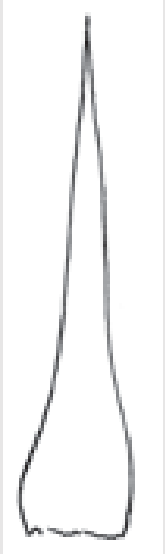
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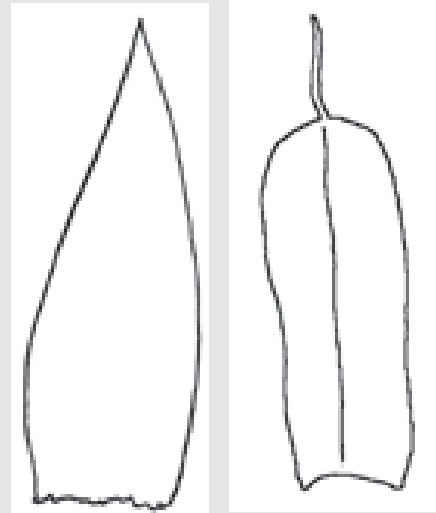
Go back one step

**A**



Leaves narrow and sword-shaped, much longer than wide

**B**



Leaves relatively broader – roughly triangular or tongue-shaped, not narrow and sword-shaped.

Go to

106

108

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Plants dark, blackish-green; leaves 6–9 mm long, with long, untidy-looking hair point

**B**

Plants light or mid-green; leaves 4–5 mm long, with relatively short hair point

Go to

***Campylopus atrovirens***  
*p. 398*

107

Go to

Title page

Key to groups

Restart section

Go back one step

**A**



Hair points bent back when dry,  
looking star-like; nerve  $>1/4$  of  
leaf width at base (hand lens)

**B**

Hair points not bent back when dry; nerve  $<1/4$   
of leaf width at base (hand lens)

Go to

***Campylopus introflexus***

*p. 400*

***Campylopus brevipilus***

*p. 401*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**108**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with some or all leaves ending in an almost white hair point*

**Progress:** *1,2,3,4,78,79,81,104,105,108*

**A**

On trees or fence posts

**B**

On some other substrate

Go to

**109**

**113**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**109**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with some or all leaves ending in an almost white hair point*

**Progress:** *1,2,3,4,78,79,81,104,105,108,109*

**A**

Prominent line of powder-like gemmae on upper side of nerve

**B**

Gemmae absent from leaves

Go to

***Syntrichia papillosa***  
*p. 500*

**110**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Fresh, green capsules on curved seta (straight when dry and brown)



**B**

Capsules with straight, sometimes very short seta

Go to

***Grimmia pulvinata***  
p. 526

111

Go to

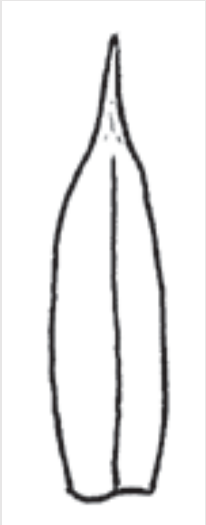
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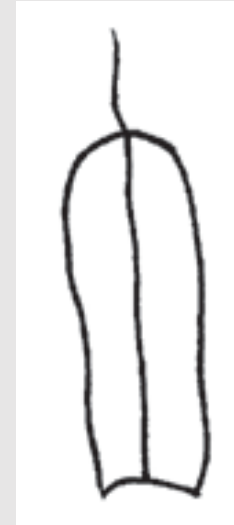
Go back one step

**A**



Leaves tapering into wide-based  
hair point (base wider than  
nerve); capsule on short seta  
such that it is scarcely held clear  
of leaves

**B**



Leaf tip broad and rounded with  
nerve extending into narrow  
hair point; capsule (if present)  
on seta long enough to hold  
capsule base clear of leaves

Go to

***Orthotrichum diaphanum***  
p. 654

112

Go to

Title page

Key to groups

Restart section

Go back one step



A

Hair point smooth (hand lens)

B

Hair point with sharp teeth throughout its length  
(hand lens)

Go to

*Syntrichia laevipila*

*p. 499*

*Syntrichia virescens*

*p. 498*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**113**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with some or all leaves ending in an almost white hair point*

**Progress:** *1,2,3,4,78,79,81,104,105,108,113*

**A**

On sand dunes; plants bright golden green to orange-brown when moist; leaves strongly bent back, tapering to a narrow tip, with strongly recurved margins

**B**

Not this combination of habitat and appearance

Go to

*Syntrichia ruralis* subsp. *ruraliformis*  
p. 495

**114**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**114**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with some or all leaves ending in an almost white hair point*

**Progress:** *1,2,3,4,78,79,81,104,105,108,113,114*

**A**

Forming straggling patches; stems freely branched

**B**

Forming neat tufts or cushions; stems little branched (mostly simple or merely forked)

Go to

**115**

**117**

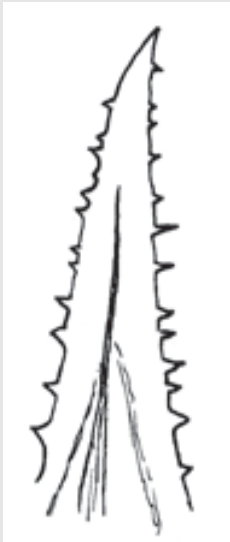
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Hair point with narrow teeth at 90° to base (hand lens); plants very robust; forming loose carpets, 20 cm to 1 m or more across with individuals often 12-25cm long. On acid rocks, walls, bare soil in uplands.



**B**

Hair point with forward-pointing teeth; plants far more slender, in loose tufts or thin, straggling patches a few centimetres across, on rock (individual stems 2-8 cm)

Go to

***Racomitrium lanuginosum***  
p. 539

116

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves concave with rounded backs and *no*  
*nerve*, tapering gradually into a broad triangular  
white tip, often with a distinct horizontal  
transition from green/yellow to white; capsules  
on short seta, hidden among leaves

**B**

Leaves flat or with keeled backs and an obvious  
nerve; capsules on long seta (>5 times length of  
capsule)

Go to

***Hedwigia stellata***

*p. 665*

***Racomitrium heterostichum* agg.**

*p. 537*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**117**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with some or all leaves ending in an almost white hair point*

**Progress:** *1,2,3,4,78,79,81,104,105,108,113,114,117*

**A**

Capsules always present (search carefully for old ones) on short seta so capsule base is hidden among sheathing leaves

**B**

Capsules (if present) on seta long enough to hold capsule base clear of leaves

Go to

**118**

**119**

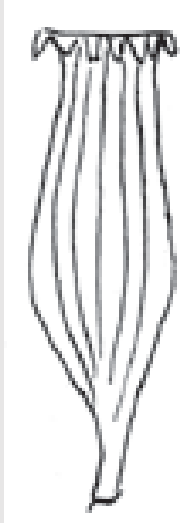
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Plants squat and unbranched;  
old capsules with folds when  
dry; young capsules with slightly  
hairy calyptra

**B**

Plants loosely branched; old capsules smooth;  
calyptra without hairs

Go to

***Orthotrichum diaphanum***  
*p. 654*

***Schistidium crassipilum***  
*p. 511*

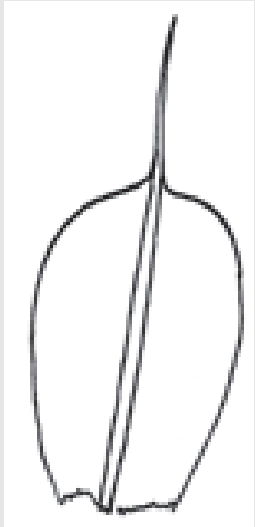
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves abruptly narrowing into hair point (may be parallel-sided or tapering before abrupt narrowing)



**B**

Leaves gradually tapering into hair point

Go to

120

123

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and  
Liverworts

**120**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with some or all leaves ending in an  
almost white hair point*

**Progress:** *1,2,3,4,78,79,81,104,105,108,113,114,117,119,120*

**A**

Hair point smooth (hand lens)

**B**

Hair point with sharp teeth throughout its length  
(hand lens)

Go to

**121**

**122**

Go to

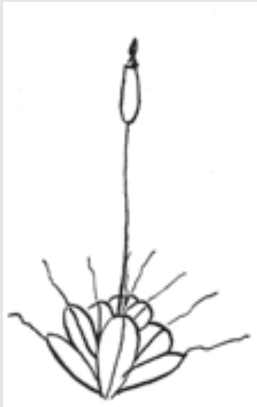
**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**



Leaves tongue-shaped,  
appearing thickened on margins  
(hand lens); capsules held clear  
of leafy rosettes on long  
(>15mm) straight seta

**B**



Leaves gradually tapering  
from base, then abruptly  
narrowing into hair point;  
margins recurved, but not  
thickened; capsules on  
short (<8 mm) curved seta  
(NB straightens when dry)

Go to

***Tortula muralis***

*p. 479*

***Grimmia pulvinata***

*p. 526*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaf margins recurved for most of its length;  
upper part of leaves curved upwards and  
inwards

*Leaf margins are **recurved** where the edges are curled **down**  
**towards the base** of the shoot, making the leaf edges only  
visible from below.*

*The opposite is a **rolled**, or **incurved** leaf where the margins  
are curled **up towards the top** of the shoot, making the leaf  
edges only visible from above.*

**B**

Leaf margins not recurved; upper part of leaves  
**flat**

Go to

***Syntrichia ruralis* subsp. *ruralis***  
p. 494

***Syntrichia intermedia***  
p. 496

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**123**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with some or all leaves ending in an almost white hair point*

**Progress:** *1,2,3,4,78,79,81,104,105,108,113,114,117,119,123*

**A**

Shoots with abundant, short branches; usually on gravelly soil, mine waste, etc

**B**

Shoots with long, irregular branches or unbranched; on rock

Go to

***Racomitrium ericoides***

*p. 540*

**124**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Tiny (<8 mm deep), almost black cushions;  
almost always with pale green capsules on short  
(as long as capsule), straight seta

**B**

Cushions at least 1 cm deep; seta either curved  
or much longer than capsules

Go to

***Grimmia donniana***  
*p. 522*

125

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Capsules on long, straight seta; hair point  
flattened where it joins the rest of the leaf

**B**

Capsules on short, curved seta (but rarely  
produced); hair point not flattened where it joins  
the rest of the leaf

Go to

***Racomitrium heterostichum***  
*p. 537*

***Grimmia trichophylla***  
*p. 529*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**126**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** 1,2,3,4,78,79,81,82,83,84,86,126

**A**

Robust, 2.5–15 cm tall

**B**

Small, up to 2 cm tall

Go to

**127**

**137**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves strongly curved and turned to one side, at least at the shoot tip



**B**

Leaves straight, not curved or turned to one side

Go to

128

130

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves very long (the longest being 10–14 mm), all sickle-shaped and very strongly turned to one side of shoot; chiefly in sheltered, humid woods

**B**

Leaves shorter (the longest 6–8 mm), less strongly and regularly turned to one side of shoot; habitats various

Go to

***Dicranum majus***  
*p. 379*

129

Go to

Title page

Key to groups

Restart section

Go back one step

**A**



Nerve at base of leaf  $\frac{1}{3}$  to  $\frac{1}{2}$  width  
of base of leaf (hand lens); plants  
dark green; leaves wavy when dry, 4–  
5 mm long

**B**



Nerve at base of leaf  $<\frac{1}{5}$  width  
of base of leaf (hand lens);  
leaves 4–8 mm long, little  
altered when dry; shoots  
brownish below and bright,  
yellowish-green above

Go to

***Campylopus flexuosus***

*p. 395*

***Dicranum scoparium***

*p. 378*

Go to

Title page

Key to groups

Restart section

Go back one step

A

Forming deep cushions or scattered in bogs and wet places on moors; leaves dull, yellowish-green, spreading when moist, shrivelled and curled when dry.

B

Habitat different; if on bogs or moors then leaves shiny

Go to

*Aulacomnium palustre*  
p. 625

131

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**131**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** 1,2,3,4,78,79,81,82,83,84,86,126,127,130,131

**A**

Leaves much twisted and curled when dry

**B**

Leaves little altered when dry

Go to

**132**

**134**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Cushions yellow-green; leaf margins untoothed (but sometimes irregularly notched near tip) and undulate; very rarely fertile; strict lime-lover

**B**

Cushions dull green or pale green; leaf margins toothed, not undulate; usually fertile; on acidic or mildly limey substrate

Go to

***Tortella tortuosa***  
*p. 428*

133

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Cushions dark green near shoot tip and black near the centre; leaves with bluntly toothed margins (clearly visible with ×10 hand lens); usually with pale brown, cylindrical capsules; on siliceous, upland rocks

**B**



Cushions pale green; leaves rigidly straight; leaf margins finely toothed (just visible with ×10 hand lens); characteristic apple-shaped capsules usually present; habitats various

Go to

***Ptychomitrium polyphyllum***  
p. 541

***Bartramia pomiformis***  
p. 630

Go to

Title page

Key to groups

Restart section

Go back one step

**A**



Leaves widely spreading to give  
shoot a bottle-brush effect;  
distinct orange or red-brown  
rhizoids on stems

**B**

Leaves not as above; orange rhizoids seldom  
obvious

Go to

***Breutelia chrysocoma***  
p. 640

135

Go to

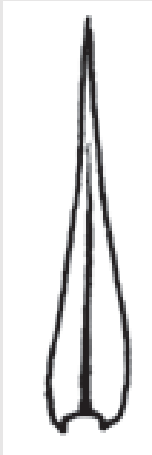
Title page

Key to groups

Restart section

Go back one step

**A**



Leaves with evident expanded blade  
either side of nerve, all the way to  
the leaf tip; plant yellow-green

**B**



Leaves bristle-like, abruptly narrowed  
to form long, fine tip composed  
almost entirely of nerve (if leaf blade  
is not very obvious then key here)

Go to

***Dicranum scoparium***  
*p. 378*

136

Go to

Title page

Key to groups

Restart section

Go back one step



**A**



Leaves almost straight when moist,  
and slightly wavy when dry; orange-  
brown patch at basal angles of leaf;  
on acidic substrate

**B**

Leaves markedly wavy when moist or dry; no  
orange-brown patches; on calcareous substrate

Go to

***Campylopus flexuosus***  
p. 395

***Ditrichum gracile***  
p. 349

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**137**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** 1,2,3,4,78,79,81,82,83,84,86,126,137

**A**

Minute plants on base-rich rock; leaves <1 mm long; tiny capsule on seta <3 mm long

**B**

Plants taller; on soil or acidic rock, or on base-rich rocks in flushes

Go to

**138**

**139**

Go to

Title page

Key to groups

Restart section

Go back one step

A

Seta curved, leaves brownish-green

B

Seta straight, leaves vivid green

Go to

*Seligeria recurvata*  
p. 546

Go to

*Other Seligeria spp.*  
pp. 545, 547-551

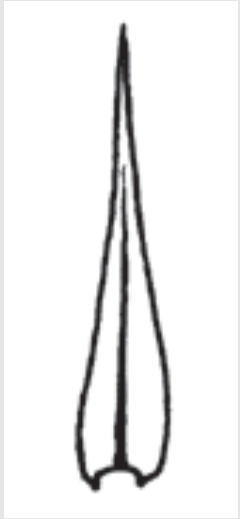
Title page

Key to groups

Restart section

Go back one step

**A**



Leaves with evident blade either side of nerve, all the way to the leaf tip; plant yellow-green

**B**

Leaves bristle-like, abruptly narrowed to form long, fine tip composed almost entirely of nerve (if leaf blade is not *very* obvious then key here)

Go to

***Dicranum scoparium***  
p. 378

140

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**140**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** *1,2,3,4,78,79,81,82,83,84,86,126,137,139,140*

**A**

Leaves appearing thick, opaque & dull green; leaves narrow and strap-like, scarcely tapering from base

**B**

Leaves translucent, usually shiny green; leaves tapering, so wider at base than tip

Go to

***Diphyscium foliosum***  
*p. 338*

**141**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**141**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** ...126,137,139,140,141

**A**

Leaves bent back from a sheathing base, held at 90° to vertical

**B**

Leaves not bent back from a sheathing base

Go to

**142**

**144**

Go to

Title page

Key to groups

Restart section

Go back one step

A

Limb of leaf composed almost entirely of nerve,  
appearing cylindrical through a hand lens

B

Limb of leaf with blade apparent to tip, appearing  
flat through a hand lens

Go to

*Trichodon cylindricus*  
p. 342

143

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Upper and lower leaves of the same length;  
tubers absent from stems

**B**

Upper leaves much longer than lower leaves; red  
tubers often produced on short rhizoids between  
leaves on lower part of stem

Go to

***Dicranella schreberiana***  
p. 368

***Leptobryum pyriforme***  
p. 576

Go to

Title page

Key to groups

Restart section

Go back one step





**A**  
Leaves strongly curved and  
turned to one side

**B**  
Leaves straight or wavy, spreading, not turned to  
one side

Go to

145

147

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and  
Liverworts

**145**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** ...126,137,139,140,141,144,145

**A**

Shoots bright green; in lime-rich places

**B**

Shoots dark green; in acidic places

Go to

***Dicranella varia***

*p. 366*

**146**

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Capsule erect, cylindrical,  
symmetrical (not identifiable when  
non-fertile), mostly in uplands



**B**

Capsule inclined, curved  
and asymmetrical; both in  
lowlands and uplands and  
very common on acidic  
woodland banks

Go to

***Ditrichum heteromallum***

*p. 346*

***Dicranella heteromalla***

*p. 371*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**147**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** ...126,137,139,140,141,144,147

**A**

Leaf and shoot tips fragile; colonies usually covered with detached shoot fragments.

**B**

Leaf and shoot tips not easily detaching from rest of plant

Go to

**148**

**150**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**



**A**

Colonies dark green; red-brown patch at basal corners of leaves (×20 hand lens)

**B**

Colonies vivid light green; red-brown patches lacking (×20 hand lens)

Go to

***Campylopus flexuosus***  
p. 395

149

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Individual shoots narrow and scarcely distinct in colonies; leaves widest at base (hand lens)

**B**

Colonies composed of clearly distinct, rather wide shoots; leaves widest a short way above the base (hand lens)

Go to

***Campylopus pyriformis***  
p. 394

***Campylopus fragilis***  
p. 393

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**150**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** ...126,137,139,140,141,144,147,150

**A**

Leaves with very distinct red base (×10 hand lens); plants shiny dark green; on base-rich rocks, often in springs

**B**

Leaves without red base; plants mid- or light green; in other habitats

Go to

***Blindia acuta***  
*p. 544*

**151**

Go to

Title page

Key to groups

Restart section

Go back one step

A

Curved seta supporting egg-shaped capsule; on rotting logs, peat, acidic rock, etc



B

Seta straight or very short; on soil

Go to

*Orthodontium lineare*

p. 580

152

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**152**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** ...126,137,139,140,141,144,147,150,151,152

**A**

Lowest 1/4 of shoot (stem and leaves) red; on acidic soil

**B**

Shoots entirely green; on base-rich, neutral or acidic soil

Go to

***Dicranella rufescens***  
*p. 367*

**153**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**153**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with leaves narrowly spearhead-shaped, tapering to a long, fine point*

**Progress:** ...126,137,139,140,141,144,147,150,151,152,153

**A**

Upper leaves only slightly longer than lower ones, not strikingly different

**B**

Upper leaves of shoots strikingly different from lower leaves

Go to

**154**

**155**

Go to

Title page

Key to groups

Restart section

Go back one step

A

Capsules dark red, inclined, on long, red seta

B

Capsules absent

Go to

***Dicranella varia***

*p. 366*

***Dicranella staphylina***  
*(collect to check for tubers)*

*p. 369*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**



Upper leaves held vertically; capsule oval, without separate lid, immersed between bristle-like leaves at top of shoots

**B**



Upper leaves spreading horizontally; capsule pear-shaped, with separate lid falling to reveal peristome, on long seta

Go to

*Pleuridium acuminatum* p.340  
*Pleuridium subulatum* p. 340

Go to

*Leptobryum pyriforme*  
p. 576

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**156**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Acrocarps with large leaves (3.5-10mm long and 1-3mm wide), and forming large patches*

**Progress:** *1,2,3,4,78,79,81,82,83,84,86,87,156*

**A**

Leaves spearhead- or tongue-shaped or gradually tapering, at least 4 times as long as broad

**B**

Leaves rounded or egg-shaped, 2 to 3 times as long as broad

Go to

**157**

**165**

Go to

Title page

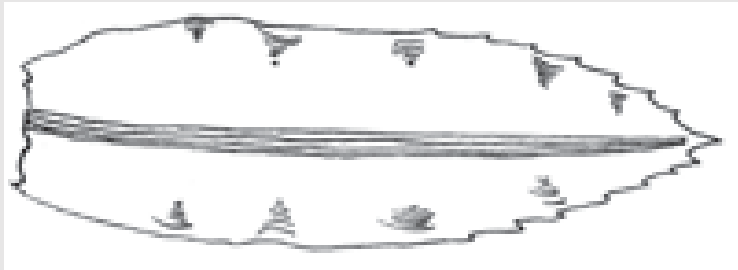
Key to groups

Restart section

Go back one step

A

Leaves wrinkled transversely



B

Leaves not wrinkled transversely

Go to

158

159

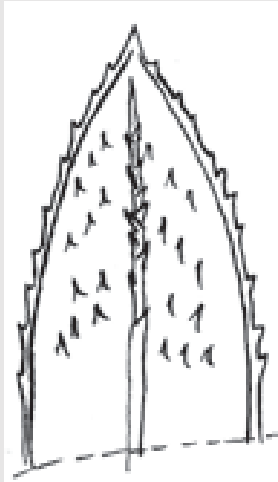
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Title page

Key to groups

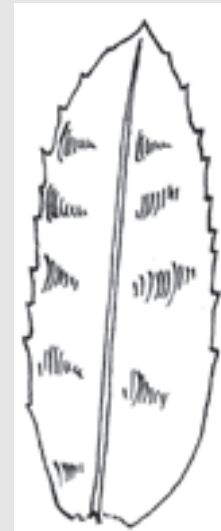
Restart section

Go back one step



**A**

Upright stem with few or no  
branches; leaves with teeth on  
back and double teeth on  
margins (hand lens); narrowly  
cylindrical capsules common in  
winter



**B**

Stem usually branched above,  
branches often arching; leaves  
with single teeth, only on  
margins; usually without  
capsules

Go to

***Atrichum undulatum***

*p. 330*

***Plagiomnium undulatum***

*p. 618*

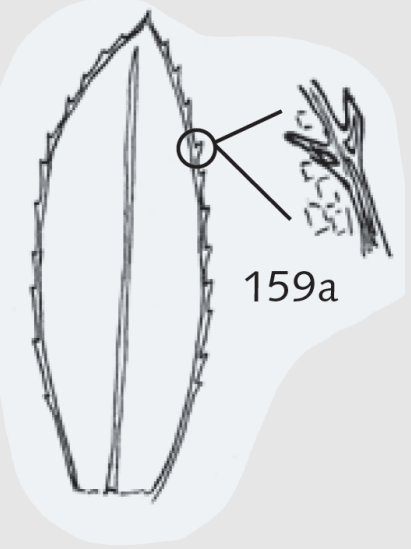
Go to

Title page

Key to groups

Restart section

Go back one step



**A** Leaf margins toothed (double teeth fine, but clearly visible with ×10 hand lens) and with thickened border

**B**  
Leaf margins entire



***Mnium hornum***  
p. 612

160



Title page

Key to groups

Restart section

Go back one step



**A**



Leaf tip rounded; tufts vivid green when moist; dull-glaucous and with much curled leaves when dry; stem with abundant, brown rhizoids; lime-lover, commonest on limestone walls and mortar, or on limestone outcrops

**B**

Leaf tip acute or with shortly excurrent nerve; appearance and habitat various, but not forming tufts on mortar of walls as above

Go to

***Encalypta streptocarpa***  
*p. 557*

161

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Stems short, <2 cm tall, upright or forming turfs

**B**

Stems elongated, 3–10 cm or more, either  
straggling or forming very deep cushions

Go to

**162**

**163**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves 2.5–4 mm long, without pale margins  
(hand lens); plants growing as turfs or patches  
on soil; shoots usually without capsules;  
common, especially abundant on coasts

**B**

Leaves 3–6 mm long, with pale margins (hand  
lens); forming short rosettes about 5 mm tall;  
nearly always with capsules (or starting to  
produce them); capsule 7–9 mm long, erect and  
narrowly cylindrical, on long seta; moderately  
common, mostly inland

Go to

***Trichostomum brachydontium***  
*p. 433*

***Tortula subulata***  
*p. 475*

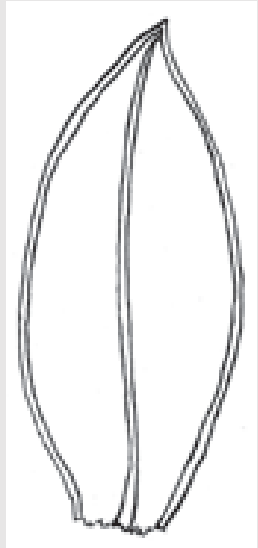
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Shoots straggling and dark green; margins of leaves thickened to form a narrow border (hand lens); capsules common, almost hidden by leaves; mostly by rivers

**B**

Shoots light yellowish-green; margins of leaves not bordered; capsules on long seta, rarely produced

Go to

***Cinclidotus fontinaloides***  
p. 502

164

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Forming hanging patches on lime-rich rocks or  
walls, or the base of trees

**B**

Growing as cushions, hummocks or scattered  
plants in bogs, heaths or flushes

Go to

*Anomodon viticulosus*  
(a pleurocarpous moss)  
p. 694

Go to

*Aulacomnium palustre*  
p. 625

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and  
Liverworts

**165**

*Key: Key to Acrocarpous mosses*

**Section:** *Acrocarps with large leaves (3.5-10mm long and  
1-3mm wide), and forming large patches*

**Progress:** ...87,156,165

**A**

Leaf tip rounded; nerve not excurrent

**B**

Leaf tip acute; nerve often excurrent in short  
point

Go to

**166**

**168**

Go to

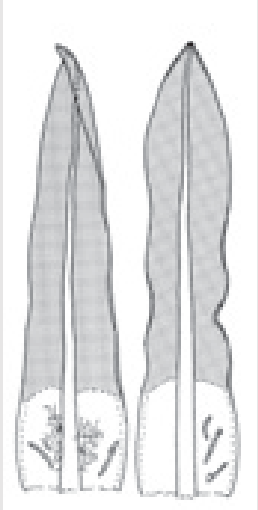
**Title page**

**Key to groups**

**Restart section**

**Go back one step**

A



Leaf margins not thickened;  
leaves very opaque; only on  
limestone, mortar on walls, etc

B

Leaf margins thickened; leaves translucent;  
habitats various

Go to

*Encalypta streptocarpa*  
p. 557

167

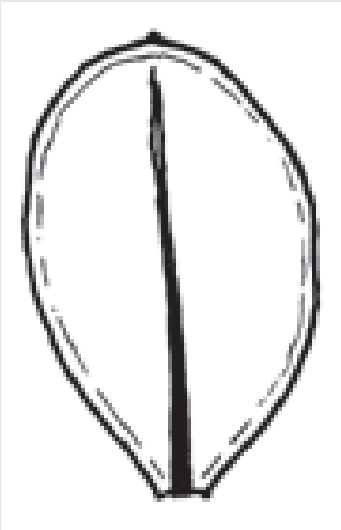
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaf margins untoothed;  
shoots upright

**B**

Leaf margins toothed; if apparently untoothed  
then shoots creeping



***Rhizomnium punctatum***  
p. 616

***Plagiomnium spp.***  
pp. 618-623



Title page

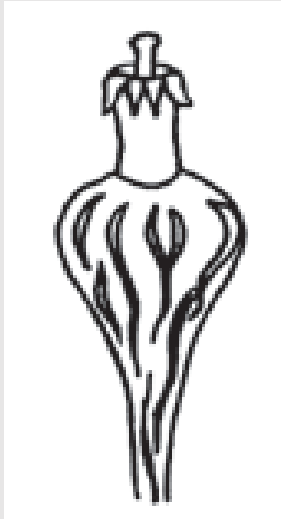
Key to groups

Restart section

Go back one step



**A**



On dung in wet places; leaves strongly and irregularly toothed; plants usually very fertile, with abundant flask-shaped capsules

**B**

Habitat, leaves and capsules not as above

Go to

***Splachnum ampullaceum***  
p. 571

169

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Erect stems crowned by striking, flower-like leaf rosettes which are 1.5–2.5 cm across

**B**  
Not forming wide, flower-like rosettes of leaves

Go to

***Rhodobryum roseum***  
p. 600

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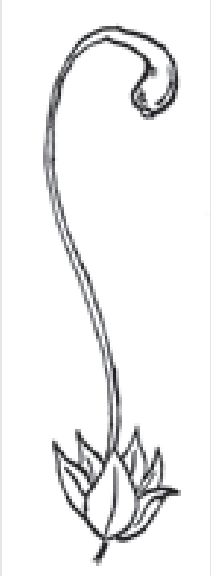
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaf without well-defined border; nerve not excurrent; unripe capsule asymmetrical, on curved seta; ripe capsule furrowed when dry

**B**

Leaf with well-defined border; nerve excurrent; capsule symmetrical, on straight seta, not furrowed when dry

Go to

***Funaria hygrometrica***  
p. 561

171

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Nerve excurrent in long, pale greenish, hair-like point; leaves spirally curled when dry; on dry ground, walls, trees, etc



**B**

Nerve shortly excurrent or ending in tip; leaves shrunken or slightly curled, but not spiral when dry; tall plants (3–10 cm) in wet, lime-rich places



Go to

***Bryum capillare***

p. 586

***Bryum pseudotriquetrum***

p. 592

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**172**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on tarmac or concrete paths*

**Progress:** *1,2,3,4,78,79,81,82,83,84,86,87,172*

**A**

Leaf parallel-sided or with rounded outline

**B**

Leaf gradually tapering to tip

Go to

**173**

**178**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**173**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on tarmac or concrete paths*

**Progress:** ...87,172,173

**A**

Leaves parallel-sided, opaque and yellowish-green

**B**

Leaves rounded, opaque or translucent, and bright or brownish green

Go to

**174**

**175**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

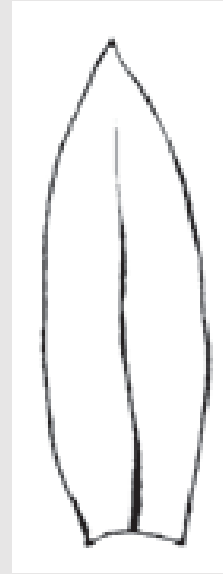
A

Nerve excurrent in short point



B

Nerve ending in leaf tip



Go to

***Barbula unguiculata***  
p. 455

***Barbula convoluta*** p. 454  
***Barbula sardoa*** p. 454

Go to

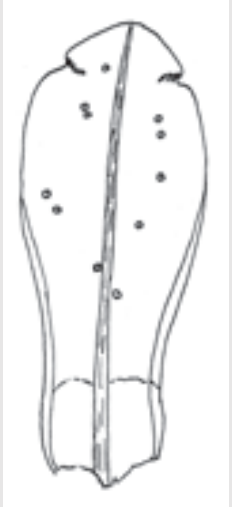
Title page

Key to groups

Restart section

Go back one step

A



Leaves opaque, dirty brownish-  
green; nerve ending in tip

B

Leaves translucent

Go to

*Syntrichia latifolia*

*p. 501*

176

Go to

Title page

Key to groups

Restart section

Go back one step



A



Capsule on long, wavy seta; young  
capsule tightly sheathed by bunched  
leaves

B

Capsule on straight seta, although capsule itself  
nodding; young capsule not tightly sheathed by  
leaves

Go to

***Funaria hygrometrica***  
p. 561

177

Go to

Title page

Key to groups

Restart section

Go back one step

177a



**A**

Nerve excurrent in a wispy  
point; bulbils absent

177b



**B**

Nerve ending in leaf tip or  
shortly excurrent; yellowish-  
green bulbils present in leaf axils

Go to

***Bryum capillare***

*p. 586*

***Bryum dichotomum***

*p. 595*

Go to

Title page

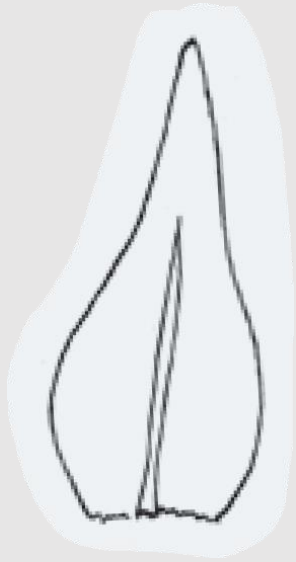
Key to groups

Restart section

Go back one step

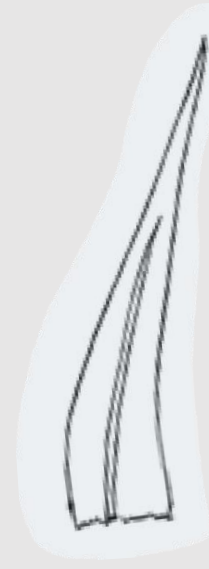
**A**

Leaf tip narrow but rounded  
(hand lens)



**B**

Leaf tip sharply pointed (hand  
lens)



Go to

179

180

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves 2–3 mm long, >3 times as long as wide

**B**

Leaves 2 mm long or shorter, <2 times as long as  
wide

Go to

***Didymodon nicholsonii***

*p. 460*

***Didymodon luridus***

*p. 461*

Go to

Title page

Key to groups

Restart section

Go back one step

A

Leaves curved to one side, looking like a spiral  
from above



B

Leaves straight when viewed from above

Go to

*Didymodon insulanus*

*p. 463*

*Ceratodon purpureus*

*p. 354*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**181**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on walls in towns and villages, on bridge parapets, etc.*

**Progress:** *1,2,3,4,78,79,81,82,83,84,86,87,181*

**A**

Medium-sized plants with leaves at least 4 mm long

**B**

Very small plants, with leaves 3 mm long or shorter

Go to

**182**

**188**

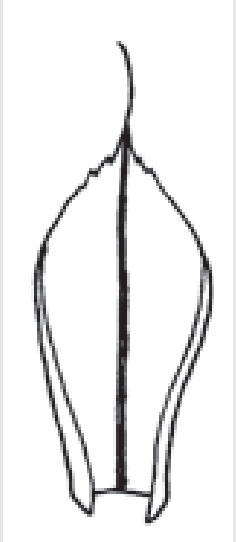
Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**



**A**

Leaves corkscrew-curved when  
dry, egg-shaped; nerve  
projecting from leaf tip as a fine,  
greenish hair

**B**

Leaves not corkscrew-curved when dry, gradually  
tapering to tip; nerve ending in leaf tip

Go to

***Bryum capillare***  
p. 586

183

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**183**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on walls in towns and villages, on bridge parapets, etc.*

**Progress:** ...87,181,182,183

**A**

Plants dull, dark green; capsules usually present, covered by hairy calyptra

**B**

Plants yellowish-green or mid-green; capsules rare, calyptra not hairy

Go to

**184**

**185**

Go to

Title page

Key to groups

Restart section

Go back one step



184a



A

Capsules projecting above  
leaves on long seta

184b



B

Capsules hidden among  
leaves on short seta

Go to

***Orthotrichum anomalum***

*p. 656*

***Orthotrichum cupulatum***

*p. 657*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**185**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on walls in towns and villages, on bridge parapets, etc.*

**Progress:** ...87,181,182,183,185

**A**

Leaf margins with notches; leaf tip sometimes missing

**B**

Leaf margins without notches; leaf tip never missing

Go to

**186**

**187**

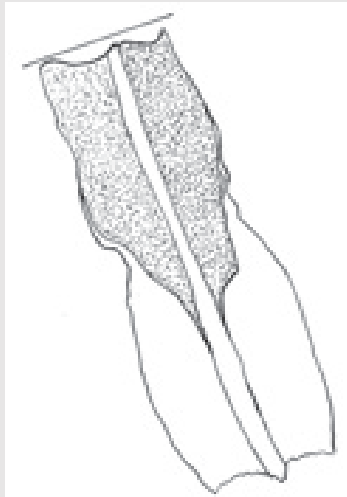
Go to

Title page

Key to groups

Restart section

Go back one step



**A**  
Leaf base with sharp V-shaped division between colourless basal cells and green upper cells (remove a leaf)

**B**  
Leaf base with a few colourless cells, but no sharp V-shaped division from upper cells

Go to

***Tortella tortuosa***  
p. 428

***Didymodon sinuosus***  
p. 464

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**187**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on walls in towns and villages, on bridge parapets, etc.*

**Progress:** ...87,181,182,183,185,187

**A**

Leaf tip shaped like a boat's prow (view from side through a hand lens)

**B**

Leaf tip not shaped like a boat's prow

Go to

***Trichostomum crispulum***

*p. 434*

**188**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**188**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on walls in towns and villages, on bridge parapets, etc.*

**Progress:** ...87,181,(182,183,185,187,)188

**A**

Leaves parallel-sided to just below tip; on mortar courses

**B**

Leaves tapering to tip; on mortar, tops or sides of walls

Go to

**189**

**192**

Go to

Title page

Key to groups

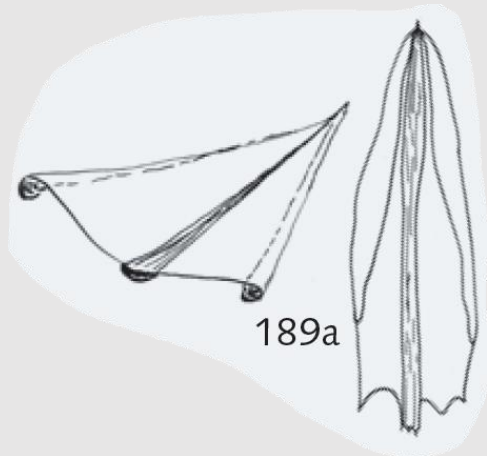
Restart section

Go back to 181

Go back to 187

**A**

Leaf margins rolled back underneath, almost to nerve



**B**

Leaf margins not rolled back, may be down-curved



*Pseudocrossidium revolutum*  
p. 441



Title page

Key to groups

Restart section

Go back one step

**A**



Leaf margins down-curved;  
nerve protruding beyond tip of  
leaf in short point

**B**

Leaf margins not down-curved; nerve not  
protruding

Go to

***Barbula unguiculata***  
*p. 455*

191

Go to

Title page

Key to groups

Restart section

Go back one step

A

Leaf margins wavy; plants yellowish-green

B

Leaf margins flat; plants vivid mid-green

Go to

***Barbula sardoa***

*p. 454*

***Zygodon viridissimus***

*p. 642*

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**192**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on walls in towns and villages, on bridge parapets, etc.*

**Progress:** ...87,181,(182,183,185,187,)188,192

**A**

Nerve ending below rounded leaf tip

**B**

Nerve protruding beyond the acute leaf tip

Go to

*Didymodon luridus* p. 461  
*Didymodon tophaceus* p. 466

**193**

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Shoots reddish-brown below; leaf tip often with a few teeth; leaf gradually tapering, then abruptly angled in at tip

**B**

Shoots green or orange below; leaf tip untoothed; leaf gradually tapering all the way to the tip

Go to

*Bryoerythrophyllum recurvirostrum*  
p. 442

194

Go to

Title page

Key to groups

Restart section

Go back one step

A

Leaves curved to one side, looking like a spiral when viewed from above



B

Leaves more or less straight

Go to

*Didymodon insulanus*

p. 463

195

Go to

Title page

Key to groups

Restart section

Go back one step

A

Plants dark green

B

Plants yellow-green

Go to

*Didymodon rigidulus*

*p. 459*

*Didymodon vinealis*

*p. 462*

Go to

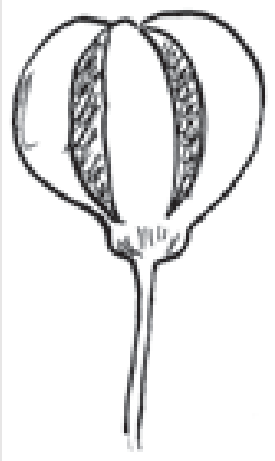
Title page

Key to groups

Restart section

Go back one step

**A**



Tiny, almost black or red-brown cushions on acidic, upland rocks; leaves <1 mm long; capsules opening with 4 slits

**B**

Green cushions (sometimes brownish) or patches in various habitats; leaves usually >1 mm long; capsules opening with a single hole

Go to

197

198

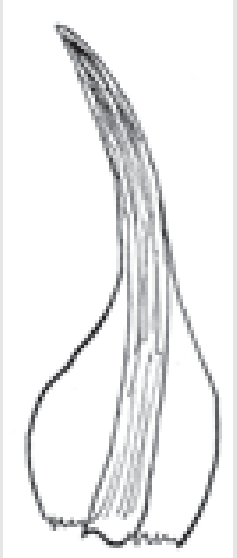
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves curved, mostly  
composed of nerve



**B**

Leaves straight, nerveless

Go to

***Andreaea rothii***

*p. 314*

***Andreaea rupestris***

*p. 312*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**198**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198

**A**

Stems prostrate or ascending at tip, with plenty of irregular branching

**B**

Stems erect or nearly so, unbranched or sparsely so

Go to

**199**

**205**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**199**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,199

**A**

Leaf tip rounded (hand lens)

**B**

Leaf tip acute

Go to

**200**

**201**

Go to

Title page

Key to groups

Restart section

Go back one step



**A**



Leaf tip with teeth (hand lens),  
about half as wide as leaf base,  
so leaves appear short and  
blunt; mostly on rocks by  
streams

**B**

Leaf tip without teeth (hand lens), about 1/4 as  
wide as leaf base; usually forming patches on  
damp, upland cliffs

Go to

***Racomitrium aciculare***

*p. 534*

***Racomitrium aquaticum***

*p. 535*

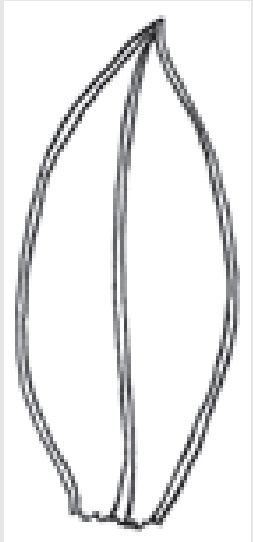
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaf margins much thicker than  
rest of leaf (hand lens), not  
recurved

**B**

Leaf margins not thicker than rest of leaf (hand  
lens) (may look thicker if recurved, so check  
carefully)

Go to

***Cinclidotus fontinaloides***  
*p. 502*

202

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**202**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,199,201,202

**A**

Leaves curved (examine colony as a whole);  
capsules hidden among sheathing leaves

**B**

Leaves straight (examine colony as a whole);  
capsules not hidden, held above leaves on long seta

Go to

**203**

**204**

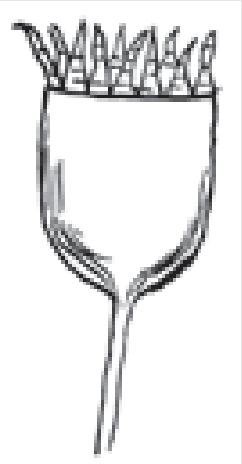
Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**



**A**

Capsule longer than wide (about  
1 1/2 times as long as wide)



**B**

Capsule as long as wide

Go to

***Schistidium apocarpum***

*p. 510*

***Schistidium rivulare***

*p. 507*

Go to

Title page

Key to groups

Restart section

Go back one step

A

Shoots tightly appressed to rocky surfaces, with  
short tassel-like branches

B

Shoots loosely or not appressed to rocky  
surfaces; branches long and irregular

Go to

***Racomitrium fasciculare***  
*p. 538*

***Racomitrium heterostichum***  
*(forms without hair points)*  
*p. 537*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**205**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,205

**A**

Individual colonies forming discrete, well-defined cushions

**B**

Colonies forming turfs, loose ill-defined tufts, etc

Go to

**206**

**211**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**

Capsules hidden among sheathing leaves; dense, olive-green, rounded cushions on coastal rocks

**B**

Capsules, if present, not sheathed by leaves; generally not on coastal rocks (a few of the following are occasional by the sea)

Go to

***Schistidium maritimum***  
*p. 506*

207

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Short (<2 cm tall) cushions on acidic boulders or rocks; dull green; capsules abundant

**B**

Tall (>2 cm tall) cushions on base-rich cliffs, especially under overhangs, or on calcareous boulders; bright or yellow-green; capsules uncommon

Go to

208

209

Go to

Title page

Key to groups

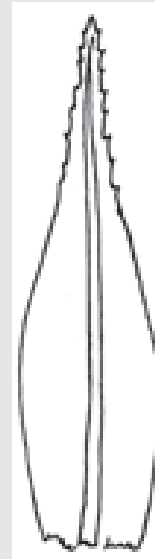
Restart section

Go back one step



A

Leaves 1–2 mm long, untoothed



B

Leaves 2–3 mm long, margins obviously toothed (hand lens)

*Dicranoweisia cirrata*

*p. 364*

*Ptychomitrium polyphyllum*

*p. 541*

Go to

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**209**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,205,206,207,209

**A**

Mid-green cushions; leaves long and narrow (>3 times as long as wide), with parallel sides and acute tip

**B**

Yellow-green cushions; either leaves shorter (<3 times as long as wide), or gradually tapering and with wavy margins

Go to

***Amphidium mougeotii***

*p. 641*

**210**

Go to

Title page

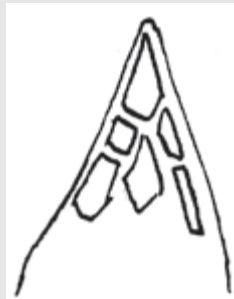
Key to groups

Restart section

Go back one step

**A**

Leaves short (<3 times as long as wide), tipped  
with a single pointed cell (×20 hand lens); leaf  
margins not undulate; cushions vivid yellow-  
green



**B**

Leaves long (>4 times as long as wide), gradually  
tapering to one or two blunt cells (×20 hand  
lens); leaf margins undulate; cushions pale green

Go to

***Anoetangium aestivum***  
p. 452

***Tortella tortuosa***  
p. 428

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**211**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,205,211

**A**

Leaf margins toothed (hand lens); plants of wet places

**B**

Leaf margins untoothed (hand lens), but may be notched (see [220](#)); plants of various habitats

Go to

**212**

**213**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves tapering sharply; margins recurved; plants glaucous green; stem with matted rhizoids among lower leaves

**B**

Leaves acute or blunt; margins plane; plants not blue-green; stem without matted rhizoids among lower leaves

Go to

***Philonotis fontana***  
p. 636

***Dichodontium spp.***  
pp. 361-362

Go to

Title page

Key to groups

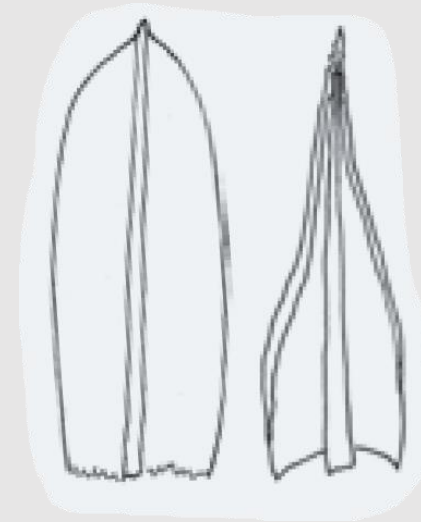
Restart section

Go back one step



**A**

Leaves with rounded or  
egg-shaped outline



**B**

Leaves parallel-sided  
or gradually tapering  
to tip

Go to

214

216

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**214**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,205,211,213,214

**A**

Leaves corkscrew-curved when dry; nerve projecting from leaf tip as a fine greenish hair

**B**

Leaves more or less straight when dry; nerve ending in leaf tip

Go to

***Bryum capillare***  
*p. 586*

**215**

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Margins recurved; plants wine red (sometimes dark green); shoots without tightly appressed leaves

**B**

Margins plane; plants always dark green; shoots with tightly appressed leaves often projecting above main colony

Go to

***Bryum alpinum***

*p. 599*

***Pohlia nutans***

*p. 605*

Go to

Title page

Key to groups

Restart section

Go back one step



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**216**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,205,211,213,216

**A**

Leaves >4 mm long, parallel-sided

**B**

Leaves <3 mm long, tapering gradually from base to leaf tip

Go to

**217**

**221**

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**217**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,205,211,213,216,217

**A**

Plants dull, dark green; leaf margins recurved; capsules usually present, covered by hairy calyptra

**B**

Plants yellowish-green or mid-green; leaf margins not recurved; capsules very rare, calyptra not hairy

Go to

**218**

**219**

Go to

**Title page**

**Key to groups**

**Restart section**

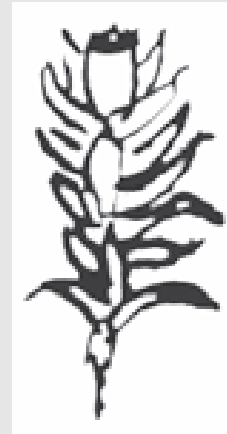
**Go back one step**

A



Capsules projecting above leaves  
on long seta

B



Capsules hidden among leaves  
on short seta

Go to

***Orthotrichum anomalum***

*p. 656*

***Orthotrichum cupulatum***

*p. 657*

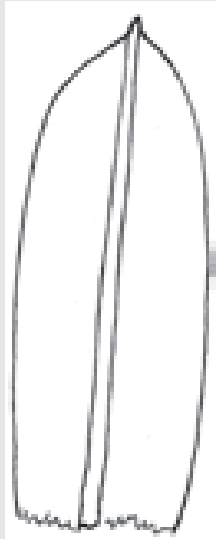
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaf margins without notches;  
leaf tip never missing; nerve  
protruding beyond leaf tip as a  
blunt point

**B**

Leaf margins with notches; leaf tip sometimes  
missing; nerve ending in leaf tip

Go to

*Trichostomum brachydontium*  
p. 433

220

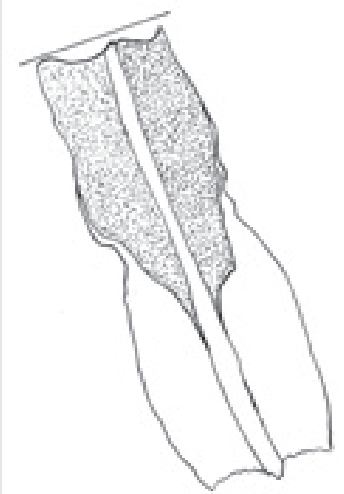
Go to

Title page

Key to groups

Restart section

Go back one step



**A**  
Leaf base with sharp V-  
shaped division between  
colourless basal cells and  
green upper cells (remove a  
leaf)

**B**  
Leaf base with a few colourless cells, but no  
sharp V-shaped division from upper cells

Go to

***Tortella tortuosa***  
p. 428

***Didymodon sinuosus***  
p. 464

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**221**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on rocks, drystone walls, etc.*

**Progress:** ...87,196,198,205,211,213,216,221

**A**

Plants on damp, calcareous rock faces

**B**

Plants not on damp, calcareous rock faces

Go to

**222**

**223**

Go to

Title page

Key to groups

Restart section

Go back one step

A

Leaf tip rounded (hand lens)

B

Leaf tip sharply pointed (hand lens)

Go to

*Gymnostomum aeruginosum*  
p. 451

*Eucladium verticillatum*  
p. 420

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves with narrow upper part composed mostly  
of nerve; leaves never toothed at tip (hand lens)

**B**

Leaves with leaf blade continuing all the way to  
leaf tip; 1 or 2 obscure teeth near leaf tip (hand  
lens)

Go to

***Didymodon rigidulus***  
*p. 459*

224

Go to

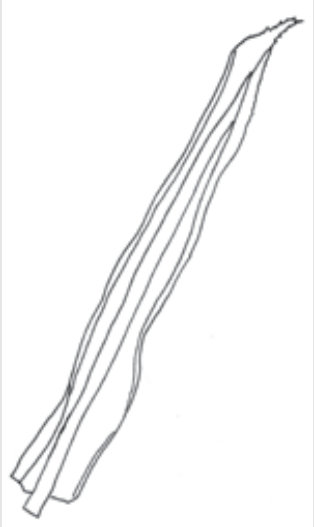
Title page

Key to groups

Restart section

Go back one step





**A**

Leaf gradually tapering,  
then suddenly angled in at  
tip; upper leaves dull,  
yellow-green and opaque



**B**

Leaf gradually tapering all the  
way to the tip; leaves glossy  
green (or pink or reddish) and  
translucent

Go to

*Bryoerythrophyllum recurvirostrum*  
p. 442

Go to

*Ceratodon purpureus*  
p. 354

Title page

Key to groups

Restart section

Go back one step

**A**

Stem with matted rhizoids among lower leaves; leaves sharply tapering; margins recurved; plants glaucous green

**B**

Stem without matted rhizoids, or rhizoids very sparse; if leaves tapering and margins recurved, then plants yellow-green or mid-green

Go to

***Philonotis fontana***  
*p. 636*

226

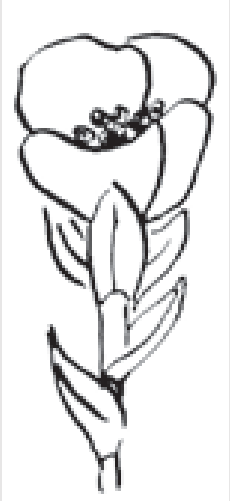
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves at tip of shoot forming a  
nest-like group, holding several  
gemmae

**B**

Leaves not forming a nest; gemmae absent from  
shoot tip

Go to

***Tetraphis pellucida***  
p. 226

227

Go to

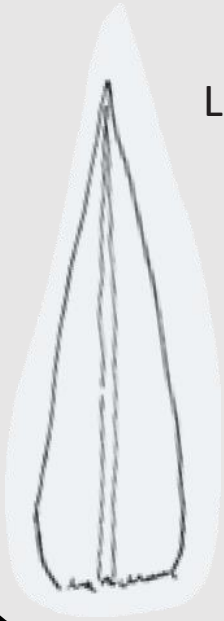
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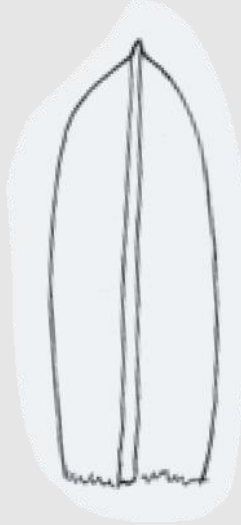
Restart section

Go back one step

**A**  
Leaves tapering from base to tip



**B**  
Leaves parallel-sided until just below tip, or with egg-shaped outline



228

243



Title page

Key to groups

Restart section

Go back one step

A

Minute (<3 mm tall) plants with capsules on very short seta, hidden among leaves; capsules without differentiated lid (hand lens); leaves translucent

B

Capsules on long seta or absent, mostly with differentiated lid; if seta very short, then plants >5 mm and leaves opaque

Go to

229

230

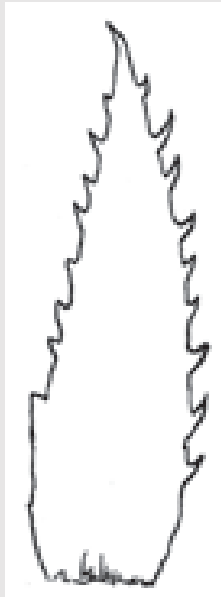
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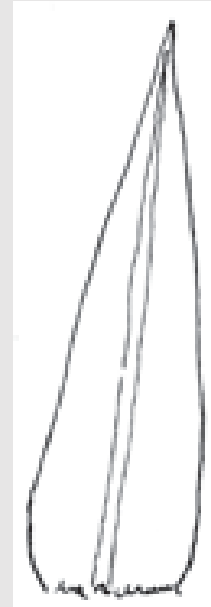
Restart section

Go back one step



**A**

Bud-like plants arising from  
green mat of protonema; leaves  
nerveless and with toothed  
margins



**B**

Upright (but tiny) plants with no  
mat of protonema; leaves with  
faint nerves and without teeth

Go to

*Ephemerum minutissimum* p. 504  
*Ephemerum serratum* p. 504

Go to

*PseudoepheMERUM nitidum*  
p. 341

Title page

Key to groups

Restart section

Go back one step



**A**

Leaf margins wavy; leaf base with sharp, V-shaped division between colourless basal cells and green upper cells (remove a leaf); robust, yellow-green cushions in limestone grassland

**B**

Leaf margins not wavy; leaf base without V-shaped division

Go to

***Tortella tortuosa***  
*p. 428*

231

Go to

Title page

Key to groups

Restart section

Go back one step

A

Leaf tip with a few teeth (hand lens)

B

Leaf tip without teeth (hand lens)

Go to

232

234

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaf margins recurved only in lower half of leaf;  
irregular teeth in upper half of leaf

**B**

Leaf margins recurved almost to leaf tip (to  
upper 1/4 at least); teeth restricted to extreme  
tip

Go to

***Dichodontium spp.***  
*pp. 361-362*

233

Go to

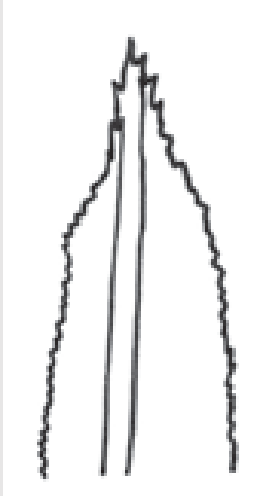
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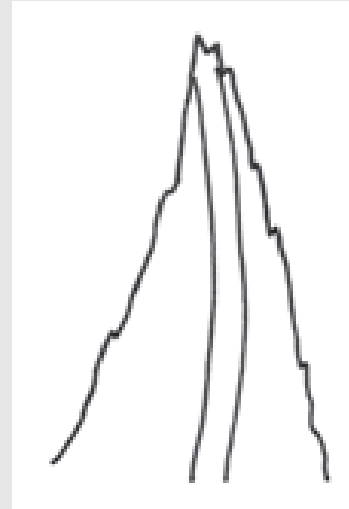
Go back one step

**A**



Leaf gradually tapering, then abruptly angled in at tip; upper leaves dull, yellow-green and opaque, lower leaves brick red

**B**



Leaf gradually tapering all the way to the tip; leaves glossy, green, pink or red, and translucent

Go to

*Bryoerythrophyllum recurvirostrum*  
p. 442

*Ceratodon purpureus*  
p. 354

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves with very broad upright base then bent  
back 90° to point away from stem



**B**

Leaf tip not abruptly bent back: straight or  
gradually curved

Go to

***Dichodontium palustre***

*p. 362*

235

Go to

Title page

Key to groups

Restart section

Go back one step

A

Upper leaves curved to one side when viewed  
from above, looking like a spiral



B

Upper leaves straight, not looking like a spiral

Go to

236

237

Go to

Title page

Key to groups

Restart section

Go back one step

A

Lower leaves with tip pointing downwards to the  
ground

B

Lower leaves with tip at 90° to stem or angled up

Go to

*Didymodon fallax*  
p. 457

Go to

*Didymodon insulanus*  
p. 463

Title page

Key to groups

Restart section

Go back one step

A

Nerve ending below rounded leaf tip

B

Nerve excurrent from or ending in acute leaf tip

Go to

*Didymodon tophaceus*  
p. 466

238

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Plants dark green; shoots 1 cm tall or taller; in  
tufa-forming flushes

**B**

Plants yellow green; shorter than 1 cm; on dry,  
calcareous or acidic soil

Go to

*Hymenostylium recurvirostrum*  
p. 447

239

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and  
Liverworts

**239**

*Key: Key to Acrocarpous mosses*

*Section: Other Acrocarps growing on soil, etc.*

*Progress: ...87,225,226,227,228,230,231,234,235,237,238,239*

**A**

Plants shiny and with translucent leaves

**B**

Plants dull, leaves opaque

Go to

**240**

**241**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**



A

Most shoots short and upright; inclined capsules  
on long, purple seta

B

Most shoots sprawling on the ground; spherical  
capsules with very short seta hidden by  
sheathing leaves

Go to

***Ceratodon purpureus***  
*p. 354*

***Archidium alternifolium***  
*p. 339*

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Plants orange-green or  
brownish-green; leaves  
curved, with tip pointing  
slightly downwards

**B**

Plants yellow-green; leaves more or less straight

Go to

***Didymodon fallax***  
*p. 457*

242

Go to

Title page

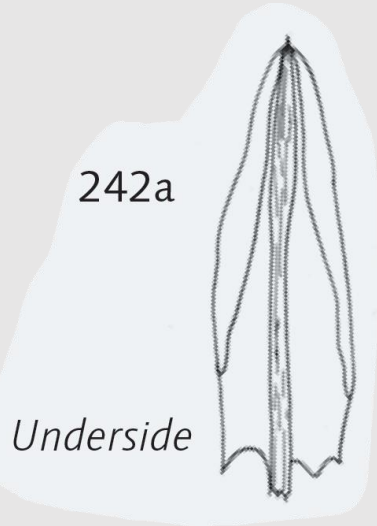
Key to groups

Restart section

Go back one step

**A**

Leaf margins strongly recurved (margins recurved to nerve) all the way to leaf tip



242a

Underside

**B**

Leaf margins slightly recurved and not all the way to leaf tip



***Pseudocrossidium hornschuchianum***  
p. 440

***Didymodon vinealis***  
p. 462



Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and  
Liverworts

**243**

*Key: Key to Acrocarpous mosses*

*Section: Other Acrocarps growing on soil, etc.*

*Progress: ...87,225,226,227,243*

**A**

Leaves parallel-sided until just below tip

**B**

Leaves with rounded outline

Go to

**244**

**250**

Go to

**Title page**

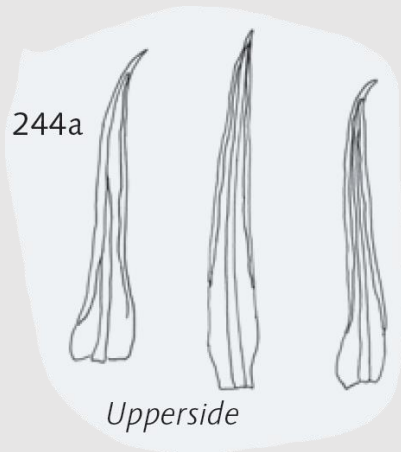
**Key to groups**

**Restart section**

**Go back one step**

**A**

Leaf margins turned upwards or incurved (hand lens)



**B**

Leaf margins plane or recurved (hand lens)

Go to

245

248

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaf margins turned upwards; leaf tip hooded  
(shaped like the prow of a boat); capsules  
seldom present

**B**

Leaf margins incurved; capsules common (only  
identifiable in fruit)

Go to

***Trichostomum crispulum***

*p. 434*

246

Go to

Title page

Key to groups

Restart section

Go back one step

A

Seta very short; spherical capsules hidden among  
leaves

B

Seta >4 times the length of capsule, so capsules  
clearly visible

Go to

*Weissia longifolia*  
p. 427

247

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Capsule with wide mouth; peristome present  
(although sometimes very hard to detect)

**B**

Capsule with narrow mouth covered by a  
membrane; peristome absent

Go to

***Weissia controversa***

*p. 422*

***Weissia brachycarpa***

*p. 423*

Go to

Title page

Key to groups

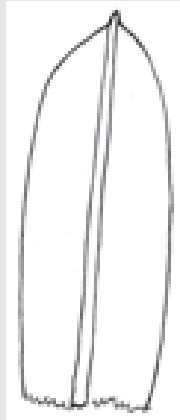
Restart section

Go back one step



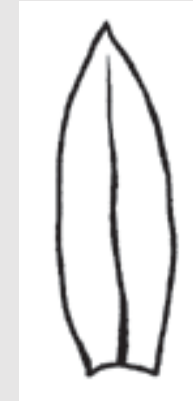
A

Nerve excurrent as short point



B

Nerve ending in or below leaf tip



Go to

249

*Barbula convoluta* p. 454

*Barbula sardoa* p. 454

Go to

Title page

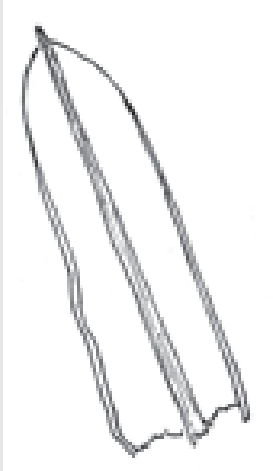
Key to groups

Restart section

Go back one step

A

Leaf margins recurved; capsules  
common



B

Leaf margins plane; capsules rare

Go to

***Barbula unguiculata***

*p. 455*

***Trichostomum brachydontium***

*p. 433*

Go to

Title page

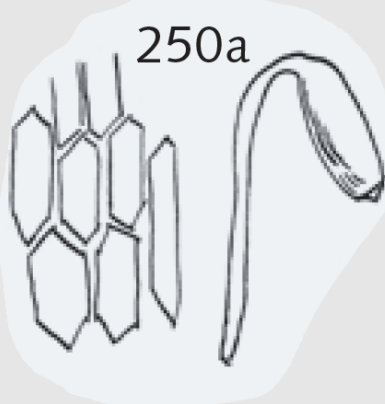
Key to groups

Restart section

Go back one step

**A**

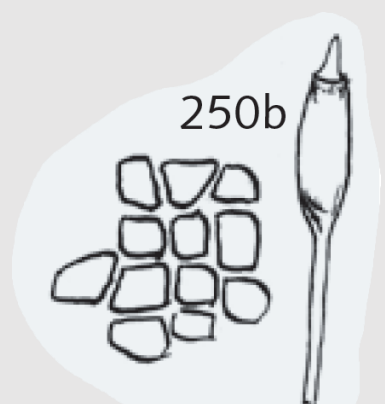
250a



Leaves with elongated cells (hand lens), usually translucent; capsules nodding (some species identifiable without capsules)

**B**

250b



Leaves with square cells (hand lens), usually looking opaque; capsules upright or hidden among leaves (only identifiable with capsules)



**251**  
*(Bryum & Pohlia)*

**258**  
*(Pottiales)*

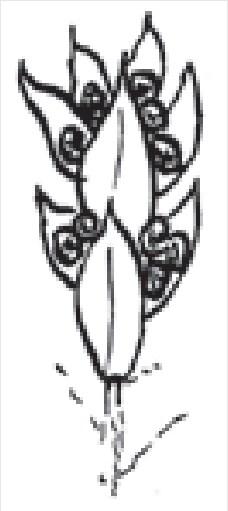


Title page

Key to groups

Restart section

Go back one step



**A**

Bulbils present in leaf axils  
(between leaves and stem)

**B**

No bulbils in leaf axils

Go to

252

253

Go to

Title page

Key to groups

Restart section

Go back one step

A

Leaves <3 times as long as wide, concave and usually pressed to stem

B

Leaves >3 times as long as wide, flat and held well back from stem

Go to

***Bryum dichotomum***  
*p. 595*

***Pohlia annotina***  
*p. 607*

Go to

Title page

Key to groups

Restart section

Go back one step

A

Plants dark green; shoots with tightly appressed  
leaves often projecting above main colony; on  
peat or acidic soil

B

Plants mid-green or pale green; shoots without  
appressed leaves

Go to

*Pohlia nutans*

*p. 605*

254

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**254**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on soil, etc.*

**Progress:** ...87,225,226,227,243,250,251,253,254

**A**

Leaves pale green, contrasting strongly with red stem; margins not recurved

**B**

Leaves and stem of similar colours; leaf margins recurved

Go to

**255**

**256**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**

Usually tall plants (>5 mm), occasionally smaller;  
usually forming loose tufts; strikingly pale, dull,  
whitish-green

**B**

Short plants (<5 mm); usually growing as  
scattered patches; shiny, pale green, but not  
almost white

Go to

***Pohlia wahlenbergii***

*p. 611*

***Pohlia melanodon***

*p. 610*

Go to

Title page

Key to groups

Restart section

Go back one step



A

Whole plants pale, vivid pink

B

Plants green, brown, red, etc., but not vivid pink

Go to

*Bryum pallens*  
p. 584

257

Go to

Title page

Key to groups

Restart section

Go back one step

**A**



Red, spherical tubers between  
leaves near stem base (hand  
lens)

**B**

Tubers, if present, only on long rhizoids (collect  
plants with ripe capsules if present, or small tufts  
if on disturbed soil, arable land or river banks)

Go to

***Bryum rubens***  
*p. 598*

***Bryum spp.***  
*pp. 581-599*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**



Capsule completely covered by very large, pale calyptra with a long, drawn-out tip

**B**

Calyptra short, not completely covering capsule, or capsules absent

Go to

***Encalypta vulgaris***  
*p. 556*

259

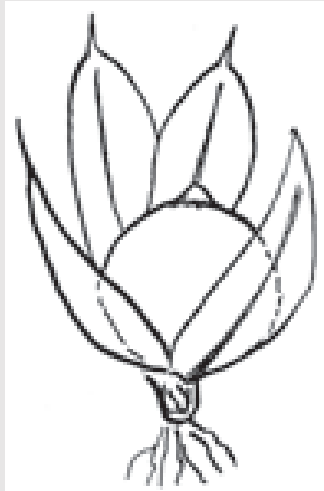
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Seta very short; capsule  
spherical, hidden among  
leaves

Go to

***Phascum cuspidatum***

*p. 486*

Title page

Key to groups

**B**

Seta longer than capsule

260

Go to

Restart section

Go back one step

**A**

Capsule spherical or egg-shaped, without a  
deciduous lid

**B**

Capsule oblong or wide-mouthed, with a  
separate lid

Go to

**261**

**262**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

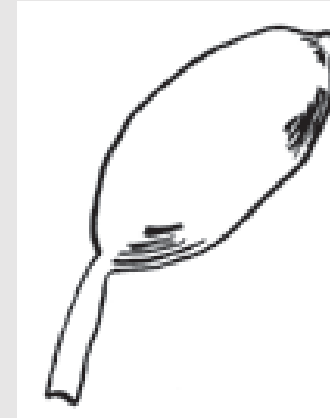
A

Capsule spherical; tiny (<4 mm tall) plants



B

Capsule egg-shaped; small (5–8 mm tall) plants



Go to

*Microbryum rectum*

*p. 488*

*Protobryum bryoides*

*p. 485*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Capsule hardly longer than wide, with a wide  
mouth and no peristome



**B**

Capsule at least 2 times as long as wide;  
peristome present or absent

Go to

***Tortula truncata***

*p. 482*

263

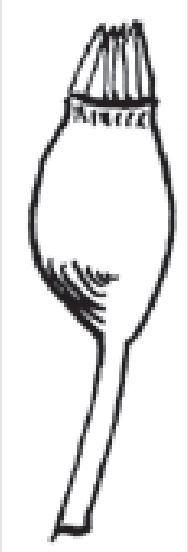
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Title page

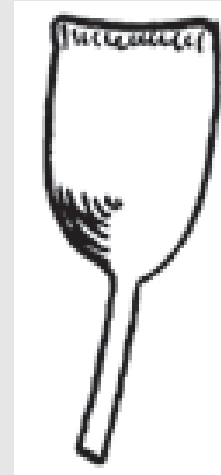
Key to groups

Restart section

Go back one step



**A**  
Peristome present



**B**  
Peristome absent

Go to

264

265

Go to

Title page

Key to groups

Restart section

Go back one step



A

Peristome at least 1/4 length of capsule; tall  
plants >8 mm

B

Peristome very short; tiny plants <5 mm tall

Go to

***Tortula lanceola***  
*p. 481*

***Pottia davalliana*** *p. 487*  
***Pottia starkeana*** *p. 487*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves with a few teeth near tip; tall (about 1 cm), brown plants on upper saltmarsh or salty cliff tops

**B**

Leaves without teeth; green, or if brown then tiny (<5 mm)

Go to

***Henediella heimii***  
p. 491

266

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Tiny (<5 mm tall) plants with brown leaves

**B**

Tall (>8 mm) plants with green leaves

Go to

***Pottia davalliana***

*p. 487*

***Tortula modica***

*p. 483*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**267**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on trees, logs, stumps, fences, etc.*

**Progress:** *1,2,3,4,78,79,81,82,83,84,86,87,267*

**A**

Gemmae clearly visible with ×10 hand lens on shoot tip, on leaves or between leaves and stem

**B**

Gemmae absent or only clearly visible under a microscope

Go to

**268**

**272**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

A

Green gemmae on shoot tip; on decaying wood or acidic bark

B

Brown gemmae on leaves or between leaves and stem; on bark of living trees

Go to

269

270

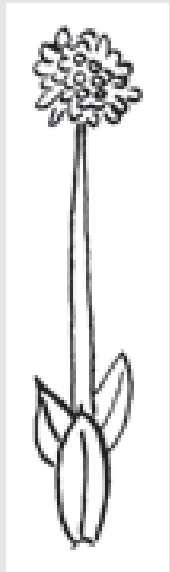
Go to

Title page

Key to groups

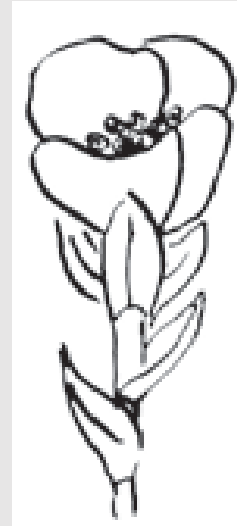
Restart section

Go back one step



**A**

Gemmae clustered on stalks projecting above shoot tips, giving the impression of pin-heads



**B**

Gemmae lying in a cup of leaves at shoot tip

Go to

***Aulacomnium androgynum***  
p. 627

Go to

***Tetraphis pellucida***  
p. 333

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**270**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on trees, logs, stumps, fences, etc.*

**Progress:** ...87,267,268,270

**A**

Gemmae looking like brown hairs between leaves and stem; leaves relatively short and wide, clearly <4 times as long as wide

**B**

Gemmae on the leaves themselves; leaves >4 times as long as wide

Go to

***Bryum laevifilum***  
*p. 587*

**271**

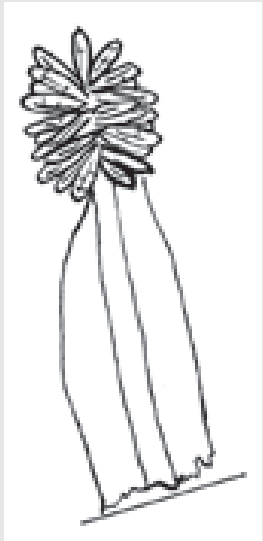
Go to

Title page

Key to groups

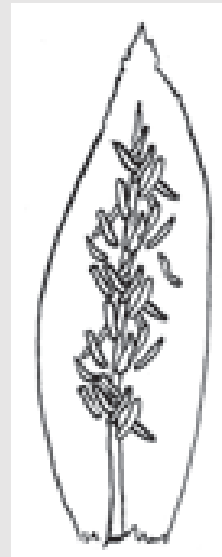
Restart section

Go back one step



**A**

Clusters of brown gemmae like  
pom-poms on tip of leaves



**B**

Gemmae abundant all over leaf  
surfaces

Go to

***Ulota phyllantha***  
p. 664

***Orthotrichum lyellii***  
p. 648

Go to

Title page

Key to groups

Restart section

Go back one step



A

Mosses on trees by silty rivers

B

Mosses on trees away from silty rivers

Go to

273

276

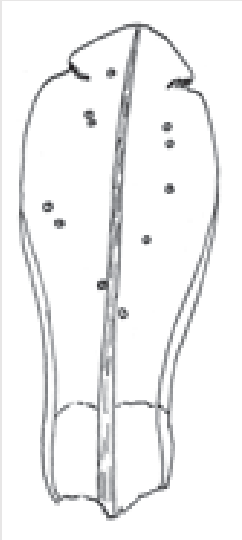
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves with rounded outline and blunt tip, opaque, dirty green

**B**

Leaves with parallel sides or gradually tapering; translucent if with rounded outline (*Bryum capillare*)

Go to

***Syntrichia latifolia***

*p. 501*

274

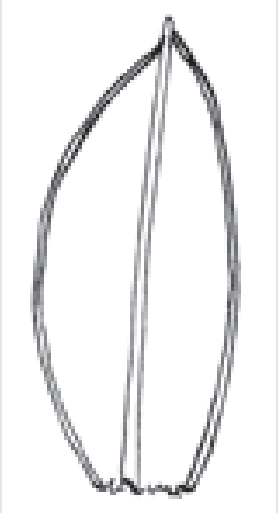
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaf margins much thicker than rest of leaf (×20 hand lens), not recurved, nerve excurrent in short, blunt point

**B**

Leaf margins not thickened, sometimes recurved

Go to

***Dialytrichia mucronata***  
p. 446

275

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**275**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on trees, logs, stumps, fences, etc.*

**Progress:** ...87,267,272,273,274,275

**A**

Capsules partly hidden among leaves; leaf tip bluntly rounded; plants dark green

**B**

Not fitting all three of these characters

Go to

*Orthotrichum rivulare* p. 650  
*Orthotrichum sprucei* p. 650

Title page

Key to groups

**276**

Go to

Restart section

Go back one step

**A**

Leaves with rounded outline, corkscrew-curved  
when dry; nerve projecting from leaf tip as fine  
greenish or pale brown hair; capsules pendulous

**B**

Leaves parallel-sided or gradually tapering from  
base; nerve ending in leaf tip; capsules not  
pendulous

Go to

***Bryum capillare***  
*p. 586*

277

Go to

Title page

Key to groups

Restart section

Go back  
to 272

Go back  
to 275

**A**

Plants vivid green; leaves very short (<2 mm long), with acute tip; leaves appressed to stem when dry, rapidly spreading when wetted

**B**

Plants dull green or with longer, blunter leaves; if vivid green then leaves curled when dry

Go to

278

279

Go to

Title page

Key to groups

Restart section

Go back one step

A

Capsules on long, curved seta

B

Capsules on long, straight seta or absent

Go to

*Zygodon conoideus*  
p. 642

*Zygodon spp.*  
pp. 642-645

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**279**

**Key:** *Key to Acrocarpous mosses*

**Section:** *Other Acrocarps growing on trees, logs, stumps, fences, etc.*

**Progress:** ...87,267,272,(273,274,275,)276,277,279

**A**

Capsule on seta long enough to hold it well above leaves; leaves curled when dry

**B**

Capsule either hidden among leaves or only just visible projecting from among them; leaves straight when dry

Go to

**280**

**282**

Go to

Title page

Key to groups

Restart section

Go back one step



A

Calyptra hairless and without dark tip; seta >5 times as long as capsule

B

Either calyptra very hairy, or with a dark tip

Go to

*Dicranoweisia cirrata*  
p. 364

281

Go to

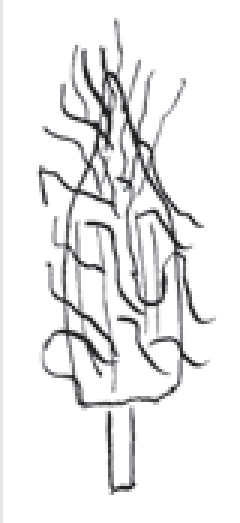
Title page

Key to groups

Restart section

Go back one step

**A**



Calyptra covered with abundant,  
orange-brown hairs; calyptra >3  
times as long as wide, with hairs  
obscuring dark tip

Go to

*Ulota bruchii* p. 658  
*Ulota crispa* p. 658

Title page

Key to groups

**B**



Calyptra with sparse, pale hairs; <3 times as  
long as wide, with dark tip and with dark spots  
around its lower edge

Go to

*Orthotrichum pulchellum*  
p. 652

Restart section

Go back one step

**A**

Calyptra hairless, with dark tip contrasting  
strongly with papery, pale lower part; plants  
forming compact, rounded cushions

**B**

Calyptra hairy; plants loosely branched, or tiny  
and narrow

Go to

***Orthotrichum stramineum***  
*p. 653*

283

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Calyptra very narrow, pale green, >3 times as  
long as wide; plants <1cm tall, with very narrow  
individual shoots

**B**

Calyptra <3 times as long as wide; plants >1cm  
tall

Go to

***Orthotrichum tenellum***  
*p. 651*

284

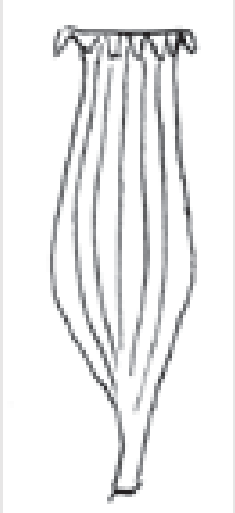
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Key to groups

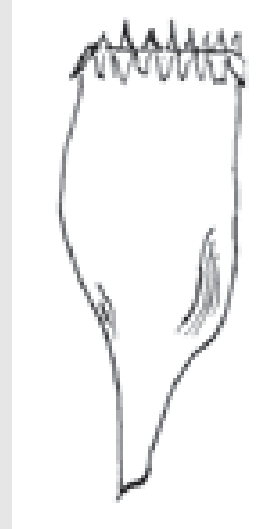
Restart section

Go back one step



**A**

Dry capsules furrowed; leaves  
with acute tip



**B**

Dry capsules smooth; leaves  
with very narrow, sharply  
pointed tip

Go to

***Orthotrichum affine***

*p. 647*

***Orthotrichum striatum***

*p. 646*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**285**

Key: *Key to Pleurocarpous mosses*

Section: Key to sections

Progress: 1,2,3,4,285

**A**

Some or all of the leaves ending in almost white hair point

**B**

Leaves lacking almost white hair point (no true pleurocarps have hair points)

Go to

**115**

*Branched acrocarps*

**286**

Go to

Title page

Key to groups

Restart section

Go back one step

A

Shoots not strongly flattened in one plane

B

Shoots strongly flattened in one  
plane



Go to

287

288

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves strongly curved and turned downwards or to one side, at least near tip of shoots

**B**

Leaves straight or evenly spreading-recurved, not turned to one side, even at the shoot tip

Go to

**297**

**323**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**



**British Bryological Society**

Interactive key to British Mosses and Liverworts

**288**

*Key: Key to Pleurocarpous mosses*

**Section:** Pleurocarps with shoots strongly flattened in one plane

**Progress:** 1,2,3,4,285,286,288

**A**

Plants growing as fans on trees, calcareous rocks or walls

**B**

Plants growing in patches on soil or rotting wood

Go to

**289**

**292**

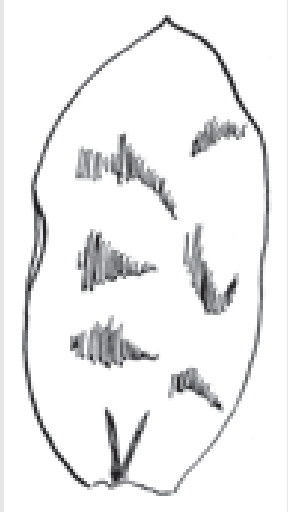
Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**



**A**  
Leaves transversely wrinkled

**B**  
Leaves not transversely wrinkled

Go to

290

291

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Shoots 4–5 mm wide at tip, often golden brown;  
mostly on calcareous rocks

**B**

Shoots 1.5–3 mm wide at tip, pale green; on  
trees and shrubs in western woodlands

Go to

***Neckera crispa***

*p. 680*

***Neckera pumila***

*p. 681*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Nerve short and single, but hard to see with a hand lens; shoots brownish, with leaves curving down on either side, giving a rounded back to branches; loose, untidy habit; looks like a leafy liverwort

**B**

Nerve absent; branches with leaves less down-curved; plant forming dense, pale whitish-green patches

Go to

***Homalia trichomanoides***

*p. 683*

***Neckera complanata***

*p. 682*

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves tapering gradually to an acute tip; often down-curved at tip

**B**

Leaves not gradually tapering; flat or concave, but not obviously down-curved

Go to

293

294

Go to

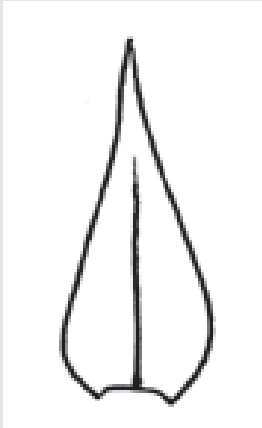
Title page

Key to groups

Restart section

Go back one step

**A**  
Long nerve present



**B**  
Nerve absent, or very short and double

Go to

***Leptodictyum riparium***  
*p. 707*

***Hypnum jutlandicum***  
*p. 806*

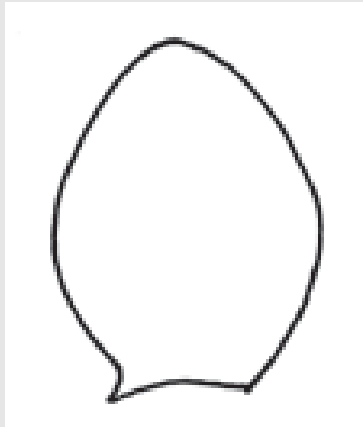
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Key to groups

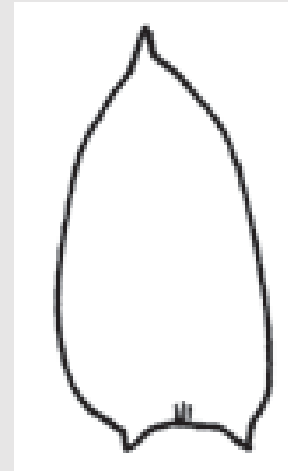
Restart section

Go back one step



**A**

Shoots 6–8 mm wide; leaves about 5 mm long and 3 mm wide, translucent, with rounded tip and extremely large cells that are easily seen with a hand lens



**B**

Shoots 4–5 mm wide or less; leaves smaller, less translucent, more or less parallel-sided, acute-tipped; individual cells scarcely visible with a hand lens

Go to

***Hookeria lucens***

*p. 667*

295

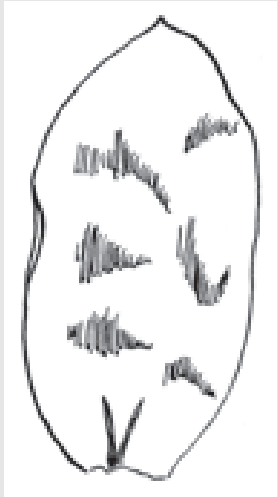
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Shoots robust (4–5 mm wide), strikingly pale green, scarcely glossy; leaves transversely wrinkled

**B**

Shoots medium-sized (2–4 mm wide), deeper green, moderately to very glossy; leaves not wrinkled

Go to

***Plagiothecium undulatum***  
p. 785

296

Go to

Title page

Key to groups

Restart section

Go back one step





**A**

Plant slender, forming neat patches with many parallel shoots about 1 mm wide; minute, deciduous branchlets often present in axils of some leaves

**B**

Plant larger; shoots lacking deciduous branchlets

Go to

*Pseudotaxiphyllum elegans*  
p. 788

Go to

*Plagiothecium* spp.  
pp. 779-785

Title page

Key to groups

Restart section

Go back one step

**A**

Stems red; robust, rigid, irregularly pinnately branched; abundant in upland woods and on hillsides in the north and west

**B**

Stems green, or almost black; habitats various

Go to

***Rhytidiadelphus loreus***  
*p. 817*

298

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**298**

**Key:** *Key to Pleurocarpous mosses*

**Section:** Pleurocarps with leaves strongly curved or turned downwards or to one side (at least near shoot tips)

**Progress:** ...285,286,287,297,298

**A**  
On trees

**B**  
On some other substrate

Go to

**299**

**302**

Go to

Title page

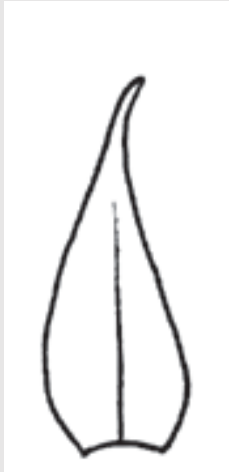
Key to groups

Restart section

Go back one step

**A**

Leaves only slightly curved, nerve present; capsules <2 times as long as wide, with short beak to lid



**B**

Leaves moderately to strongly curved, often forming almost complete circles, nerve present or absent; capsules >2 times as long as wide

Go to

***Brachythecium velutinum***  
p. 745

300

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves very narrow, very strongly curved, forming complete circles up to about 3 mm in diameter; nerved more or less to leaf tip; leaves with longitudinal folds



**B**

Leaves moderately to strongly curved; nerveless and without longitudinal folds

Go to

***Sanionia uncinata***  
p. 728

301

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Capsules frequent in winter, with a very short lid; plants consistently very slender, appearing combed down vertical surfaces



**B**

Capsules occasional in winter, with a long-beaked lid; plants very variable in size and appearance

Go to

***Hypnum andoi***  
p. 804

***Hypnum cupressiforme***  
p. 802

Go to

Title page

Key to groups

Restart section

Go back one step

A

On dry ground, soil, wall tops, stony ground, etc

B

In wetlands, marshes, flushes or bogs, or on wet rocks by streams and lakes

Go to

303

307

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Plant with numerous nearly erect shoots, themselves sparingly branched; glossy, very pale green plant of grassy banks, etc., chiefly on acidic soils

**B**

Shoots mainly prostrate or ascending, with numerous pinnate branches

Go to

***Brachythecium albicans***  
p. 741

304

Go to

Title page

Key to groups

Restart section

Go back one step





**A**

Branches very crowded; shoot tip contrastingly pale green, the leaves strongly curled in various directions; abundant in calcareous habitats



**B**

Branches not crowded; all leaves regularly curved and turned downwards (but not strongly curled as above)

Go to

***Ctenidium molluscum***  
*p. 812*

305

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Pale to silvery green species of heathland and other acidic ground; shoots flattened and pinnately branched

**B**

Green, olive, or bronzed, prostrate species on rocks, tiles or base-rich soil

Go to

***Hypnum jutlandicum***  
*p. 806*

306

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Glossy, bronzed, robust species of base-rich,  
often sandy ground or calcareous rocks; leaves  
2–3 mm long

**B**

Green or brown, prostrate species of stones,  
tiles, wall tops, etc.; leaves up to 2 mm long

Go to

***Hypnum lacunosum***  
*p. 803*

***Hypnum cupressiforme***  
*p. 802*

Go to

Title page

Key to groups

Restart section

Go back one step

A

On rocks by lakes, streams or waterfalls

B

On peaty or other soil, in marshes, bogs or pools

Go to

308

315

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Plant dark red-brown, purple-brown or blackish-green; primary stem prostrate with long (8–15 cm), little branched, nearly prostrate secondary shoots

**B**

Plant yellowish-green to golden; secondary shoots either short, erect and nearly simple, or long and freely branched

Go to

309

310

Go to

Title page

Key to groups

Restart section

Go back one step

A

Leaves with strong nerve extending to leaf tip

B

Leaves without a nerve

Go to

*Scorpidium revolvens*

p. 723

*Scorpidium scorpioides*

p. 721

Go to

Title page

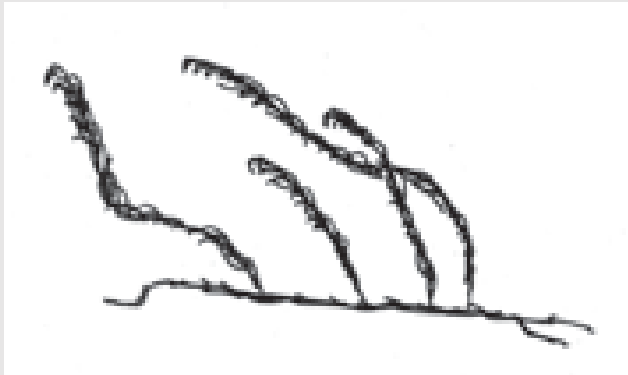
Key to groups

Restart section

Go back one step

**A**

Primary stem prostrate, with short, nearly simple, erect or ascending secondary shoots



**B**

Shoots long and freely branched, often regularly pinnate



Go to

311

312

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Shoots dark green below and more golden at tip;  
leaves large, down-turned and crowded; leaf tip  
acute

**B**

Shoots dull yellowish-green to brownish; leaves  
small, tightly curved and not crowded; leaf tip  
blunt

Go to

***Brachythecium plumosum***  
p. 751

***Hygrohypnum luridum***  
p. 731

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Red-brown rhizoids present on the stem; leaves equally curved throughout; strong nerve present

**B**

Red-brown rhizoids absent from the stem; leaves more strongly curved at shoot tip than elsewhere; nerve absent

Go to

313

314

Go to

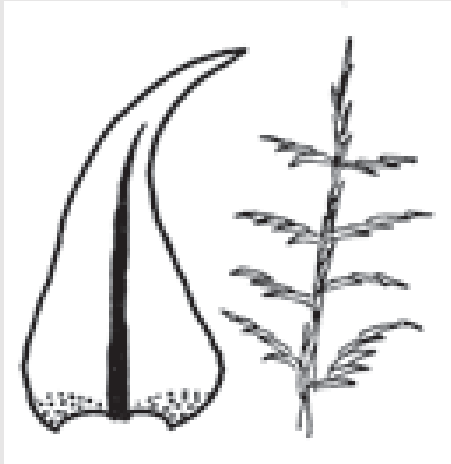
Title page

Key to groups

Restart section

Go back one step

**A**



Leaves on any one  
shoot all curved in one  
direction, but not so  
much that the tip curls  
round and back  
towards the leaf base;  
rhizoids sparse on  
stem

Go to

***Cratoneuron filicinum***  
p. 701

Title page

Key to groups

**B**



Leaves uniformly  
and strongly  
curved; older  
stems with  
abundant, red-  
brown rhizoids

Go to

***Palustriella commutata*** p. 698  
***Palustriella falcata*** p. 699

Restart section

Go back one step

**A**

Young shoots very small and crowded, their leaves strongly curled; on calcareous rocks

**B**

Young shoots not crowded, often elongated, their leaves only lightly curved; mainly on siliceous rocks by waterfalls, etc.

Go to

***Ctenidium molluscum***  
*p. 812*

***Hyocomium armoricum***  
*p. 813*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves very short (<2 mm long)

**B**

Leaves longer than 2 mm

Go to

316

318

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Branches at shoot tip very slender and crowded, their leaves strongly curled; nerve absent

**B**

Branches at shoot tip not very crowded, their leaves only slightly curved; distinct nerve present

Go to

***Ctenidium molluscum***  
*p. 812*

317

Go to

Title page

Key to groups

Restart section

Go back one step

A

Sparse, red-brown outgrowths on lower part of  
stem (hand lens)

B

Stem entirely without outgrowths below

Go to

***Cratoneuron filicinum***  
*p. 701*

***Drepanocladus aduncus***  
*(small forms)*  
*p. 714*

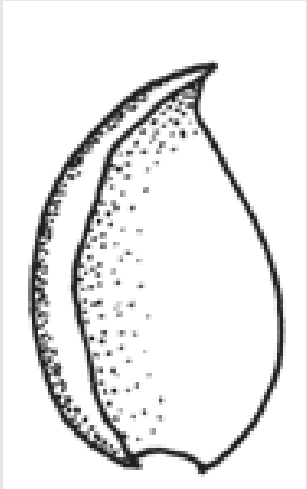
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves without a nerve,  
crowded, noticeably broad,  
concave and shortly  
pointed at the tip; dark red-  
brown, purplish or blackish-  
green plant with long,  
prostrate, little-branched  
shoots

**B**  
Leaves with a nerve, and finely pointed

Go to

***Scorpidium scorpioides***  
*p. 721*

319

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**319**

**Key:** *Key to Pleurocarpous mosses*

**Section:** Pleurocarps with leaves strongly curved or turned downwards or to one side (at least near shoot tips)

**Progress:** ...285,286,287,297,298,302,307,315,318,319

**A**

Leaves strongly pleated

**B**

Leaves not pleated

Go to

*Palustriella commutata* p. 698  
*Palustriella falcata* p. 699

Go to

**320**

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves strongly and uniformly curved (almost  
to form a circle); shoots prostrate, little-  
branched, dark red



**B**

Either leaves strongly curved, but plants upright,  
or shoots prostrate/floating, but most leaves  
only slightly curved

Go to

***Scorpidium revolvens***

*p. 723*

321

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Sprawling plants in lowland ditches (*D. aduncus*) or bog pools (*W. fluitans*); only identifiable with a microscope

**B**

Upright plants in flushes or fens

Go to

*Drepanocladus aduncus* p. 714  
*Warnstorfia fluitans* p. 717

322

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves strongly curved (almost to form a circle),  
relatively short and broad; shoots often  
mottled green and red, not orange; no  
prominent inflated, colourless cells at basal  
angles of leaves



Go to

***Scorpidium cossonii***

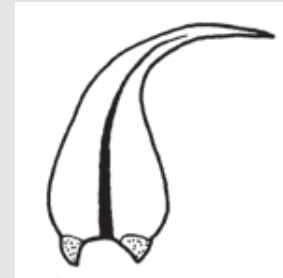
*p. 722*

Title page

Key to groups

**B**

Leaves moderately curved (tip pointing more or  
less at right angle to stem), relatively long and  
narrow; shoots usually orange or light green;  
prominent group of inflated, colourless cells at  
basal angles of leaves



Go to

***Warnstorfia exannulata***

*p. 716*

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**323**

**Key:** *Key to Pleurocarpous mosses*

**Section:** Pleurocarps with leaves not turned to one side, even near the tip of shoots

**Progress:** 1,2,3,4,285,286,287,323

**A**

Plant aquatic, growing submerged (periodically) in streams, rivers or lakes

**B**

Plant not aquatic

Go to

**324**

**328**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**

Leaves long (5 mm), keeled and often nested together to form 3 strict rows, giving the shoot a triangular cross-section.



**B**

Shoots not triangular in cross-section

Go to

***Fontinalis antipyretica***

*p. 671*

325

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Shoots very long, narrow (<3 mm wide) and string-like; dark green, with appressed, round-backed leaves



**B**

Shoots not string-like

Go to

***Fontinalis squamosa***  
p. 671

326

Go to

Title page

Key to groups

Restart section

Go back one step

A

Leaves with thickened margins easily visible through a ×10 hand lens

B

Leaves without thickened margins

Go to

*Cinclidotus fontinaloides*  
(an acrocarp)  
p. 502

327

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Tip of shoots flat; leaves wide and bluntly pointed; nerve not quite reaching tip

**B**

Tip of shoots not flat; leaves narrow and gradually tapering to tip; nerve very thick, reaching leaf tip

Go to

***Platyhypnidium riparioides***  
p. 758

***Cratoneuron filicinum*** p. 701  
***Hygroamblystegium*** spp. P. 706

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Very large plants (>12 cm long), habit bushy; stems rigid, erect, red, and branched from the base; leaves 3–5 mm long

**B**

Plants and leaves not so large

Go to

***Rhytidiadelphus triquetrus***  
*p. 816*

329

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Appressed patches on bark with fruiting stems projecting, and abundant capsules on short seta (less than capsule length) along one side of shoots

**B**

Capsules, if present, with seta longer than capsules; not appressed to bark

Go to

***Cryphaea heteromalla***  
*p. 672*

330

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Secondary shoots somewhat tassel-like or resembling miniature trees, with erect or ascending, almost bare main stem and crowded branches above



**B**

Plants lacking this tree-like or nearly tree-like habit



Go to

331

334

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Stems thick, rigid, and blackish-green or dark brown, unbranched for several centimetres, so that habit is markedly tree-like; in grassy places, on calcareous rocks or woodland floor

**B**

Stems thin, weak and not dark green, with some branches almost to base, so that habit tassel-like or nearly tree-like; on tree bases or acidic rocks

Go to

332

333

Go to

Title page

Key to groups

Restart section

Go back one step

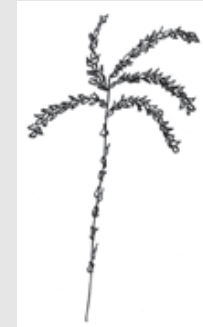
**A**

Stems erect; leaves 2–3 mm long, branches originating from the same level on the main stem, so looking like miniature palm trees; in moist, grassy places



**B**

Stems sub-erect or arched; leaves about 1 mm long, branches arising from different places on the main stem; on shaded, calcareous rocks, woodland floor, etc



Go to

***Climacium dendroides***

p. 674

***Thamnobryum alopecurum***

p. 684

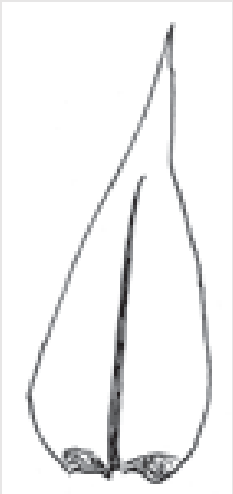
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Title page

Key to groups

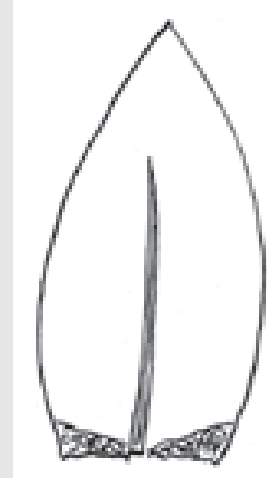
Restart section

Go back one step



**A**

Stem leaves finely drawn out at tip; branches appear slender and acutely pointed; capsules curved, inclined



**B**

Stem leaves only shortly pointed; branches usually appear relatively stout and bluntly pointed; capsules straight, erect

Go to

***Isothecium myosuroides***

*p. 736*

***Isothecium alopecuroides***

*p. 737*

Go to

Title page

Key to groups

Restart section

Go back one step

A

Shoots regularly bi- or tripinnate in one plane, hence frond-like or feather-like

B

Shoots simple or only once pinnate, or irregularly branched

Go to

335

337

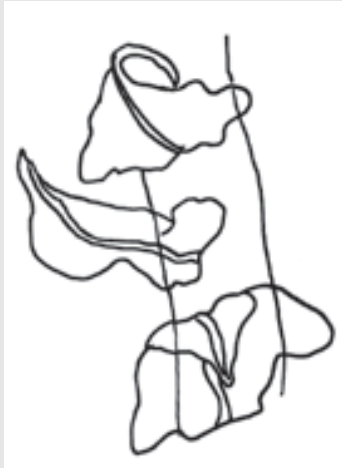
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Title page

Key to groups

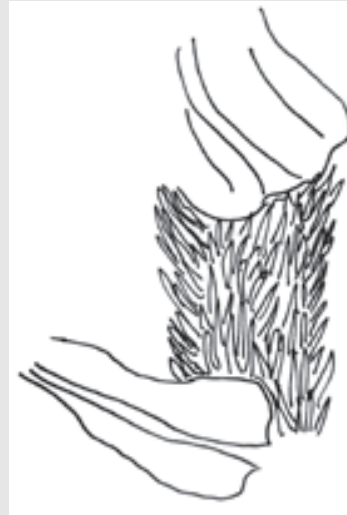
Restart section

Go back one step



**A**

Shoots not symmetrically tripinnate; stem without outgrowths, so apparently shiny; branch leaves <1 mm long, much narrower than stem leaves; leaves with prominent nerve



**B**

Shoots symmetrically tripinnate; stem with abundant outgrowths, so appearing fuzzy and dull; leaves with or without a nerve

Go to

***Kindbergia praelonga***  
p. 767

336

Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Stems green or almost black, rigid; leaves not glossy, vivid green, yellow-green or orange, whole plant very opaque

**B**

Stems red, not rigid; leaves glossy, pale or dull yellowish green, whole plant appearing translucent

Go to

***Thuidium tamariscinum***  
p. 696

Go to

***Hylocomium splendens***  
p. 821

Title page

Key to groups

Restart section

Go back one step

A

Stems red or orange-red; nerve absent

B

Stems green or yellowish; nerve present or absent

Go to

338

342

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves straight, with very short point or rounded  
at tip, appressed or slightly spreading; branching  
usually very regularly pinnate

**B**

Leaves curved, with broad base and long, acute  
tip which is widely spreading or recurved;  
branching most often irregular (sometimes  
pinnate)

Go to

339

340

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Uppermost leaves rolled together (even when moist) to form sharp, spearhead shoot tip, lower leaves rather widely spreading; growing in damp places, including lawns

**B**

Spearhead shoot tip normally lacking (at least when moist), lower leaves not widely spreading; chiefly heath and moorland

Go to

***Calliergonella cuspidata***

*p. 797*

***Pleurozium schreberi***

*p. 815*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaf tip straight or slightly curved back; stem  
with abundant, fuzzy outgrowths (hand lens);  
irregular bushy growth form

**B**

Leaves strongly curved; stem lacking outgrowths;  
more or less pinnate

Go to

***Loeskeobryum brevirostre***  
*p. 820*

341

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Plant robust (shoots >4 mm wide), with strong, rigid, freely branched stems; leaves curved gradually from base to long, fine, hook-like tip; upland woods and mountain slopes

**B**

Plant of medium size (shoots <3 mm wide), with relatively weak, little-branched stems; leaves abruptly bent outwards above short, clasping base, divergent tip straight and scarcely hook-like; grassy places (very common)

Go to

***Rhytidiadelphus loreus***

*p. 817*

***Rhytidiadelphus squarrosus***

*p. 818*

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**342**

**Key:** *Key to Pleurocarpous mosses*

**Section:** Pleurocarps with leaves not turned to one side, even near the tip of shoots

**Progress:** ...285,286,287,323,328,329,330,334,337,342

**A**

Semi-aquatic: in flushes, marshes or on rocks or tree bases by water

**B**

Not semi-aquatic; habitat various

Go to

**343**

**351**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**343**

**Key:** *Key to Pleurocarpous mosses*

**Section:** Pleurocarps with leaves not turned to one side, even near the tip of shoots

**Progress:** ...285,286,287,323,328,329,330,334,337,342,343

**A**  
Nerve absent

**B**  
Leaves with nerve

Go to

**344**

**346**

Go to

Title page

Key to groups

Restart section

Go back one step



A

Uppermost leaves rolled together to form sharp, spearhead shoot tip

B

Uppermost leaves not forming a spearhead

Go to

*Calliergonella cuspidata*  
p. 797

345

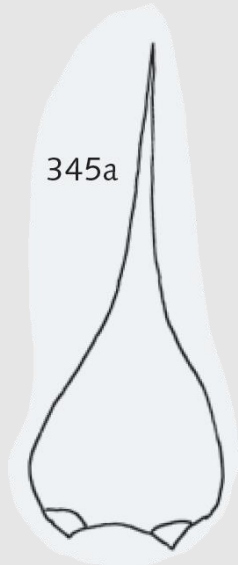
Go to

Title page

Key to groups

Restart section

Go back one step



**A**

Leaves with long point, much narrower than leaf base; uppermost leaves widely spreading in conspicuously star-like manner; in calcareous flushes



**B**

Leaves small (about 1 mm), without narrow upper part; secondary stems with long, slender branches; dark green plant with golden shoot tips; on rocks by waterfalls and upland streams

Go to

***Campylium stellatum***

*p. 709*

***Hyocomium armoricum***

*p. 813*

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Leaves very short (<1.5 mm long); capsules abundant; tiny yellowish-green plant on silty tree bases by rivers

**B**

Leaves longer (>1.5 mm long); colour not yellowish-green

Go to

***Leskea polycarpa***  
*p. 689*

347

Go to

Title page

Key to groups

Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**347**

**Key:** *Key to Pleurocarpous mosses*

**Section:** Pleurocarps with leaves not turned to one side, even near the tip of shoots

**Progress:** ...285,286,287,323,328,329,330,334,337, 342,343,346,347

**A**

Leaf tip obtuse, rounded or hooded; shoots upright in wetlands

**B**

Leaf tip sharply pointed

Go to

**348**

**349**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

A

Leaves overlapping; shoots string-like; rhizoids  
growing from leaf tip

B

Leaves widely spreading; shoots not string-like;  
no rhizoids on leaf tip

Go to

***Straminergon stramineum***  
p. 720

***Calliergon cordifolium***  
p. 719

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Tip of shoots flat; leaves egg-shaped and shortly pointed; plant deep green or brown; older stems often nearly bare of leaves; always by or in running water

**B**

Leaves narrower, with rather long, fine point; plant mid-green; older stems not bare of leaves

Go to

***Platyhypnidium riparioides***  
p. 758

350

Go to

Title page

Key to groups

Restart section

Go back one step

**A**

Secondary stems with numerous short, nearly erect branches; leaves crowded and not widely spreading; tip of branches light yellowish-green and very glossy

**B**

Habit usually creeping, with irregular or pinnate branching; leaves rather distantly spaced and widely spreading; tip of branches darker green and not very glossy

Go to

***Brachythecium rivulare***  
p. 748

***Leptodictyum riparium***  
p. 707

Go to

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Go back one step

**A**

Leaves minute (0.5 mm long), only just distinguishable with the naked eye

**B**

Leaves larger (1 mm or over), easily seen with the naked eye

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Go to

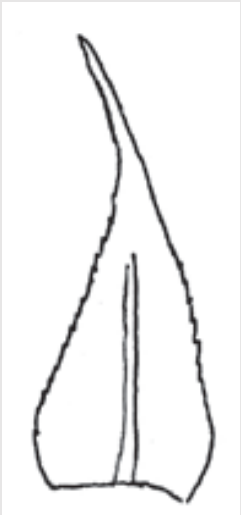
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**A**

Leaves >3 times as long as wide,  
with very long, narrow tip;  
usually on wood, stone, walls,  
etc



**B**

Leaves about 2 times as long as  
wide, with relatively short tip;  
usually on soil

Go to

***Amblystegium serpens***

*p. 702*

***Rhynchostegiella pumila***

*p. 773*

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Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**353**

**Key:** *Key to Pleurocarpous mosses*

**Section:** Pleurocarps with leaves not turned to one side, even near the tip of shoots

**Progress:** ...285,286,287,323,328,329,330,334,337,342,351,353

**A**

Leaves bluntly rounded, or abruptly contracted into minute point at tip

**B**

Leaves gradually tapering to acute point

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**354**

**356**

Go to

**Title page**

**Key to groups**

**Restart section**

**Go back one step**

**A**

Leaves opaque, not glossy, much shrivelled and curled when dry; yellow-green plant of calcareous banks or limestone

**B**

Leaves translucent, glossy, little altered when dry; habitats various

Go to

***Anomodon viticulosus***  
*p. 694*

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Title page

Key to groups

Restart section

Go back one step

**A**

Uppermost leaves rolled together to form sharp, spearhead shoot tip; shoots green, occasionally orange-green; very common in wet lawns, fens, flushes, etc

**B**

Spearheads lacking, shoot tip appearing blunt and rounded; branches swollen with concave leaves; usually pale green; very common on dry, grassy banks, woodland floor, etc.

Go to

***Calliergonella cuspidata***

*p. 797*

***Pseudoscleropodium purum***

*p. 753*

Go to

Title page

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Restart section

Go back one step

**A**

Plant with numerous, fine branches on which the leaves are much smaller and narrower than on the main stems; forming untidy, usually deep green, straggling mats on shaded banks, etc

**B**

Plant lacking very fine, small-leaved branches, and less intricately branched; leaves nearly equal in size throughout shoot

Go to

***Kindbergia praelonga***  
p. 767

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Restart section

Go back one step



**A**

Tiny plants with abundant, short branches and very narrow (>4 times as long as wide), gradually tapering, short ( $\leq 1.5$  mm long) leaves with no pleats; common on wall mortar and limestone

**B**

Plants larger, with longer leaves; leaves with or without pleats

Go to

***Rhynchostegiella tenella***

*p. 771*

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Restart section

Go back one step

**British Bryological Society**

Interactive key to British Mosses and Liverworts

**358**

**Key:** *Key to Pleurocarpous mosses*

**Section:** Pleurocarps with leaves not turned to one side, even near the tip of shoots

**Progress:** ...285,286,287,323,328,329,330,334,337,342,351,353,356,357,358

**A**

Leaves without nerve, leaves pointing up from substrate in the same direction to form a crest; plants creeping, usually olive-green

**B**

Leaves with a nerve, not pointing up from substrate

Go to

***Hypnum resupinatum***  
*p. 805*

**359**

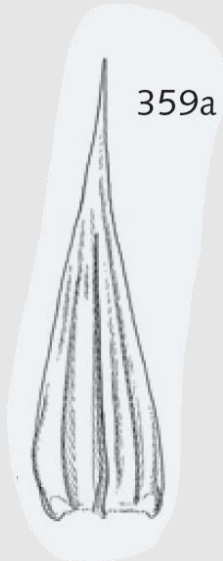
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**A**  
Leaves strongly and obviously pleated (hand lens); narrowly spearhead-shaped, tapering gradually from base to a rather long, fine tip, usually 2–2.5 mm long; plants very glossy



**B**  
Leaves not or scarcely pleated (except *Eurhynchium striatum*, p. 764), often <2 mm long, rather abruptly narrowed above the middle to form fairly short, fine point; dull or glossy

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Go back one step



**A**

Bright green, with silky sheen, creeping on walls, boulders or tree bases; branches curved when dry

**B**

Yellowish, of loose habit with ascending branches; in calcareous grassland or sand dunes; branches always straight

Go to

***Homalothecium sericeum***

*p. 738*

Go to

***Homalothecium lutescens***

*p. 739*

Title page

Key to groups

Restart section

Go back one step

**A**

Robust; leafy shoots (stem and stem leaves) 2 mm or more across, leaves 1.5–2.5 mm long and 1 mm broad at base

**B**

Slender; leafy shoots (stem and stem leaves) 1 mm across, leaves distinctly smaller than above

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Go back one step

**A**

Shoots upright, glossy pale green, with spearhead shoot tip; leaves very concave, with a fine wispy point at the tip

**B**

Plants either irregularly branched or creeping, without spearhead shoot tip

Go to

***Cirriphyllum piliferum***  
p. 756

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Key to groups

Restart section

Go back one step

**A**

Shoots usually with long (>1.5 cm), upright branches, rarely creeping; leaves appressed to stem, making shoots string-like; plants very pale or yellowish-green

**B**

Shoots creeping or with short (<1 cm) branches; shoots not string-like

Go to

***Brachythecium albicans***  
p. 741

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Go back one step



**A**

Stems and branches rather rigid, forming big, bushy tufts; leaves evenly and widely spreading when dry; stem leaves heart-shaped to triangular, with strong longitudinal pleats; capsule lid long-beaked



**B**

Stems creeping, with soft, irregular ascending branches, not forming bushy tufts; leaves less regularly and widely spreading when dry, broadly egg-shaped to spearhead-shaped and not or only faintly pleated; lid of capsule not long-beaked

Go to

***Eurhynchium striatum***

*p. 764*

***Brachythecium rutabulum***

*p. 746*

Go to

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Restart section

Go back one step

A

Leaves rather widely spaced on stems and branches so that they hardly overlap; common on soil

B

Leaves less widely spaced, so that many overlap

Go to

*Oxyrrhynchium hians*  
p. 768

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Go to

Title page

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Restart section

Go back one step

**A**

Shoots with long (>1.5 cm), upright branches; leaves appressed to stem, making shoots string-like; plants very pale or yellowish-green

**B**

Shoots creeping or with short (<1 cm) branches; shoots not string-like

Go to

***Brachythecium albicans***  
p. 741

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Title page

Key to groups

Restart section

Go back one step

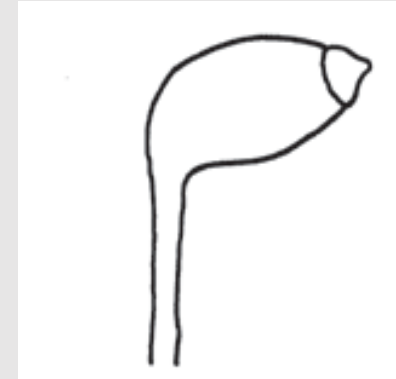
**A**

Capsule lid long-beaked; seta smooth (not identifiable in the field without capsules)



**B**

Capsule lid not long-beaked; seta roughened (not identifiable in the field without capsules)



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Restart section

Go back one step



**A**

Leaves more or less flat; plants mid-green;  
forming loose, irregularly branched mats

**B**

Leaves very concave; plants pale green; forming  
neat patches of rather tightly packed branches

Go to

***Rhynchostegium confertum***  
p. 761

***Rhynchostegium murale***  
p. 760

Go to

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Key to groups

Restart section

Go back one step

**A**

Long, narrow leaves with nerve almost reaching the tip; seta roughened in upper half; mostly on rocks, especially in the west

**B**

Relatively shorter, wider leaves, with nerve reaching 3/4 of the way up leaf; seta roughened throughout; on rocks, trees or soil, mostly in the east

Go to

***Brachythecium populeum***  
p. 744

***Brachythecium velutinum***  
p. 745

Go to

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Key to groups

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Go back one step