

*Classification of
bryophytes
(Strotler & Crandle)*

The roughly 18,000 species of bryophytes are now classified into three coordinate phyla (Table 6.1), the **Marchantiophyta** (= Hepatophyta) (liverworts), **Anthocerotophyta** (hornworts) and **Bryophyta** (mosses), comprising of 1,237 genera, 193 families, 39 orders and 9 classes (Stotler and Crandall-Stotler, 1977; Crandall-Stotler, 1980; Kenrick and Crane, 1997 and Crandall-Stotler and Stotler, 2000) :

**Phylum (Division) I : MARCHANTIOPHYTA
(Hepatophyta) (Liverworts)**

Class 1 : Marchantiopsida

Subclass 1 : Sphaerocarpidae

Order 1 : SPHAEROCARPALES

Suborder 1 : Sphaerocarpineae

Family 1 : Sphaerocarpaceae

Suborder 2 : Riellineae

Family 1 : Riellaceae

Subclass 2 : Marchantiidae

Order 1 : MONOCLEALES

Family 1 : Monocleaceae

Order 2 : MARCHANTIALES

Suborder 1 : Marchantiineae

- Families :**
1. Aytoniaceae
 2. Wiesnerellaceae
 3. Conocephalaceae
 4. Lunulariaceae
 5. Marchantiaceae
 6. Monosoleniaceae
 7. Cleveaceae
 8. Exormothecaceae

Suborder 2 : Corsiniineae

- Families :**
1. Cyathodiaceae
 2. Corsiniaceae

Suborder 3 : Monocarpineae

Family 1 : Monocarpaceae

Suborder 4 : Targioniineae

Family 1 : Targioniaceae

Order 3 : RICCIALES

- Families :**
1. Oxymitraceae
 2. Ricciaceae

Class 2 : Jungermanniopsida

Subclass 1 : Metzgeriidae

Order 1 : HAPLOMITRIALES

Family 1 : Haplomitriaceae

Order 2 : BLASIALES

Family 1 : Blasiaceae

Order 3 : TREUBIALES

Suborder 1 : Treubiineae

Family 1 : Treubiaceae

Suborder 2 : Phyllothalliineae

Family 1 : Phyllothalliaceae

Order 4 : FOSSOMBRONIALES

Suborder 2 : Fossombroniineae

- Families :**
1. Fossombroniaceae
 2. Allisoniaceae

Suborder 2 : Pellineae

- Families :**
1. Pelliaceae
 2. Sandeothallaceae

Order 5 : METZGERIALES

Suborder 1 : Pallaviciniineae

- Families :**
1. Pallaviciniaceae
 2. Makinoaceae
 3. Hymenophytaceae

Suborder 2 : Metzgeriineae

- Families :**
1. Aneuraceae
 2. Mizutaniaceae
 3. Vandiemeniaceae
 4. Metzgeriaceae

Subclass 2 : Jungermanniidae

Order 1 : LEPICOLEALES

Suborder 1 : Ptilidiineae

- Families :**
1. Ptilidiaceae
 2. Mastigophoraceae
 3. Chaetophyllopsidaceae

Suborder 2 : Lepicoleineae

- Families :**
1. Vetaformataceae
 2. Lepicoleaceae

Suborder 3 : Perssoniellineae

- Families :**
1. Schistochilaceae
 2. Perssoniellaceae

Suborder 4 : Lepidolaenineae

- Families :**
1. Trichocoleaceae
 2. Lepidolaenaceae
 3. Neotrichocoleaceae
 4. Jubulopsidaceae

Order 2 : JUNGERMANNIALES

Suborder 1 : Herbertineae

- Families :**
1. Herbertaceae
 2. Pseudolepicoleaceae
 3. Trichotemnomataceae
 4. Grolleaceae

Suborder 2 : Balantiopsidineae

Family 1 : Balantiopsidaceae

Suborder 3 : Lophocoleineae

Families : 1. Geocalycaceae

2. Gyrothyraceae

3. Plagiochilaceae

4. Acrobolbaceae

5. Arnelliaceae

Suborder 4 : Lepidoziineae

Families : 1. Phycolepidoziaceae

2. Calypogeiaceae

3. Lepidoziaceae

Suborder 5 : Cephaloziineae

Families : 1. Cephaloziaceae

2. Cephaloziellaceae

3. Jackiellaceae

4. Adelanthaceae

Suborder 6 : Antheliineae

Family 1 : Antheliaceae

Suborder 7 : Brevianthineae

Families : 1. Brevianthaceae

2. Chonecoleaceae

Suborder 8 : Jungermanniineae

Families : 1. Jungermanniaceae

2. Mesoptychiaceae

3. Gymnomitriaceae

4. Scapaniaceae

Order 3 : PORELLALES

Suborder 1 : Porellineae

Family 1 : Porellaceae

Suborder 2 : Jubulineae

Families : 1. Goebeliellaceae

2. Jubulaceae

3. Bryopteridaceae

4. Lejeuneaceae

Order 4 : RADULALES

Family 1 : Radulaceae

Order 5 : PLEUROZIALES

Family 1 : Pleuroziaceae

Phylum (Division) II : ANTHOCEROTOPHYTA
(Hornworts)

Class 1 : Anthocerotopsida

Order 1 : ANTHOCEROTALES

Families : 1. Anthocerotaceae

2. Phaeocerotaceae

3. Dendrocerotaceae

4. Notothylaceae

Phylum (Division) III : BRYOPHYTA (Mosses)

Class 1 : Takakiopsida

Order 1 : TAKAKIALES

Family 1 : Takakiaceae

Class 2 : Sphagnopsida

Order 1 : SPHAGNALES

Family 1 : Sphagnaceae

Order 2 : AMBUCHANANIALES

Family 1 : Ambuchananiaceae

Class 3 : Andreaeopsida

Order 1 : ANDREAEALES

Family 1 : Andreaeaceae

Class 4 : Andreaebryopsida

Order 1 : ANDREAEOBRYALES

Family 1 : Andreaebryaceae

Class 5 : Polytrichopsida

Order 1 : TETRAPHIDALES

Families : 1. Tetraphidaceae

2. Oedipodiaceae

3. Buxbaumiaceae

Order 2 : POLYTRICHALES

Family 1 : Polytrichaceae

Class 6 : Bryopsida

Subclass 1 : Diphysciidae

Order 1 : DIPHYSCIALES

Family 1 : Diphysciaceae

Subclass 2 : Funariidae

Order 1 : TIMMIALES

Family 1 : Timmiaceae

Order 2 : ENCALYPTALES

Family 1 : Encalyptaceae

Order 3 : FUNARIALES

Families : 1. Funariaceae

2. Disceliaceae

3. Gigaspermaceae

Subclass 3 : Dicranidae

Order 1 : GRIMMIALES

Families : 1. Grimmiaceae

2. Ptychomitriaceae

3. Scouleriaceae

4. Drummondiaaceae

Order 2 : ARCHIDIALES
 Family 1 : Archidiaceae

Order 3 : SELIGERIALES
 Families : 1. Seligeriaceae
 2. Wardiaceae

Order 4 : DICRANALES
 Families : 1. Bryoxipliaceae
 2. Fissidentaceae
 3. Dicranaceae
 4. Bruchiaceae
 5. Dienemonaceae
 6. Leucobryaceae
 7. Ditrichaceae
 8. Rhabdoweisiaceae
 9. Rhachithecaceae
 10. Erpodiaceae
 11. Schistostegaceae
 12. Eustichiaceae
 13. Viridivelleraceae

Order 5 : POTTIALES
 Families : 1. Pottiaceae
 2. Ephemeraceae
 3. Sepotortellaceae
 4. Calymperaceae
 5. Cinclidotaceae
 6. Bryobartramiaceae

Subclass 4 : Bryidae

Superorder 1 : BRYANAE

Order 1 : SPLACHNALES
 Families : 1. Splachnaceae
 2. Meesiaceae
 3. Catosciopaceae

Order 2 : ORTHOTRICHIALES
 Family 1 : Orthotrichaceae

Order 3 : HEDWIGIALES
 Families : 1. Hedwigiaceae
 2. Helicophyllaceae
 3. Rhacocarpaceae

Order 4 : BRYALES
 Families : 1. Aulacomniaceae
 2. Bartramiaceae
 3. Orthodontiaceae
 4. Bryaceae
 5. Phyllocladaceae
 6. Pseudoditrichaceae

7. Mnaceae
 8. Leptostomataceae

Superorder 2 : RHIZOGONIANAE

Order 1 : RHIZOGONIALES
 Families : 1. Hypnodendraceae
 2. Rhizogoniaceae
 3. Calomniaceae
 4. Mitteniaceae
 5. Cyrtopoaceae
 6. Spiridentaceae
 7. Pterobryellaceae
 8. Racopilaceae

Superorder 3 : HYPNANAE

Order 1 : HOOKERIALES
 Suborder 1 : Hookeriineae
 Families : 1. Hookeriaceae
 2. Leucomiaceae
 3. Daltoniaceae
 4. Adelotheciaceae
 5. Pilotrichaceae
 6. Hypopterygiaceae

Suborder 2 : Ptychomniineae
 Families : 1. Ptychomniaceae
 2. Garovagiaceae

Order 2 : HYPNALES
 Families : 1. Rutenbergiaceae
 2. Trachylomataceae
 3. Ambystegiaceae
 4. Cratoneuraceae
 5. Helodiaceae
 6. Hylocomiaceae
 7. Rhytidiaceae
 8. Leskeaceae
 9. Regmatodontaceae
 10. Pterigyandraceae
 11. Rigodiaceae
 12. Thuidiaceae
 13. Campyliaceae
 14. Brachytecaceae
 15. Stereophyllaceae
 16. Myriniaceae
 17. Fabroniaceae
 18. Meteoraceae
 19. Plagiotheciaceae
 20. Fontinalaceae
 21. Entodontaceae
 22. Climaciaceae

-
23. Pleuroziopsida-
ceae
 24. Hypnaceae
 25. Catagoniaceae
 26. Symphyodonta-
ceae
 27. Sematophyllaceae
 28. Hydropogonaceae
 29. Myuriaceae
 30. Cryphaeaceae
 31. Prionodontaceae
 32. Leucodontaceae
 33. Pterobryaceae
 34. Phyllogoniaceae
 35. Orthorrhynchia-
ceae
 36. Lepyrodontaceae
 37. Neckeraceae
 38. Leptodontaceae
 39. Lembophyllaceae
 40. Anomodontaceae
 41. Theliaceae
 42. Microtheciellaceae
 43. Sorapillaceae