

BRANCH III—Bryophyta.

Cellular plants with roots, epidermis and stomata,
often with leafy stems,
Sexual generation predominant.

Thallophyta.—(Continued.)

II. RHODOPHYCEÆ.
(Red Seaweeds.)

Order.
Florideæ.

IX. CHAROPHYCEÆ

Order.
1. Characeæ.

Asexual reproduction
often predominant
by means of tetra-
ridia.

Perfect plant
♂ or ♀
Spermatogonia.

Spermatia ♀

Perfect plant
♂ or ♀
Procarp.

Trichogyne.

III. Carpospores.

IV. Protonema.

Asexual reproduction
often predominant by
means of bulbils, or
tubers, or special vege-
tative branches.

1. Perfect plant ♂
2. Antheridium ♀
3. Spermatozoids motile

1. Perfect plant ♂
II. Oogonium.
III. Oosphere.

1 x IV. Oospore.

5 x V. Pro-embryo.

X. HEPATICA.
(Liverworts)

Orders

1. Jungermanniacea.
2. Ricciacea.
3. Anthocerotacea.
4. Marchantiacea.

Asexual reproduction often pre-
dominant, by means of simple
separation of the vegetative axis,
by adventitious shoots or by
gemmae.

1. Perfect plant ♂ or ♀
2. Antheridia ♀
3. Spermatozoids motile

1. Perfect plant ♂ or ♀
II. Archegonium.
III. Oosphere (Ovum).

4 x IV. Oospore.

5 x V. Embryo rudimentary.

6 x VI. Sporogonium parasitic
upon the sexual gene-
ration.

7 x VII. Spores with elaters.

8 x VIII. Protonema.

XI. MUSCINE.
(Mosses)

Orders.

1. Sphagnaceæ.
2. Andreaceæ.
3. Phascaceæ.
4. Bryaceæ.

Asexual reproduction predomi-
nant, by the development of a
protonema, more rarely through
gemmae.

1. Perfect plant ♂ or ♀
2. Antheridia ♀
3. Spermatozoids motile.

1. Perfect plant ♂ or ♀
II. Archegonium.
III. Oosphere (Ovum).

4 x IV. Oospore.

5 x V. Embryo rudimentary.

6 x VI. Sporogonium parasitic
upon the sexual gene-
ration.

7 x VII. Spores

8 x VIII. Protonema.

Oöphyte Generation.
(Sexual Phase).
Alternation of generations well defined.

Sporophyte Generation.
(Asexual Phase)