

Isogamous sexual
reproduction in algae

Ulothrix (flagellated)
Spirogyra (non-flagellated)

Anisogamous sexual
reproduction in algae

Udorina

Oogamous sexual
reproduction in algae

Volvox, *Fucus*

Algin

Brown Algae

Carrageenan

Red Algae

Agar

Gelidium, Gracilaria
(Red algae)

Motile asexual
spores in algae

Zoospores

Laminarin, Mannitol

Complex
carbohydrates of
Brown algae

Fucoxanthin

Brown Algae

Phycoerythrin

Red Algae

Floridean Starch

Found in Red algae, similar to amylopectin and glycogen

The main plant body is a gametophyte

Bryophytes

Peat

Sphagnum

Microphylls

Selaginella

Macrophylls

Fern

Heterosporous
pteridophytes

Selaginella
Salvinia

Vascular plants
without seeds

Pteridophytes

Mycorrhiza

Pinus
(symbiotic association with fungi
in the roots)

Coralloid roots

Cycas
(nitrogen-fixing cyanobacteria
in the roots)

The tallest
gymnosperm

Sequoia (red wood tree)

Microscopic
angiosperm

Wolffia

Parallel venation

Monocotyledons

Reticulate venation

Dicotyledons

The cells of embryo
sac are

Haploid

Algae showing
haplo-diplontic life
cycle

Ectocarpus,
Polysiphonia, Kelps

Algae showing
diplontic life cycle

Fucus

Zygotic meiosis

Haplontic life cycle