

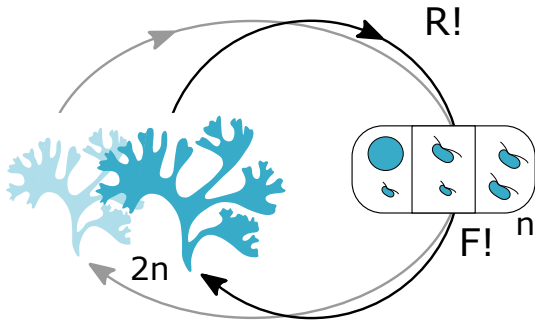
Haplodiplontic

a biphasic life cycle with free living haploid gametophytic and diploid sporophytic phases that both undergo mitosis. The gametophytic and sporophytic phase can be similar in size and morphology (isomorphic) or different (heteromorphic). Here, sex determination happens in the haploid phase.

E.g. isomorphic monoicous:

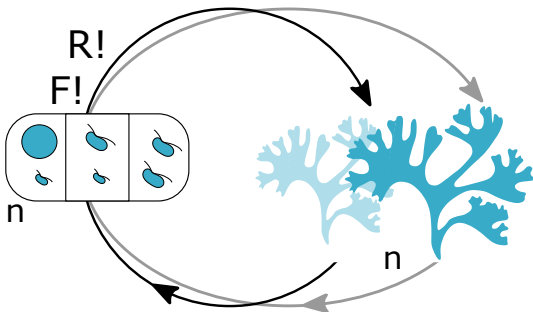
Dermocorynus; heteromorphic monoicous:

Atractophora, *Gloiosiphonia*; isomorphic dioicous: *Gracilaria*; heteromorphic dioicous: *Cutleria*, *Derbesia*, *Laminariales (kelps)*



Diplontic

a monomorphic life cycle where mitosis only happens in the diploid phase, the haploid phase is restricted to the unicellular gametes. Here, sex determination happens in the diploid phase. E.g. *Fucus*, *Cystoseira*



Haplontic

a monomorphic life cycle where mitosis only happens in the haploid phase. Here, sex determination happens in the haploid phase. E.g. *Chara*, *Tolypella*, *Rhodophysema*, *Pantoneura*