

haplont for the solely haploid organism and diplont for the solely diploid, it follows that we can establish the diplohaplont (Hartmann) for the organisms with real morphological alternation of generations between haploid and diploid generations. Thus I am of the opinion that the terms haplobiont and haplont as well as the terms diplobiont and diplont may be kept in use, but each with its separate definition.

Thus a haplont is a sexual haploid plant with only the zygote diploid (*Conjugatae*, *Coleochaete*, *Scinaia*, *Nemalion* etc.);

a diplohaplont is a sexual plant with morphological alternation between a haploid generation and a diploid generation developed from the zygote and finished by reduction division (*Ulva*, *Enteromorpha*, *Dictyota*, *Cutleria*, *Laminaria*, *Liagora tetrasporifera*, *Polysiphonia*, *Bryophyta*, *Pteridophyta* and the *Phanerogams*);

a diplont is a sexual diploid plant in which only the gametes are haploid (*Codium*, *Fucus*);

a haplobiont is a sexual plant with only one kind of individuals or bionts (except males and females!) in Nature. Haplobionts are either haplonts (*Scinaia*), diplonts (*Fucus*) or diplohaplonts (*Bryophyta*), that is, they are either haploid, diploid or diplohaplonts with both stages in one individual.

*Conjugatae*, *Coleochaete*, *Scinaia* and *Nemalion* are all haplobiontic haplonts, but *Codium* and *Fucus* are haplobiontic diplonts. Haplobiontic diplohaplonts are *Liagora tetrasporifera* (see further on!), the Mosses, and the *Phanerogams*.

A diplobiont is a sexual plant with alternation of generations and two kinds of individuals or bionts in Nature, but these two kinds of bionts or individuals need not necessarily coincide with the two cytological generations (e. g. *Polysiphonia*). It does not matter whether the bionts or generations are alike or not. Diplobionts are *Ulva*, *Enteromorpha*, *Dictyota*, *Cutleria*, *Laminaria*, *Polysiphonia* and the *Pteridophyta*, all with established morphological alternation of generations between freeliving generations. These are alike in *Ulva*, *Enteromorpha*, *Dictyota*; different in *Cutleria*, *Laminaria*, and the *Pteridophyta*. In *Polysiphonia* the two haploid and diploid generations do not coincide with the two bionts. Therefore it was just the *Polysiphonia*-type that led to the establishment of the type "diplobiontic" plants.

I think I have now made clear the distinct difference between haplonts and haplobionts and between diplonts and diplobionts. Both these terms are necessary and have a quite different meaning. I must, however, decidedly protest against any attempt to confuse these two quite necessary but quite different terms, all the more as I have in my *Scinaia*-paper of 1915 given a complete and clear definition, which ought not to be misapprehended nor to be given a quite different meaning.

In my opinion, the diplobiontic type of the *Rhodophyceae* has arisen by a delay of the reduction-division; for if by some reason the reduction-division does not occur immediately after the fertili-