

Although an overwhelming majority of salt-water species is characteristic in the case of animals, this is not so in the case of plants. It is difficult to be very precise in a matter which involves the counting up of an immense number of aquatic species, but there seems some evidence for believing that the number of fresh-water forms is actually in excess of those which inhabit the sea. Be this as it may, we can safely state that there is no such striking disproportion as certainly exists in the animal kingdom, and that the waters of the globe, both salt and fresh, are inhabited by very many forms of vegetable life.

Of the higher plants, a large proportion of the Phanerogams are purely terrestrial; but, with the exception of the Gymnospermæ (among which, however, swamp-plants occur), most of the larger groups contain species of aquatic habitat. The marine flora includes comparatively few Phanerogams, which belong to the families Hydrocharitaceæ and Potamogetonaceæ, the so-called sea-grass (*Zostera marina*) being a very common and widely distributed example. There are no marine Dicotylæ. The Phanerogams of fresh water, on the contrary, belong to the most diverse orders of Angiosperms, and far exceed in number of species those of salt water. Of importance amongst the Dicotylæ are the Nymphæaceæ, all fresh-water forms; certain Ranunculaceæ (*Batrachium*); Ceratophyllaceæ; Haloragidaceæ (*Myriophyllum*); and Utriculariaceæ. Of Monocotylæ we may mention the following families:—Alismaceæ; Potamogetonaceæ (with *Potamogeton natans*); Naiadaceæ; and Lemnaceæ.

It is amongst the Cryptogams, however, that we find the number of aquatic forms really great. Nevertheless, the Pteridophyta and Bryophyta are of little importance, for both of these groups are entirely unrepresented in the sea, although a few examples are known from fresh water. Of Pteridophyta, various Salviniaceæ (*Salvinia* and *Azolla*), Marsiliaceæ, and Isoetaceæ (*Isoetes lacustris*) occur in fresh water, and of Bryophyta a rather larger assemblage, among which we may mention *Riccia fluitans*, *Fontinalis antipyretica*, *Hypnum*, and *Sphagnum*.

The Thallophyta, then, constitutes the great proportion of both salt- and fresh-water plants, but the classes differ markedly in their distribution between the two media. The Characeæ, with the well-known genera *Chara* and *Nitella*, are exclusively fresh-water forms. Both the Phæophyceæ and Rhodophyceæ, on the other hand, are very widely distributed, and are represented by many species in the sea, while in fresh water there occur only a few isolated examples. Among the most important of these Algæ we may indicate the genera *Laminaria*, *Fucus*, *Sargassum*, and *Chondrus* from the ocean, and *Batrachospermum* from fresh water.