

Preface

Bryophyte are widely distributed throughout the world from the Polar Regions to the tropics, most abundant in humid environments. They favour moist, shady places; a few grow on arid sites and some are aquatic, but none is Marine. Most bryophytes are small, usually 2 to 5 cm tall; the smallest one is about 4 mm, and a few are more than 30 cm long. Bryophytes display a distinct alternation of sexual and asexual generations. The sexual gametophyte with a haploid chromosome number is more conspicuous, longer-lived, and more diversified, compared with the diploid sporophyte generation which is reduced in size, short-lived, and structurally attached to the Gametophyte, and partially or completely dependant on it.

The Gametophyte plant body is either a Flattened Thallus or leafy shoot. In the latter case the main shoot bears lateral flattened leaves. Leaves and stems are usually simple. The Gametophyte of Bryophytes do not have roots but are generally attached to the substratum by means of unicellular or multicellular branched or unbranched hair-like Rhizoids which are not necessarily absorptive but do influence water and mineral uptake. Vascular tissue is totally absent or very rudimentary with no Lignification of cells.

Bryophytes are less economically important than other land plants except the Peat Moss Sphagnum, which has some medicinal value. Some are used Ornamentally. They have indirect use in the formation of Soil and Rock, in Vegetation Cover and Soil Conservation, and act as a pioneer plant in plant succession.

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