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Rhizoids

These are attached to the substratum by unicellular or multicellular rhizoids.

Sex Organs

The main plant body produces gametes, hence it is called gametophyte. The sex organs in bryophytes are multicellular, the male sex organs in bryophytes is called antheridium (which produces biflagellate antherozoids) and the flask-shaped female sex organ is called archegonium (produces a single egg).

Reproduction

It is of sexual type reproduction. The antherozoids are released into water where they come in contact with archegonium.

Fertilisation

It occurs inside the archegonium. The egg secretes a chemical which attracts spermatozoids. Sperms require a thin film of water for swimming and reaching the dehisced archegonium. One sperm fuses with an egg and produces a diploid zygote. Zygotes do not undergo reduction division immediately instead, they produce a multicellular body called sporophyte.

Dependent Sporophyte The sporophyte is not free-living but attached to the photosynthetic gametophyte deriving nourishment from it. Some cells of the sporophyte undergo reduction division (meiosis) to produce haploid spores (which germinate to produce gametophyte).

The sporophyte of bryophytes is called sporogonium because it is mainly dependent and meant for producing spores.