ERADAJAYE VICTOR MUDIAGA

19/MHS01/156

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| DIVISION | CLASS |
| Thallophyta | Phycotinae(Algae)Mycotinae(Fungi) |
| Bryophyta | Hepaticae(Liverworts)Musci(Mosses) |
| Pteridophyta | Psilotinate (Ps ilotum)Lycopodinae(Lycopodium, Selaginella)Equisetinae (Horsetails)Filicinae (Fems) |
| Spermatophyta | Gymnospemae (Gymnosperms)Angiospemae (Angiospems) |

2

* Algae serves as food for people and livestock
* It serves as thickening agent in ice-cream and shampoo
* Algae have High iodine content therefore prevent goiter
* Different species of red algae provide agar and carrageen used for the preparation of various gels used in scientific research
* Carrageen is also used as a thickening and stabilizing agent in products e.g. pudding syrups and shampoos.
* Algae have also been used for their purported powers to cure or prevent illnesses.

3

Chlamydomonas represents the unicellular and motile forms of green algae,Found in stagnant water usually along with other forms. Flagella are the structures for mobility. The cell is bounded by a cellulose cell wall: contains organelles e.g. nucleus, mitochondria, stigma (eyespot), cup-shaped chloroplast, pyrenoid etc.The nucleus carries the genetic programme ofthe cell,The stigma is for photoreception. The mitochondria mediate the elaboration of energy molecules. Manufactured sugar is processed into starch on the pyrenoid.

4

**In chlamydomonas reproduction can either be vegetative of sexual**

Through vegetative reproduction a cell about to divide loses its flagella. The cell undergoes mitotic division leading t to nuclei, cell walls are elaborated which delimit cytoplasm around each nucleus i.e. two daughter cells (zoospores are released, increase in the population of vells in colony is achieved by repeated mitotic division.

Through sexual reproduction aggregation of cells in a colony occurs under favourable conditions. These cells pair by their posterior ends. This pairing is said to be isogamous because the pairing cells(gamates) are morphologically identical. The cytoplasm of the pairing cells (plasmogamy)fuse and the flagella are lost. The two nuclei fuse(karyogamy) this situation is essentially a fertilization process so that a zygote is formed. After karyogamy sometimes, the zygote undergoes two successive cell divisions the first division restores the haploid condition by halfing the nuclear material in the two resulting nuclei (reduction division) while in the second division each haploid nucleus undergoes a normal mitotic division. These two divisions which end up with four cells and with n quantity of nuclear material are together known as meiosis. The four products of meiosis are released as haploid zoospores.

5

Volvox evolutionary more advanced than Pandorina

There are more cells in the volvox’s colony

6

Fucus

A genus of brown algae whose species are often found on rocks in the intertidal zones of the sea shores. The plant body is flattened, dichotomously-branched thallus with a mid rib, a vegetative apex, a reproductive apex at maturity) and a multicellular disk (hold fast) with which plant is attached to rock surface. The plant body also has air bladders which is believed to aid the plant to float on the water. Various species of fucus exist; vary in size from a few centimetres to about2metres in length. They also vary in terms of whether the sex cells are found in the same sexual chamber on different plant bodies