

NAME: OSASENAGA HERO DOUGLAS AGHEDO
MATRIC NO: 19/MHS01/054

BIO 102 ASSIGNMENT

1. Eichler's Grouping of 1883

- Thallophyta - Phycotinae(algae), Mycotinae(fungi)
- Bryophyta - Hepaticae(liverworts), Musci(mosses)
- Pteridophyta - Psilotinate(psilotum), Lycopodinae(lycopodium, selaginella), Equisetinae(horsetails), Filicinae(ferns)
- Spermatophyta - Gymnospermae(gymnosperms), Angiospermae(angiosperms)

2. Importance of Algae to Man

- Direct use of algae as food for man
- Used as fertilizer
- Medicines and minerals
- Alginic acid, algin and mannitol which is used in the production of dyes, buttons and combs
- Manufacture of soaps and alums

3. Unicellular Form of Algae

- It is found in stagnant water
- The cell is bounded by a cellulose cell wall
- It has flagella which enables movement

4. Reproduction in Unicellular Alga

Cell division or fission is the simplest method of reproduction for the unicellular forms of algae. It is often called binary fission as found in chlamydomonas. In this method the two vegetative cells divide mitotically into two daughter cells, those finally divide and new individuals. The reproduction is asexual.

5. Differences between Volvox and Synura

- In volvox, reproduction is both sexual and asexual, while in synura, reproduction is only sexual
- In volvox, there is a large number of cells in the spherical colonies, while in synura, there is only a few number of cells

6. A Complex form of Alga

Fucus; It is a genus of the brown Algae whose species are found on rocks in the intertidal zones of the sea shores. The body of the plant is flattened, has a dichotomously-branched thallus with a mid rib, a vegetative apex and a multicellular disk with which the plant is attached to rock surface. The body has air bladders which is believed to aid the plant to float on the water. It varies in size from a few centimetres to about 2 metres in length. Sexual reproduction is oogamous, sex cells are produced in conceptacles which have openings (ostioles) on the surface of the thallus.