Akinbohun Samuel Opeyemi

BIO 102

Nursing

19/MHS02/017 ASSIGNMENT

1. A system of plant taxonomy, the Eichler system was the first phylogenic (phyletic) or evolutionary system. He gave system of classification for the whole plant kingdom. Eichler classified the plant kingdom into two sub-kingdom. They are Cryptogamae and Phanerogamae. A] Cyptogamae are flowerless and seedless plants. They are simple and flowerless plants like algae, mosses and ferns which do not produce flowers, fruits and seeds. Cryptogams are considered as lowerplants.

B] Phanerogamme are seed bearing plants. So they are also known as spermatophytes. They are higher plants. The plant body is differentiated into roots, stem and leaves with well developed vascular system. Examples are angiosperms and gymnosperms.

1. Importance of algae toman.
   1. Direct use of algae as food forman
   2. As a source of agar in the production of ice cream, jellies, dessertsetc.
   3. Medicines andminerals
   4. Manufacture ofiodine
   5. Alginic acid, align and mannitol which is used in the production of dyes, buttons andcombs
   6. Manufacture of soaps andalums
   7. Used asfertilizer
   8. Ornamentaluses
2. Unicellular form of algae are also called acellular algae as they function as complete living organisms. Unicellular forms are common in all the groups of algae except Rhydophyceae, Phyaeophycaea and Charophyceae. The unicells may be motile ornon-motile.
3. 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 chlamydominas. In this method the two vegetative cells divides mitotically into two daughter cells, those finally divide an new individuals. There reproduction isasexual.
4. Difference between Volvox andSynura

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| VOLVOX | SYNURA |
| A. Reproduction is both sexual and  asexual | A. Reproduction is sexual |
| B. Spherical colonies of up to 50,000  cells. | B.Few cells in colonies |

1. Spirogyra is a filamentous charophyte green algae of the order of Zygementales, named for the helical or spiral arrangement of the chloroplasts that is characteristic of the genus. It is commonly found in freshwater habitats, and there are more than 400 species of spirogyra in the world.