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MICROBIOLOGY

BIO 102 ASSIGNMENT

1.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-kingdoms. They are Cryptogamae and Phanerogamae.

A.Crytogamae are flowerless and seedless plants. They are simple and flowerless plants like algae,mosses and ferns which do not produce flowers,fruits and seeds.Cryptograms are considered as lower plants.

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

2.Ornamental uses

Used as fertilizer

Source of agar

Medicines and minerals

Manufacture of iodine

Manufacture of soaps and alums

Direct use of algae as food for man

3.Unicellular form of algae are also called a cellular 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 or non-motile

4.The unicellular forms of algae commonly reproduce by the simple process called binary fission as found in Chlamydomonas.In this method,the vegetative cell divides mitotically into two daughter cells which finally behave as new individual. Their reproduction is asexual.

5.

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| Volvox | Synura |
| Reproduction is both sexual and asexual  Spherical colonies of up to 50,000 cells | Reproduction is sexual  Few cells in colonies |

6.Spirogyra is a filamentous charophyte green algae of the 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.