

Bio 102

Akinajiye Feranmi David

19/MHS03/001

Anatomy

1) A system of plant taxonomy, the **Eichler system** was the first phylogenetic (phyletic) or evolutionary system. The system was based on dividing the plant kingdom into those plants with concealed reproductive organs (non-floral), the (Cryptogamae, = hidden reproduction) and those with visible reproductive organs (floral), the (Phanerogamae, = visible reproduction).[6]

Moreover, Eichler was the first taxonomist to separate the Phanerogamae into Angiosperms and Gymnosperms and the former into Monocotyledonae and Dicotyledonae. [7] His primary ranks were Divisions (*Abtheilung*), followed by orders (*Reihe*)

2) Since the pre-historic times,

several sea weeds have been used as direct source of food to human beings. Several fresh water algae have also been utilised in the preparation of various kinds of vitaminized food. As we know well that the fundamental food of sea living stock are algae and they are used as food by human beings. Several diseases caused by vitamin deficiency such as vitex, asthma, tooth decay, etc., may be eradicated, if flour of the sea weeds is added to the food. According to Dr. Weston, iodine is the most important element to enable the thyroid glands to secrete the thyrosin which contains 60% iodine. It controls the general development of the animal. Sea weeds are the best source of iodine for human beings.

3) Unicellular Algae: Unicellular forms 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 Rhodophyceae, Phaeophyceae and Charophyceae. The unicells may be motile or non-motile.

4) Many small **algae reproduce** asexually by ordinary cell division or by fragmentation, whereas larger **algae reproduce** by spores. Some green **algae** produce nonmotile spores called aplanospores, while others produce zoospores, which lack true cell walls and bear one or more flagella.

5)

COLONIAL ORGANISMS	FILAMENTOUS ORGANISMS
A group of individual organisms with a close dependent relationship with other organisms	Organisms that form a filamentous growth
Form a spherical mass of cells	Form an array of cells with an end to end arrangement
Appear as a sphere	Appear as a thread
A result of multiple cell divisions by mitosis	A result of multiple binary fission
Cells lack an intercellular cell wall	Cells have an intercellular wall
Bacteria, algae, marine invertebrates, & lower chordates	Bacteria, fungi, and algae.
Generally sessile	Either sessile or floating
	Visit www.PEDIAA.com

6) The largest and most **complex** marine **algae** are called seaweeds, while the most **complex** freshwater **forms** are the Charophyta, a division of green **algae** which includes, for example, Spirogyra and stoneworts. ... Diatoms and brown **algae** are examples of **algae** with secondary chloroplasts derived from an endosymbiotic red **alga**.