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1. Eichler gave a system of classification for the whole plant kingdom. It is a traditional system as well as a phylogenetic system of classification of plants. Eichler classified the plant kingdom into two sub-kingdoms. They are Cryptogamae (non-floral or hidden reproduction) and Phanerogamae (floral or visible reproduction)
2. **Importance of algae to man:**

**Food for sea animals and fishes:**

The algae are used as a direct source of food by several sea animals and fishes. The marine algae are rich in iodine and several other important minerals. This makes the fundamental source of food for all marine animals and in this respect, sea is the richest food producing area.

**Mineral contents:**

High mineral content, up to five percent of the wet material, in which all the mineral elements important in human and animal physiology are found, makes sea weeds a unique supplement for a well-balanced diet. Potassium, sodium and chloride are found in the ionic form in sea weeds (*Pillai 1956*).

**Direct use of algae as food for man:**

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 utilized 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.

1. **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.

1. The unicellular forms of algae commonly reproduce by this simple process, often called binary fission as found in Chlamydomonas, Synechococcus, diatoms etc. In this method the vegetative cell divides mitotically into two daughter cells, those finally behave as new individual.
2. A coenobium colony is a colony containing fixed number of cells, with little or no specialization. They occur in several groups of algae. The cells are often embedded in a mucilaginous matrix, and maybe motile or non-motile, while a non-Coenobium Colony Among the simplest non-coenobic colonies are those of green algae included in the order Tetrasporales, in which successive generations of cells have reproduced by motile or non-motile spores which are either retained in the gelatinous matrix (palmelloid colonies) or remained attached to one another by gelatinous stalks.
3. **Charophyta:**

The most complex freshwater form of algae. A division of green algae which includes, for example, Spirogyra and stonewort.