

DEPARTMENT OF BOTANY BY: DR. RANJANA  
D.B. COLLEGE, JAYNAGAR ASST. PROFESSOR  
L.N.M. D. DARBHANGA (BIHR) (GUEST TEACHER)  
Lecture No 08 Date: 05.12.2020  
B.Sc. PART I (H)  
PAPER - I

CORE CONCEPT OF

Group - A, Algae

RANGE OF THALLUS STRUCTURE I

Algae are plants of simple structure, simplest of which consists of a non-motile single-celled to filamentous forms with no well-organized nucleus and plastids. They exist many unicellular motile forms which may be solitary or colonial. Particularly, certain brown algae possessing long flexuous stem-like structure and an expanded blade portion, have holdfasts attaching them to rocks. Some of these plants have considerable differentiation of tissue very similar to higher plants. But they lack vascular tissues. On the other hand, in the terrestrial forms there are distinct adaptations in the plant body to ~~survive~~ survive under constant inadequate inadequate

supply of moisture. Again, there are heterotrichous forms where the plant body is highly developed being differentiated into prostrate and erect portions resembling prototype of simplest plant body of Bryophyte level with very clear division of labour.

1. Unicellular motile form:— Single-celled plant body being spherical, oval or pear-shaped bearing two flagella in the anterior region.

2. Unicellular non-motile (sedentary) form — The cells commonly small and spherical without any flagella and do not exhibit any movement. Some are solitary others in groups being embedded in a gelatinous material. Also there are slightly elongated forms which can be differentiated into base and apex.

3. Motile Coenobial form:— Definite number of motile cells are embedded in a gelatinous matrix with their flagella protruded out, or are held together by cytoplasmic connection. The cells may be compact or ~~too~~ loosely arranged. Thus a colony is formed of definite