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Date: 12 Sept. 2020

Lecture No: 10

B.Sc. PART I

CORE CONCEPT OF ALGAE

Conjugation in Spirogyra: In Spirogyra sexual reproduction takes place through conjugation. Conjugation in Spirogyra is of two types:

- (i) Scalariform and
- (ii) Lateral

- (i) SCALARIFORM conjugation: Two filaments of different strains come close ~~to~~ to each other. Small lateral protuberances grow from the opposite cells of filament. By the dissolution of middle lamella, a conjugation tube is formed. The cell content of the adjoining filaments metamorphose into gametes. Gametes from the cell of one filament migrate to the cell of another filament (-) through the conjugation tube.
- (ii) Lateral conjugation: 1. Indirect lateral conjugation: Here conjugation tube is formed by a slight protrusion above the cross wall separating two adjoining cells. Subsequently, the septum gets partially dissolved.
2. Direct lateral conjugation: The gamete migrates to the adjoining cell by piercing the septum in the centre.