

Dr. Rachana Shalini

(15)

Deptt. of Botany

Class : Deg. I (Hons.)

Paper : I (Algal)

Topic : Oedogonium (contd.)

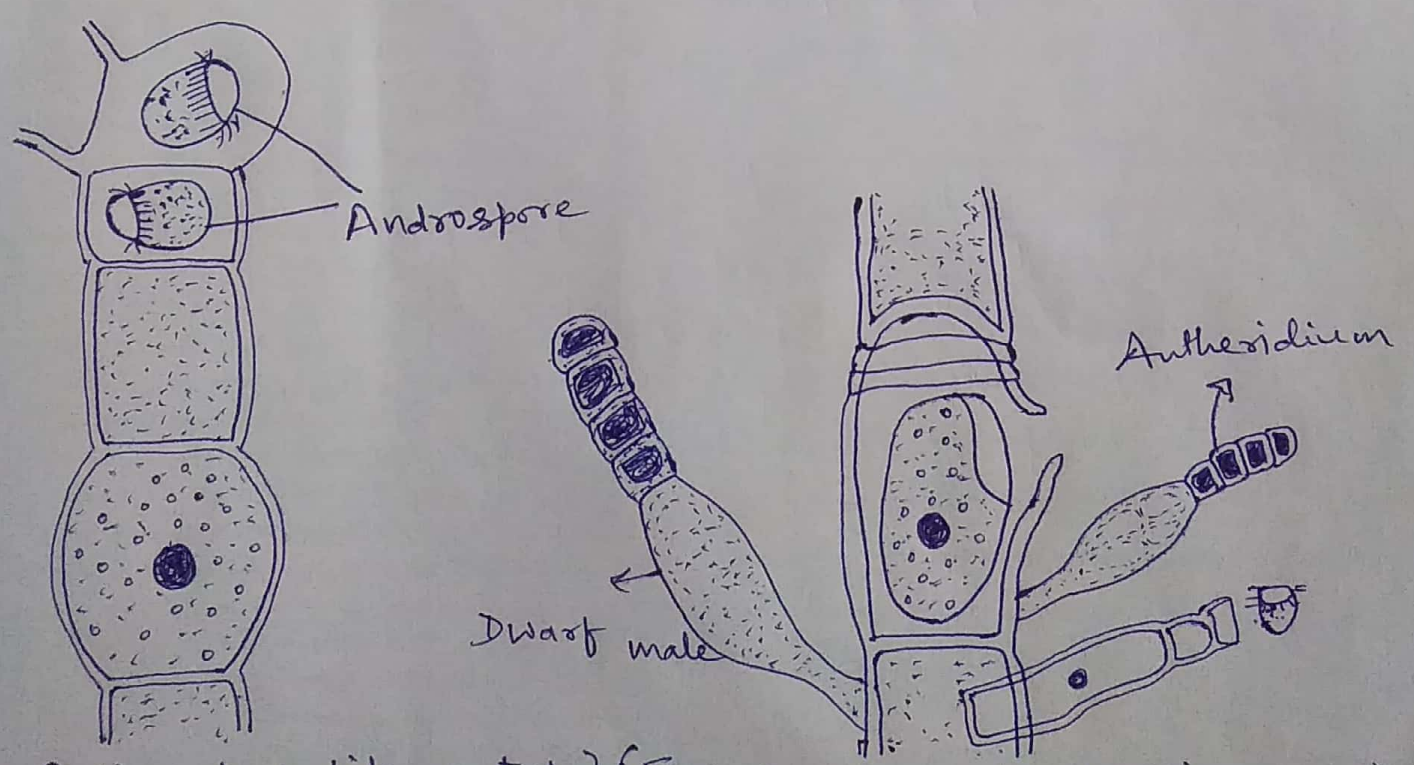
Lecture No. - 81

Date : 16/09/2020

Dwarf Malex or (Nannandria) in Oedogonium :

- In certain dioecious species of Oedogonium, a complicated process of reproduction takes place. A special type of zoospore, called androspore, is produced by the same filament that bears the oogonia or by a distinct filament.
- Androspores are produced in special cells, called androsporangia.
- Androsporangia formed either singly or in a row, like the antheridia, by division of the ordinary vegetative cells of the filament.
- Each androsporangium produces a single androspore, which like the antherozoid, is provided with a crown of cilia and is motile.
- The androspore is intermediate in size between the zoospore and the antherozoids.
- When liberated, the androspore swims for a while and soon attaches itself directly to the oogonium or to a cell close to it.

- It then produces a short narrow filament, called the dwarf male or nannandrium.
- This consists of an elongated basal cell and a terminal cell or a row of cells (2 to 4).
- Each such cell is an antheridium. It bears a pair of small, motile antherozoids crowned with cilia.
- The antheridium opens by a lid at the apex or it ruptures by the wall and the antherozoids are liberated.
- They swim to the oogonium and fertilisation takes place in the usual way.



Portion of a filament of Oogonium showing the oogonia and two androspores.

Fig: A filament showing Oogonium with a receptive spot, and two dwarf males or Nannandria