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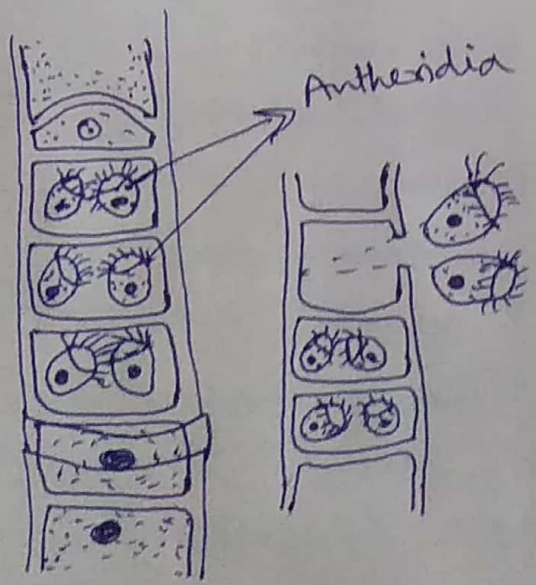
Reproduction in Oedogonium

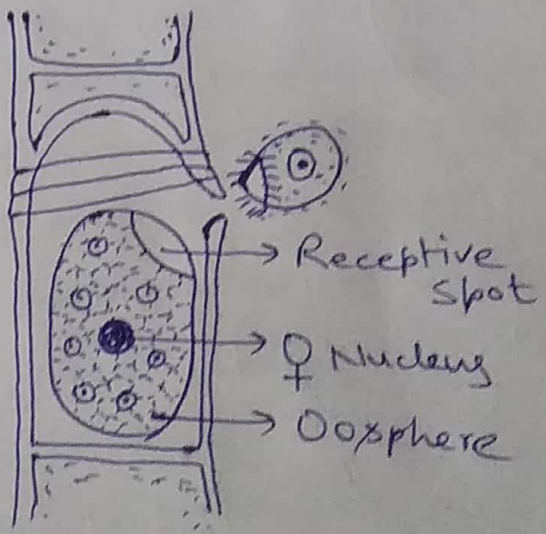
- **Sexual Reproduction:**

- In Oedogonium, sexual reproduction takes place through differentiated male and female gametes, known as antherozoids and oospheres or egg-cell respectively. Many species are monoecious or homothallic and some are dioecious (heterothallic).
- Antherozoids are borne in certain small cells, known as antheridia.
- Antheridia are produced in a series by repeated divisions of any cell of the filament. The protoplasmic contents of each antheridium divides once and produce a pair of antherozoids.
- Each antherozoid has a ring of cilia and is like the zoospore, but it is smaller in size.
- Antherozoids or sperms are liberated by a transverse splitting of the antheridial wall.

- The egg-cell is borne in a large spherical cell, known as Oogonium.
- The oogonia occur amongst the ordinary vegetative cells of the filament, either singly or 2 or more in a row.
- The protoplasmic contents of the oogonium separate from the cell-wall and become round off, forming a single, large, non-motile egg-cell or Oosphere.
- This egg-cell enlarges and becomes spherical or oval. There is a colourless receptive spot at one end of it and the oogonium opens-close to this spot by a pore or a transverse slitting of the wall.
- Receptive spot is the point of entry of the sperms, during fertilization.



(Fig: Formation of sperm or Antheridia and their Liberation)



(Fig: Structure of Oogonium at the time of Fertilization)

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