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Class : Deg. I (Hons.)

Paper : I (Algae)

Topic : Life-cycle of Fucus (Continued)

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Life-cycle of Fucus (Continued):

• Reproduction in Fucus :

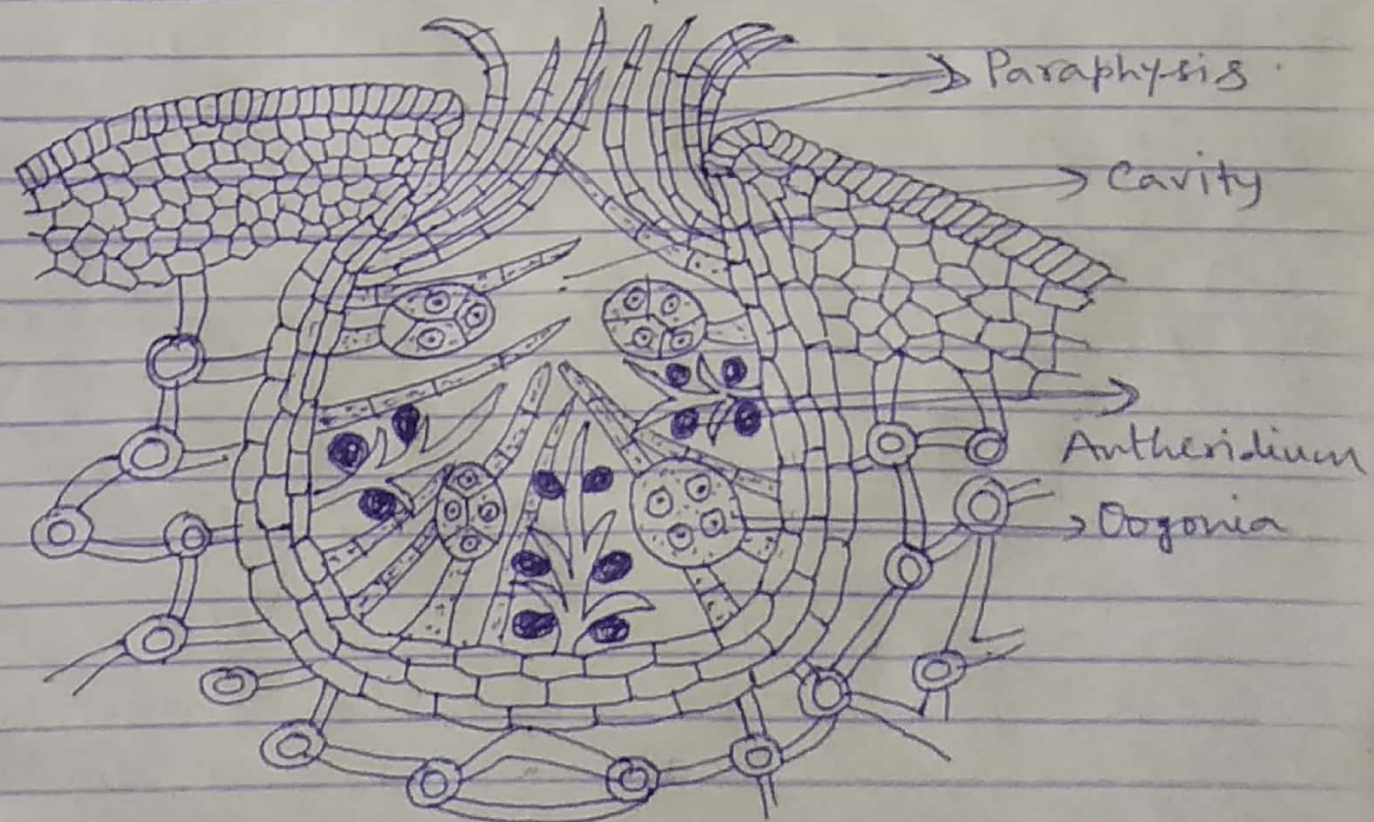
- Asexual reproduction is absent in Fucus.
- Vegetative reproduction occurs through fragmentation of the thallus. The detached parts then float on the water and vegetate.
- Fucus usually reproduces sexually through heterogametes - antherozoids and eggs borne by the antheridium and Oogonium, respectively. Sexual reproduction is of Oogamous type.
- The sex organs consists of antheridium and Oogonium and developed in conceptacles, a roughly spherical cavity.

• Structure of Conceptacle :

Antheridia and Oogonia are borne in special globose or flask-shaped cavities, known as conceptacles, which lie embedded in the swollen tip or receptacle of the thallus.

Both antheridia and oogonia may occur in the same conceptacle or in two separate conceptacles borne by the same plant (monocious) or they may be borne by two separate plants (dioecious). A conceptacle of monocious species shows following structures:-

- (i) several unbranched, multicellular, sterile hairs called Paraphysis.
- (ii) An apical opening known as the ostiole.
- (iii) Numerous oval, sac-like antheridia borne on small, much-branched antheridial filaments; and
- (iv) A number of isolated oval oogonia, each borne on a very short stalk-cell.



(Fig: L.S. of Conceptacle showing antheridial filaments with antheridia, oogonia and paraphysis (Continued...))