

SACCULINA

Phylum → Arthropoda.
Class → Crustacea.
Order → Rhizocephala.
Genus → Sacculina:

* Features :-

- Sacculina is an ectoparasite on crab.
- The parasitic life leads to the degeneration of many arthropodan characters of Sacculina.
- It looks like a fleshy tumour attached to the abdomen of the crab by a peduncle.
- The peduncle divides into many branched roots and these roots ramify the body of the crab the roots take the nutritive material from the crab.
- The posterior end of the parasite has an opening called cloacal aperture.
- The cloacal aperture opens into a broad chamber with eggs filled.
- The broad chamber and the visceral mass are enclosed by a mantle.
- The visceral mass consists of a ganglion, a cement gland and the reproductive system.
- The digestive system and circulatory system are absent.
- Sacculina is a hermaphrodite.
- The peritrochanter is internal.

Life - history :-

- The life history of Sacculina is significant, because the arthropodan characters of Sacculina is exhibited in the life cycle only.

- The fertilised eggs develop into a nauplius larva.

Nauplius Larva

- It is the free swimming larva :-

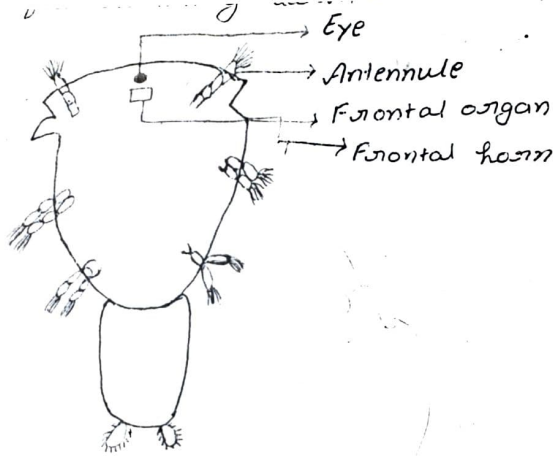


Fig → Nauplius larva of *Sacculina*

- It is triangular in shape and it contains three pairs of appendages namely antennule, Antenna, Mandible and median eye. It also contains frontal horn and a frontal sense organ.

- It contains numerous germ cells and it has no alimentary canal.

- It undergoes moulting and changes into the next larva called Cypris larva.

CYPRIS LARVA

Cypris larva

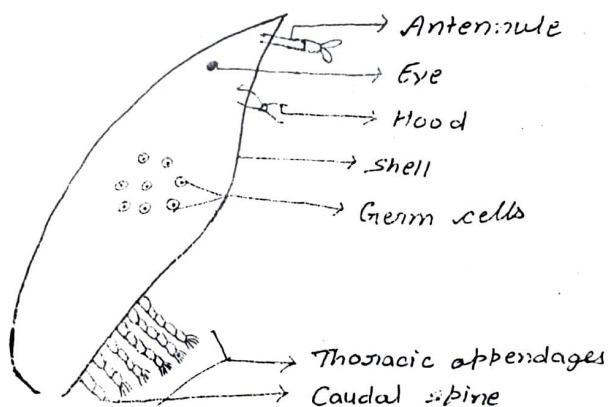


Fig → Cypris larva

- It is a free swimming larva.
- It is triangular in shape.
- It is enclosed under trivalve shell.
- The larva has 7-pairs of appendages, one pair of antennules and 6 pairs of thoracic appendages.
- The abdomen has a pair of caudal spine.
- Single eye persists.
- The terminal end of the hook.
- After a short free swimming life. The cypris larva is attached to the body of a crab and transferred into the larva are called megalopa larva.