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Larval Forms in Mollusca

Dr. Amrutha Gopan
Assistant Professor
School of Fisheries

Centurion University of Technology and Management
Odisha



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- ❖ The development may be direct or indirect.
- ❖ In the direct development, there will be no larval stage and the young ones will hatch out from the eggs which resemble their parents in general appearance, except the size.
- ❖ The direct development is seen in cephalopods.
- ❖ In indirect development, a larval stage is seen in majority of molluscan forms.



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Three main larval forms are observed in molluscan forms.

- **Trochophore**
- **Veliger**
- **Glochidium**



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TROCHOPHORE

- ❑ It is pear shaped and measures about 0.5 mm in length.
- ❑ A circle of preoral cilia, the prototroch or velum divides the body into two unequal parts, the upper one consist of prostomium whereas the lower part bearing mouth and anus.
- ❑ The preoral part is large and convex with an apical plate bearing the long cilia called the apical cilia as seen in the larvae of patella, dentalium etc

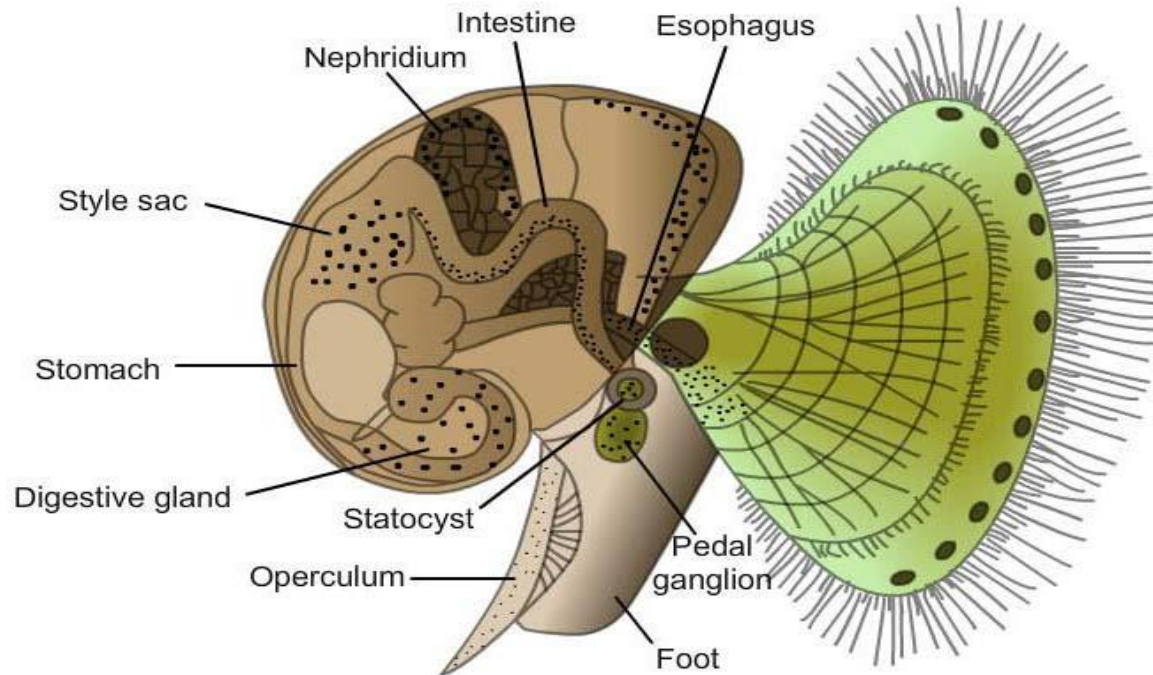


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VELIGER

Veliger Larvae





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VELIGER

- ❑ The preoral ciliate area or velum begin to protrude on both sides as a bilobed flap.
- ❑ The velum are very delicate and extensive, and a very delicate organs of locomotion.
- ❑ Between the bases of velar lobes, the anterior end of the larva is provided with eyes and tentacles.
- ❑ The larva has a shell into which the velar apparatus could be withdrawn and which encloses the partly developed viscera



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GLOCHIDIUM

- ❖ The larva is enclosed by two valves, each edge of which bears a hook.
- ❖ The shell valves cover a larval mantle, which bears four groups of sensory bristles.
- ❖ A rudimentary foot is present, to which is attached a long adhesive thread, the byssal thread.
- ❖ There is neither mouth nor anus and which measures from 0.1 mm to 0.5mm depending upon the species.