Larval Forms in Mollusca

Trochophore

- Pear shaped
- Measures about 0.5 mm in length
- Circle of preoral cilia
- Prototroch or velum divides the body into two unequal parts
- Upper one consist of prostomium
- Lower part bearing mouth and anus
- Preoral part is large and convex
- Near the apical cilia
- Two ciliated elevations each consisting of a single cell
- Bearing a bunch of cilia called telotroch

Trochophore larva

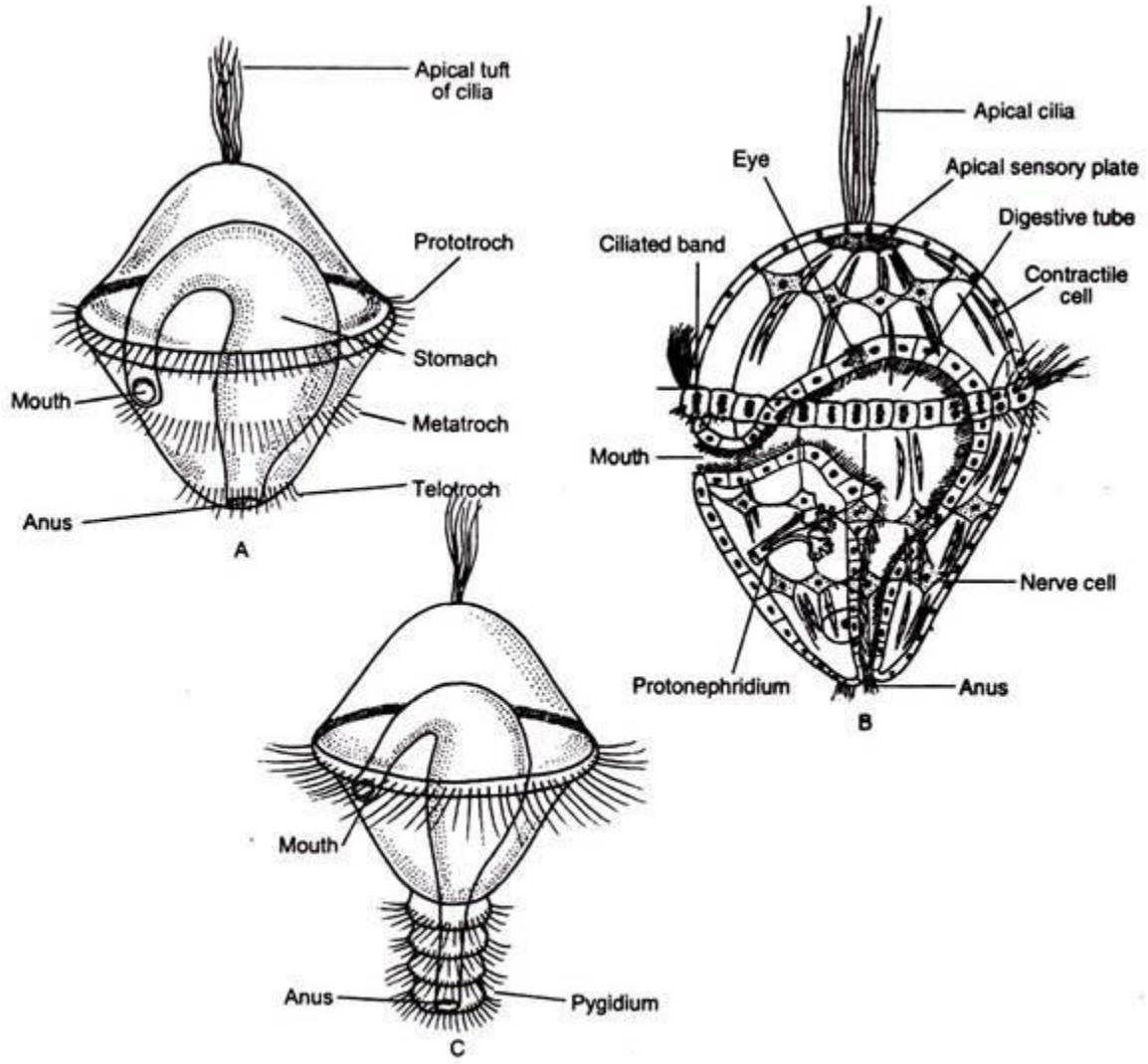


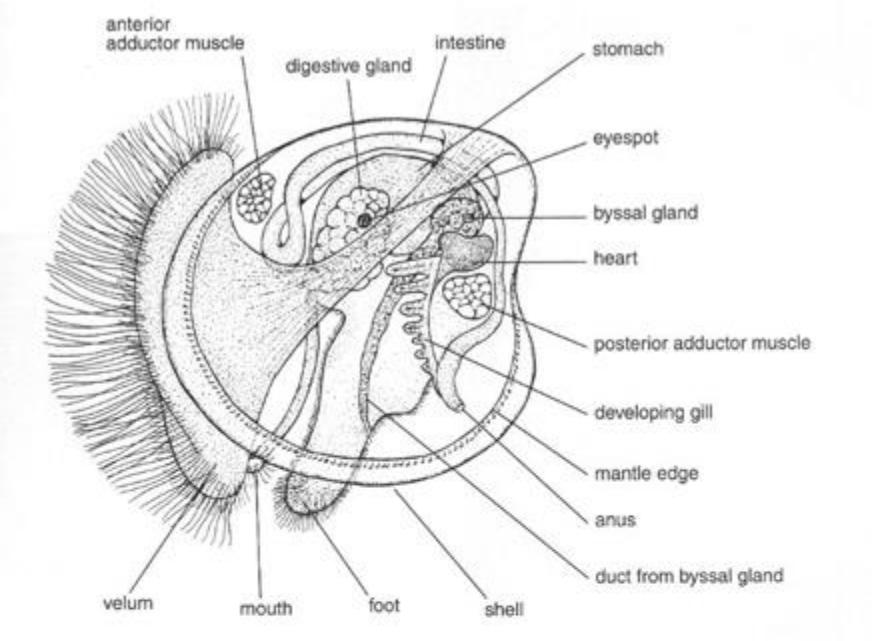
Fig. 17.12: A. External features of a trochophore larva. B. Internal organization of a trochophore larva. C. An advanced trochophore larva showing the additional ciliated segments at the posterior end.

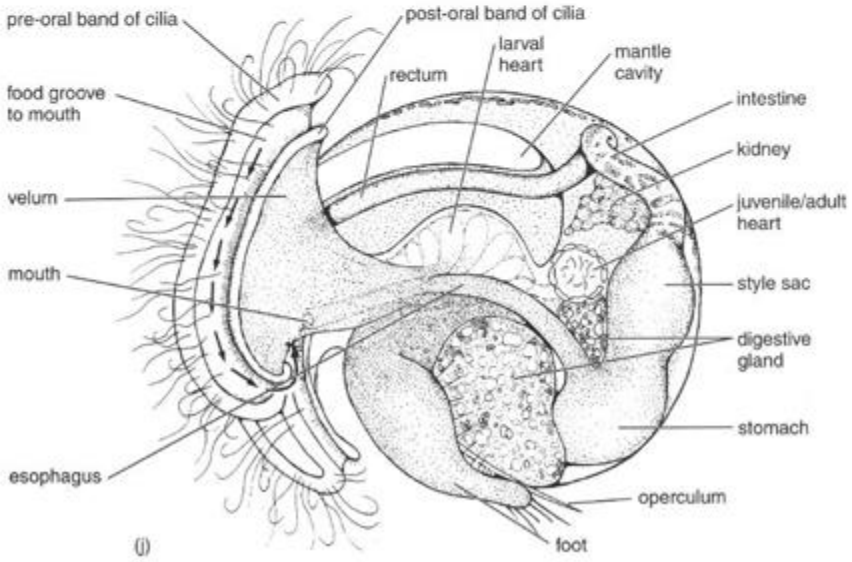
- Comprises mouth
- Stomodaeum
- Oesophagus
- Stomach
- Intestine (mesenteron)
- Statiolith sacs appear
- Sides of the mouth

Veliger

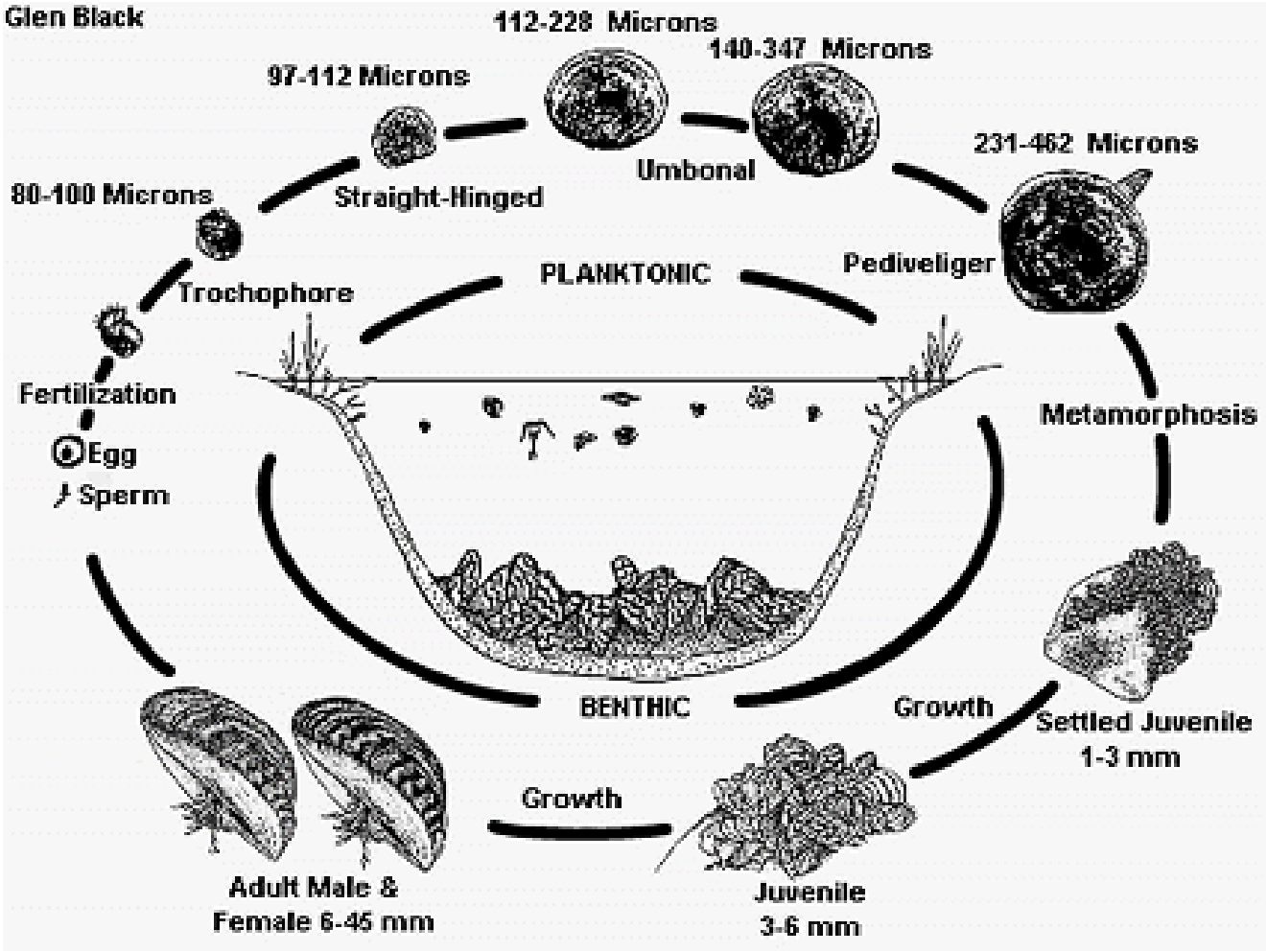
- preoral ciliate area
- *velum* begin to protrude on both sides as a bilobed flap
- very delicate
- anterior end of the larva
- provided with eyes
- Tentacles
- larva has a shell
- Alimentary canal is complete
- anus is shifted to anterior side
- foot usually bearing an operculum

VELIGER LARVA





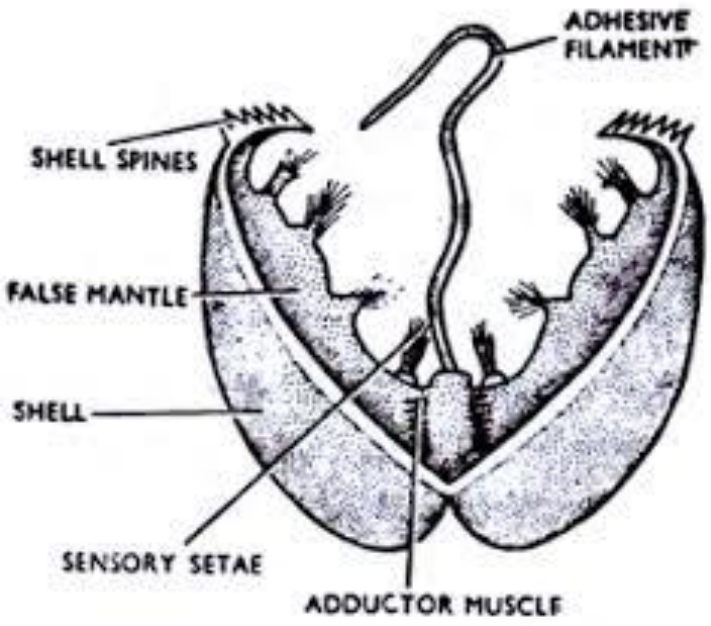
Larval stages in Molluscan Life cycle



- larval heart and kidney present
- situated at the anterior end of the body immediately behind the velum
- Statocyst and gill-rudiments present
- long cilia of the velum function
- Locomotion
- suspension feeding

Glochidium

- Glochidium larva enclosed by two valves
- Each edge of which bears a hook
- Shell valves cover a larval mantle
- Bears four groups of sensory bristles
- Rudimentary foot is present
- Attached a long adhesive thread
- *Byssal thread*
- Neither mouth nor anus
- Measures from 0.1 mm to 0.5mm



Position of Glochidium Larvae in Molluscan life cycle