



Respiratory Module

Lab 2

By

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Paragonimus westermani adult



Shape: coffee bean.

Size: 12 × 6 mm

Color: pinkish - brown .

Suckers: The oral and ventral suckers are equal in size.

Short oesophagus and two long sinous intestinal caeca.

Two lobulated testes in the posterior 1/4.

One branched ovary in front of testes.

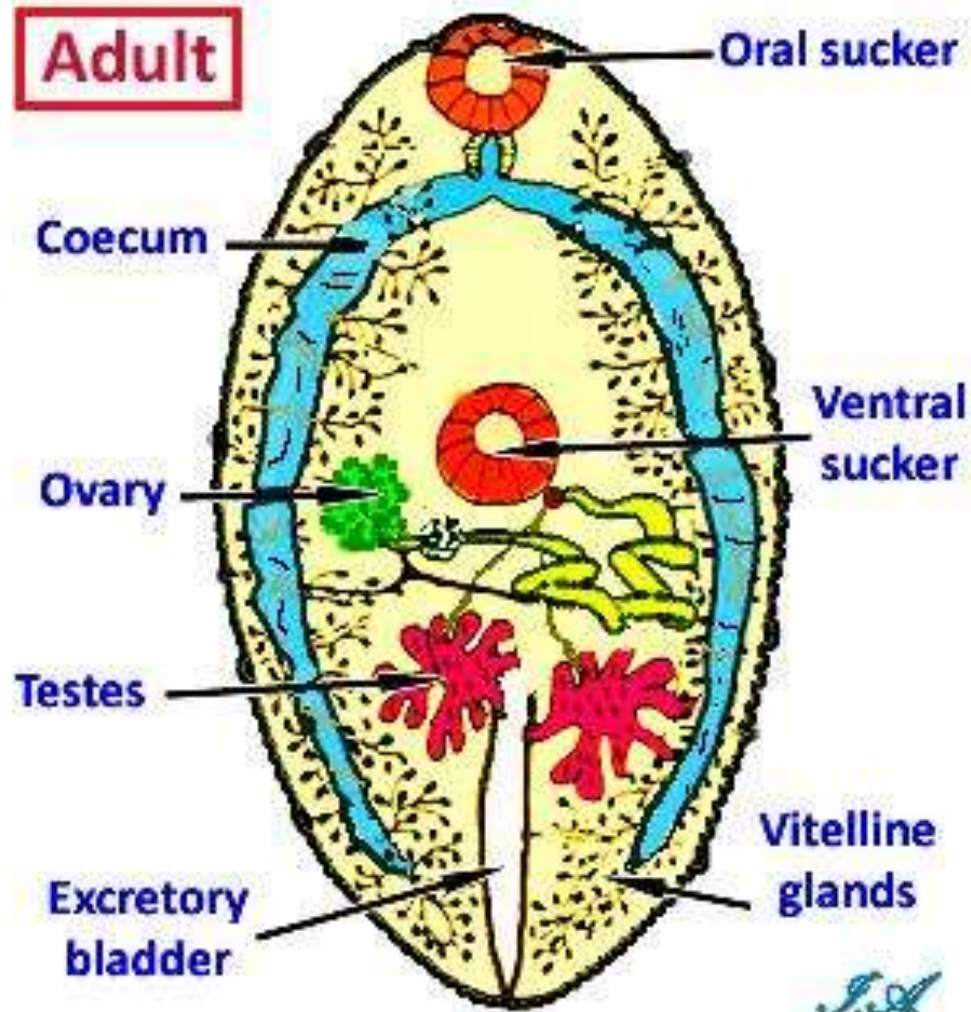
Coiled rosette shaped uterus.



D.S



Paragonimus westermani adult





Paragonimus westermani Egg



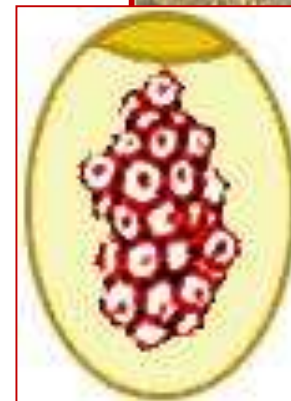
Size : 90 x 50 μm .

Shape : Oval.

Shell : Thick shell with operculum .

Color : Golden brown.

Content : Immature ovum.



D.S



Paragonimus westermani cercaria



- Oval in shape.
- Has small knob like tail (micro-cercous cercaria)
- The body covered with spine.
- Has oral & ventral suckers.
- Has 7 pairs of penetration glands.





Encysted metacercaria of *Paragonimus* (I.S)



- Spherical in shape.
- The cercaria loses its tail & secrete a thick cyst wall.
- Present in the viscera & muscles of crabs & cray fish.
- The I.S to Man, fish eating animals & carnivorous.





Echinococcus granulosus adult



- **Size:** 3-6 mm.
- **Morphology:**
- **Scolex.**
- **3 segments:**
- **Immature segment.**
- **Mature segment (longer than broad).**
- **Gravid segment (longer than broad).**





Echinococcus granulosus scolex



- Globular in shape.
- Has 4 suckers.
- Has rostellum with 2 rows of hooks.



Echinococcus granulosus Egg



(I.S to man & herbivorous).

Size: 30-40 um.

Shape: Spherical.

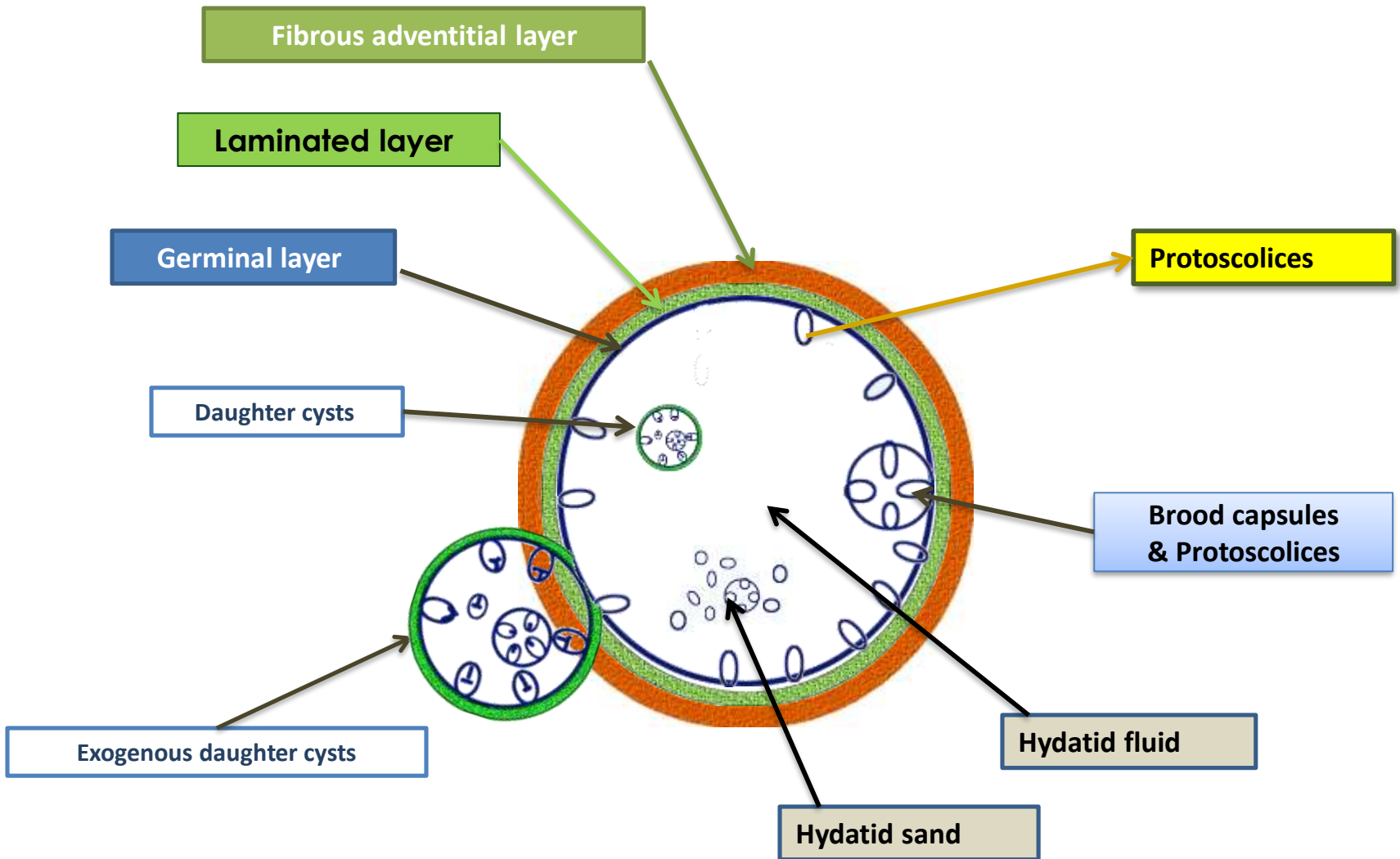
Shell: Thick, radially striated
embryophore.

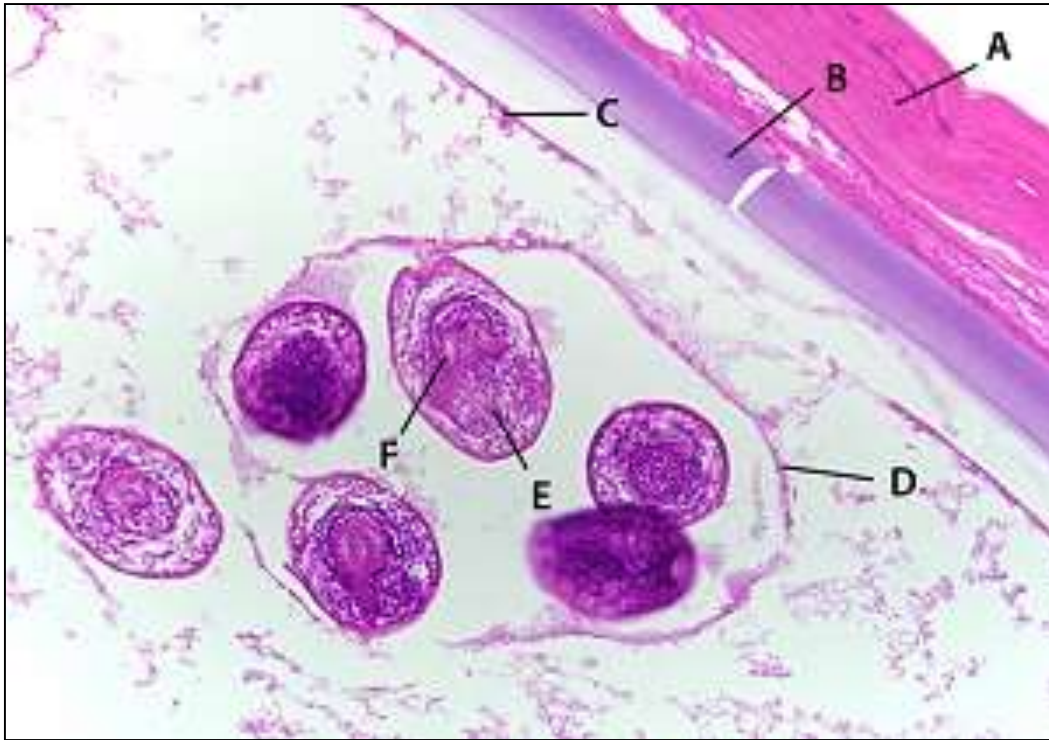
Color: brownish.

Content: Mature hexacanth
embryo (onchosphere)



Unilocular hydatid cyst





Thank
You

