



Parasitology Lab 2 and 3

Trematodes (flukes)

Cestodes (tapeworms)

By

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Taenia saginata

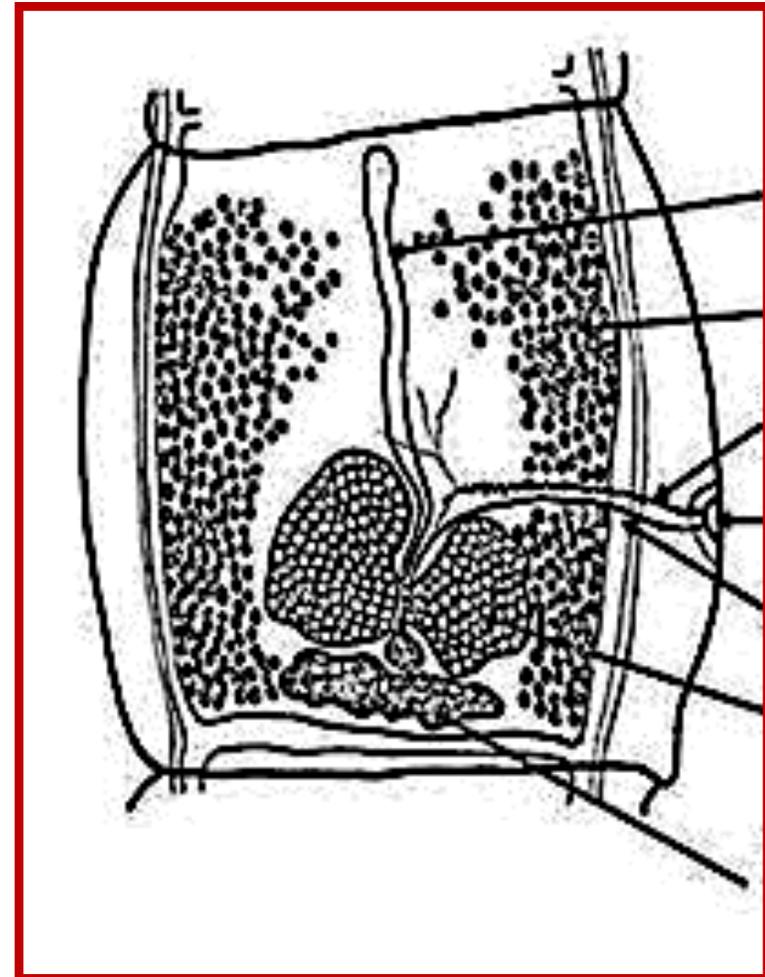
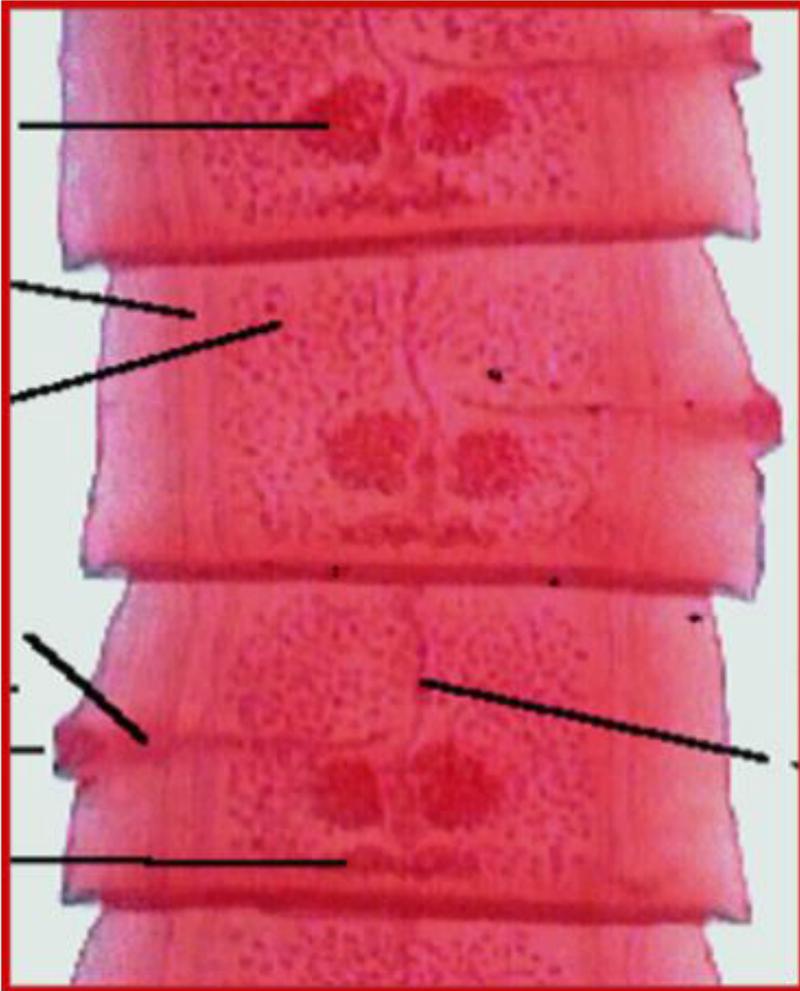


1) Adult :-

- **Size** : 4-10 meters.
- **Scolex** : Globular, with 4 cup shaped suckers at the angles of the head. **No rostellum or hooks.**
- **Strobila**: 1000 - 2000 segments.
 - **Immature segments.**
 - **Mature segments.**
 - **Gravid segments.**



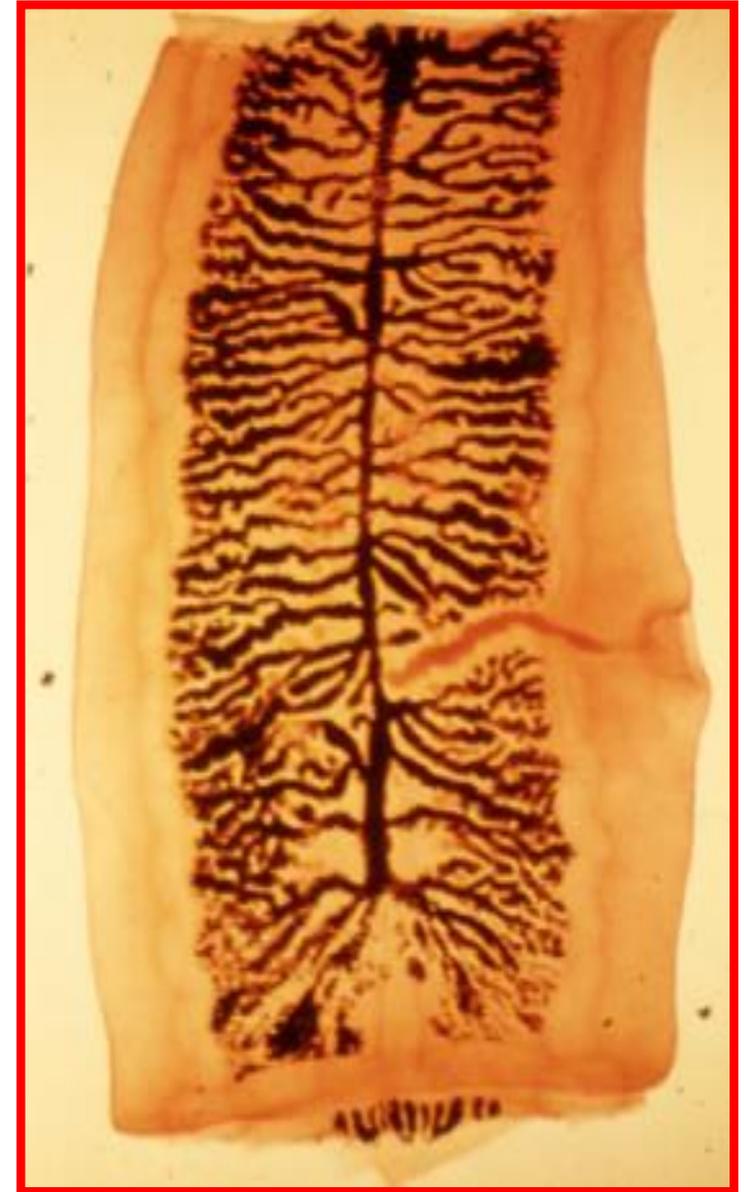
Mature segment of *T. saginata*



Squarish in shape
Contains male & female genital systems

Gravid segment of *T. saginata*

- Longer than broad
- Uterus with 15 - 30 (18) lateral branches on each side
- Full of eggs.
- Detached **singly** out of the anus (with feces or actively migrate).



Taenia solium

1)Adult :-

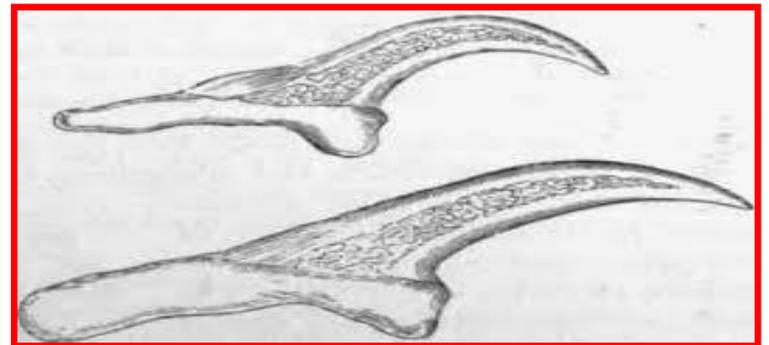
➤ **Size: 4-6 meters.**

➤ **Scolex :-**

- **Globular.**

- **4 cup shaped suckers.**

- **Rostellum with 2 rows of taenoid hooks (short handle, guard & long blade).**

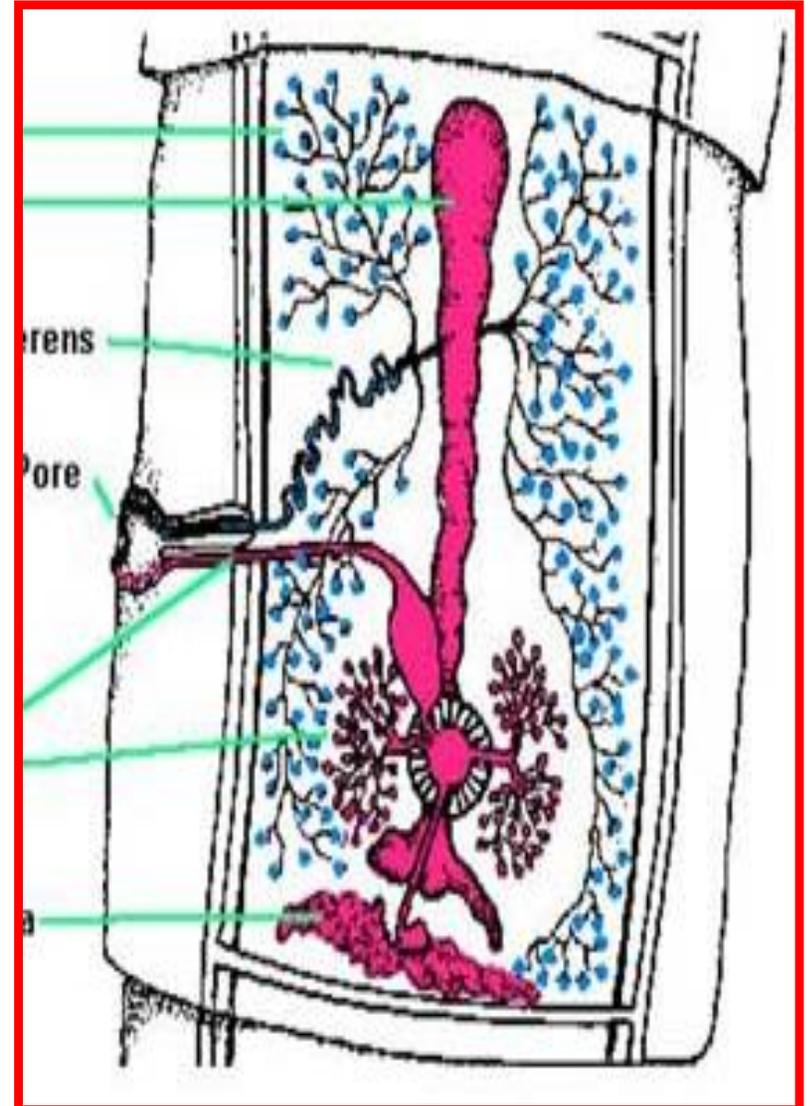


Mature segment of *T. solium*

Strobila : About 1000

segments:-

- **Immature segments.**
- **Mature segments :**
- **Similar to *T. saginata***



Gravid segment of *T. solium*

- **Gravid segments :**
- **Similar to *T. saginata* except:-**
 - 1 - Smaller.**
 - 2 - Uterus: About 9 lateral branches on each side.**
 - 3 - Segments detach in groups.**



Egg of *T. saginata* (D.S)

Size : 30- 40 μm in diameter.

Shape : Spherical.

Shell : Thick, radially striated.

Color : Yellowish brown.

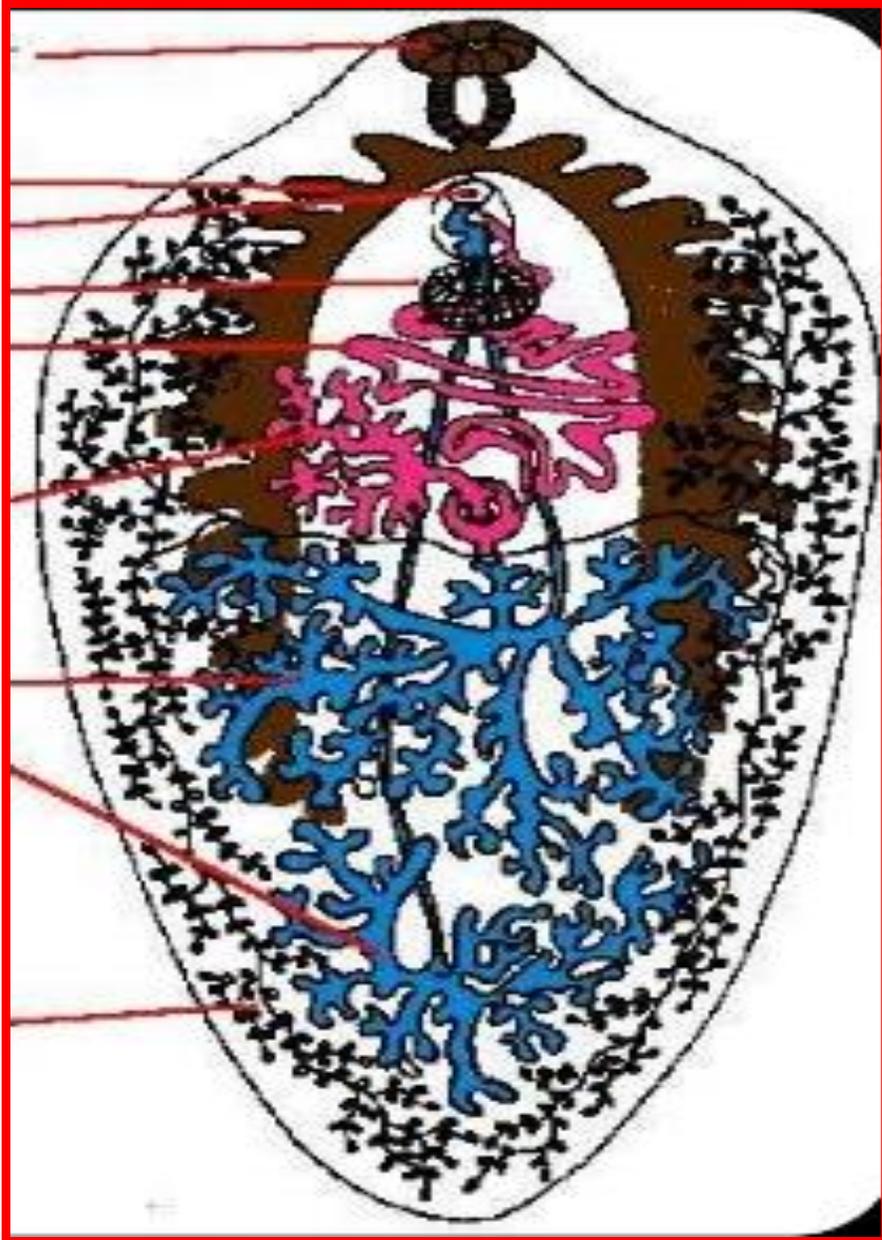
Content : Mature hexacanth embryo.

Egg of *T. solium* similar to *T. saginata* but it is the infected stage to human causing cysticercosis

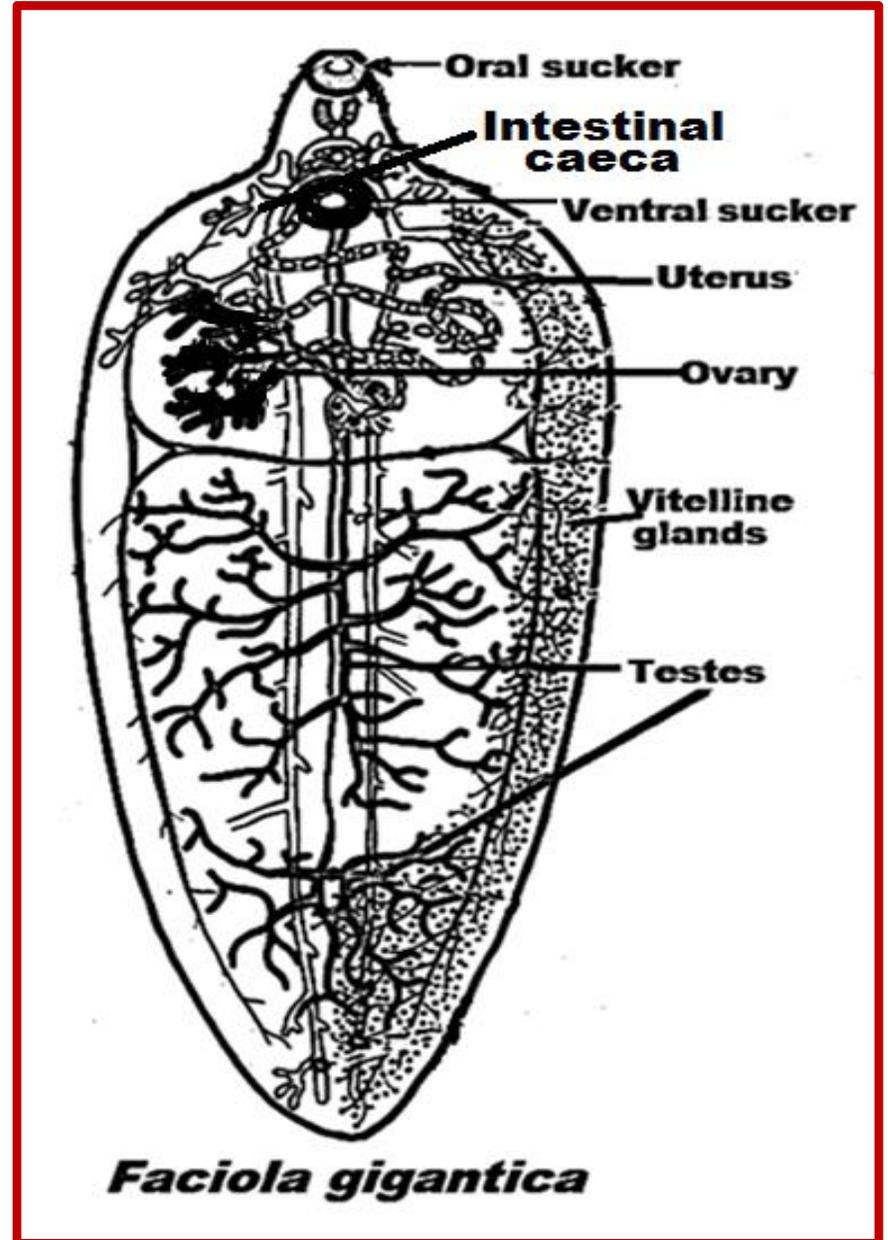


Fasciola,
Fasciolopsis buski &
Diphyllobothrium latum

Fasciola adult



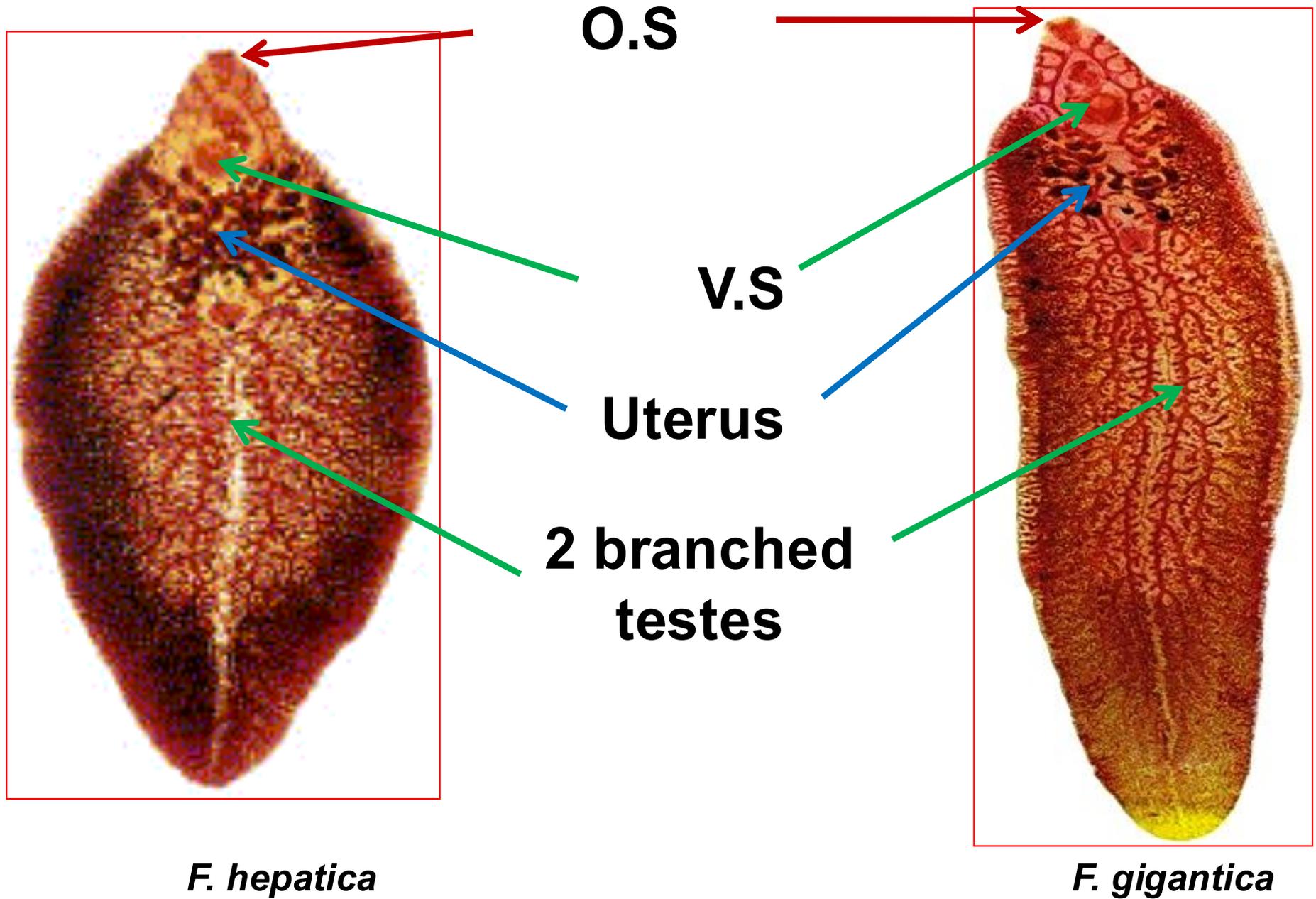
Fasciola hepatica



Fasciola gigantica

Fasciola gigantica

Fasciola adult

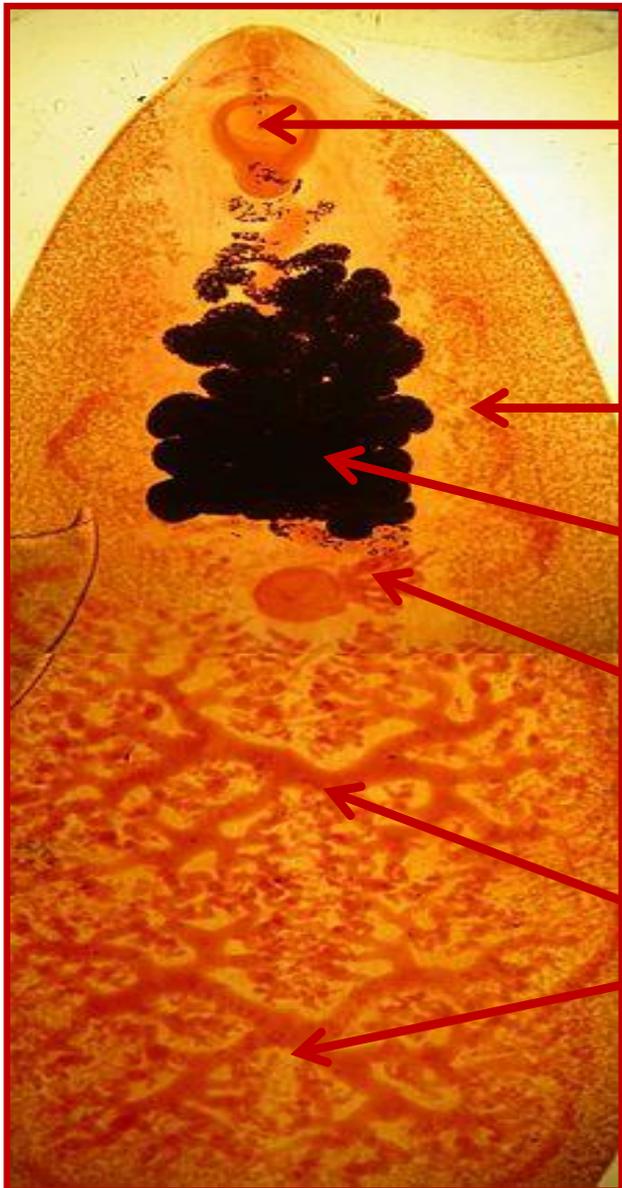


***Fasciola* egg (D.S)**

- **Size** : 140 x 70 μm .
- **Shape** : Oval.
- **Shell** : Thin operculated.
- **Color** : Yellowish brown.
- **Content** : Immature
(ovum & yolk cells).



Fasciolopsis buski adult



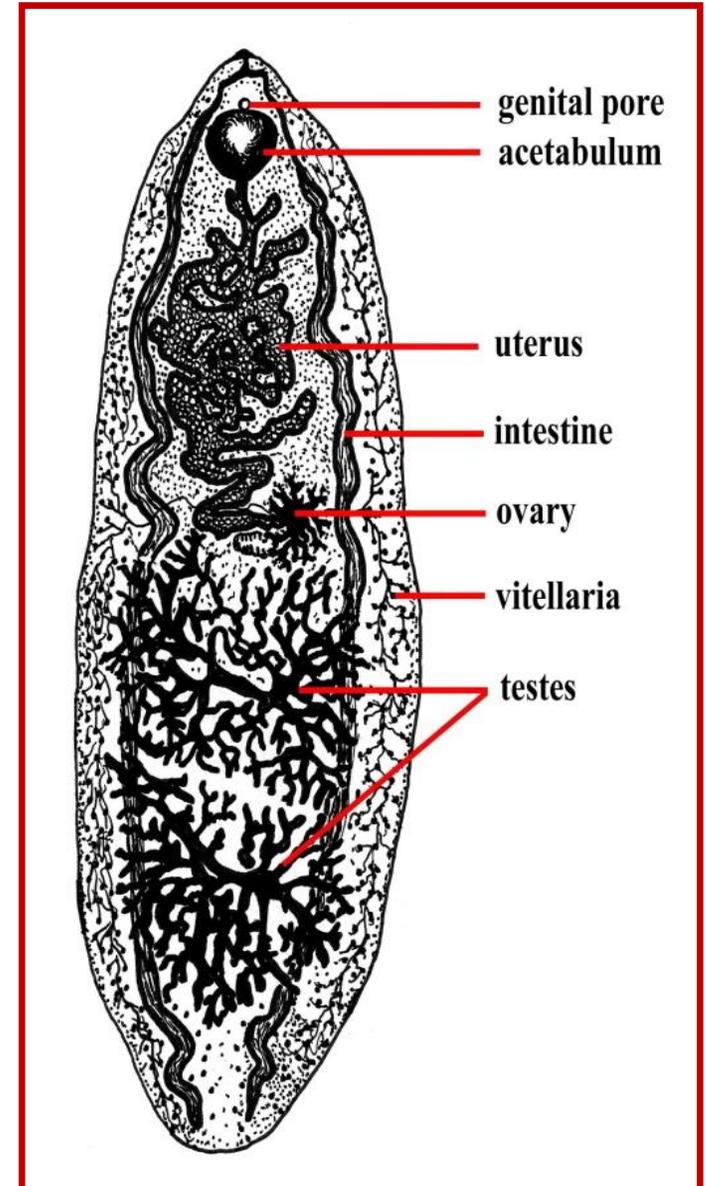
V.S

Simple Intestine

Uterus

Ovary

2 testes



genital pore
acetabulum

uterus

intestine

ovary

vitellaria

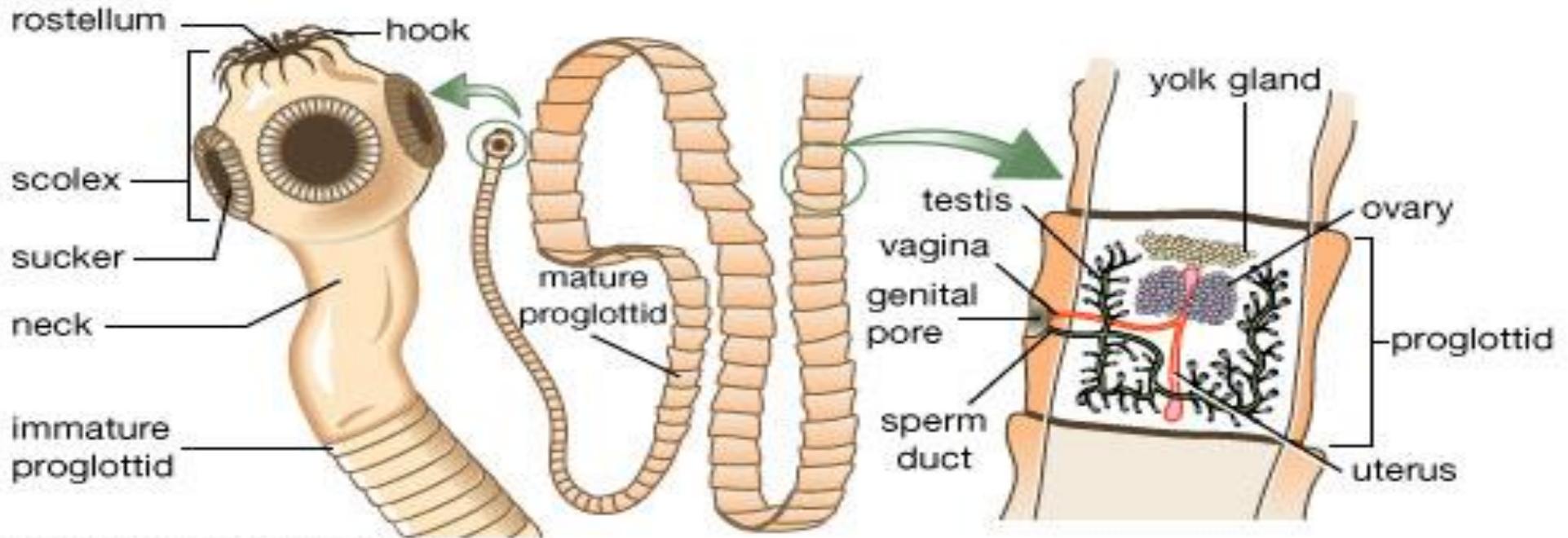
testes

***Fasciolopsis buski* egg (D.S)**

- **Size : 140 x 70 μm .**
- **Shape : Oval.**
- **Shell : Thin, operculated.**
- **Color : Yellowish brown.**
- **Content : Immature
(ovum & yolk cells).**



General characters



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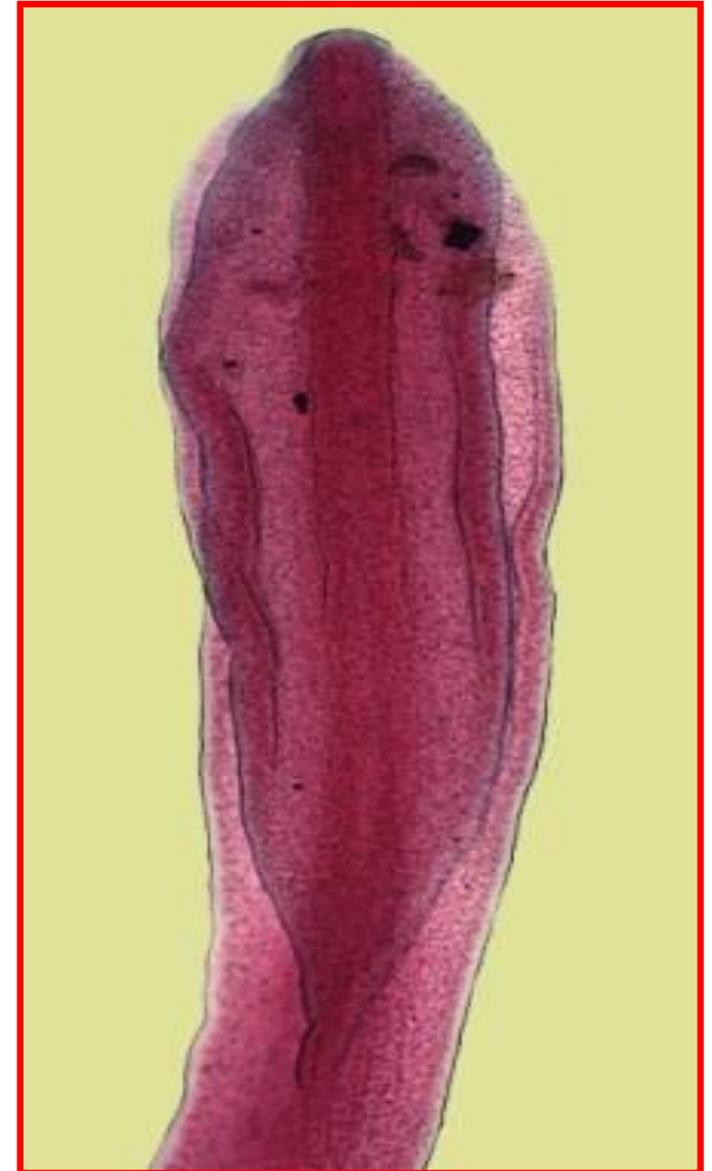
Adults:

- Flat, ribbon like and segmented.
- Cestodes have **neither a body cavity nor an alimentary tract.**
- Cestodes are **hermaphrodites.**

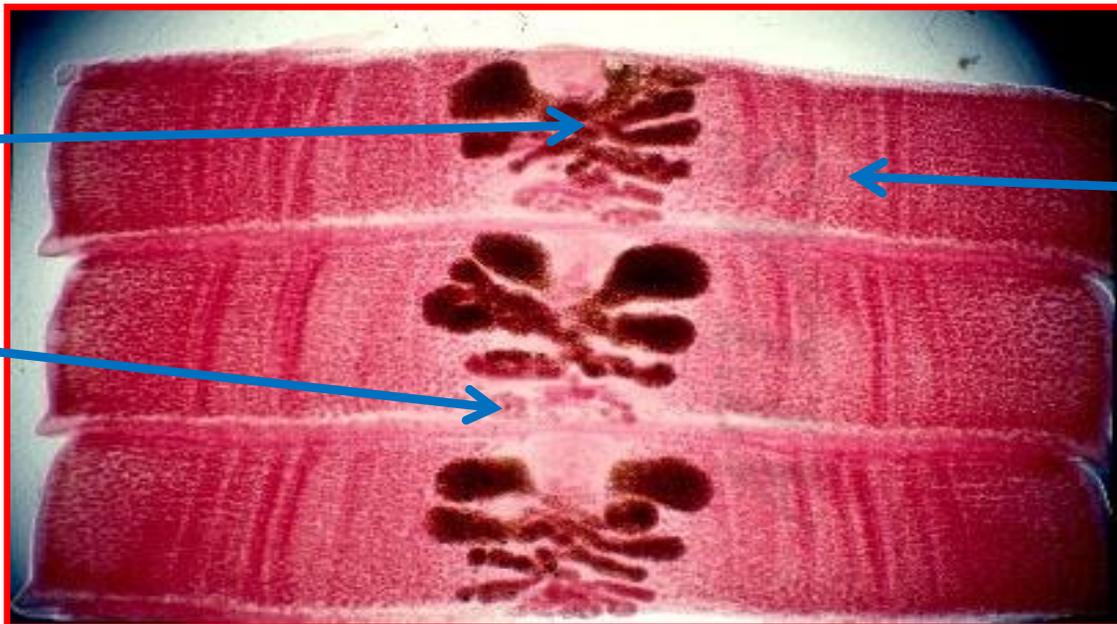
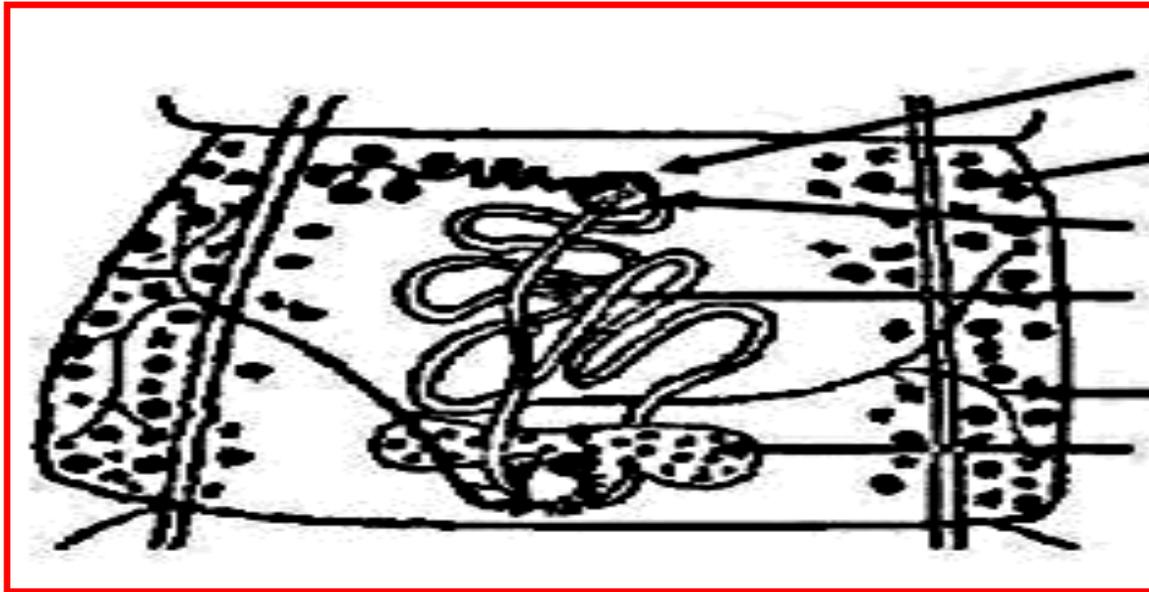
Diphyllobothrium latum
(broad tapeworm , fish tapeworm)

Scolex

**Elongated, almond like with
two grooves (bothria), one
dorsal & one ventral.**



Diphyllobothrium latum mature segment



Uterus

Ovary

Testes

Diphyllobothrium latum egg

- **Size** : 70×45 μm
- **Shape** : Oval.
- **Shell**: Thick and operculated.
- **Color** : Yellowish brown.
- **Content** : Immature (ovum and yolk cells).

