

## Lab (8)

### Phylum : Platyhelminthes

#### Classification :-

##### 1-Class : Turbellaria

##### Order : Tricladida

Genus : *Planaria* sp.

##### 2-Class : Trematoda

##### Order : Digenea

Genus : *Fasciola* sp.

##### 3-Class : Cestoda

##### Order : Eucestoda

Genus : *Taenia* sp.

Genus : *Echinococcus granulosus*

#### General characteristics:

- Free-living or parasitic .
- Bilaterally symmetrical (Their left and right sides are identical).
- Coelom lacking (acoelomate) .
- Dorsoventrally flattened .
- First animals with 3 germ layers - triploblastic ( Ectoderm , Mesoderm and Endoderm ) .
- Epidermis covered with cilia or cuticle ( which protects their bodies) .

- **Have closed digestive system ( have a highly branched gut with a mouth but the anus is absent) or No digestive system .**
- **Excretory system consists of protonephridia ( flame cells) .**
- **Respiratory, circulatory and skeletal system lacking .**
- **Reproduction mostly Sexual (Hermaphrodite )may by direct ( where the eggs hatch in to small tiny worms ) or it may by an indirect ( where the eggs hatch in to ciliated larval forms ) .**

**1/ Class : Turbellaria (Flat worms)**

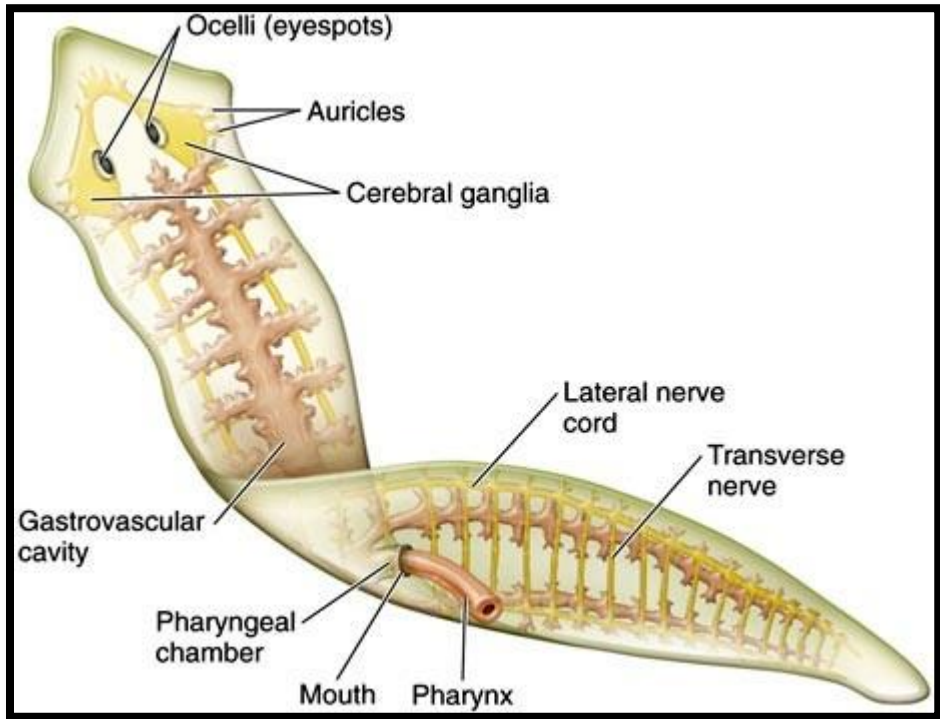
**Order : Tricladida**

Genus : *Planaria* sp.

- **Aquatic mostly marine ( Free-living )**
- **The flattend ventral surface of the body is covered with cilia**
- **Ventral mouth with extended pharynx .**
- **Head bears a pair of lateral projections called (Auricles) have a receptors used to locate food .**
- **Have closed digestive system, with three main trunks and many smaller lateral branches .**
- **Asexual reproduction by fragmentation .**
- **Cephalisation (is the development in the head region of light sensitive organs called ocelli) .**
- **sexual reproduction is direct (where the eggs hatch in to small tiny worms).**



*Planaria sp.*



*Planaria sp.*

**2/ Class : Trematoda (Flukes)**

**Order : Digenea**

Genus : *Fasciola* sp.

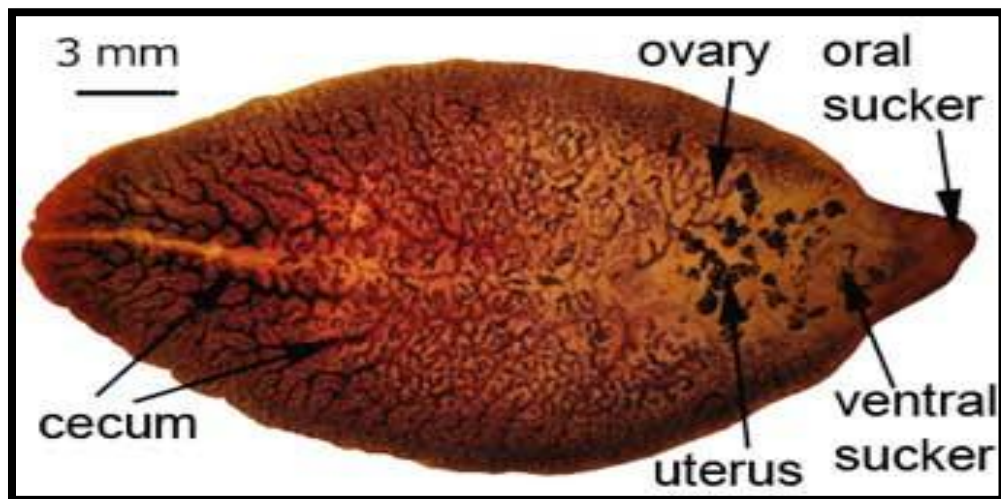
**1-Endoparasites .**

**2- Leaf shaped ,covered with a cuticle.**

**3-Oral sucker surrounds mouth .**

**4-Ventral sucker used for attachment .**

**5-Complex life cycles ( indirect ) where the eggs hatch in to ciliated larval forms .**



*Fasciola* sp.

### **3/ Class : Cestoda ( Tapeworm)**

#### **Order : Eucestoda**

Genus : *Echinococcus granulosus*

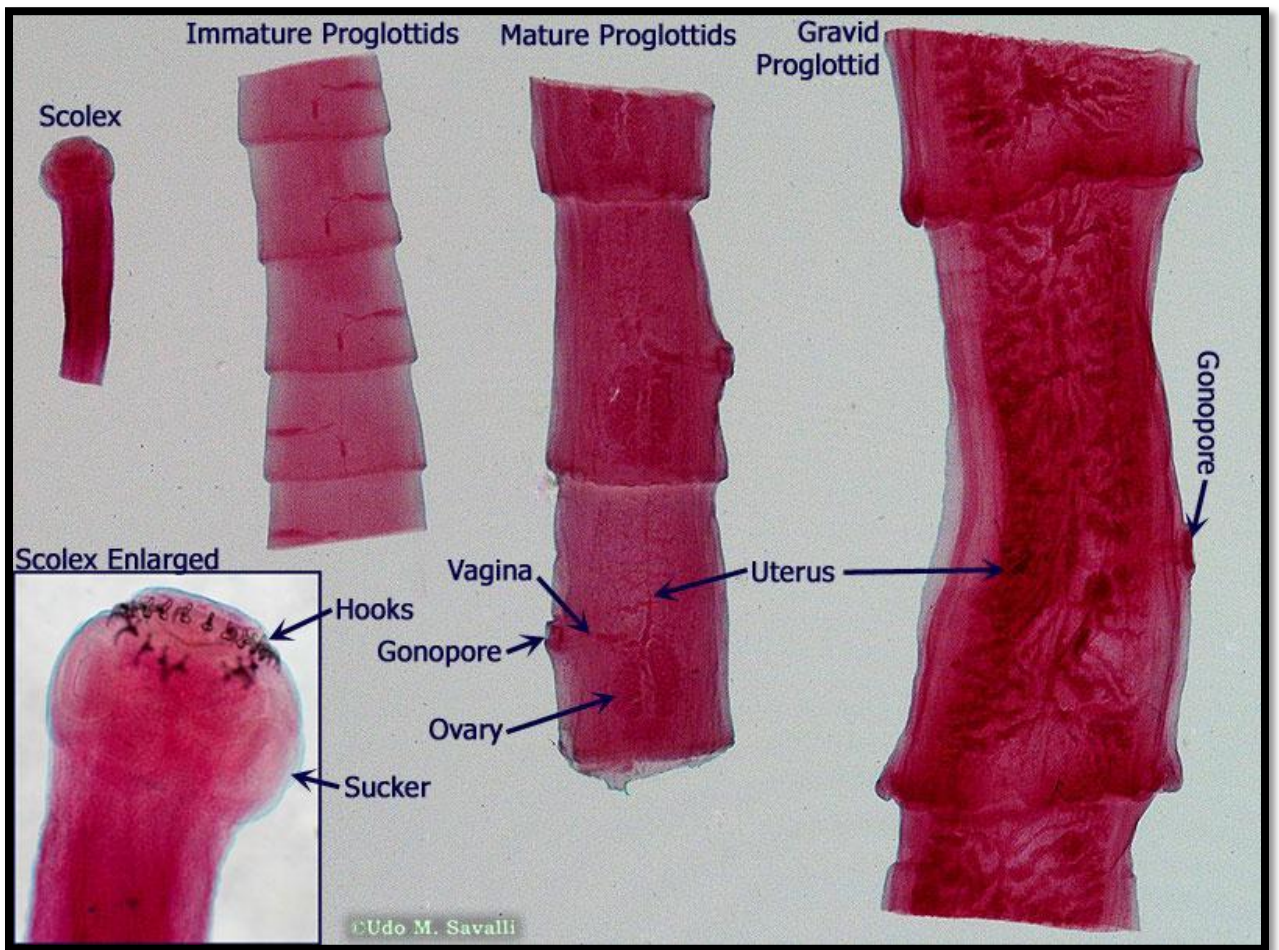
Genus : *Taenia* sp.

#### **-Endoparasites**

- cuticle covering body .**
- body is divided into three general regions : scolex , neck and strobila .**
- Scolex has structures for attachment (Hooks, suckers and rostellum).**
- Strobila has ( Immature proglottid , Mature proglottid , Gravid proglottid ).**
- Mature proglottid is completely filled with male and female gonads while gravid proglottid is completely filled with eggs .**
- No digestive system**
- Complex life cycles (indirect) where the eggs hatch in to ciliated larval forms .**



*Echinococcus granulosus*



*Taenia* sp.