

# PHYLUM PLATYHELMINTHES

(PLAT -EE- HELL-MIN - THEEZ)

## FLATWORMS

By

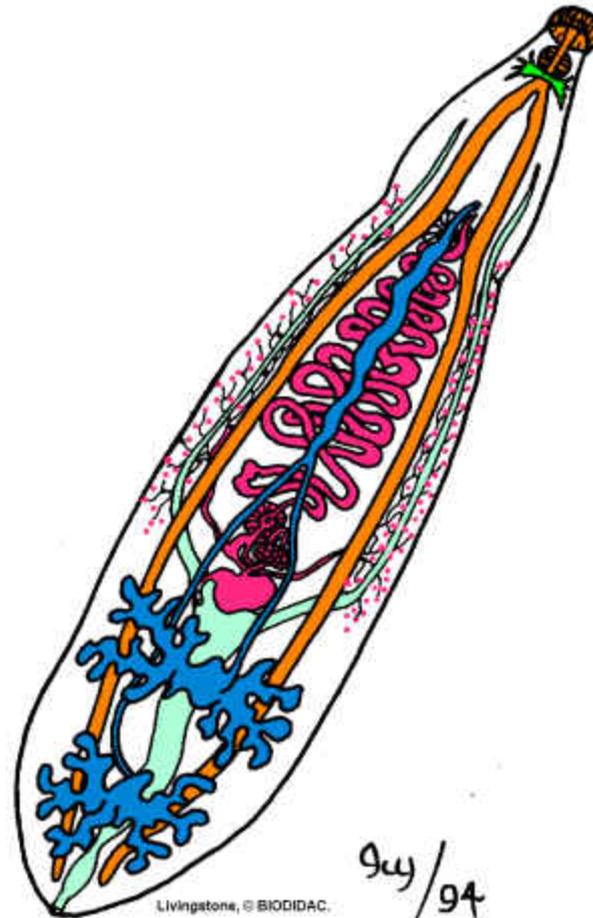
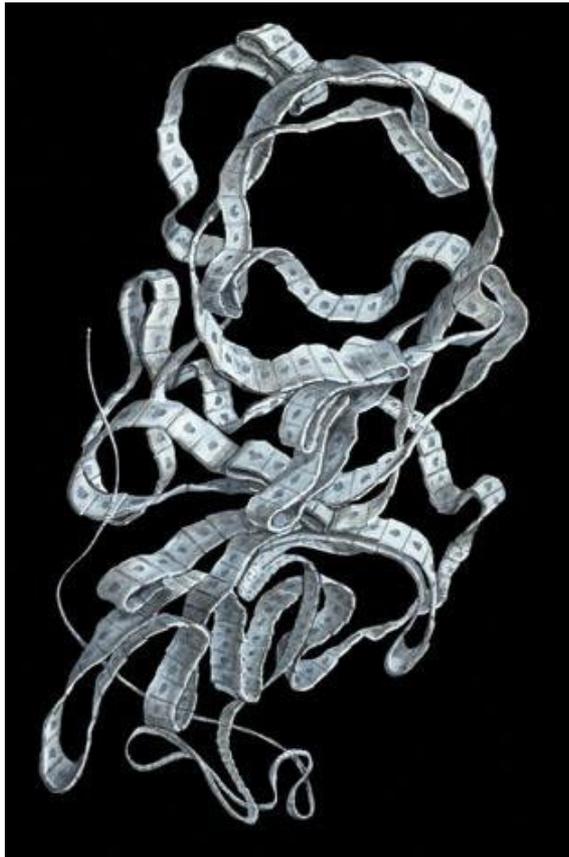
Ram Balak Mahto

Guest faculty

Zoology department

V.S.J College Rajnagar Madhubani

# A. THE MAJORITY OF FLATWORMS ARE PARASITES.



# B. THE GATEWAY PHYLUM TO THE REST OF THE ANIMAL KINGDOM.

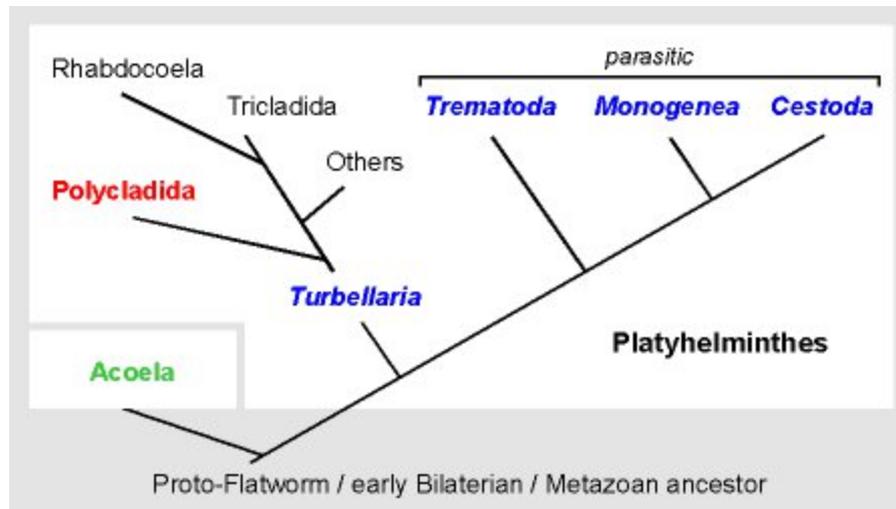
## CNIDARIANS:

- RADIAL SYMMETRY
- TWO LAYERS
- LACKING MOST ORGAN SYSTEMS.

## FLATWORMS:

- BILATERAL SYMMETRY
- THREE LAYERS
- CENTRALIZED NERVOUS SYSTEM
- SIMPLE EXCRETORY SYSTEM.
- COMPLEX REPRODUCTIVE SYSTEM.
- SIMPLE DIGESTIVE SYSTEM.

# C. THREE CLASSES



# C. THREE CLASSES

1. **TURBELLARIA -**  
MADE UP OF MOSTLY  
FREE LIVING  
FLATWORMS. CAN LIVE  
IN MARINE,  
FRESHWATER, AND  
DAMP TROPICAL ENV.

  - **EXAMPLES:**  
**PLANARIA AND**  
**POLYCLADIDS.**



# C. THREE CLASSES



2. TREMATODA – KNOWN AS FLUKES. ALL ARE PARASITIC AND VERY DAMAGING.

  - EXAMPLES: ASIAN LIVER FLUKE AND SCHISTOSOMES.

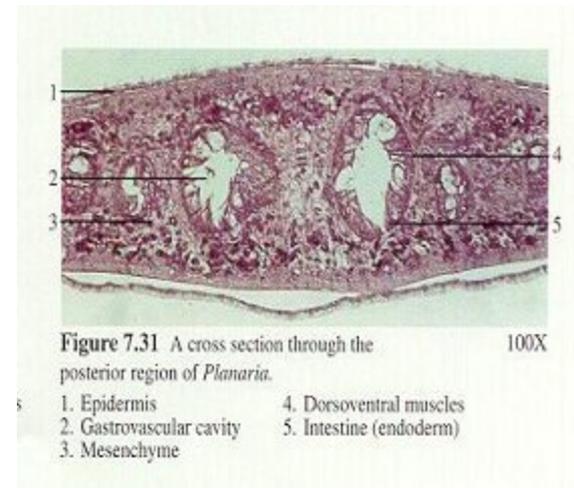
# C. THREE CLASSES

3. CESTODA –  
KNOWN AS  
TAPEWORMS.  
ALL ARE  
PARASITIC.
  - EXAMPLES:  
PORK, BEEF,  
FISH, & DOG  
TAPEWORMS.

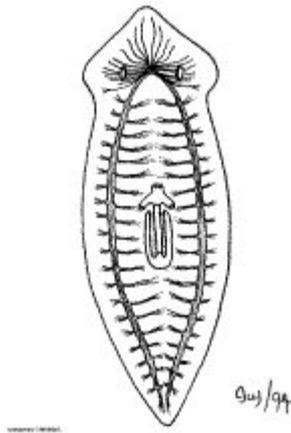


# D. THREE LAYERS

1. EPIDERMIS – TOUGH (Outer Layer)
2. MUSCLE – CIRCULAR AND LONGITUDINAL
3. MESENCHYME (Connective Tissue)



# E. NERVOUS SYSTEM



- **SIMPLE BRAIN FOUND AT THE HEAD END.**
- **TWO NERVE CORDS THAT LOOK LADDER LIKE.**

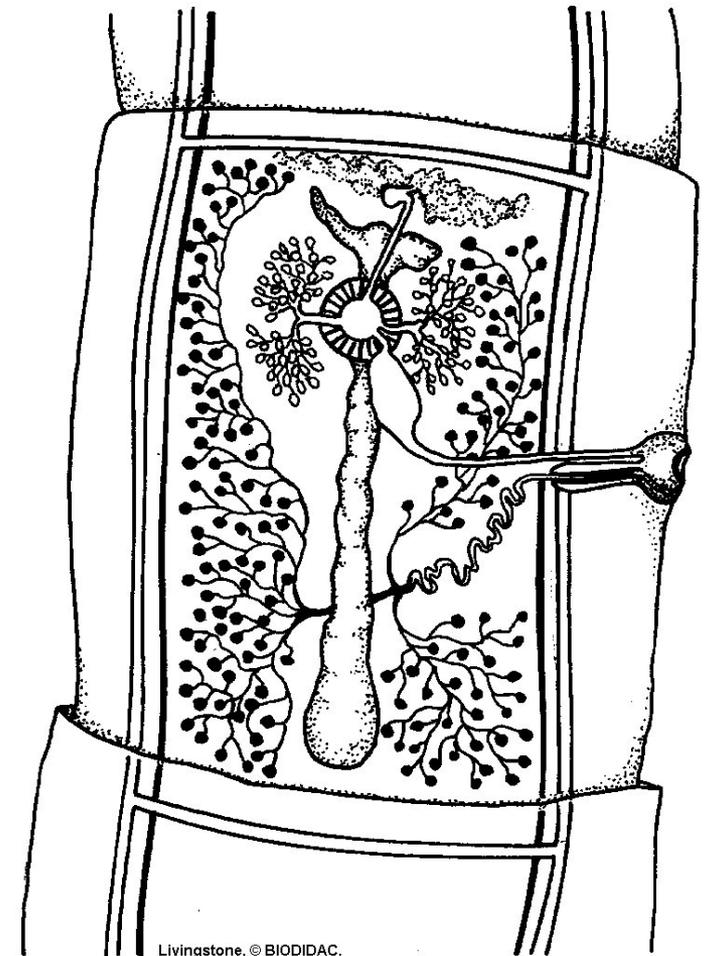
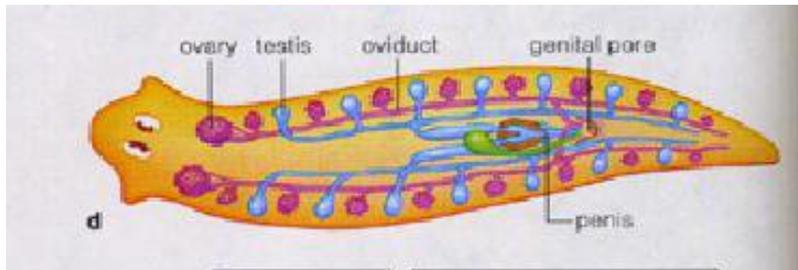
# F. EXCRETORY SYSTEM

- CONTAINS FLAME CELLS.  
(THE CILIA LOOKS LIKE A FLICKERING FLAME)



# G. REPRODUCTIVE SYSTEM

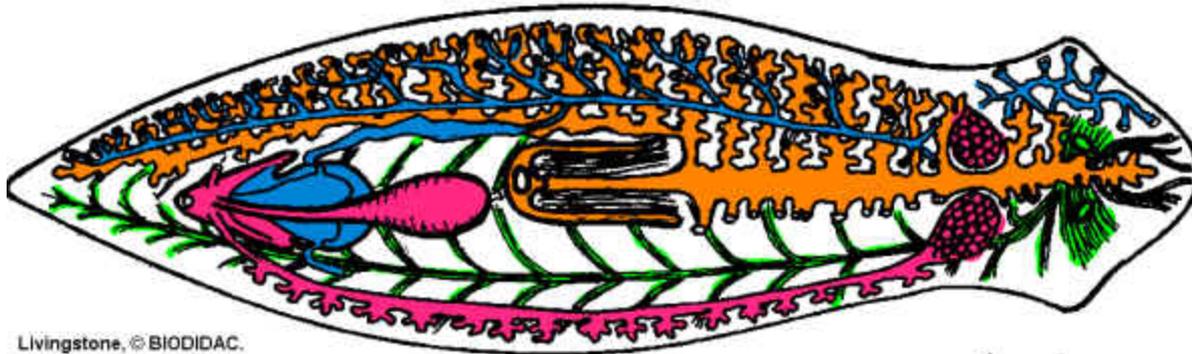
- HERMAPHRODITI  
C.
- SEXUAL ONLY
- TAPEWORMS  
CAN POSSIBLY  
SELF-FERTILIZE.



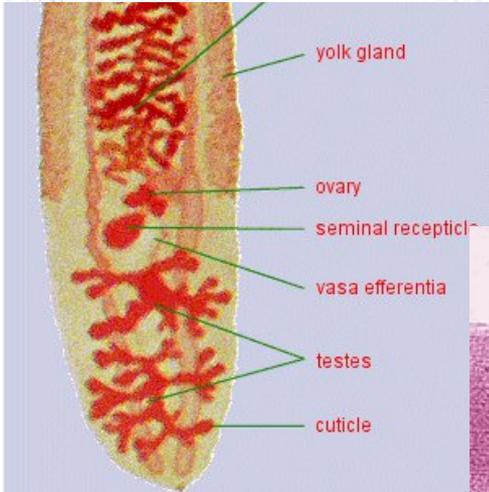
# H. DIGESTIVE SYSTEM

Class	Feeding	Digestion
TURBELLARIANS	FEED ON SMALL INVERTEBRATES	<ul style="list-style-type: none"> <li>• Mouth is used for both ingestion &amp; excretion.</li> <li>• Mouth leads to pharynx and is followed by the gut</li> </ul>
Cestodes	FEED ON HOST (INTESTINE OF A VERTEBRATE ANIMAL)	<ul style="list-style-type: none"> <li>• Possess no gut or simple gut</li> <li>• No mouth or digestive tract</li> <li>• Absorb food from environment</li> <li>• Digestion is intracellular</li> </ul>
Trematodes	FEED ON HOST TISSUE THROUGH PHARYNX.	<ul style="list-style-type: none"> <li>• Contain mouth and simple gut</li> <li>• Digestion is extracellular and then intracellular</li> </ul>

# H. DIGESTIVE SYSTEM



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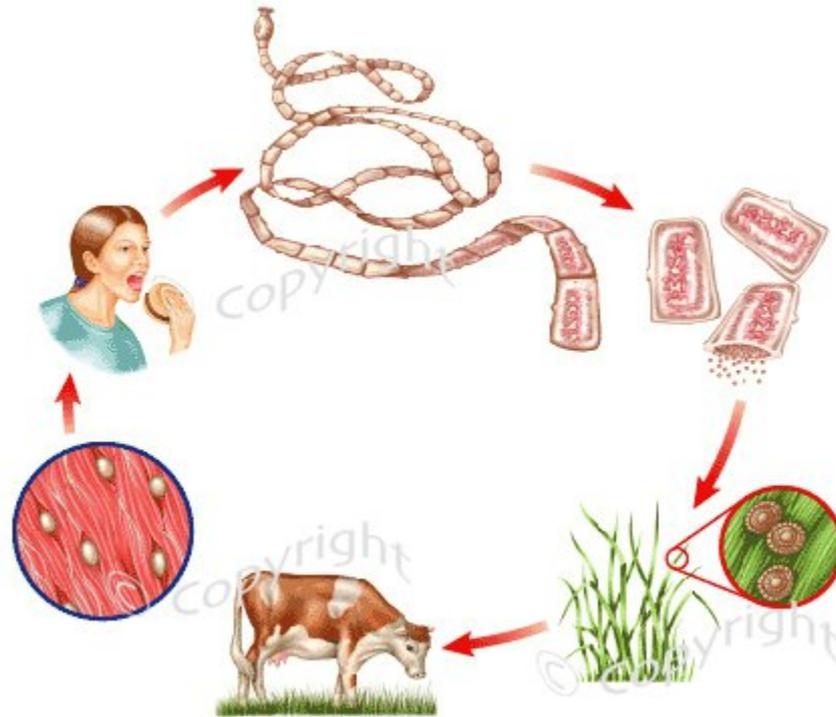
OPENING - THE  
H  
/NX AND

INTESTINES.

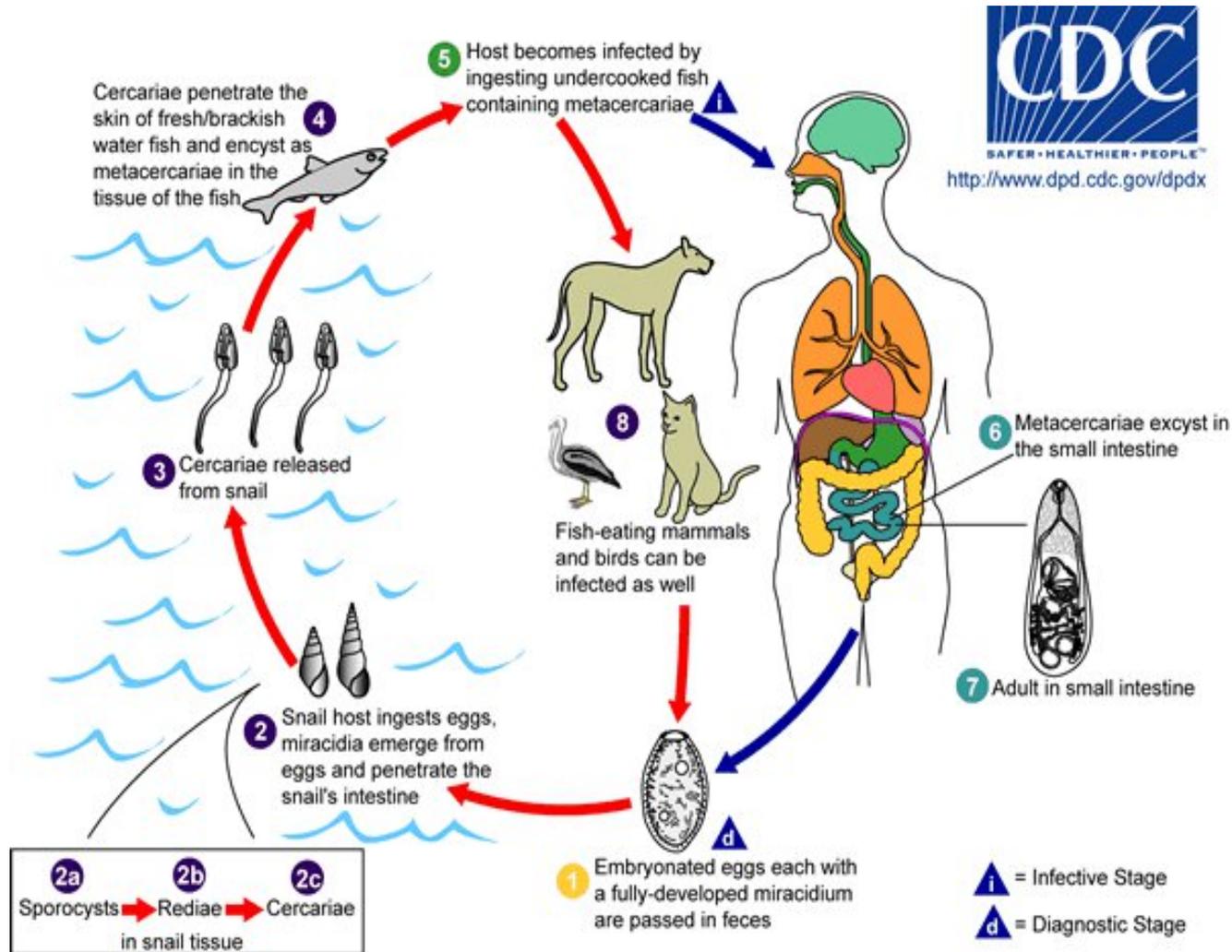
3. TAPEWORMS DO NOT NEED A DIGESTIVE SYSTEM.

# I. LIFE CYCLES

## TAPEWORM CP 25



# I. LIFE CYCLES



## FLUKE CP 23

# J. MISC.

1. THEY DO NOT  
HAVE A  
CIRCULATORY  
SYSTEM OR A  
RESPIRATORY  
SYSTEM. USE  
DIFFUSION.



# **J. MISC.**

- 2. CONSIDERED ACOELOMATES  
BECAUSE THEY LACK A BODY  
CAVITY.**
- 3. HAVE A HYDROSTATIC SKELETON.**
- 4. THEY ARE REALLY FLAT!!!**

**ANY QUESTIONS???**