

PHYLUM ASCHELMINTHES (NEMATODA)

Sunday, July 30, 2023 4:23 PM

INTRODUCTION → NEMATODA → Pointed Ends → Round worm

GENERAL CHARACTERS

BODY SYMMETRY

- Bilateral- Symmetry

BODY SIZE

- Range → Small microscopic → upto 1 meter → length

BODY STRUCTURE

- Triploblastic organization
- Pseudocoelomates → Fals- Body cavity
- Body → unsegmented

BODY CAVITY

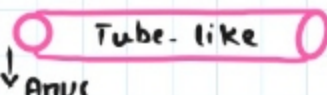
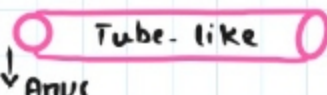
- Pseudocoelom → Hollow-space → Blastocoel → Blastula
- Vacuolated cells filled with a protein- Rich fluid

that develop high **Hydrostatic pressure**

→ **Tube within a Tube structure**

BODY SYSTEMS

Digestive-System

- Alimentary Canal → 2-openings  Anterior → Mouth
Posterior → Anus
- Tube- Like  Tube- like → Mouth
↓ Anus
- Parasitic- nematode → Simple digestive-System

Excretory-System

- Two longitudinally Running Excretory Canals
• Excretory pore → ventral Surface

- Two longitudinally running excretory canals
→ Excretory pore → ventral surface

Nervous system

- Nerve-rings around the pharynx
 - Sensory organ → Sensory papillae → Lips
- Diagram: A bracket groups 'Dorsal', 'ventral', and 'lateral' with an arrow pointing to 'Nerve cord'.

Circulatory & Respiratory system

- Absent
- Gaseous Exchange → Through Body Surface

LOCOMOTION

- Muscles → undulating waves → Contraction + Relaxation
- Muscles → Bands → Arrangement → 4-Bands
- 4-Bands → 2 Dorsal-lateral
→ 2 Ventro-lateral
- Circular-muscles → Absent
- Sexes are separate

REPRODUCTION

- Female → Gonads → ovaries → eggs
- Male → Gonads → Testes → sperm
→ Larval stage present

EXAMPLES

- | Common Name | Scientific Name |
|--------------|-------------------------|
| • Pin worm | Ascaris lumbricoides |
| • Giant worm | Enterobius vermicularis |
| • Hook worm | Ancylostoma duodenale |

PIN-WORM

- Intestinal-parasite → Human

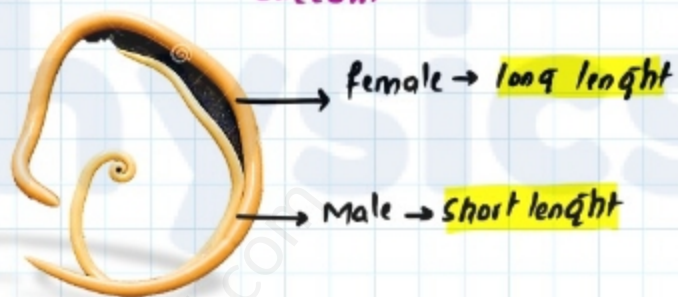
PIN-WORM

- Intestinal-parasite → Human
- Soil, organic-matter, water, feces



GIANT WORM

- Cosmopolitan
- parasite → Human → Colon, Vagina, Appendix, Coecum



- Itching → anus, and Inflammation → mucous → Colon
- Insomnia and loss of appetite

HOOK WORM

- parasite → Human → Intestine → villi → Blood → Suck
- Anticoagulant → Prevent clotting of Blood
- Severe anemia, retard physical and mental Growth



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