11th Lab

General characteristics of Phylum Nematoda (round worms):

1. Nematodes live either as freeliving, predatory, saprophytic or endoparasitic of animals.

2. Body is cylindrical, elongate, clear, unsegmented and pseudocoelomate. Anterior end (Mouth) is armed with lips, teeth or plates, but posterior end of male bears copulatory spicules...etc. Both ends are pointed.

3. Digestive system is complete, i.e., mouth, buccal cavity, pharynx (oesophagus), intestine (gut) and anus are found.

4. Respiratory and Circulatory systems are not found. They are done by diffusion.

5. Excretory system is consisted of glandular cells and canals opened in a pore.

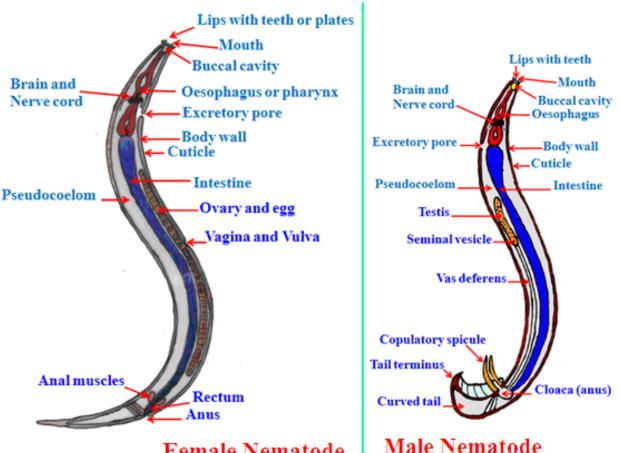
6. Nervous system is consisted of brain (pharyngeal nerve ring) and nerve cord.

7. Reproduction is sexual. They either oviparous or viviparous worms. Male has one testis,

female has two ovaries. Sexes are separated. Female is longer and male end is curved.

8. Lifecycle includes Larva that undergoes 4 moulting then becomes adult.

Egg \rightarrow 1st larva \rightarrow 2nd larva \rightarrow 3rd larva \rightarrow 4th larva \rightarrow Adult



General Morphology of Idea Nematodes

Female Nematode

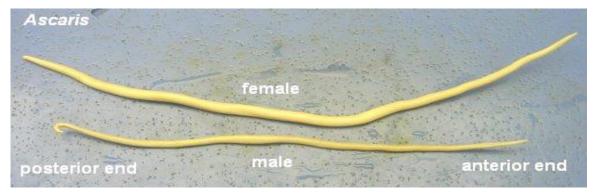
11th Lab

Kingdom: Animalia Subkingdom: Metazoa Phylum: Nemathelminthes (Nematoda) Class: Secernentea 1. Order: Ascaridida Family: Ascarididae Ascaris lumbricoides

Common name: round worm, Abdomen snake Habitat: small intestines Source of Infection: Polluted soil and water. Infective Stage: Fertilized (embryonated) egg. Site of Infection: Adult unattached in intestine of Man; but larval stage in lungs of Man. Host: Man, Intermediate Host: None Diagnosis: eggs in stool. Disease: Ascariasis

The larva discards its body outer parts (cuticle) for 4 times to become bigger in size, in a process called Moulting.

Unfertilized Egg (in soil) \rightarrow Fertilized Egg \rightarrow Larva in Man small intestine to liver; heart; lung; alveoli then to trachea (molts 4 times) \rightarrow Adult (in small intestine of Man)



11th Lab

2. Order: oxyurida

Family: oxyuridae

Enterobius vermicularis

Common name: pin worm, seat wor, anal worm Habitate: large intestine- caecum and appendix. Source of Infection: Contaminated fingertips or other things. Infective Stage: Eggs. Site of Infection: Adult in large intestine (colon) of Man especially children. Host: Man (direct life cycle) especially children. Diagnosis: By using scotch tape test to get eggs. Disease: Enterobiasis. The female release eggs on the periananl skin at night Types of infection:Infection, Autoinfrction, Retroinfection

