

MUSEUM COLLECTION

NEMATHELMINTHES

Specimens & Permanent slides

Compiled By: Dr. Vagisha Rawal

Picture credit.- Shalini Panwar

B.Sc. (Hons.) Zoology (Batch 2018-2022)

Palak Chugh

B.Sc. (Hons.) Zoology (Batch 2019-2022)

Phylum Nemathelminthes or Aschelminthes

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graph TD; A[Phylum Nemathelminthes or Aschelminthes] --> B[Class 1: Aphasmidia or Adenomorpha]; A --> C[Class 2: Phasmidia or Secernentea];
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Class 1: Aphasmidia or Adenomorpha

E.g. Enoplus, Mermis

Class 2: Phasmidia or Secernentea

E.g. Trichuris, Oxyuris, Enterobius, Ascaris, Wucheria, Ancylostoma

NEMATHELMINTHES

- Their body is bilaterally symmetrical and triploblastic.
- They are cylindrical in shape.
- They exhibit tissue level organization.
- Their body has a cavity or pseudocoelom.
- The alimentary canal is distinct, with the mouth and the anus.
- They are sexually dimorphic.
- They are devoid of the circulatory system and respiratory system.
- They are free-living or parasitic.
- Parasitic nematodes cause diseases in the host.
- Fertilization is internal and reproduction is sexual.
- Their cuticle moults periodically.
- The epidermis is syncytical and contains dorsal or ventral nerve cords.
- The body-wall muscles are longitudinal.
- They possess amoeboid sperm cells.
- They consist of chemosensory organs called aphids situated on the lips.

Ascaris lumbricoides

Common name: Round worm

Geographical distribution: It is found worldwide, but it's more frequently found in tropical and subtropical regions,

Scientific Classification

Kingdom: *Animalia* (Multicellular, eukaryotic, heterotrophic)

Phylum: *Platyhelminthes* (simple bilaterian, unsegmented, soft-bodied invertebrates.)

Phylum: *Nemathelminthes* or *Aschelminthes* (unsegmented, triploblastic, pseudocoelom, dioecious,)

Class: *Phasmidia* (unicellular sensilia in the lateral tail region)

Genus: *Ascaris*

Species: *lumbricoides*



Ascaris Female



Ascaris Male

Ascaris lumbricoides

General Features

1. *Ascaris lumbricoides* is the **giant roundworm**
2. largest and most common parasitic worm in humans
3. Cosmopolitan in distribution
4. responsible for the disease ascariasis
5. Sexual dimorphism
6. Males : 2–4 mm (0.08–0.2 in) in diameter and 15–31 cm (5.9–12 in) long
7. Females : 3–6 mm (0.1–0.2 in) wide and 20–49 cm (7.9–19 in) long
8. Uteri may contain up to 27 million eggs at a time, with 200,000 being laid per day
9. Fertilized eggs are oval to round in shape with a thick outer shell
10. Unfertilized eggs are long twice as wide
11. No intermediate host in the life history



