

Roundworms (p. 633 – 634)

I. Roundworms

p. 633

1. Roundworms make up the phylum Nematoda.

2. What type of worms are roundworms?

Circle One : Acoelomates Coelomates Pseudocoelomates

(Body cavity between mesoderm + endoderm) →

3. How does the fluid-filled cavity assist with circulation, respiration, and digestion in roundworms?

- Movement of fluid within pseudocoelom allows body fluids to diffuse into body cells.

4. What type of digestion do roundworms exhibit?

Circle One : One-Way Two-Way

First anus!

5. What two structures form a protective layer of a roundworm?

1. Epidermis 2. Cuticle

6. What pulls against the cuticle and pseudocoelom to create a whipping motion?

- Muscles that run the length of the body

7. What is the size range of roundworms?

- Few millimeters to over a foot

8. Most roundworms are free-living predators.

Circle One : True False

9. Do roundworms reproduce sexually or asexually? (Not in the book.)

Circle One : Sexually Asexually

Separate sexes

10. What can roundworms' sense organs detect? (Not in the book.)

Ganglia present - detects chemicals given off by host/prey

II. Roundworm Infections

1. Which part of plants do plant roundworms infect?

Any part (Leaves, stem, roots)

2. What effects do roundworm infections have on plants?

- Wilting + withering

Excretion
- Flame Cells

3. For each roundworm, identify the disease caused, and how the disease is spread.
(Not all information is in the book.)

p. 634

Ascaris

Disease Caused : Malnutrition
Transmission : Found in feces of host

Trichinella

Disease Caused : Trichinosis
Transmission : Eating muscle tissue of infected animal

1/4 of World Infected →

Hookworms

Disease Caused : Weakness / Poor Growth
Transmission : Burrowing through unprotected feet

Filarial Worms

Disease Caused : Elephantiasis
Transmission : Biting insects, such as mosquitoes

Heartworms

Disease Caused : Heartworm (Dog/Cat parasite)
Transmission : Worms accumulate in heart

4. Circle the letter of each sentence that is true about the life cycle of *Ascaris*.

- a. Larvae in the lungs are coughed up and swallowed.
- b. The eggs develop into larvae in the lungs. small intestine
- c. Larvae bore through the intestines and enter the bloodstream.
- d. Infections result in respiratory distress, and blockage of the pancreas & gall bladder.

5. How large can adult *Ascaris* grow in size?

1 foot

6. What is the primary host of *Trichinella* roundworms?

Pigs

7. How can humans avoid getting trichinosis?

- Avoid not eating undercooked pork.

8. How do hookworms infect humans?

- Penetrate soles of feet
(Tropical regions mainly)