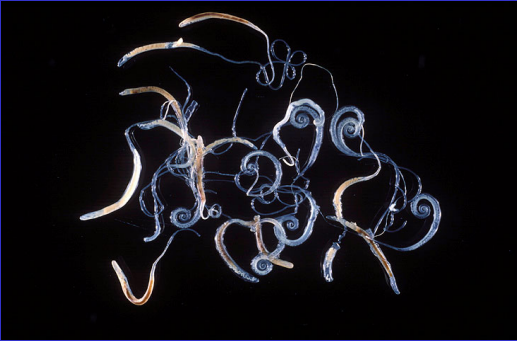


PARA3002 TUTORIAL

Tute 10: WORMS



1

PARA3002 TUTORIAL

1. Name 10 different types of worms!

Insects?

Common name "worm" also given to large range of insects:

- railroad worms
- wood worms
- glow worms
- blood worms
- inch worms
- canker worms
- meal worms
- silk worms
- woolly bear worms



2

Numerous worm-like invertebrate phyla

- earthworms (annelids)
- bristleworms (polychaetes)
- bootlace worms (nemertean)
- arrow worms (chaetognaths)
- phallus worms (priapulids)
- jaw worms (gnathostomulids)
- acorn worms (hemichordates)
- velvet worms (onychophorids)
- horseshoe worms (phoronids)
- peanut worms (sipunculids)
- horsehair worms (nematomorphids)



3

Worms! Parasites!

- roundworms (nematodes)



cestodes (tapeworms)



- flatworms (platyhelminths)

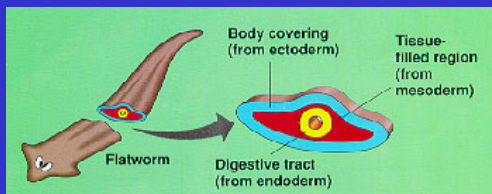
trematodes (flukes)



4

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2. List defining characteristics of platyhelminths!



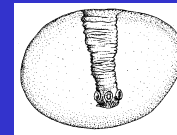
- triploblastic (3 body layers) Consequences
- ecto-, meso-, endo-derm • flat body, small size
- acoelomate (no body cavity) • 3D musculature (squirmers)

5

CESTODE life-cycle



egg

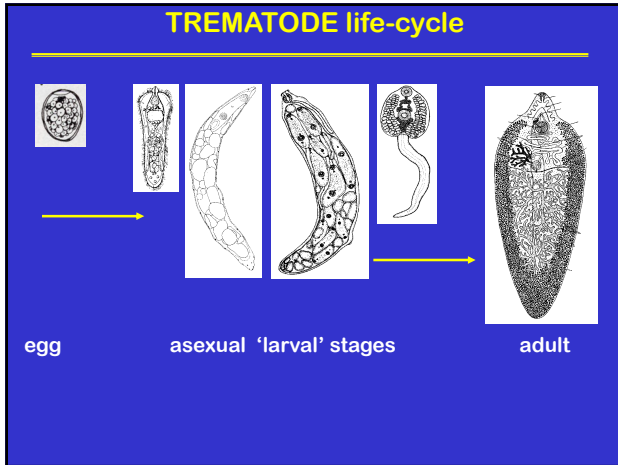


larva



adult

6



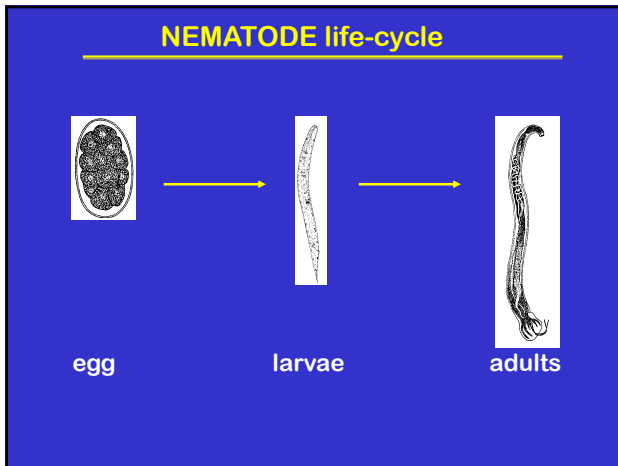
7

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3. List defining characteristics of nematodes!

- triploblastic (3 body layers) Consequences
- ecto-, meso-, endo-derm • tubular body (hydrostatic)
- pseudocoelomate (body cavity) • long. muscles (thrashers)

8



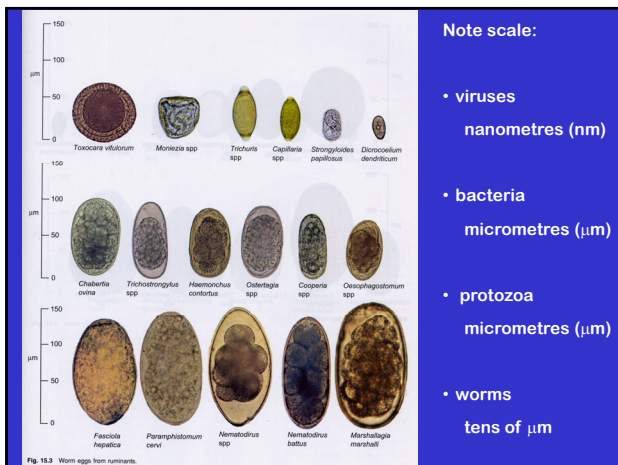
9

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4. List some attributes of worm eggs!

- Numerous (not all survive)
- Broadcast in environment
- Contain developing stages (embryos, larvae)
- Limited food reserves
- May get caught in tissues

10



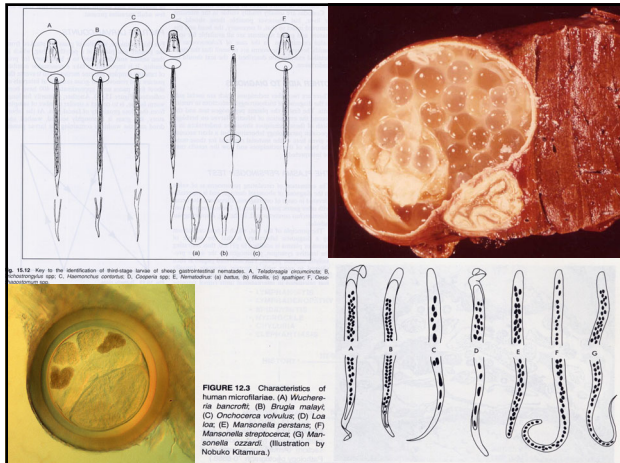
11

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5. List some attributes of worm larvae!

- Variable habitats (f-l, parasitic)
- Immature stages (moult, encysted)
- Nutrition (some feeding)
- Infective stages (transmission)
- Pathology (penetration, migration, lodgement, encystment)

12



13

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6. List some attributes of adults!

- Endoparasites (shelter, food, transport)
- Feeding (passive, active, voracious)
- Mature stages (fertility, fecundity)
 - (sexual: gender/hermaphrodites)
 - (asexual: parthenogenesis)
- Pathology (host nutrients/cells/tissues, trauma, lesions, inflammation...)

14

Feeding (osmosis/diffusion, sucking, biting)

15

sexual dimorphism

hermaphrodites

16

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7. Name 4 nematode groups!

- Pin worms (oxyurids)
- Whip worms (trichocephalids)
- Round worms (ascarids)
- Thread worms (rhabditids)
- Hook worms (strongylids)
- Filarial worms (spirurid)

17

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8. Name 2 cestode groups!

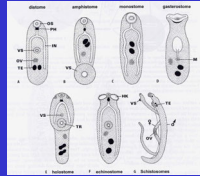
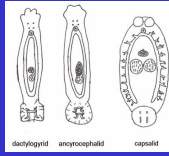
- Cyclophyllidea (terrestrial)
- Pseudophyllidea (aquatic)
- Trypanorhyncha
- Diphyllidea
- Tetracyphlidea
- Caryophyllidea
- Litobothridea
- Spatheobothridea
- Nippotaenidea
- Aporidae
- Proteocephala

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9. Name 2 trematode groups!

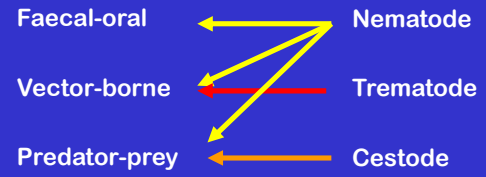
- Monogenea (one-host)
 - mono-opisthocotylids
 - gyrodactylids, dactylogyrids, monocytylids
 - poly-opisthocotylids
 - polystomatids, diclidophorids, hexastomatids
- Digenea (two-hosts)
 - echinostomes
 - paramphistomes
 - opisthorchids
 - plagiorchids
 - strigeatids



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10. Identify the three main modes of transmission!



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