

**Kingdom: Anamalia**  
**Phylum: Platyhelminthes**  
**Class : Cestoda**  
**3**



# Family: **Anoplocephalidae**

Have **pyriform apparatus** (the third external egg shell have two prominent hooks intersecting with each other).

Genus 1: ***Moniezia***

Sp. : ***M. expansa***

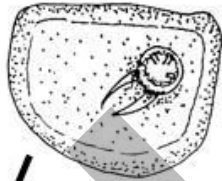
*Moniezia* it is a large tapeworm

**Host:** small intestines of sheep, goats and cattle.

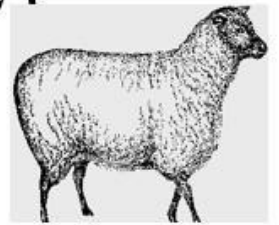
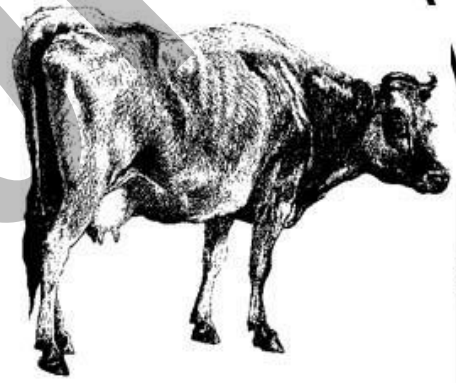
It is characterized by unarmed scolex (i.e., hooks and rostellum are absent), presence of two sets of reproductive systems in each proglottid, and each proglottid being very short but very broad.

# LIFE CYCLE OF *MONIEZIA EXPANSA*

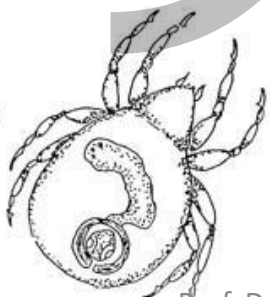
Eggs are passed in the feces.



Adult tapeworm is found in the host's small intestine



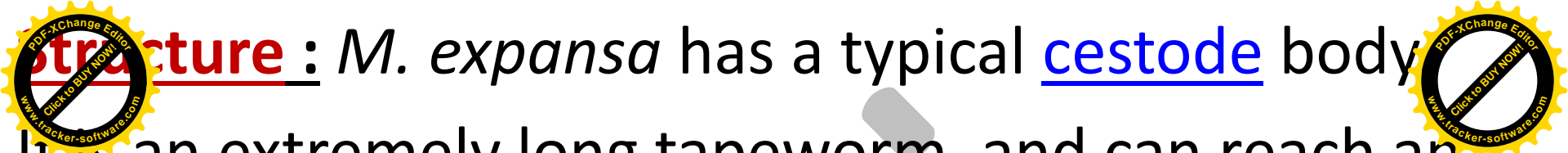
Eggs are ingested by the intermediate host, a mite.



Definitive host is infected when it eats an infected mite

A cysticercoid develops in the intermediate host





**Structure** : *M. expansa* has a typical cestode body

It is an extremely long tapeworm, and can reach an enormous length up to 6–10 m.

**Diagnosis** : Done by analysis stool sample in which eggs can be detected, or often observation of the gravid proglottids in feces and anus. The gravid proglottids resembles the cooked rice.





## Genus 2: *Anoplocephala*

Sp. : *A. magna*



Infect intestine of horses and donkeys .proglottids very short. Have transverse uterus with anterior and exterior branches. Cause effects only if present in large numbers.

Is quite small, usually 2.5-5cms long but can be up to 8cm long and 1.2cm wide. scolex, is spherical and quite small with 4 suckers. The proglottides, are wide and thin.

larvae develop to infectivity within the oribatid mite for 2 to 4 months. After the infected mites are eaten, the tapeworms mature in about 6 weeks within the horse.

**Location:** Small intestine, and occasionally in the large intestine and cecum.

**Significance:** Equine tapeworms are not generally regarded as clinically significant unless a large number are present or the host is already in poor condition.

**Effect on Host:** **Anoplocephaliasis** is the disease caused by tapeworms competing with the horse for food and vitamins.

Light infections in horses cause little damage. They especially gather around the ileo-caecal valve at the entrance to the caecum.



Large numbers of tapeworms may spill over into the intestine and cause irritation, producing haemorrhagic or ulcerative enteritis. Intestinal blockage or intestinal inflammation may be seen.

**Diagnostic Information**: Identification of square, rough embryonated eggs or segments in the feces, or the presence of adult worms at necropsy.



DH = horse  
Prepatent period = ~2 mos



2-4 months to develop

IH = Oribatid mite



8

cysticeroid



Pyriform apparatus





# Family: **Thysanomidae**



Genus 1: ***Avitellina***

sp. : ***A. centripunctata***



Infect intestine of sheep, goats.

Filiform, tapered at both ends. The anterior extremity exhibits an apical cone

**Length:** 3m or more, width: 3mm.very short proglottids and unspecified. the worm appeared unsegmented.

**Have P.U.O. (Par –Uterien Organs)**

# Order: **Davainedea**

Its rostellum have Hammer-Shaped Hooks

**Family:** Davainedae

**Genus 1:** *Davainea*

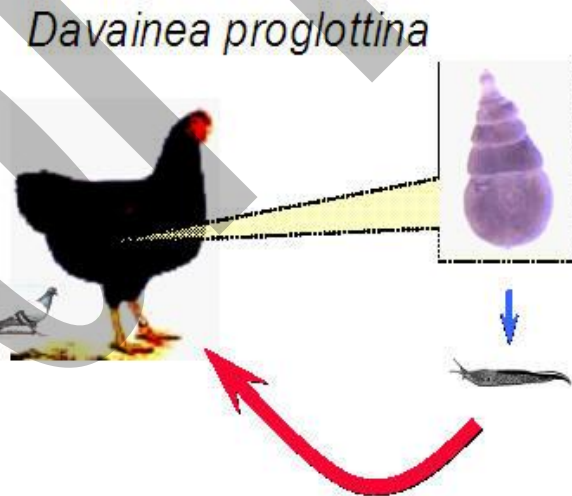
**sp. :** *D. proglottina*

size: 0.5 - 3 mm.

proglottids no.: 4 -9.

hooks on rostellum: 80 -94 which can loss easily.

Site of infection: Duodenum of chickens

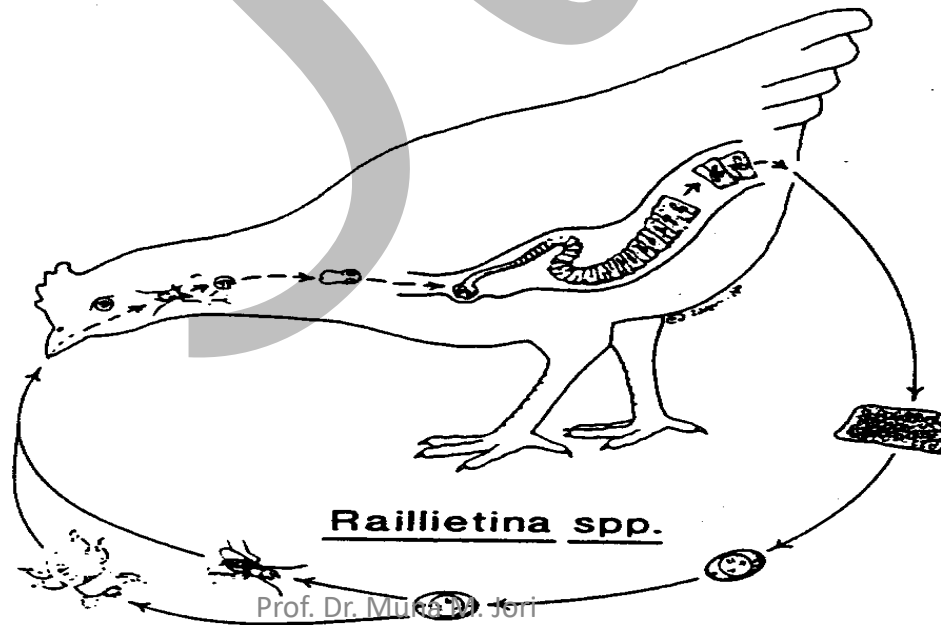


## Genus 2: *Raillietina*

sp. : *R. cesticillus*

Is a common tapeworm of chickens and other poultry.

The intermediate hosts of this worm, beetles but sometimes even houseflies, eat the eggs of the tapeworm, where they develop into cysticercoids. The chicken then consumes the insects while it is foraging. Large numbers can infect a single bird.





Family: **Dipylidiidae**

Genus: ***Dipylidium***

sp. : ***D. caninum***



- Presence of bilateral genital pores in each segment (di: 2; pylis: gate): 2 entrances
- 2 sets of male and female reproductive organs
- Scolex: - Small and globular
- 4 deeply cupped elliptical suckers
- Protrusible/retractile rostellum
- Rostellum has 1-7 rows of rose thorn shaped hooklets.

 The dog tapeworm reach 50 cm in length . It is transmitted to humans by infected dog fleas. also

called the cucumber tapeworm or the double-pore tapeworm.

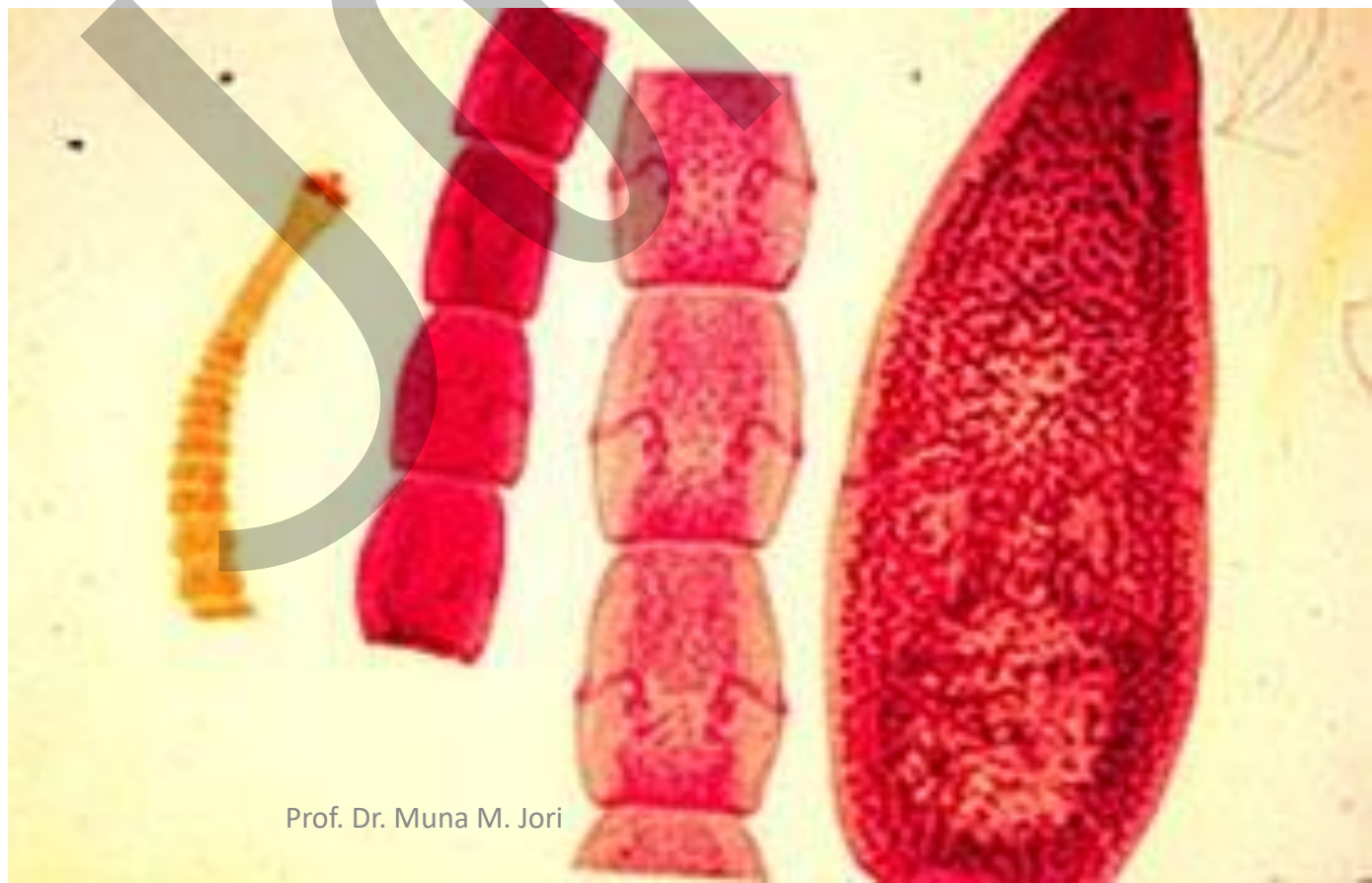
Each side has a set of male and female reproductive organs.

The scolex has a rostellum with four rows of hooks, along with the four suckers that all cyclophyllid cestodes have.

Children are the most frequently affected. By kissing a dog or having it lick the face, an infected dog flea can easily be swallowed.

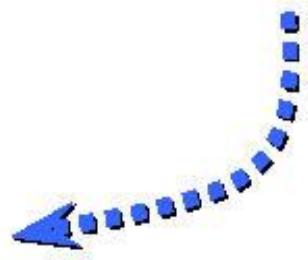
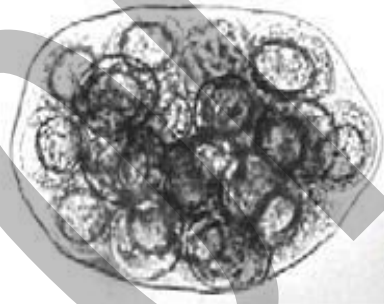


Identify the "**pumpkin seed**" tapeworm: seed-like particles in the stool or undergarments. These particles are actually the egg-bearing segments of the tapeworm. After the flea is swallowed, the larvae is liberated, reaching maturity in about twenty days.





# *Dipylidium caninum*





*Thank You*  
*And*  
*Good Luck*