

Genus : Fasciolopsis

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Fasciolopsis : Morphology

- *Fasciolopsis buski* is usually elongated, oval shaped, without a cephalic cone fluke.
- Its size varies depending on the host species, and is between 2 and 10 cm in length .
- The oral sucker is subterminal, small and approximately one-fourth the size of the ventral sucker.
- An oval pharynx is present and the short oesophagus leads to the caeca which are unbranched and terminate near the posterior end of the body.
- The two testes are highly branched, tandem, and situated in the posterior half of the body.
- The branched ovary is pretesticular situated in the middle of the body .
- A large cirrus pouch is present and opens at a genital pore immediately anterior to the acetabulum.
- The vitelline glands are numerous and small-sized, and extend from the level of the ventral sucker.



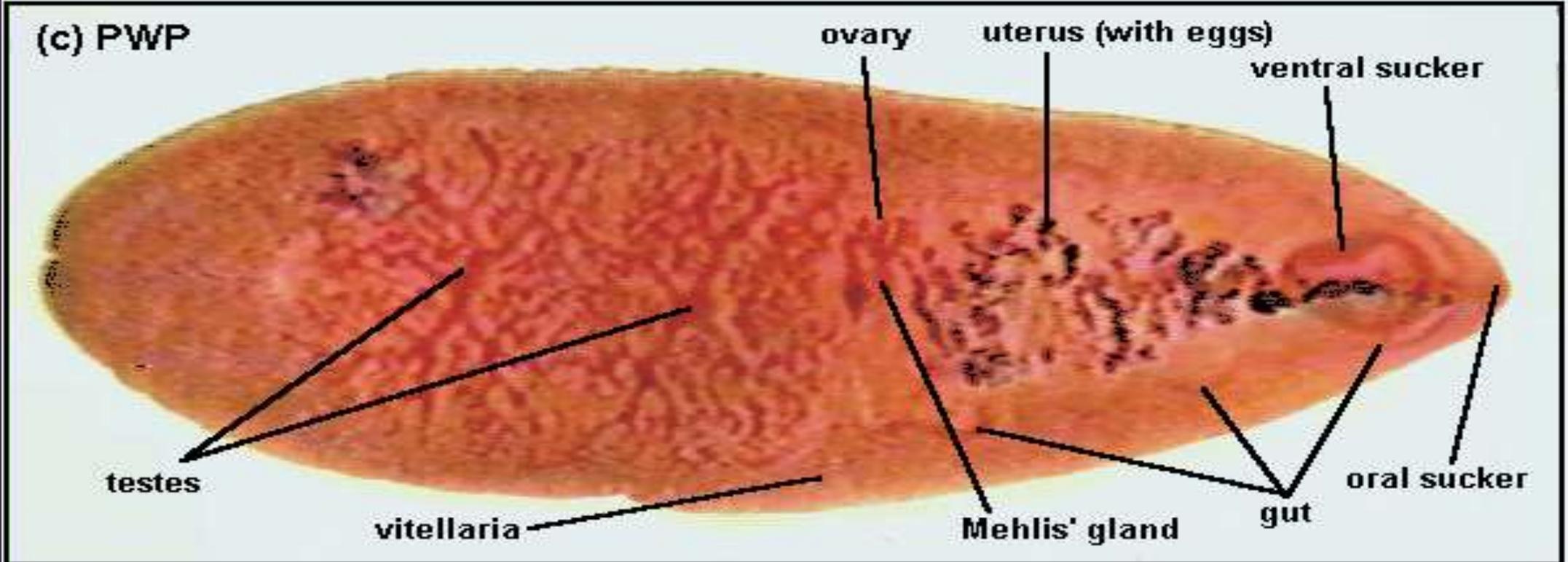
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Fasciolopsis buski

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Fasciolopsis buski

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(by P.W. Pappas and S.M.Wardrop)

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Fasciolopsis: Parts of the body

Fasciolopsis : life cycle

- The adult fluke discharged immature, unembryonated eggs into the faeces.
- The eggs become embryonated in water within two weeks,.
- After about seven weeks, eggs release miracidia, which invade a suitable snail intermediate host.
- In the snail the fluke undergoes several developmental stages e.g sporocysts, rediae, and cercariae.
- The cercariae are released from the snail and encyst as metacercariae on aquatic plants such as water chestnut, water caltrop, lotus, bamboo etc.
- The mammalian final host becomes infected by ingesting metacercariae on the aquatic plants.
- After ingestion, the metacercariae excyst in the duodenum in about three months and attach to the intestinal wall.
- There they finally develop to adult flukes.



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Fascioloopsis: Water caltrop

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Fasciolopsis: *Trapa natans*

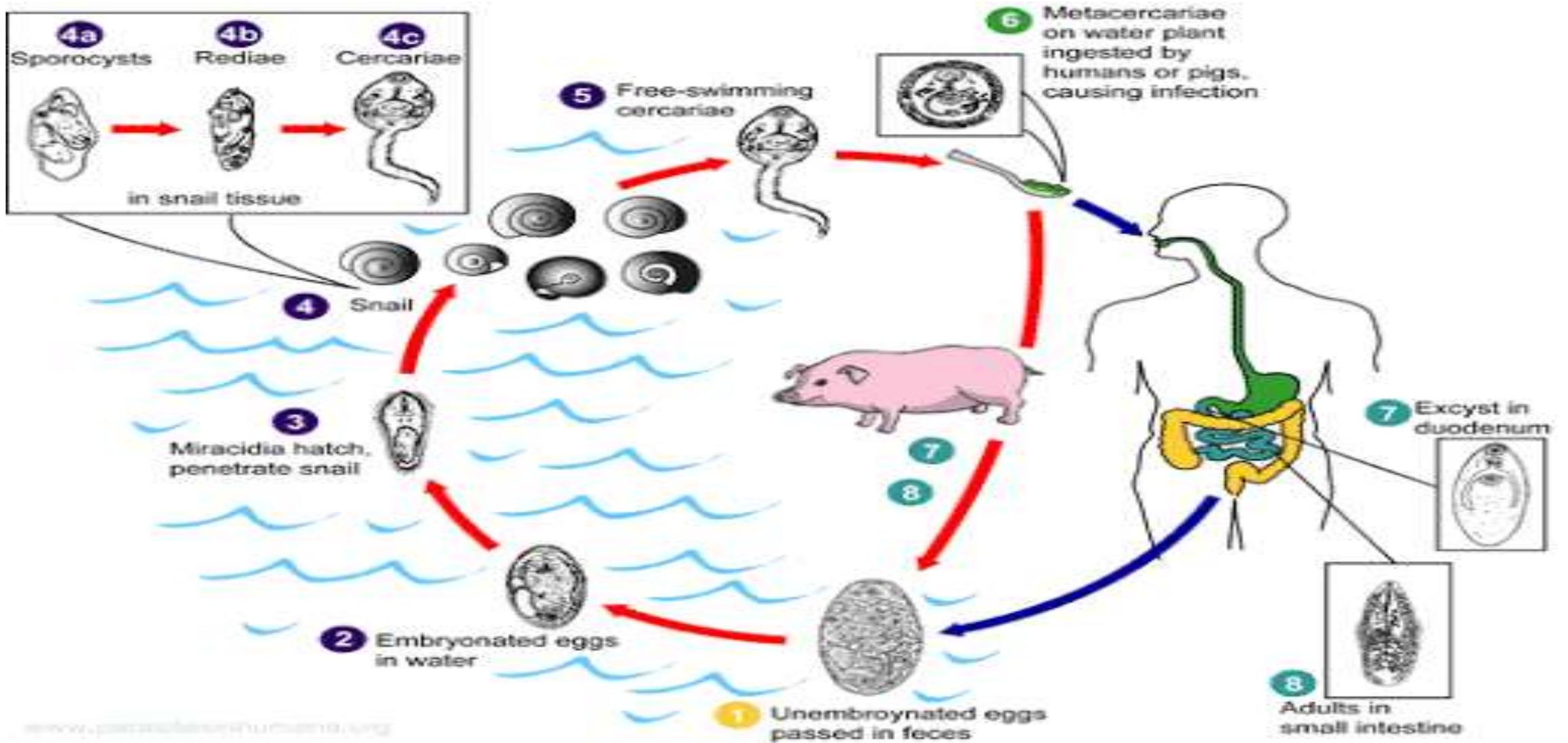
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Fasciolopsis: *Segmentina* & *Achatina* spp.

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Fasciolopsis: life cycle

Fasciolopsis : Pathogenesis

- Mostly infections are light and almost asymptomatic.
- In heavy infections, abdominal pain, chronic diarrhea, anemia, ascites, toxemia, allergic responses like symptoms can be seen.
- Sensitization caused by the absorption of the worms allergenic metabolites and intestinal obstruction.
- Ulcers or abscesses develop at the site of attachment to the intestinal mucosa in the duodenum and jejunum.
- Eosinophilia is common, and anemia can be seen in severe cases.
- In cases of heavy infections, an edematous condition resulting from protein-losing enteropathy .
- Large numbers of flukes in the intestine may cause ileus or intermittent obstruction.



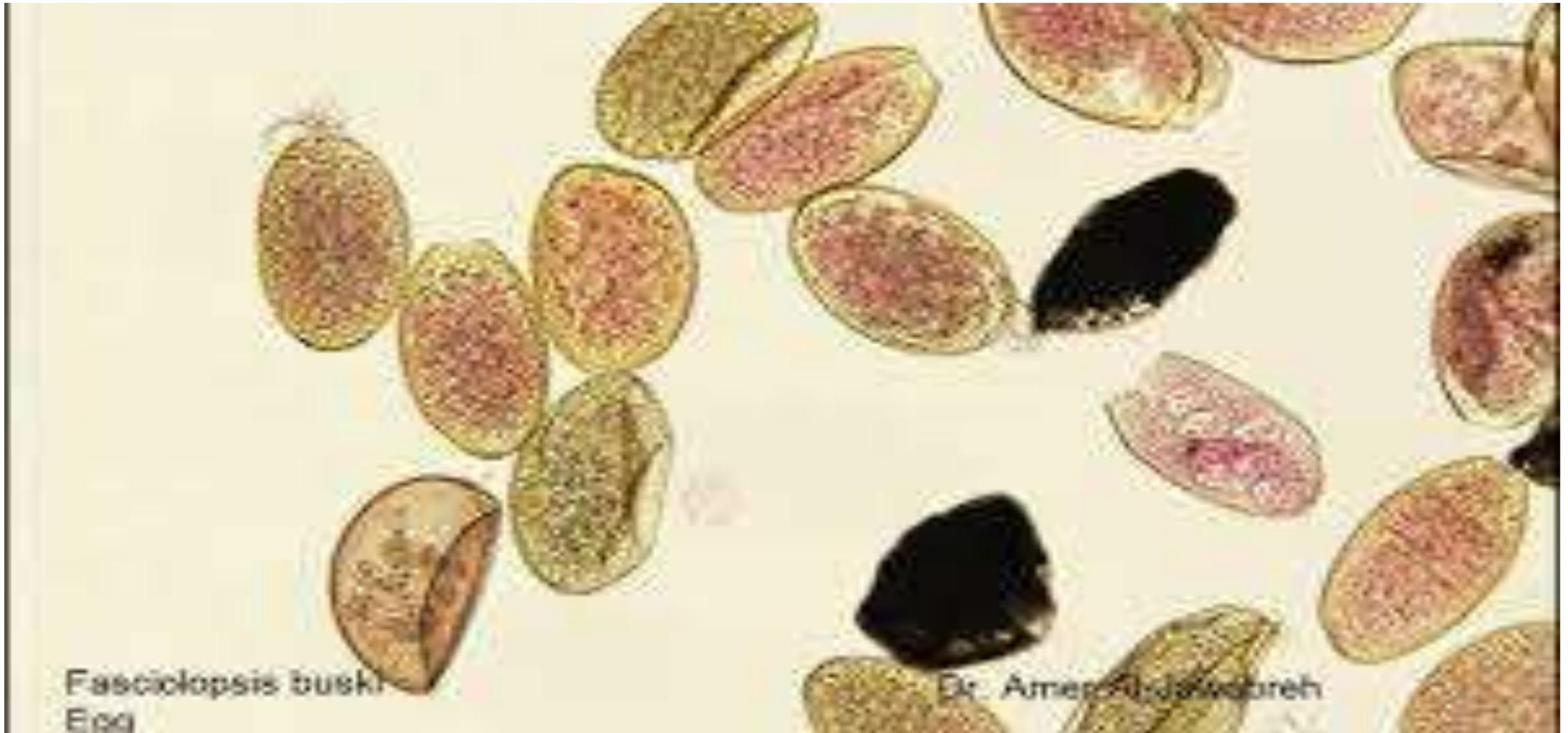
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Fasciolopsis : lesions

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Fasciolopsis : Diagnosis

- Faecal examination for identification of eggs.
- Occasionally the adult flukes found in the vomit, is the basis of specific diagnosis.
- The eggs are indistinguishable from those of the very closely related *Fasciola hepatica* liver fluke.



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Fasciolopsis: Eggs

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Fasciolopsis: Egg

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Fasciolopsis : Prevention & control

- Properly wash then cook all aquatic plants well before eating.
- Never eat raw aquatic plants.
- In endemic areas, prevent fecal contamination (from pigs) of water where aquatic plants are grown.
- Do not feed raw aquatic plants to pigs.