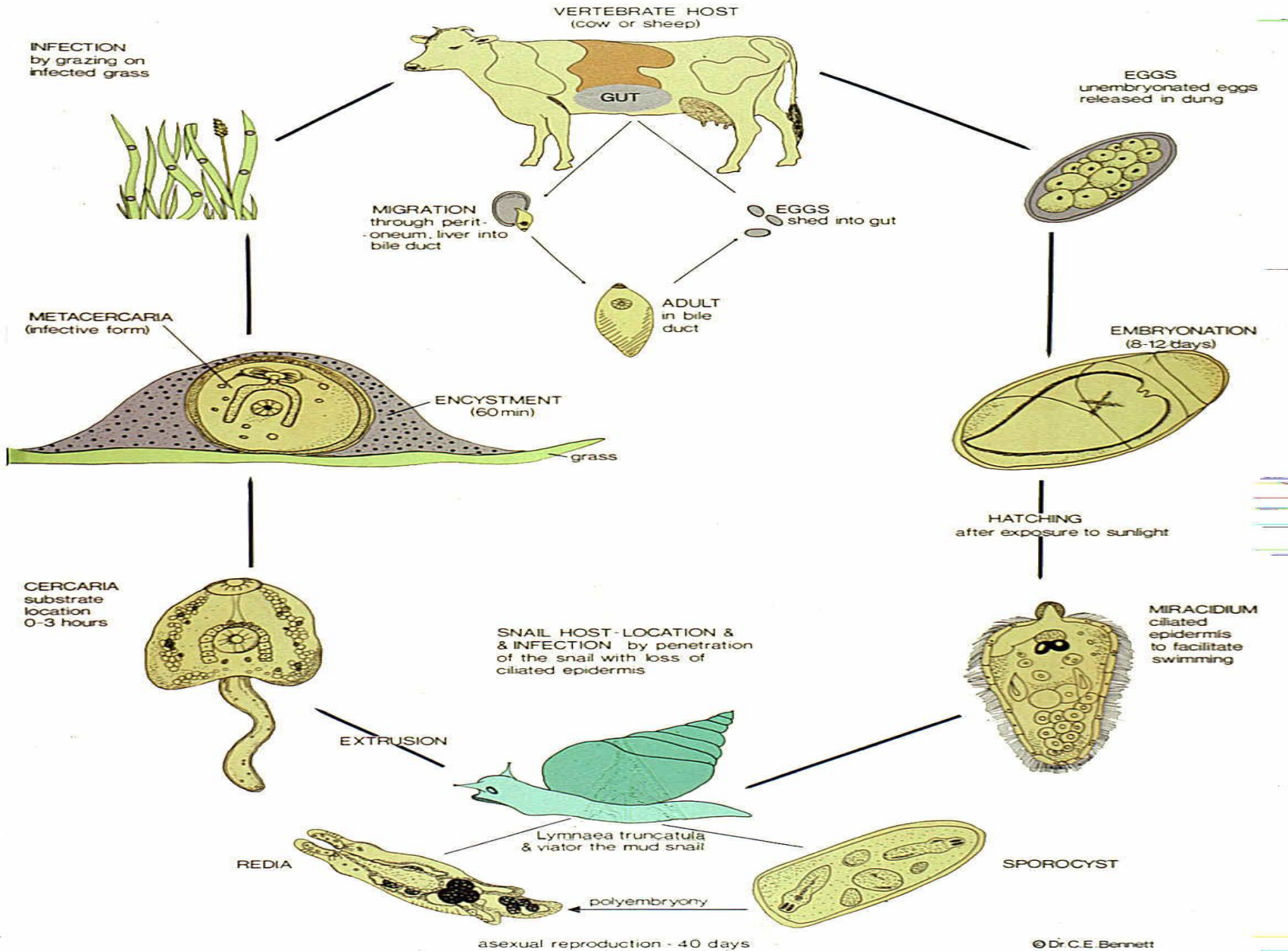


**GENERAL LIFE CYCLE  
OF  
DIGENETIC TREMATODS**

# LIFE CYCLE PATTERN IN DIGENETIC TREMATODES

- Trematoda is a class under the phylum platyhelminthes
- All digenetic trematodes have indirect life cycles.
- If they have only one intermediate host in its life cycle then it is essentially a species of snail.
- Trematods generally lay operculated eggs while some may lay spined eggs.
- There is five larval stage in life cycle of trematodes.

# The Life Cycle of *Fasciola hepatica*.

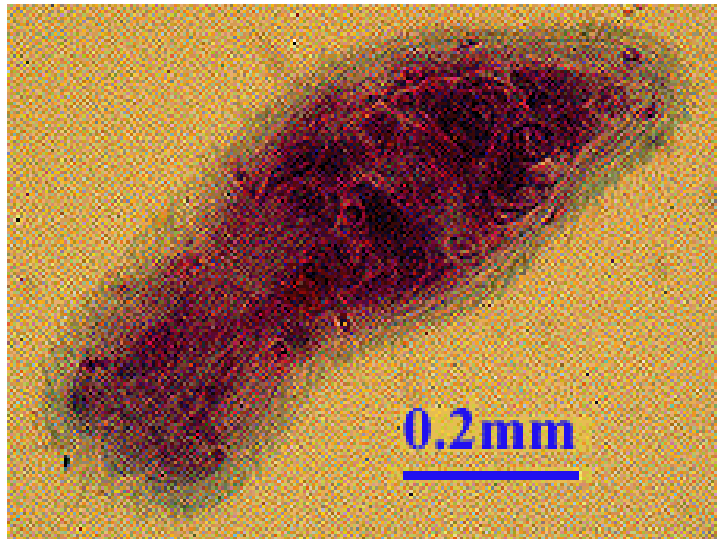


- The eggs usually passed in the faeces of the host & under suitable conditions miracidium hatches. Hatching is controlled by light temperature & salinity.

Five larval stage are miracidium, sporocyst, rediae, cercariae & metacercariae.

mesocercariae – prolonged cercariae stages may occur in *Alaria* spp.

**MIRACIDIUM:-** Roughly triangular in shape & it is covered by ciliated ectoderm & have anterior spin for boring into intermediate host.



**SPOROCYST:-** An undifferentiated mass of cells. Within the sporocyst the germinal cells multiply & produce either daughter sporocyst or redia.



**REDIAE:-** Has an oral sucker & pharynx, saclike intestine & birth pore.



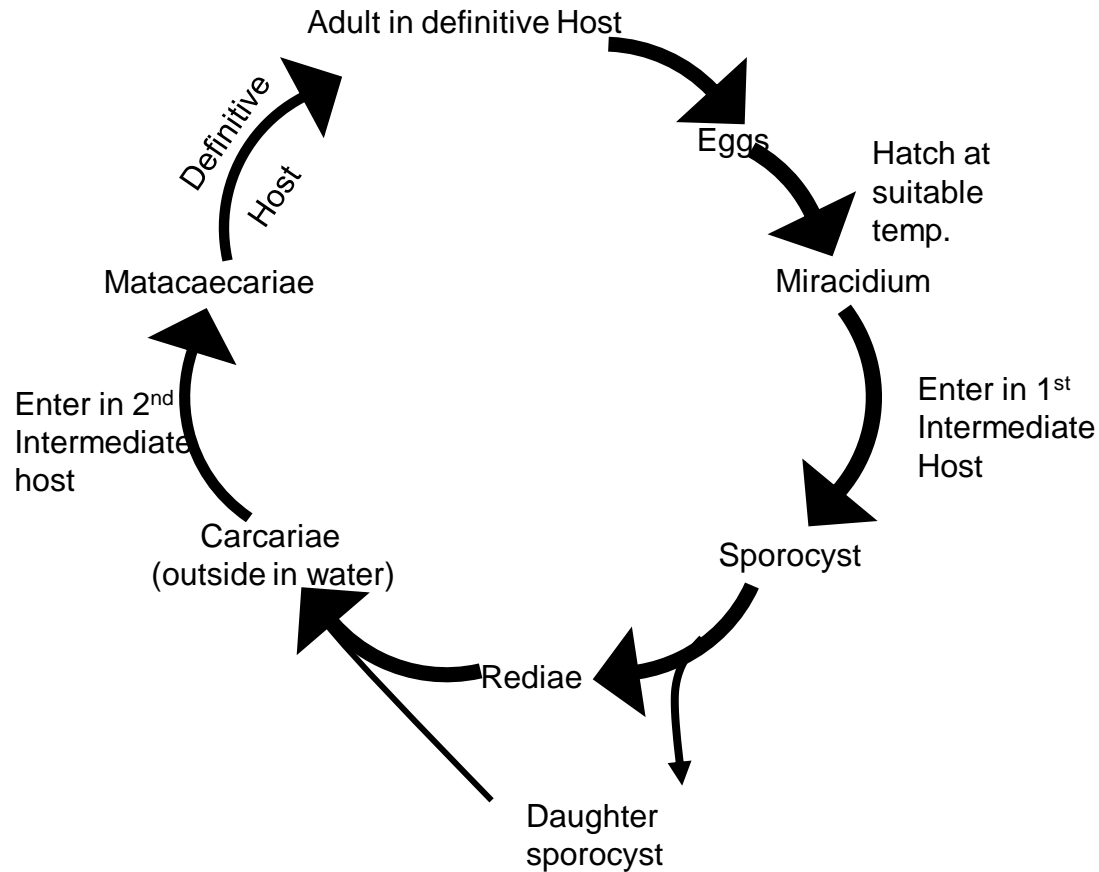
**CERCARIAE:-** Has suckers, adult like intestine, special glands & anterior spine & also provide with tail by which it propels itself through the water.



# METACERCARIA



- It reach to the definitive host.
- It may enter in host by contaminated herbage. In the family Schistosomatidae cercaria actively penetrate the skin of the definitive host.
- The reproductive potential in the trematode life cycle is enormous.
- When the encysted metacercaria is swallowed by the final host encystation occurs in the intestinal tract.



- Cercariae usually encyst on vegetation or in 2<sup>nd</sup> intermediate host or swim in water with the help of tail.
- The encysted form undergoes physiological maturation to produce the infective stage metacercaria.



# The Life Cycle of *Fasciola hepatica*.

