

Different types of pathogenic parasites

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Leishmania/ tropica

- Leishmania/ tropica are a protozoan endoparasite, residing in human skin causing cutaneous leishmaniasis or oriental sore (oriental boil).



- L. tropica is a digenetic parasite.

The primary host is man whereas the secondary host are sand-flies of the genus Phlebotomus.

- The life cycle of L. tropica is essentially similar to those of L. donovani and the two species are indistinguishable morphologically



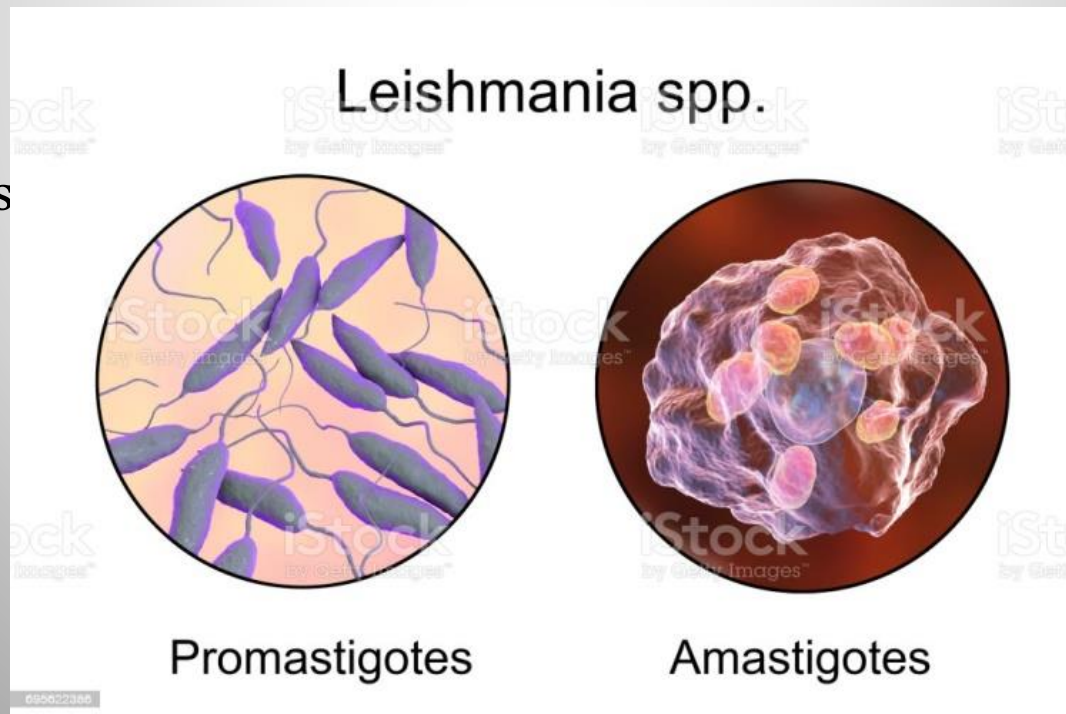
Two morphologically different forms exist during the life cycle.

promastigote (leptomonad) form.

The promastigote form increases their number by binary fission and in about

three weeks
time reaches
of the fly.

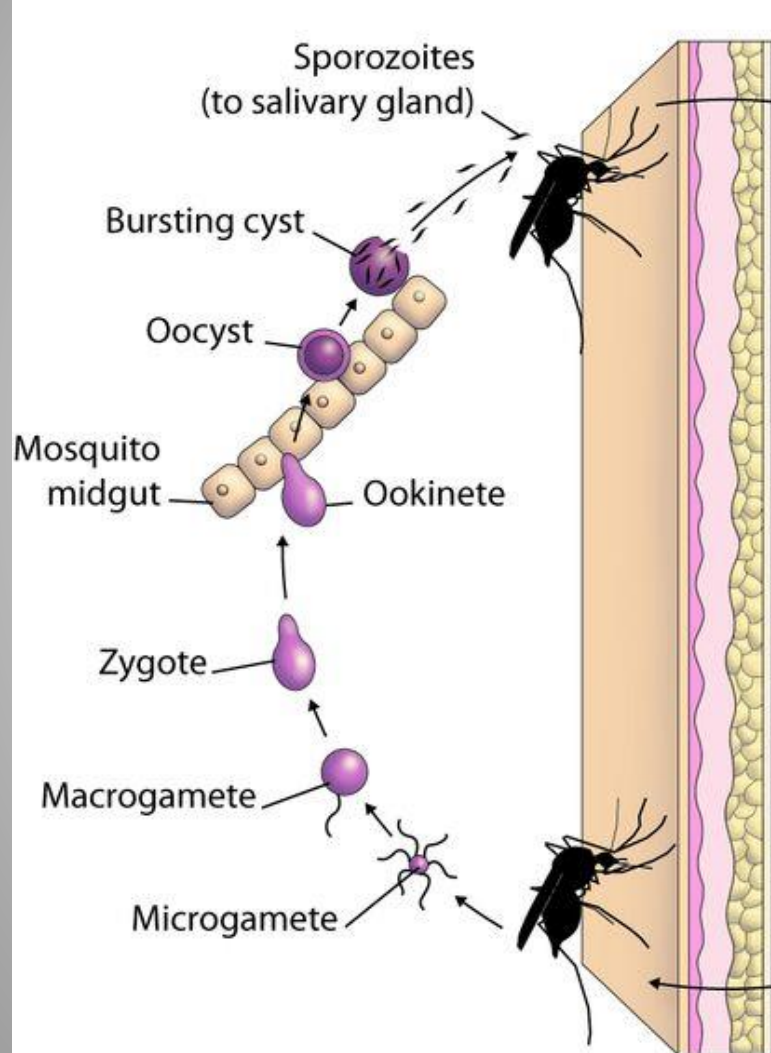
The amastigote (leishmanial) form resides in the large mononuclear cells of the skin of human beings.



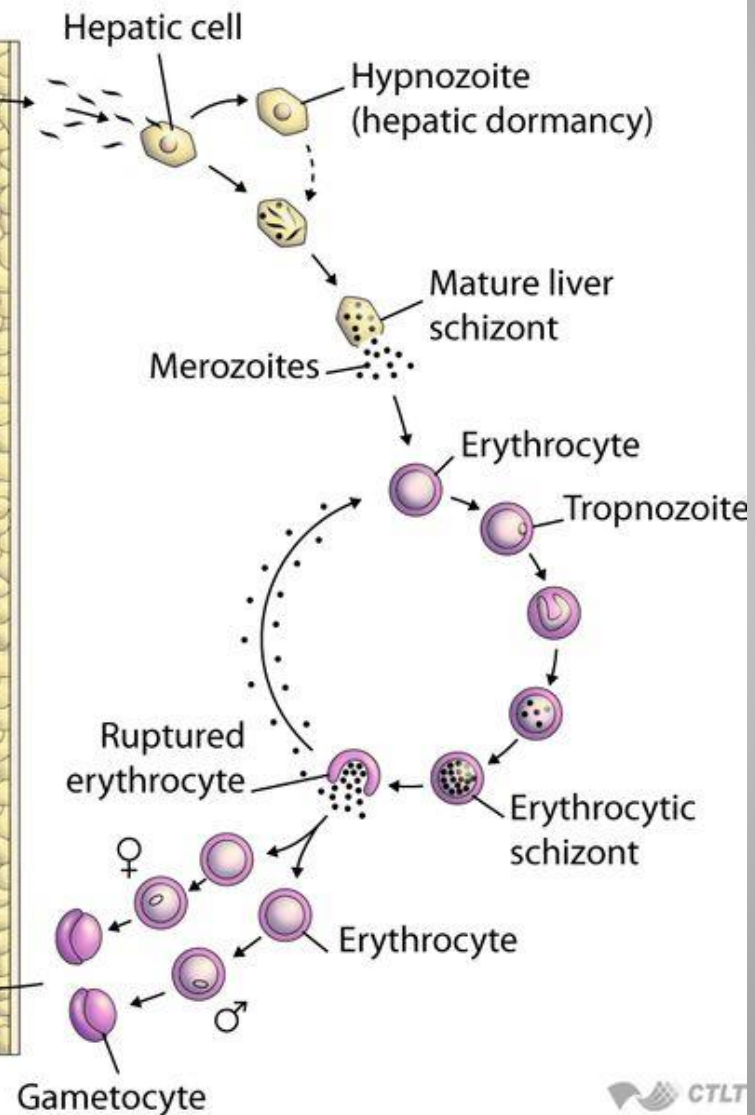
Plasmodium vivax

- is a protozoal parasite and a human pathogen. cause of recurring malaria. Although it is less virulent than *Plasmodium falciparum*, often due to splenomegaly (a pathologically enlarged spleen). *P. vivax* is carried by the female *Anopheles* mosquito; the males do not bite.

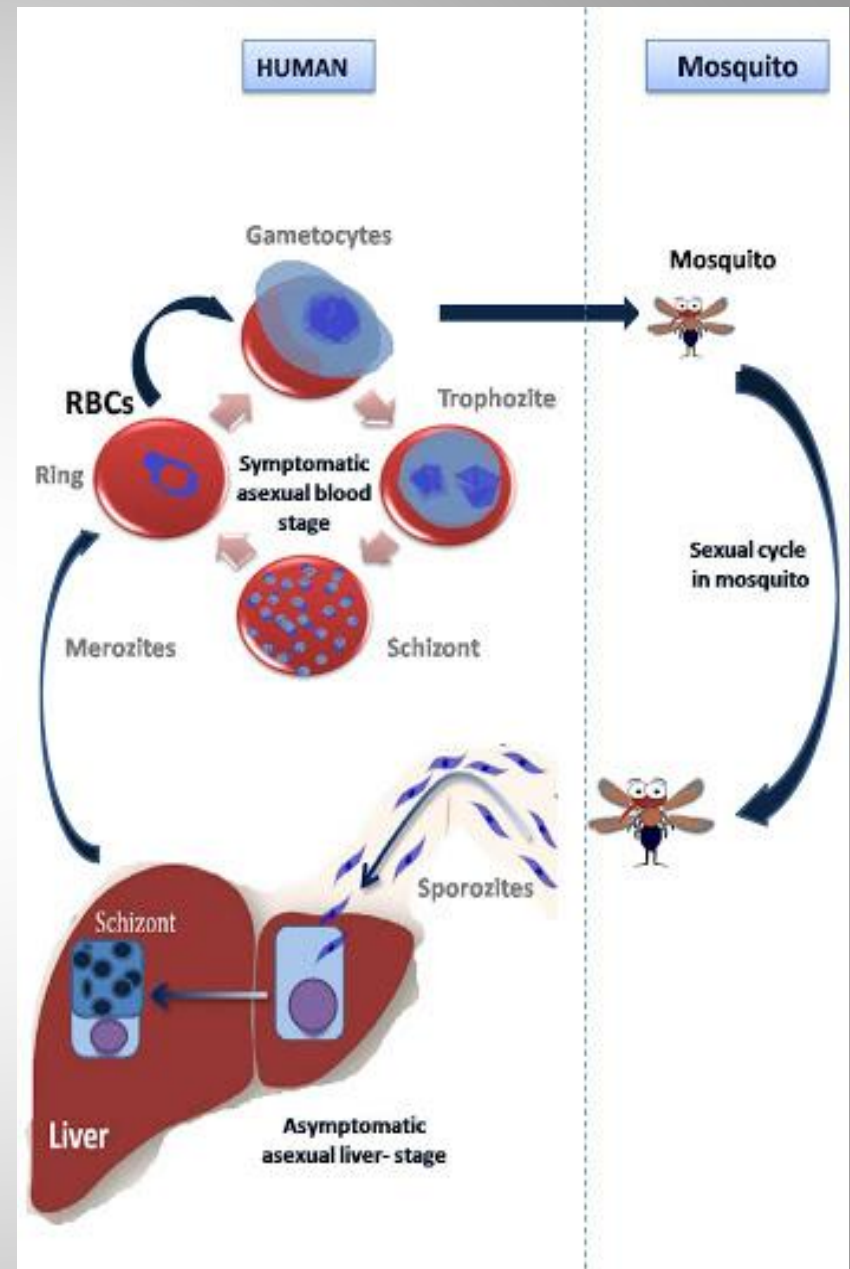
Cycle in Mosquito



Cycle in Human

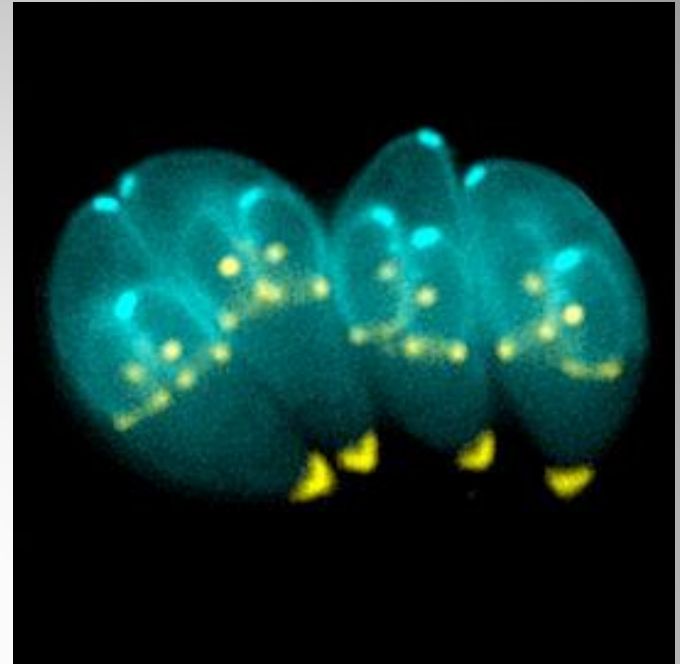


- Asexual forms: (in human)
 - Sporozoite
 - Immature trophozoites
 - Mature trophozoites
 - Schizonts merozoites.
- Sexual forms: (in mosquito)
 - Gametocytes
 - Gametes
 - Zygote
 - Oocyst: Contains zygote, develops into sporozoites

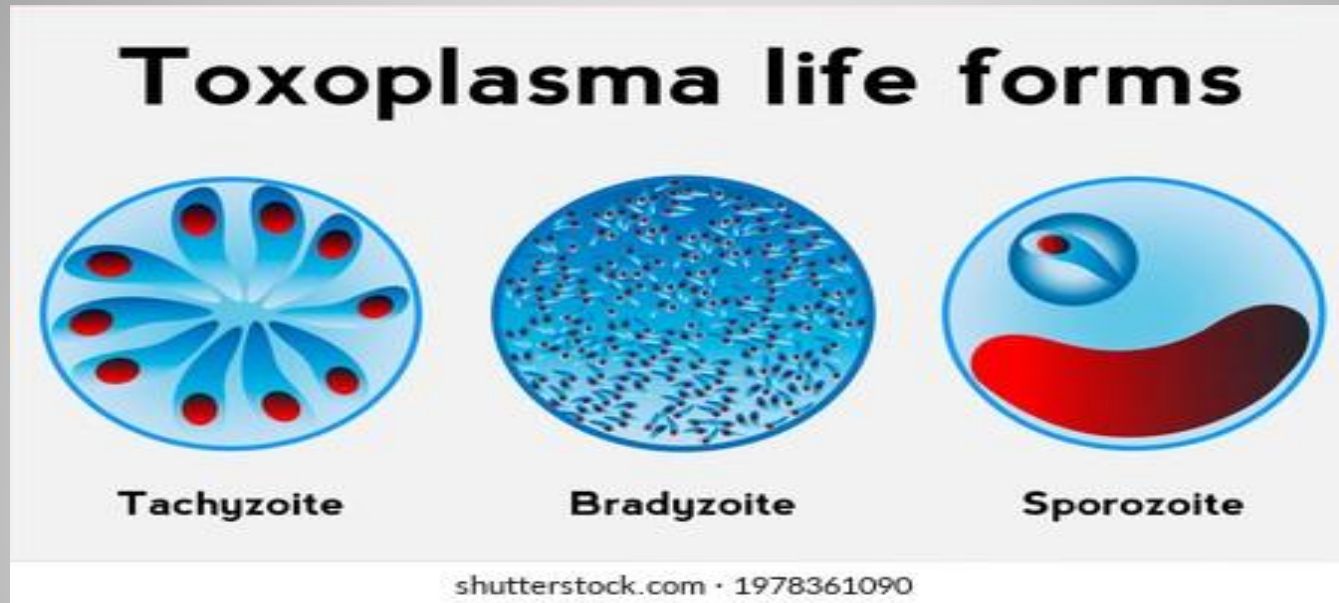


Toxoplasma gondi

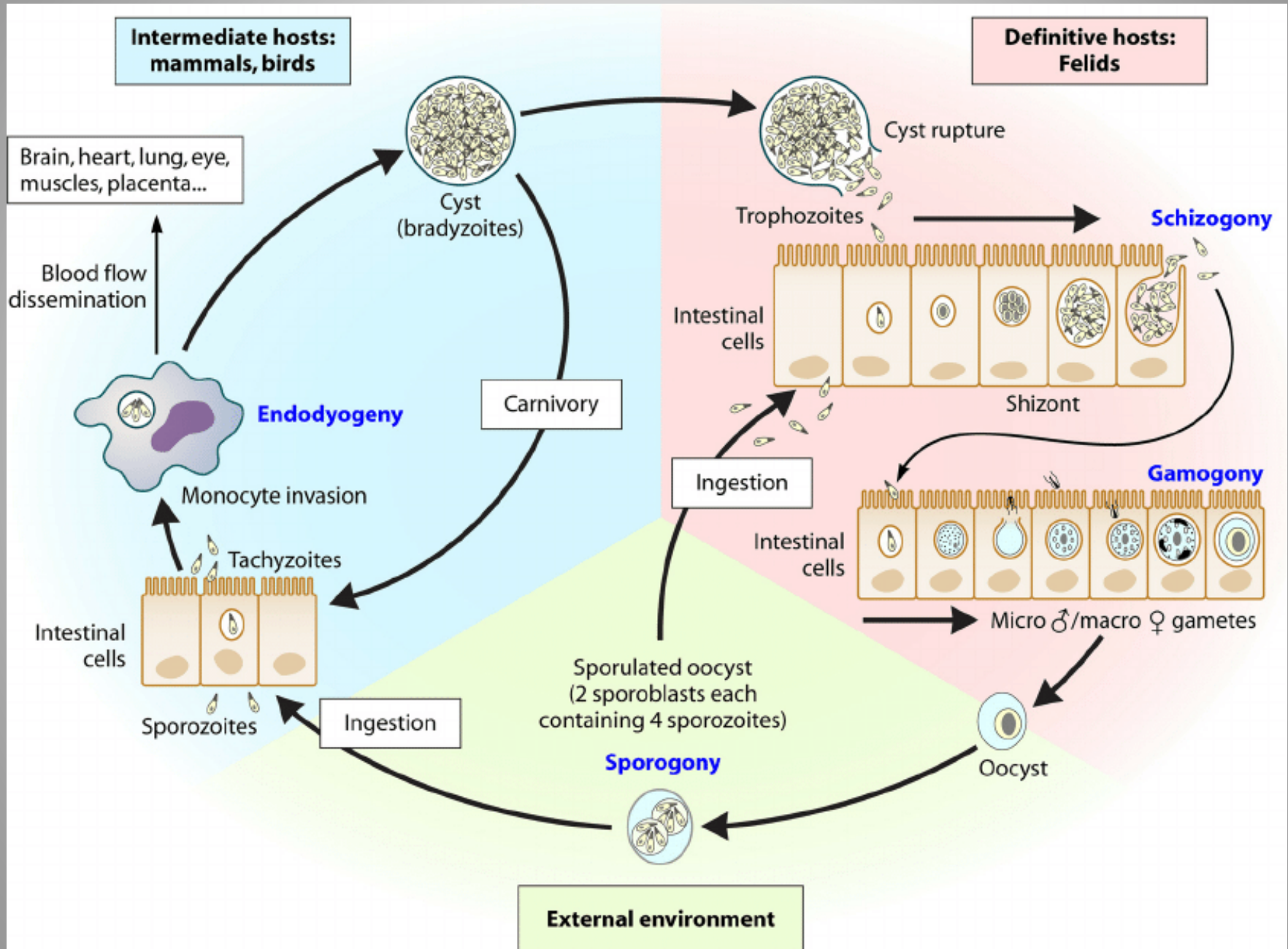
- *Toxoplasma gondii* is causes the infectious disease toxoplasmosis .
- a sexual component that occurs only within cats (felids, wild or domestic)
- an asexual component that can occur within virtually all warm-blooded animals, including humans, cats, and birds



Stage of cycle life *Toxoplasma gondii*



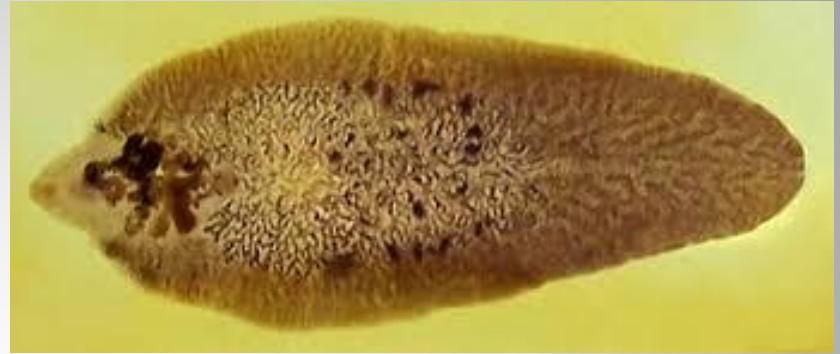
- Tachyzoites
- Merozoites
- Bradyzoites
- Sporozoites



Fasciola hepatica

Fasciola hepatica, also known as

the **common liver fluke** or



sheep liver fluke, is a parasitic trematode (fluke or flatworm, a type of helminth) of the class Trematoda, phylum Platyhelminthes. It infects the livers of various mammals, including humans, and is transmitted by sheep and cattle to humans the world over. The disease caused by the fluke is called fasciolosis or fascioliasis, which is a type of helminthiasis .

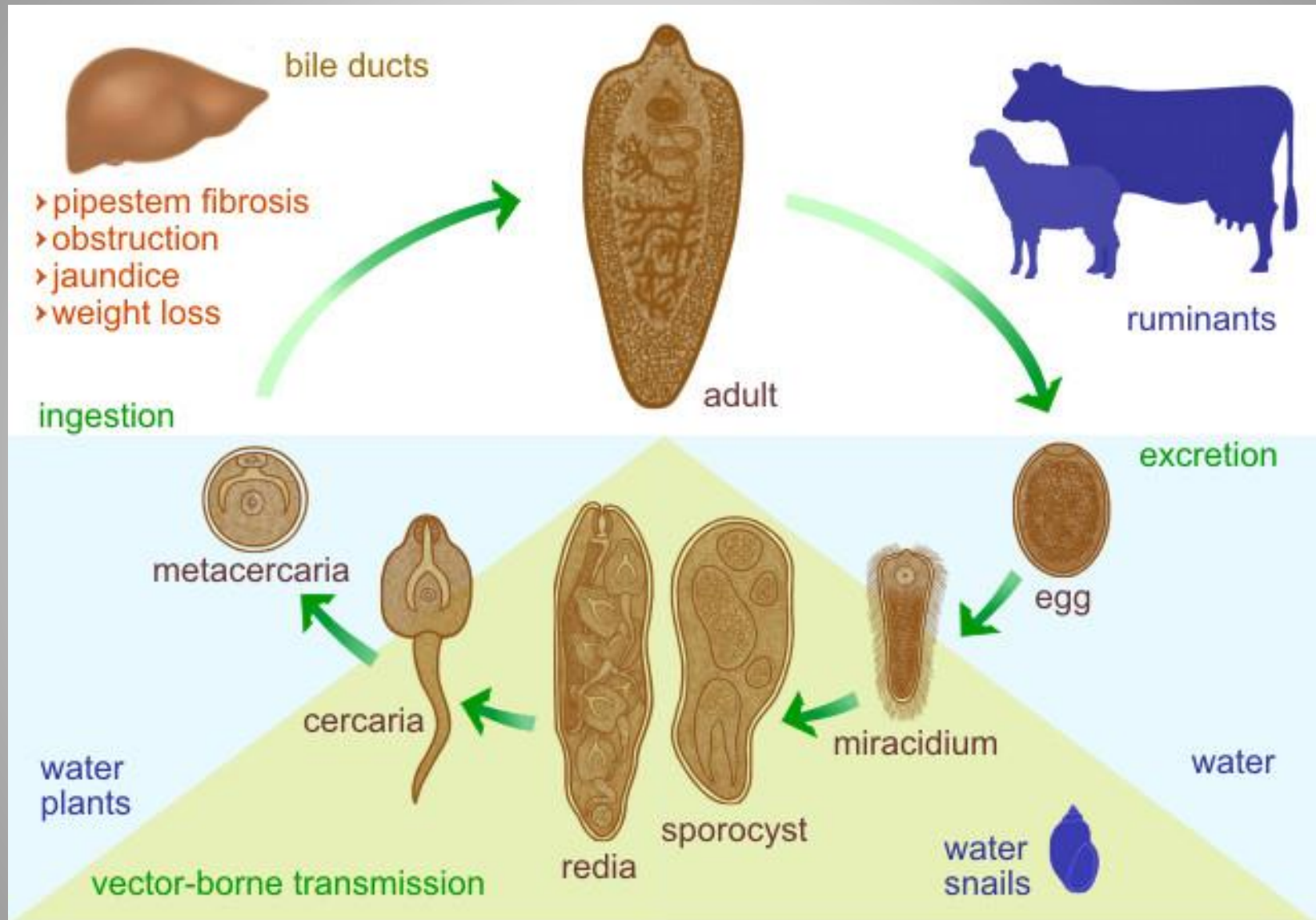
Stages cycle life of

- **In human**

- metacercariae
- adult fluke
- Eggs

- **In snail,**

- the miracidia
- sporocysts
- rediae
- cercariae



Thank you