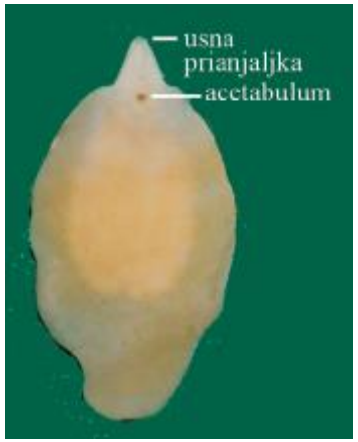
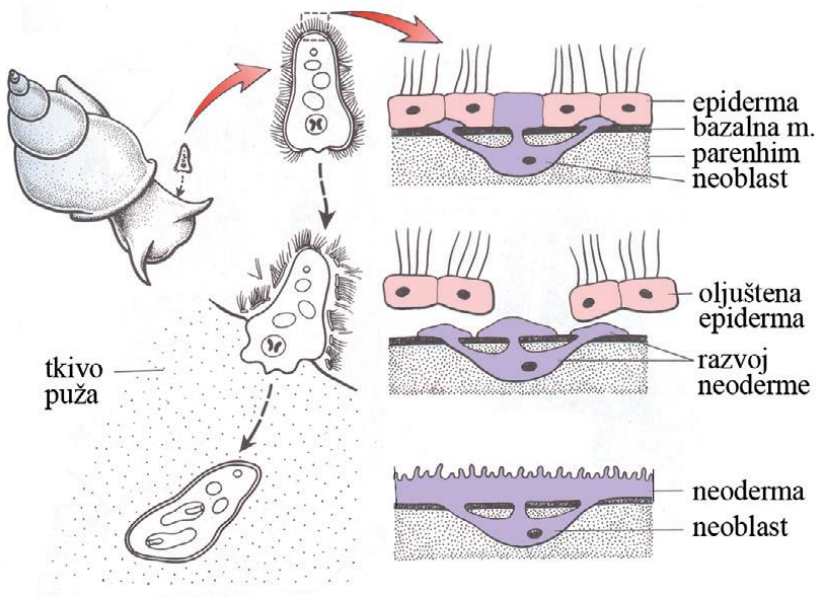
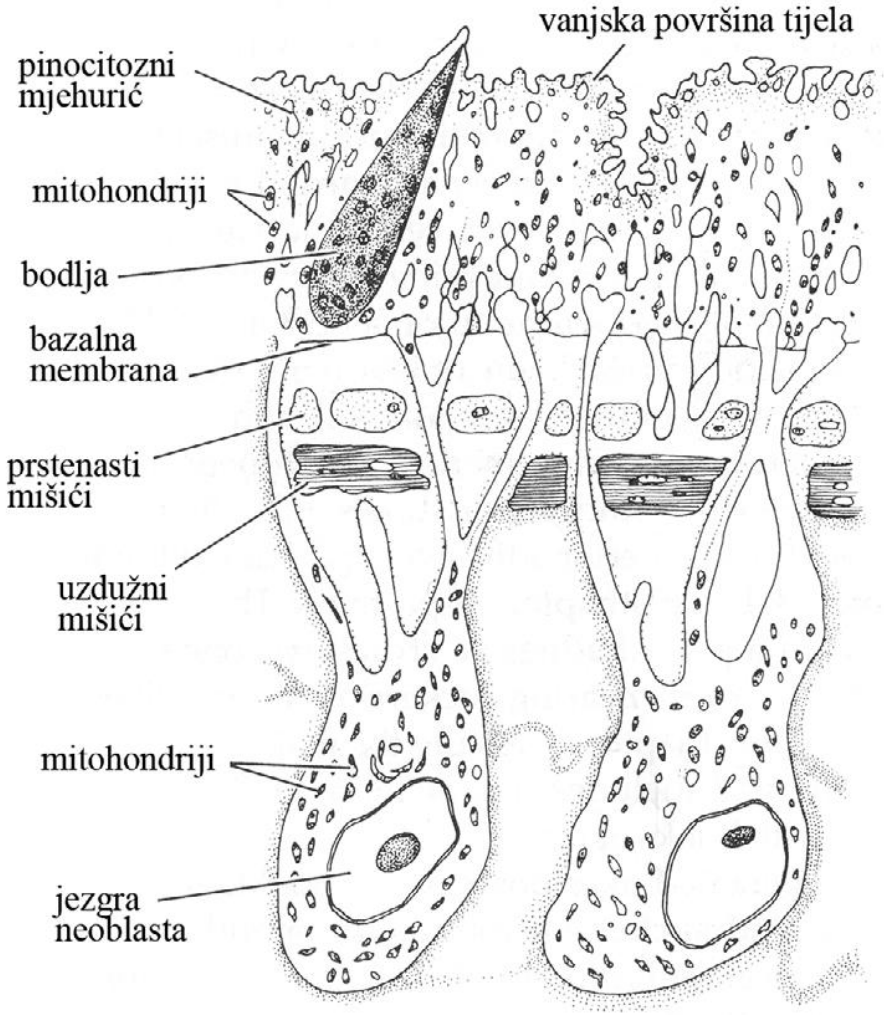
Metilji i trakavice

Dvorodni metilji

- neoderma

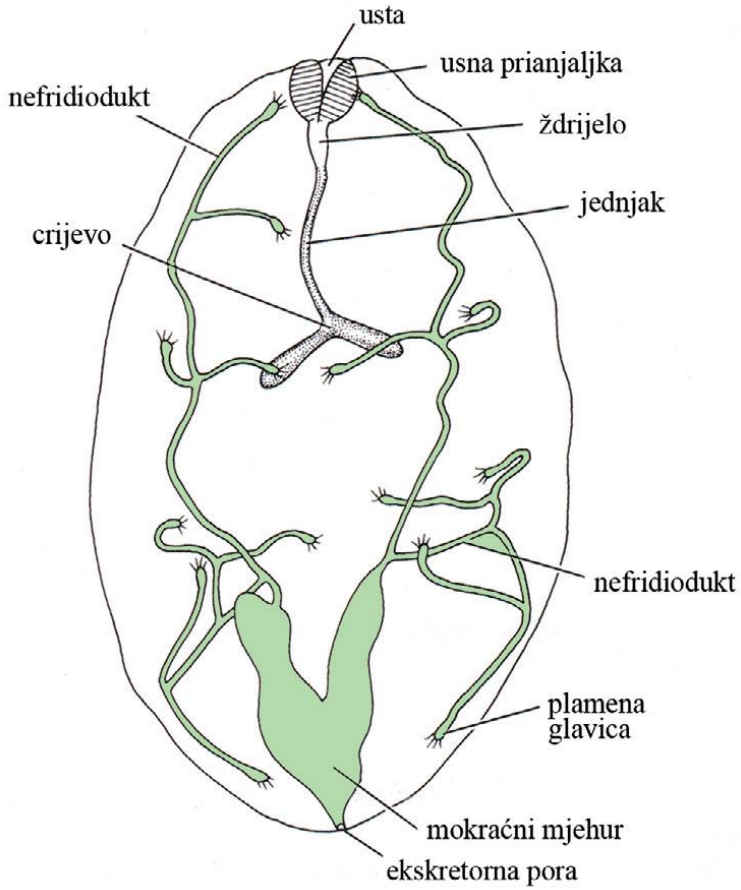






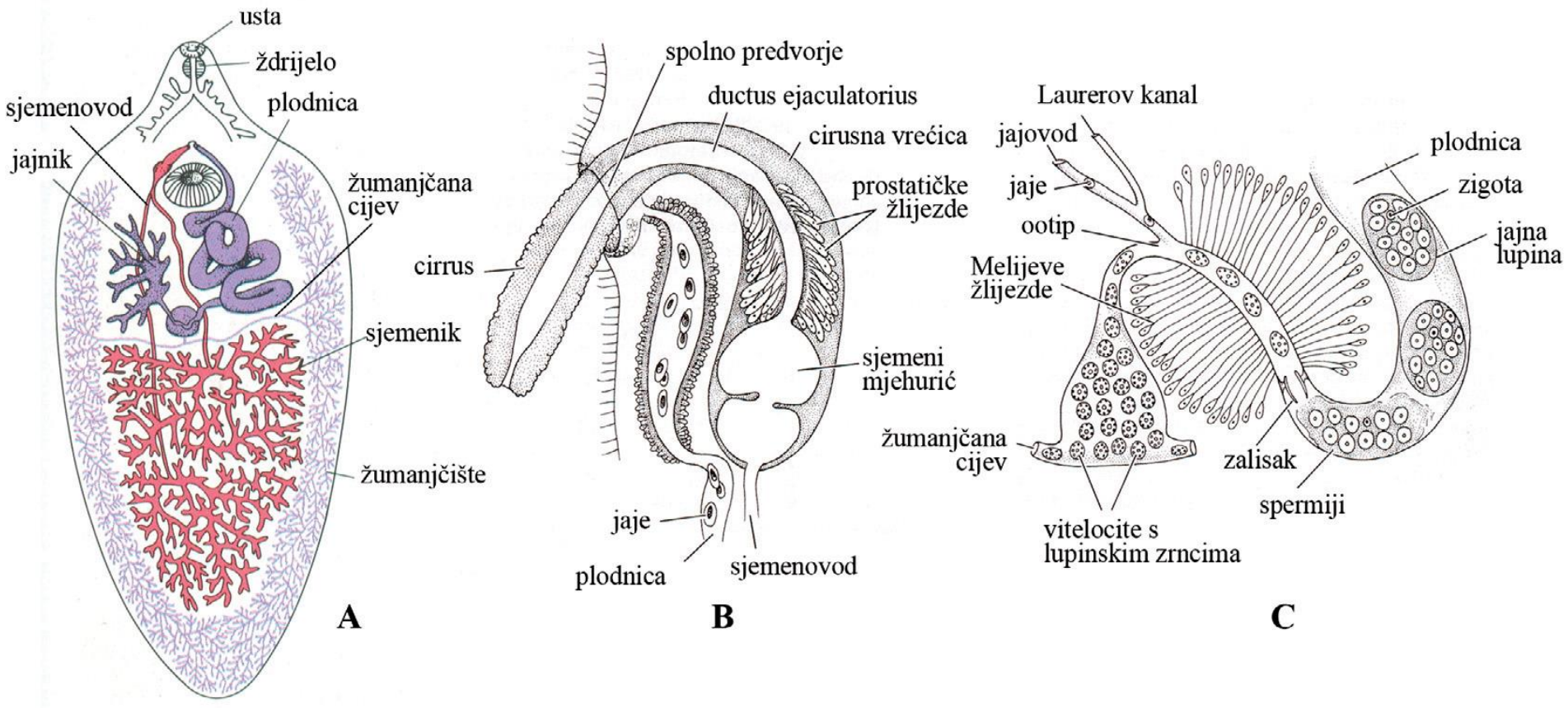
(Habdija i sur. 2021.)

Dvorodni metilji

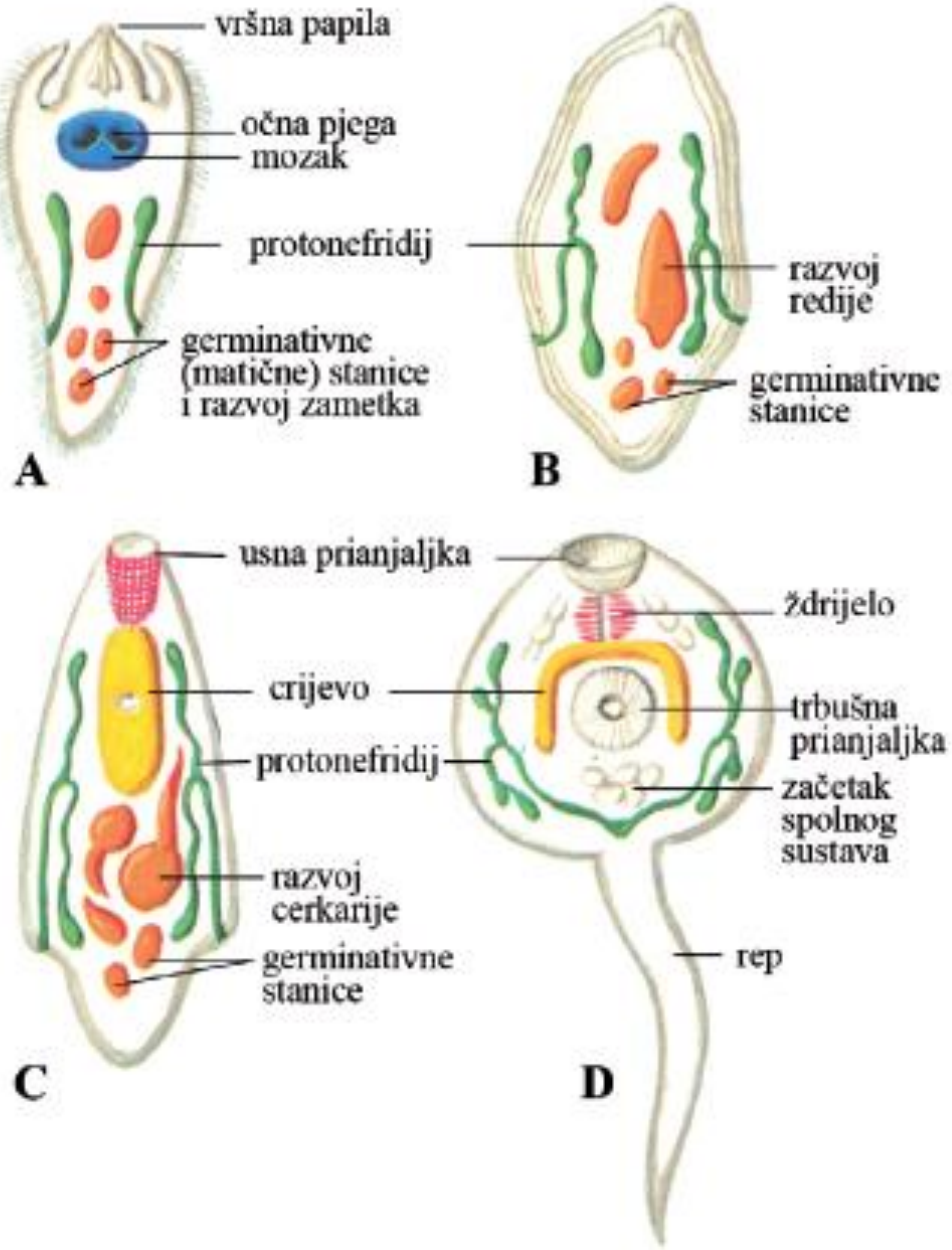


(Habdija i sur. 2021.)

Spolni sustav metilja

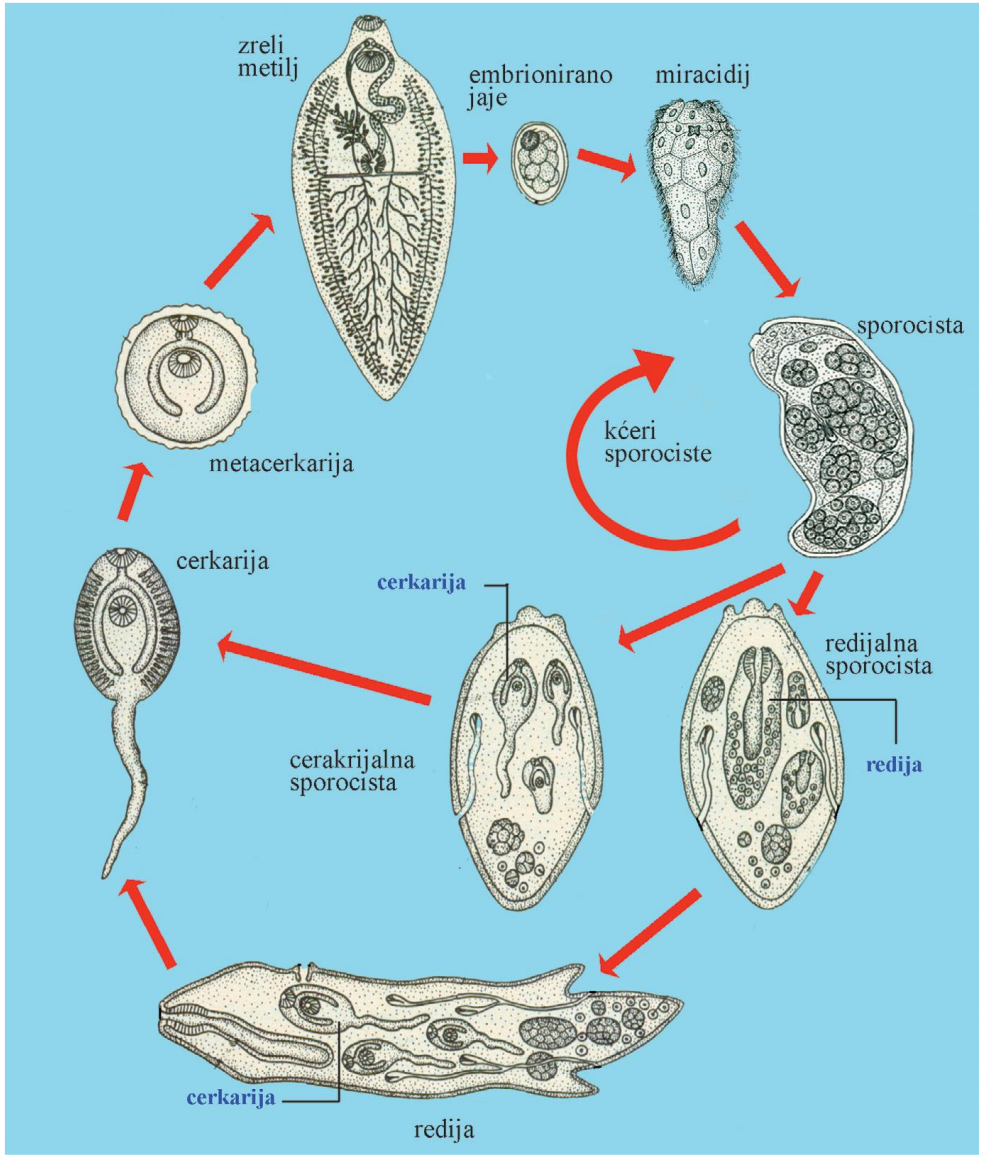


Životni stadiji



Fasciola hepatica

- poliembrionija
- dolazi do hiperplazije epitelnih stanica žučovoda



(Habdija i sur. 2021.)

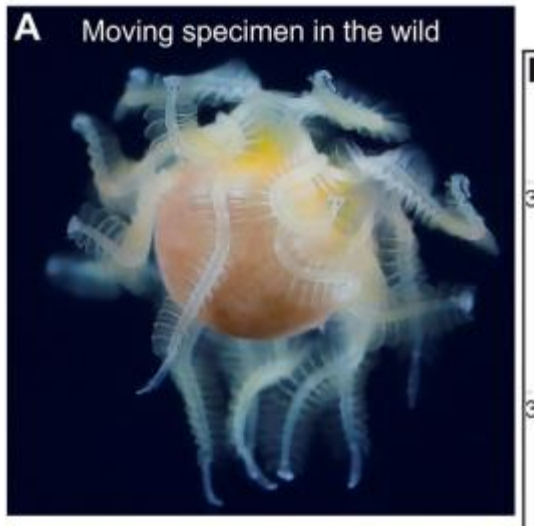
„Podjela rada” redija

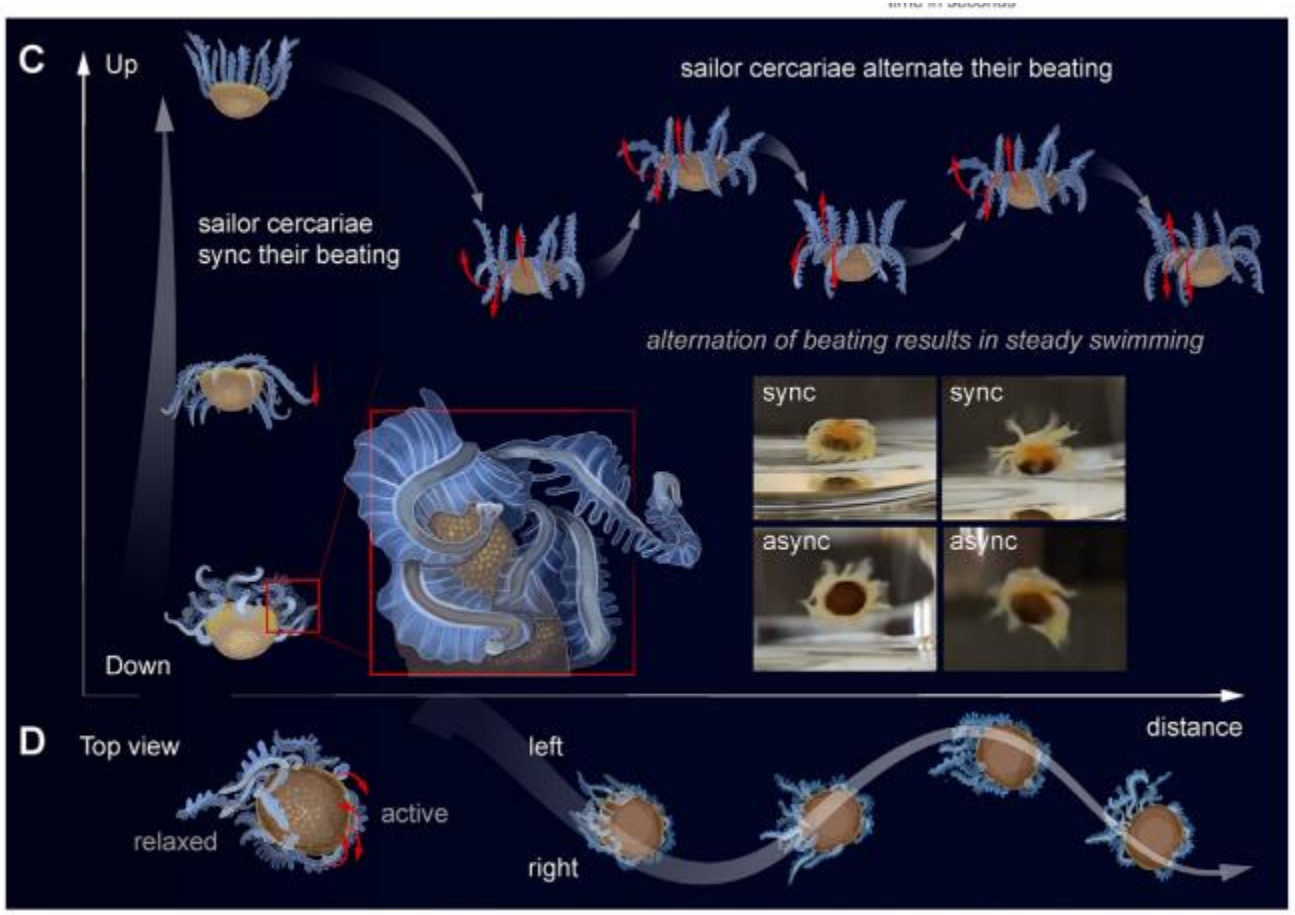
- Redije se kod nekih metilja diferenciraju:
  - „redije vojnici”
  - „reproduktivne redije”

- stopa diferencijacije u ovisnosti o infekciji drugom vrstom metilja

„Podjela rada” cerkarija

- *Pleorchis* sp.
- „sailors” & „passengers”

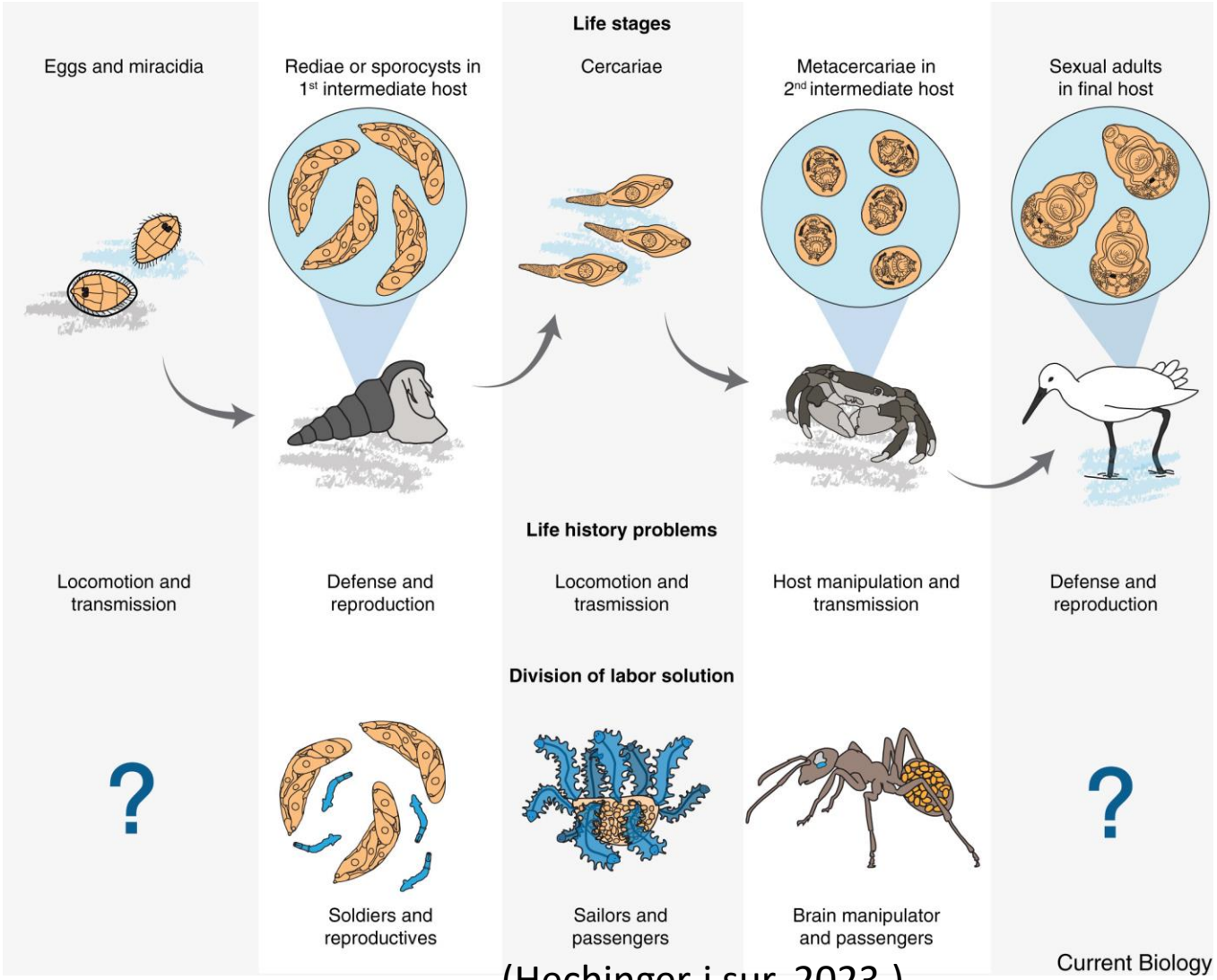




(Krupenko i sur. 2023.)

Izazovi u životnom ciklusu i podjela rada

- „kaste” ličinačkih stadija

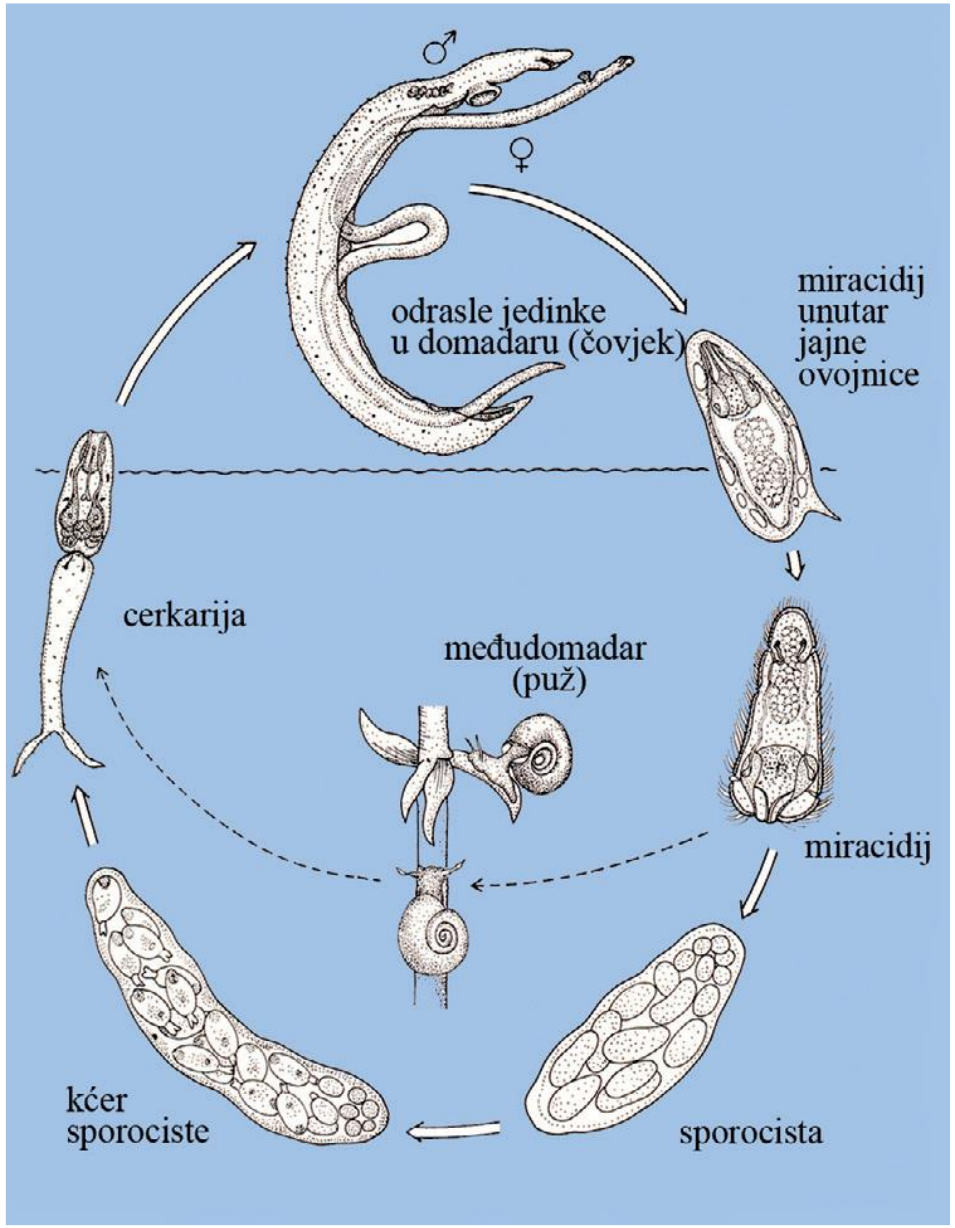


(Hechinger i sur. 2023.)

Por. Schistosomatidae – krvni metilji

- šistosomijaza
- spolni dimorfizam
- odrasli žive u krvnim žilama

  - utječu na imunitet domadara: zajednički imunitet
  - IgE



Schistosoma mansoni

Promjena ponašanja domadara

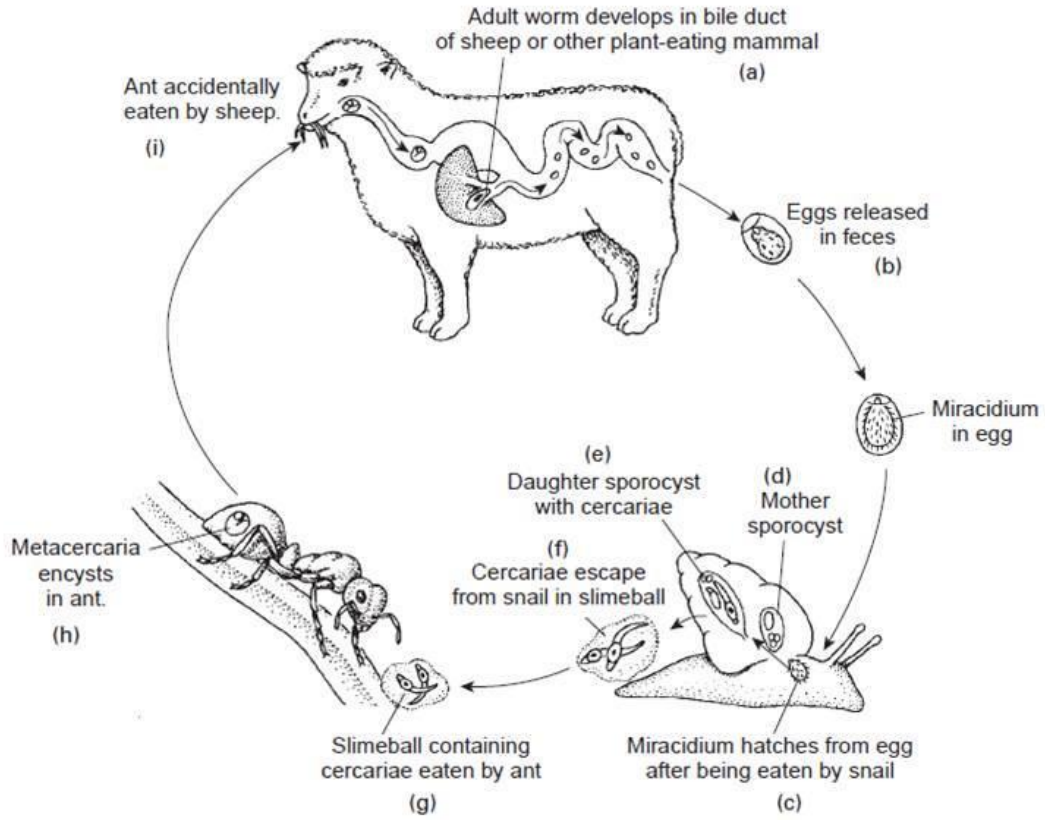


Figure 18.2 Life cycle of *Dicrocoelium dendriticum*.
(*a*) Adult, in bile duct of sheep or other plant-eating mammal. (*b*) Egg released in feces. (*c*) Miracidium hatching from egg after being eaten by snail. (*d*) Mother sporocyst. (*e*) Daughter sporocyst. (*f*) Cercariae escaping from snail in slimeball. (*g*) Slimeballs containing cercariae eaten by ant. (*h*) Metacercaria encysting in ant. (*i*) Ant accidentally eaten by sheep.

Drawing by William Ober and Claire Garrison.

Por. Schistosomatidae – krvni metilji

- glavni međudomadari puževi roda *Biomphalaria*
- Imaju imunosni odgovor:
  - hemociti stvaraju proteine slične fibrinogenu koji aglutiniraju nametničke antigene i potiču fagocitozu ili stvaranje čahure oko nametnika
- nametnik može napasti ličinke drugih metilja ili lučiti tvari koje ih suzbijaju



Biomphalaria glabrata

www.aquaportail.com

Koinfekcije s više vrsta metilja

- Koinfekcija - obično dolazi do kompetitivnog isključivanja
- hijerarhija dominacije

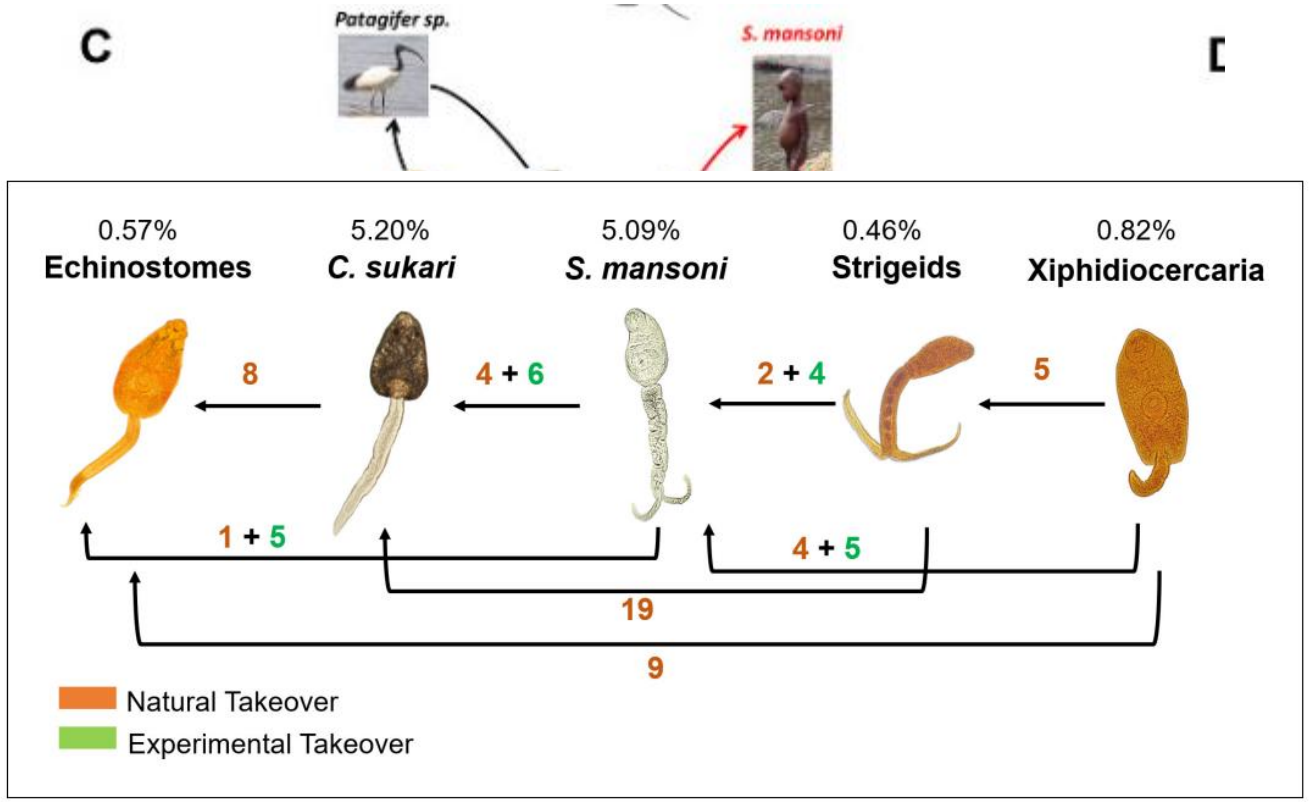


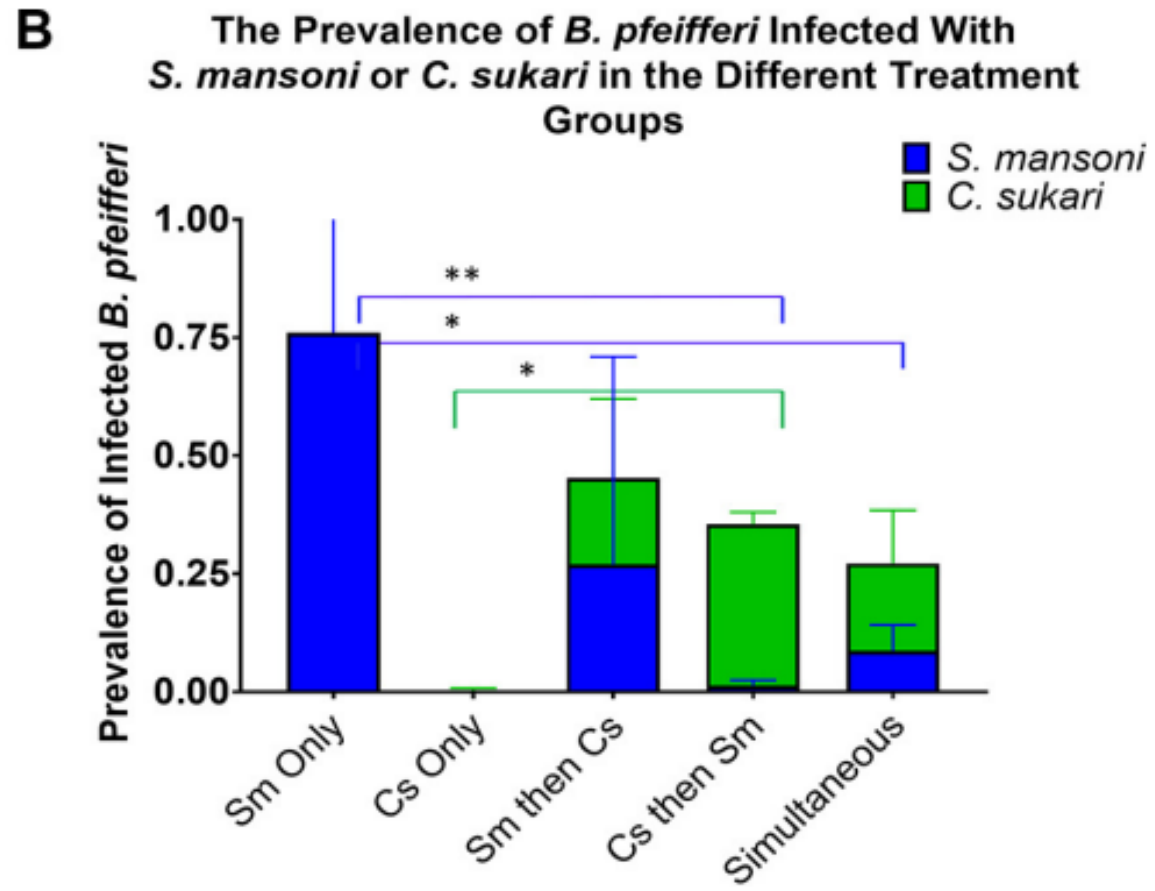
Figure 2. Trematode hierarchy in *B. pfeifferi* at Asao Stream. The dominance hierarchy was worked out through both experimental superinfections of snails with existing infections (green numbers), and by maintaining infected snails from the field to see if they switched from shedding one type of cercaria to another (orange numbers). Percentages shown are the prevalence of infected *B. pfeifferi* (shedding/total number of *B. pfeifferi* collected) for each group.

(Laidemitt i sur. 2019)

Koinfekcije s više vrsta metilja

- Slučaj koinfekcije *Schistosoma mansoni* i *Calicophoron sukari*

- značaj tradicionalnog stočarstva



(Laidemitt i sur. 2019)

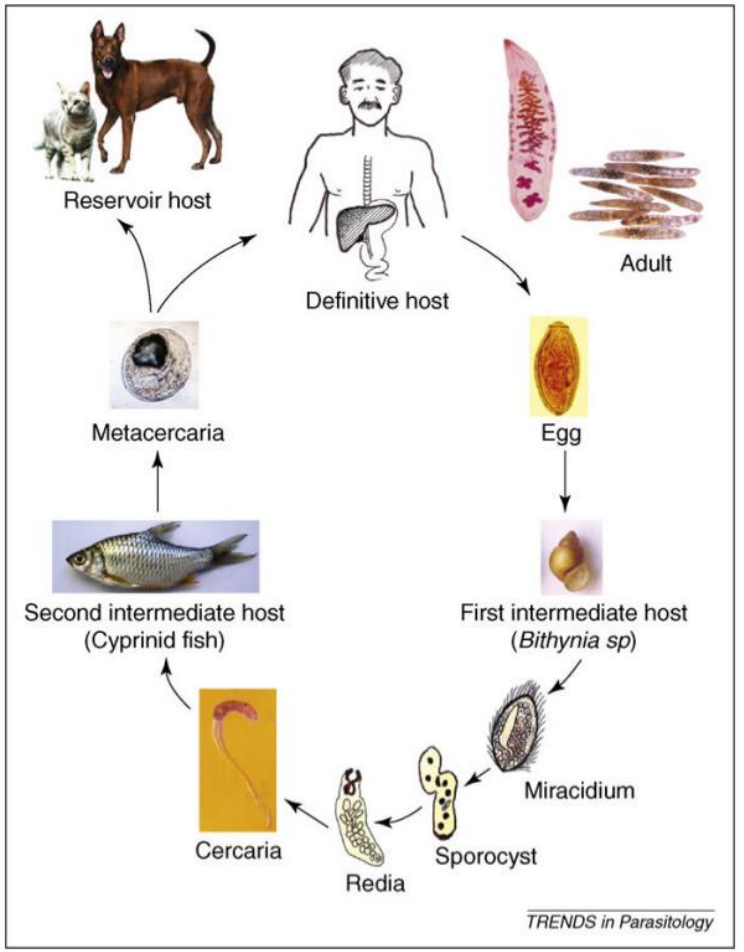
Povezanost metilja i karcinoma

- kolangiokarcionom (rak žučnih vodova)
- Iritacija dovodi do metaplazije, ponekad neoplazije



Figure 2. Raw fish salat- local name "Gỏi cá" at Vietnam's Thai people restaurant in Son La.

(Bui i sur. 2024.)



Opisthorchis viverrini

Trakavice

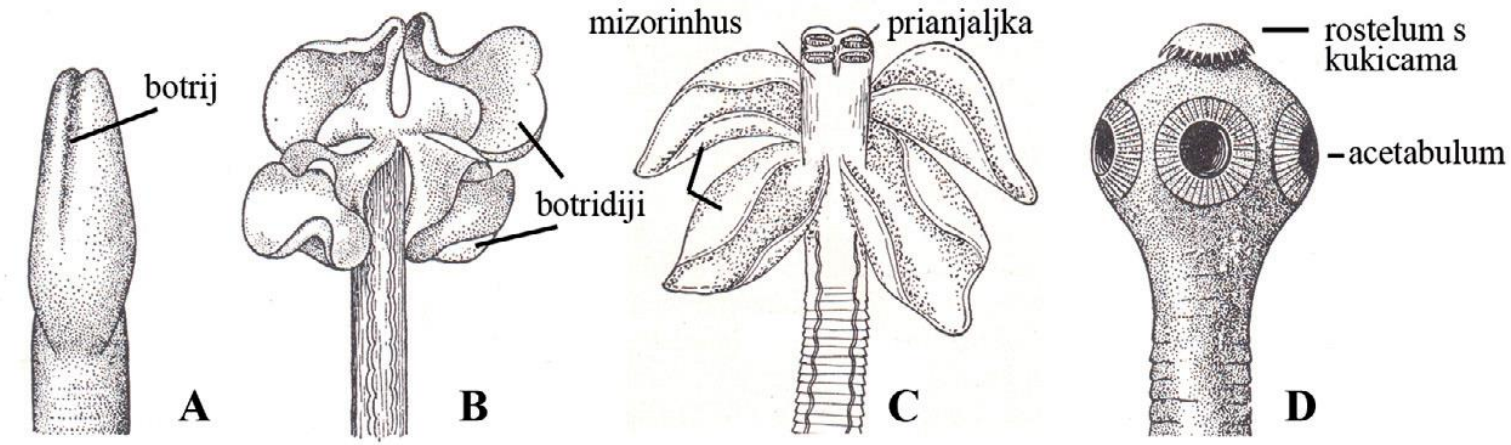
- neki od najdužih beskralješnjaka



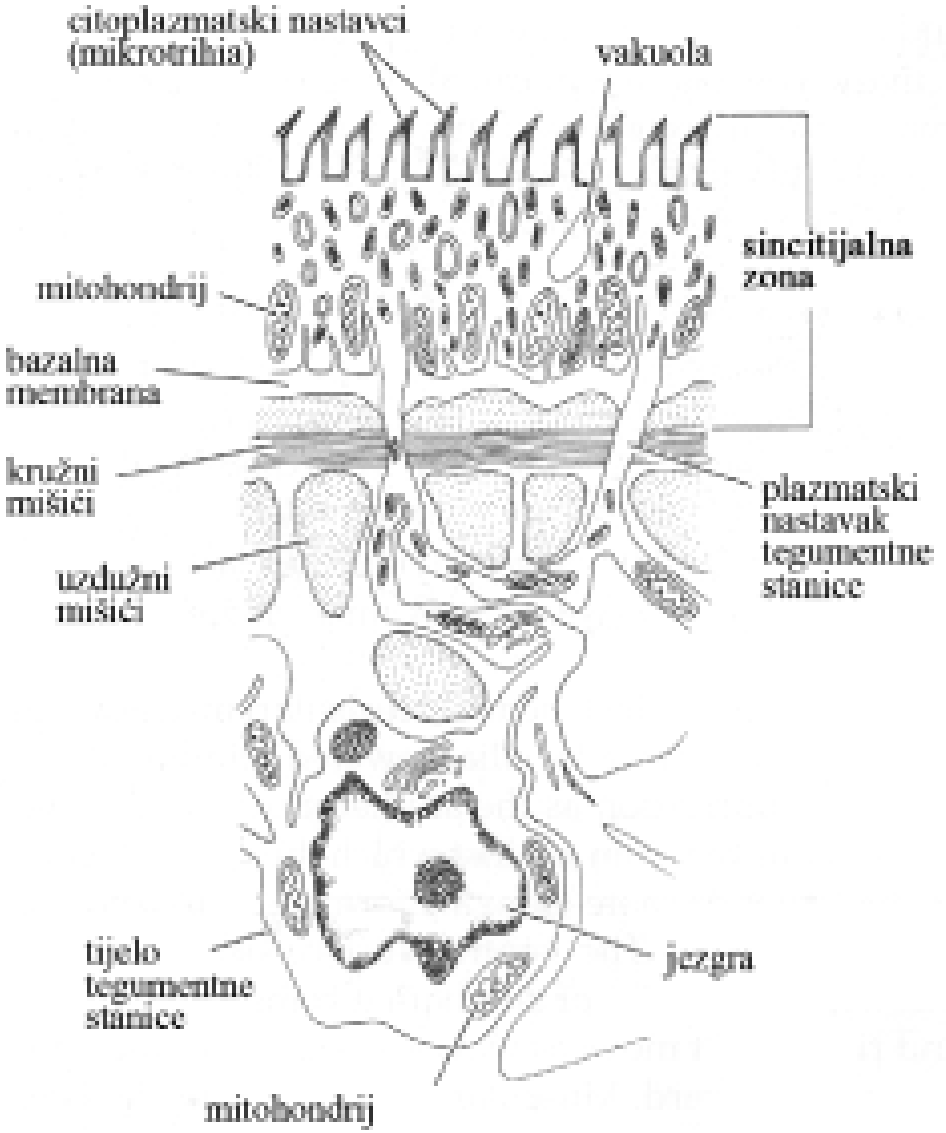
Tetragonoporus calyptocephalus

Trakavice

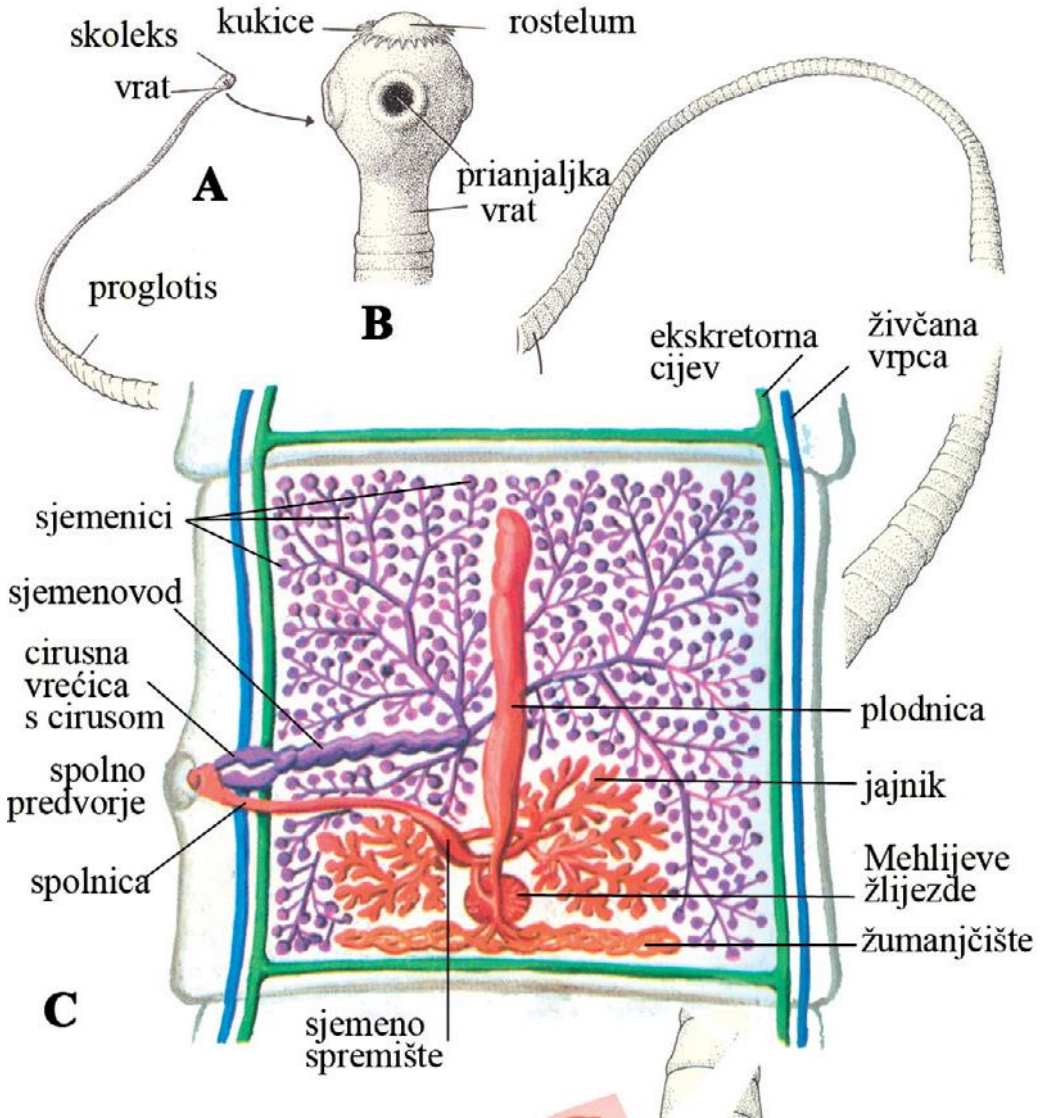
- neoderma
- dvospolci
- iznimno visoka stopa reprodukcijska (broj oplođenih jajašaca)
- *Taenia saginata* (700 000 oplođenih jaja dnevno)
- kompenzacija za nisku stopu preživljavanja potomstva



Neoderma


citoplazmatski nastavci
(mikrotrihia)
vakuola
sincitijalna
zona
mitohondrij
bazalna
membrana
kružni
mišići
uzdužni
mišići
plazmatski
nastavak
tegumentne
stanice
tijelo
tegumentne
stanice
jezgra
mitohondrij

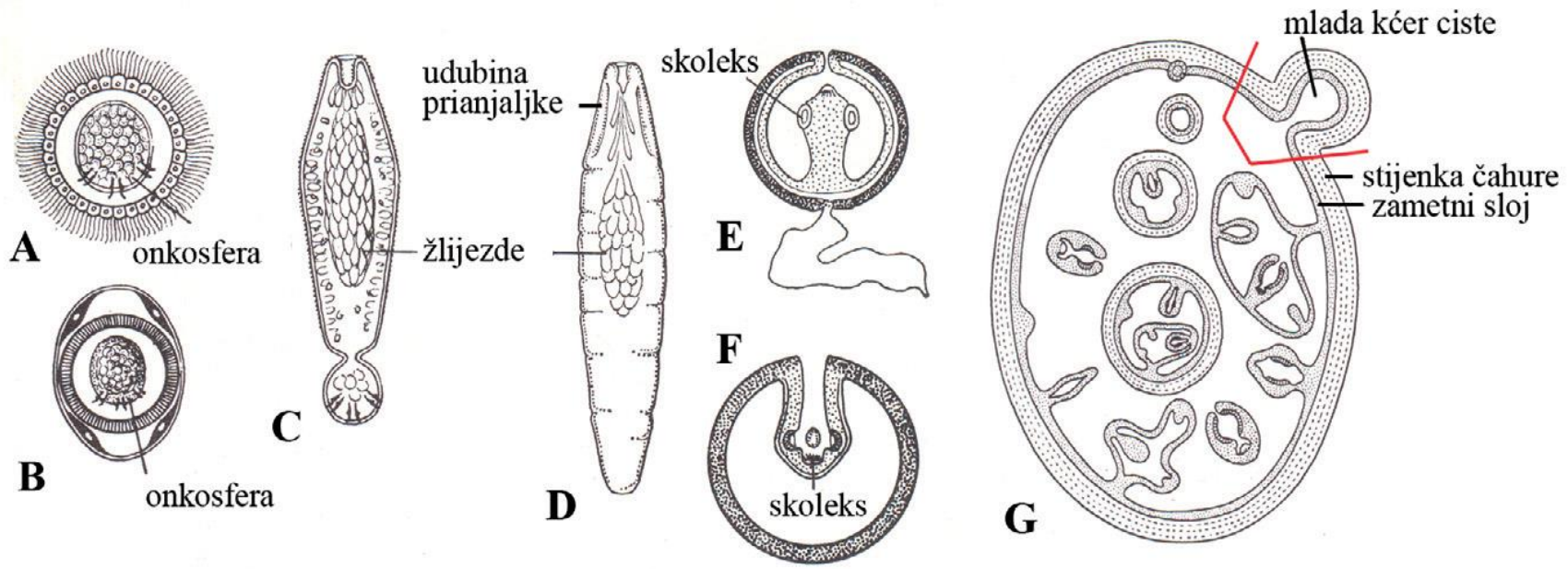
Trakavice



- unutarnji nametnici
- nemaju probavni sustav
- skoleks, vrat, strobila

Trakavice

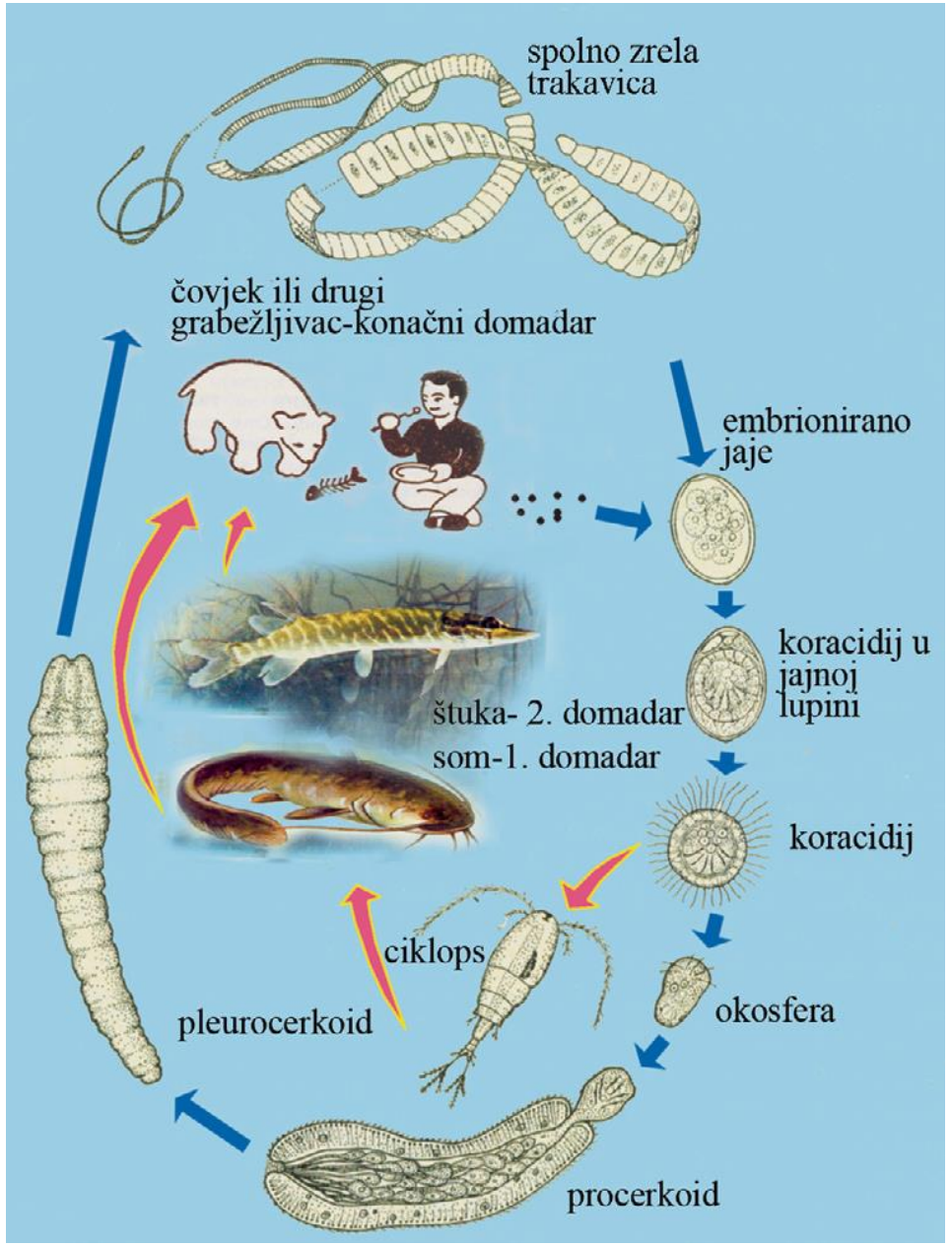
- više tipova ličinki



(Habdija i sur. 2021.)

Trakavice

Dibothriocephalus latus (=*Diphyllobothrium latum*)



(Habdija i sur. 2021)

Trakavice

Dibothriocephalus latus (=*Diphyllobothrium latum*)



Figure E: Carmine-stained proglottids of D. latus, showing the rosette-shaped ovaries.



Figure F: Diphyllobothriid eggs in an unstained wet mount of stool. Note the opercula are open.

Liječenje: prazikvantel, niklozamid

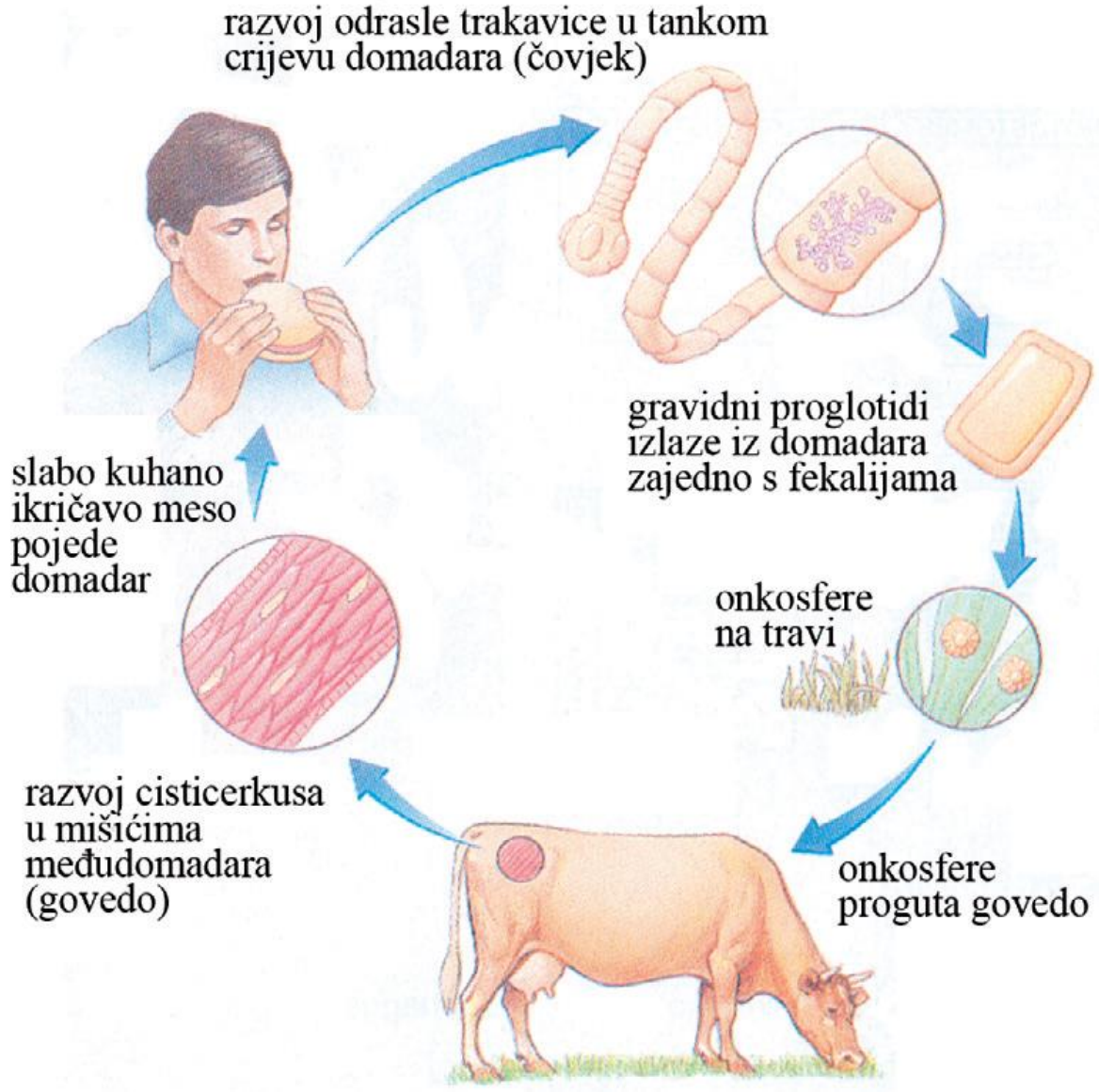


Figure G: The elongate scolex and neck region of D. latus.

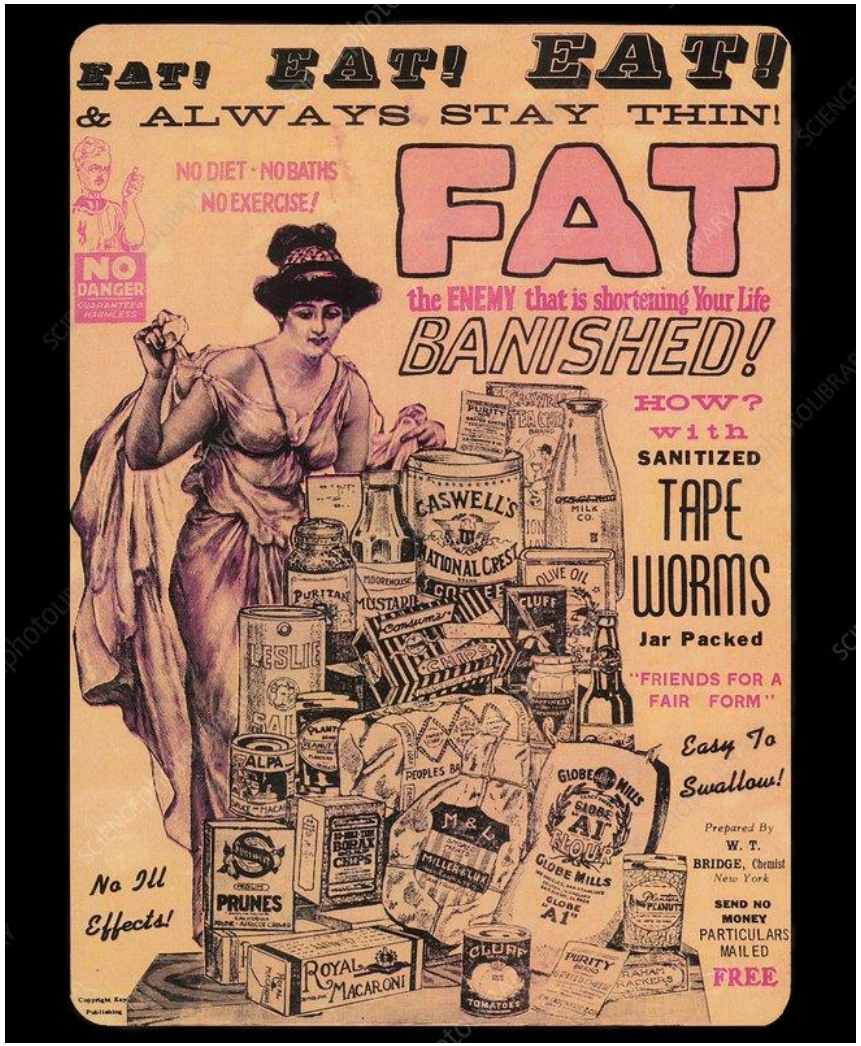
https://www.cdc.gov/

Trakavice

Taenia saginata



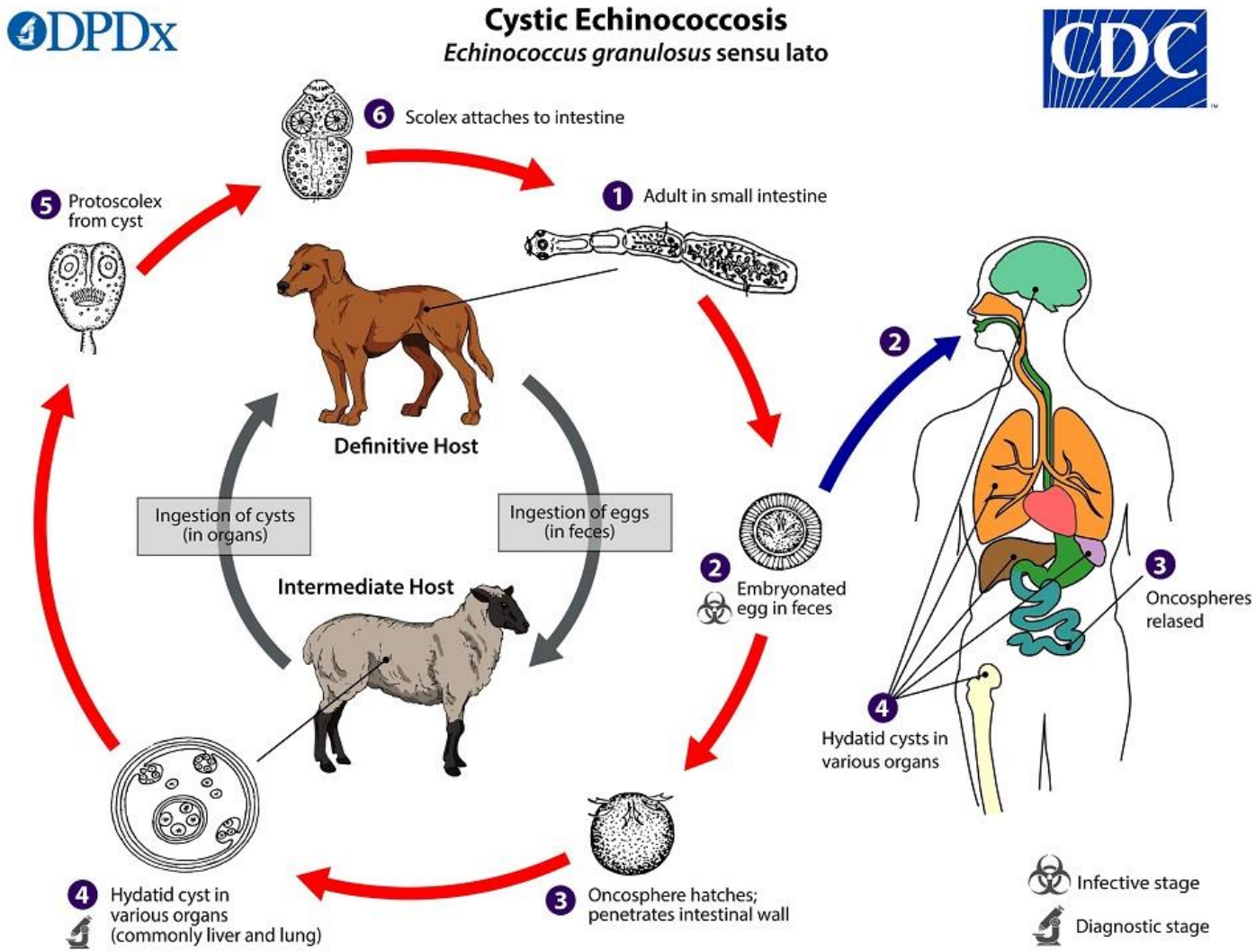
Trakavice



https://www.sciencephoto.com/

Trakavice

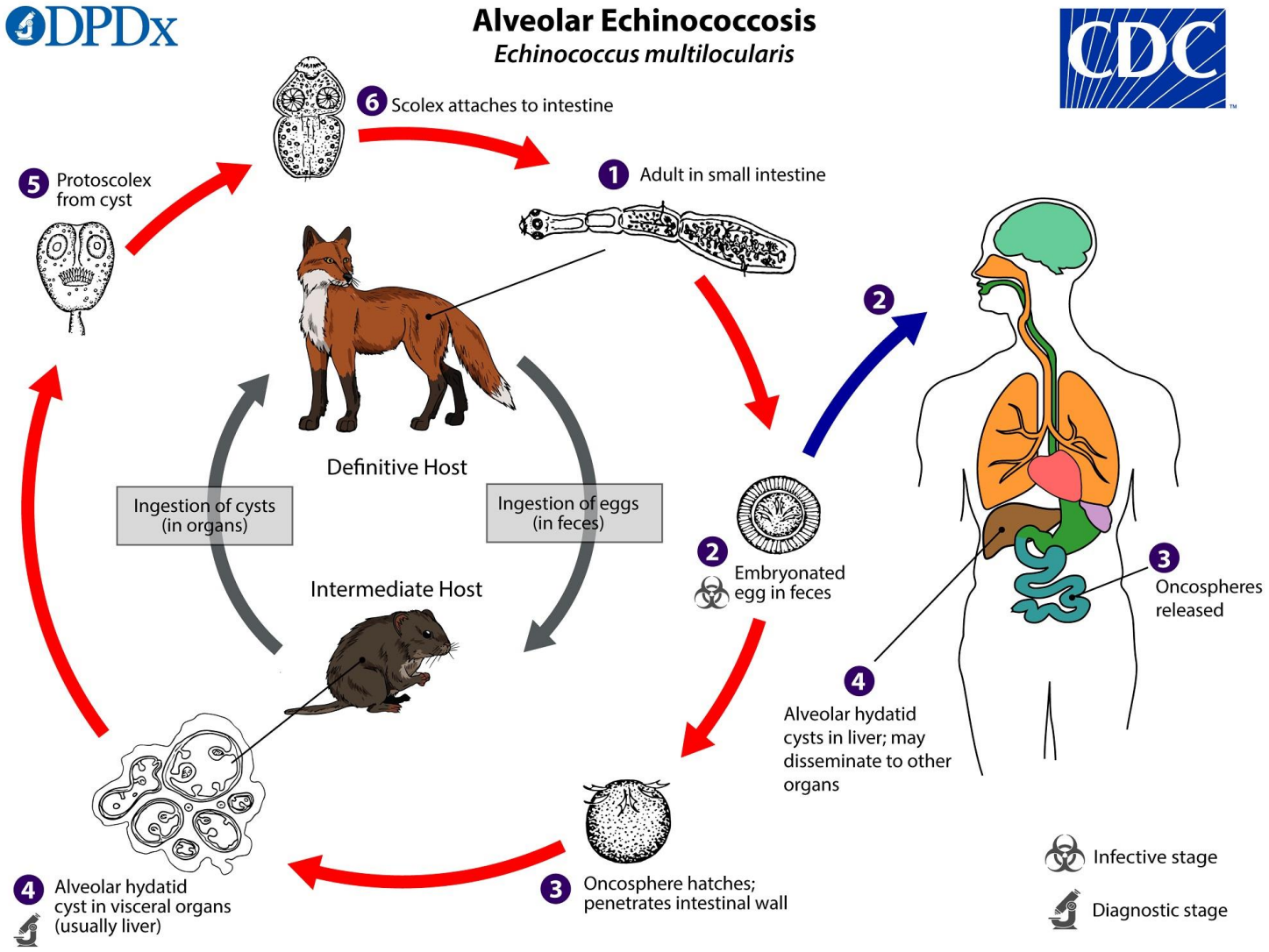
Echinococcus granulosus – pasja trakavica



https://www.cdc.gov/

Trakavice

Echinococcus multilocularis
– lisičja trakavica



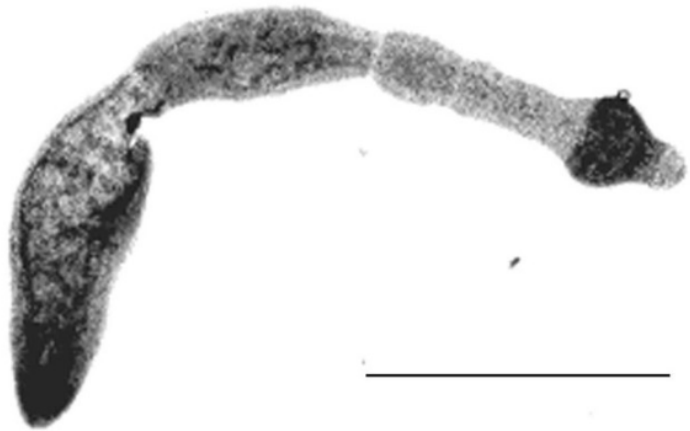
https://www.cdc.gov/

Trakavice

Echinococcus multilocularis
– lisičja trakavica

Lisičja trakavica u Njemačkoj. Liječnik: Moramo biti spremni za brzo djelovanje

Index Vijesti | Prije 2 tjedna
17:59, 27. listopada 2026.



Preferiraj na Googleu

NAJNOVIJE NAJČITANIJE VEZANO

6 min Predstavljen novi Akcijski plan protiv raka. "To nije smrtna presuda"

7 min Milanović o Plenkoviću: "Umjesto da zagovara mir, on zagovara rat"

15 min Kremlj reagirao na uhićenje američkog časnika: Nemamo nikakve veze s tim

18 min Ministrica tvrdi da nije znala za Periševu smrt. Ovo je popis njenih najvećih laži

19 min Doznajemo: Dan nakon Periševe smrti ravnateljica Jankomira pisala policiji

PRIKAŽI JOŠ VIJESTI

Literatura

- Andrews, R. H., Sithithaworn, P., & Petney, T. N. (2008). Opisthorchis viverrini: an underestimated parasite in world health. *Trends in parasitology*, *24*(11), 497-501.
- Bui, D. T., Van Hoang, H., & Ngoc Pham, D. (2024). Risk of Fishborne Trematode Infections by Eating Raw Fish of Vietnam's Thai People in Son La Province. *International Journal of BioLife Sciences (IJBLS)*, *3*(4), 353-365.
- Habdija, I., Primc Habdija, B., Radanović, I., Špoljar, M., Matoničkin Kepčija, R., Vujčić Karlo, S., ... & Sertić Perić, M. (2011). Protista-Protozoa i Metazoa-Invertebrata: strukture i funkcije.
- Hechinger, R. F., & Metz, D. C. (2023). Social evolution: Diverse divisions of labor in trematode parasites. *Current Biology*, *33*(23), R1238-R1240.
- Laidemitt, M. R., Anderson, L. C., Wearing, H. J., Mutuku, M. W., Mkoji, G. M., & Loker, E. S. (2019). Antagonism between parasites within snail hosts impacts the transmission of human schistosomiasis. *Elife*, *8*, e50095.