



Univerzitet u Beogradu
Fakultet veterinarske medicine

Katedra za biologiju

Predmet:
ZOOLOGIJA
2024/2025

Posmatranje **Protozoa** iz filuma značajnih za veterinarsku medicinu i upoznavanje njihove građe: na nativnim mikroskopskim preparatima iz buraga goveda i infuzuma, kao i trajnih mikroskopskih preparata: *Trypanosoma* sp., *Eimeria* sp., *Plasmodium* sp. i *Nosema* sp.

1. Posmatranje trajnog preparata krvi sa protozoama vrste *Trypanosoma gambiense* i upoznavanje sa građom bičara



Taksonomski status objekta:

Phylum: **Sarcomastigophora**

Subhylum: **Mastigophora** (Flagellata)

Classis: **Zoomastigophora**

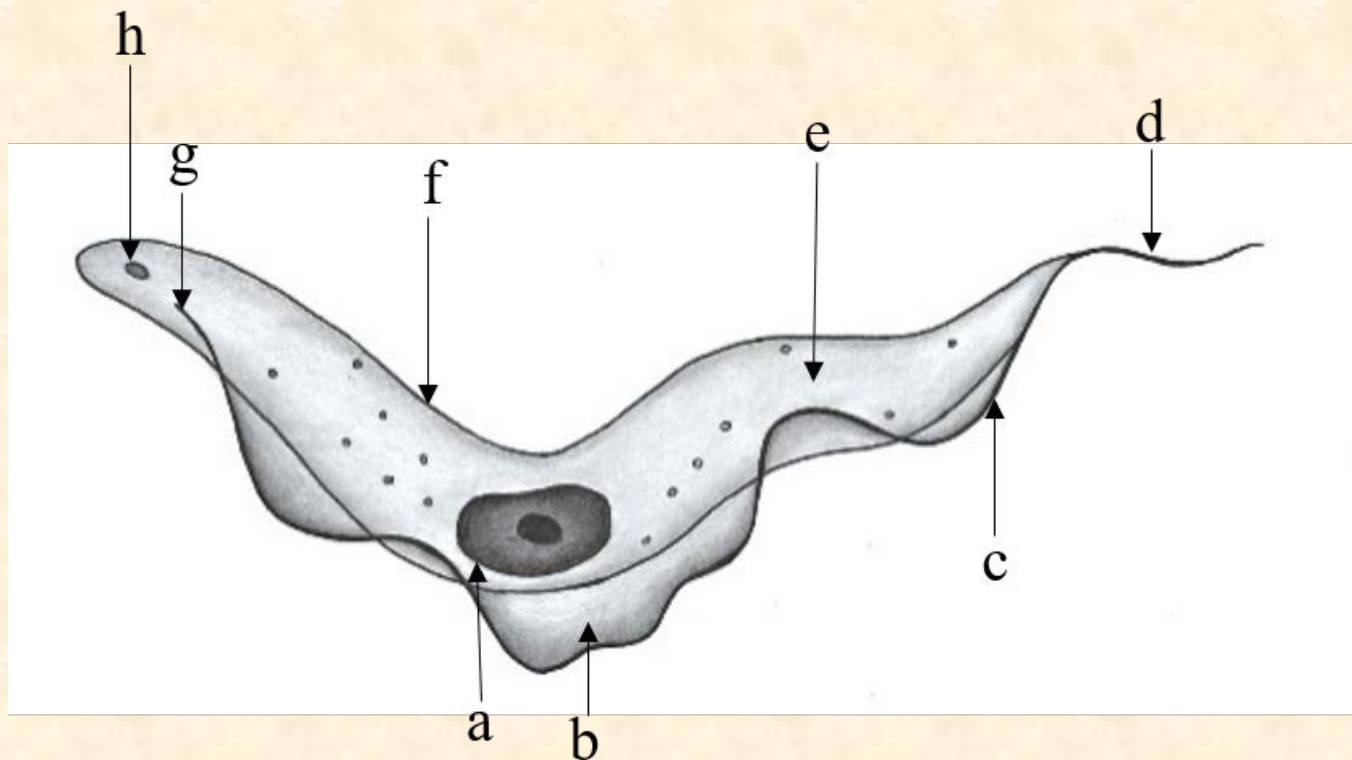
Ordo: **Kinetoplastida**

Fam: **Trypanosomatidae**

Genus: ***Trypanosoma***

Species: ***Trypanosoma gambiense***





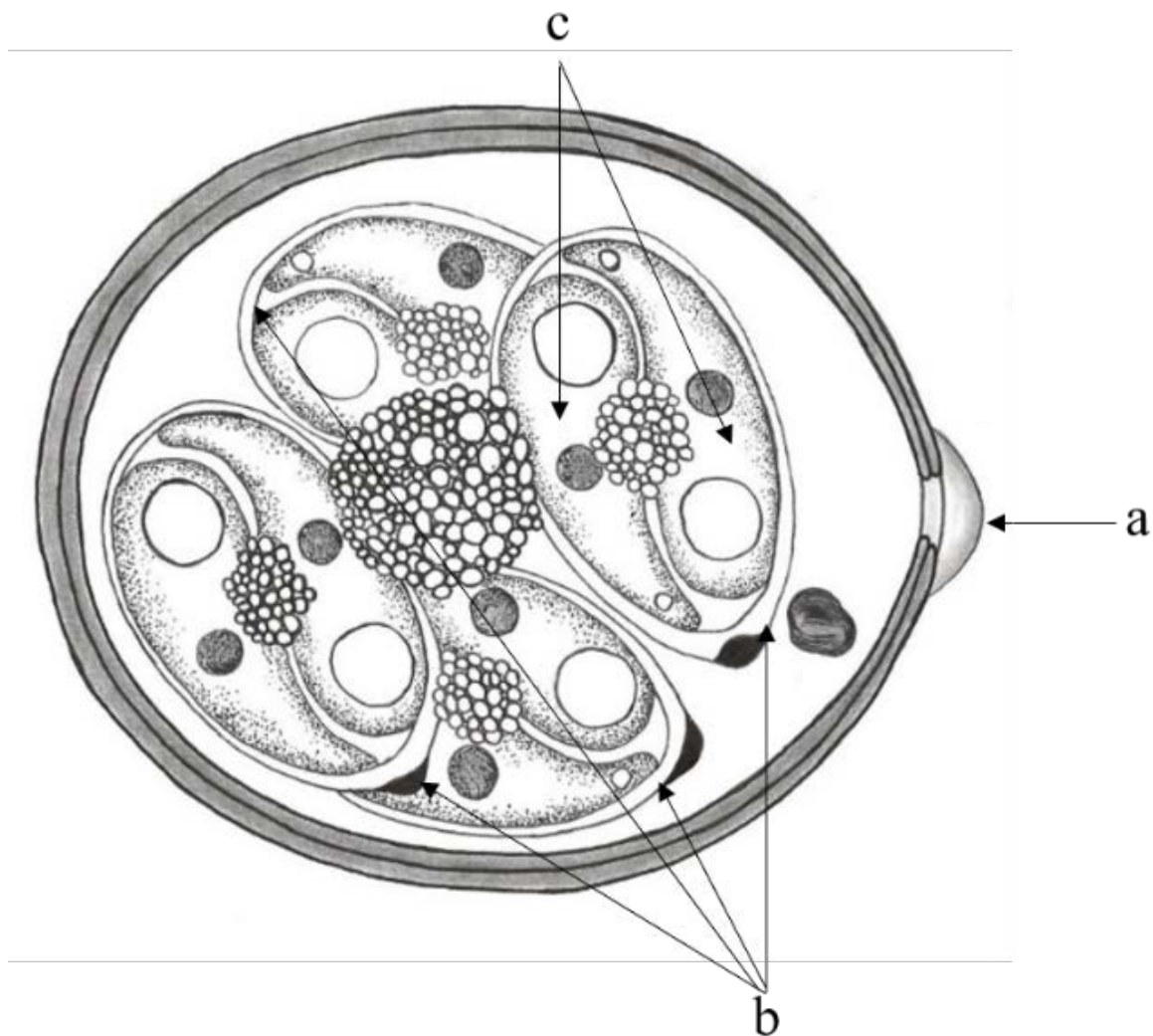
Trypanosoma gambiense

- a – jedro
- b – undulentna membrana
- c – bič spojen sa pelikulom
- d – slobodni bič
- e – citoplazma
- f – pelikula
- g – bazalno telo
- h – kinetoplast

2. Posmatranje nativnog preparata i upoznavanje sa građom parazita iz roda *Eimeria*



Oociste *Eimeria* sp.



a – polarna kapa
b – sporociste
c – sporozoiti

Šematski prikaz oociste roda *Eimeria*

Taksonomski status objekta:

Phylum: **Apicomplexa**

Classis: **Conoidasida**

Subclassis: **Coccidiasina (Coccidia)**

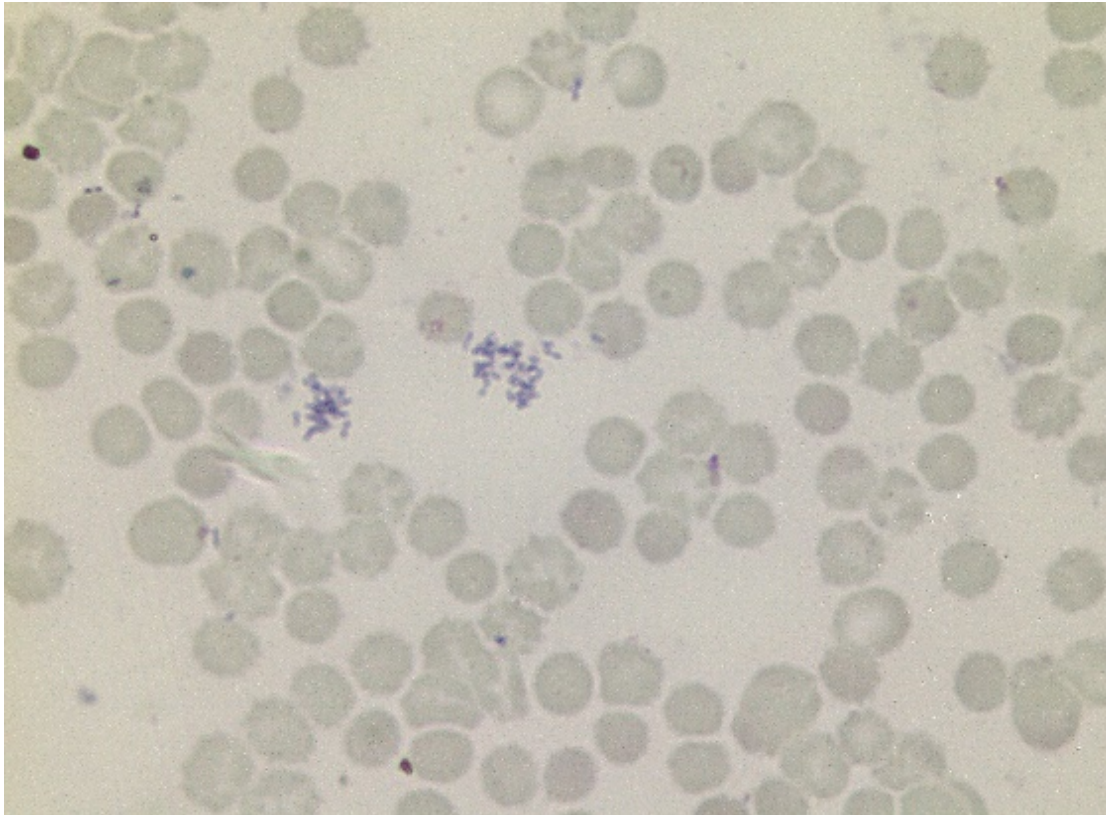
Ordo: **Eucoccidiorida**

Familia: **Eimeriidae**

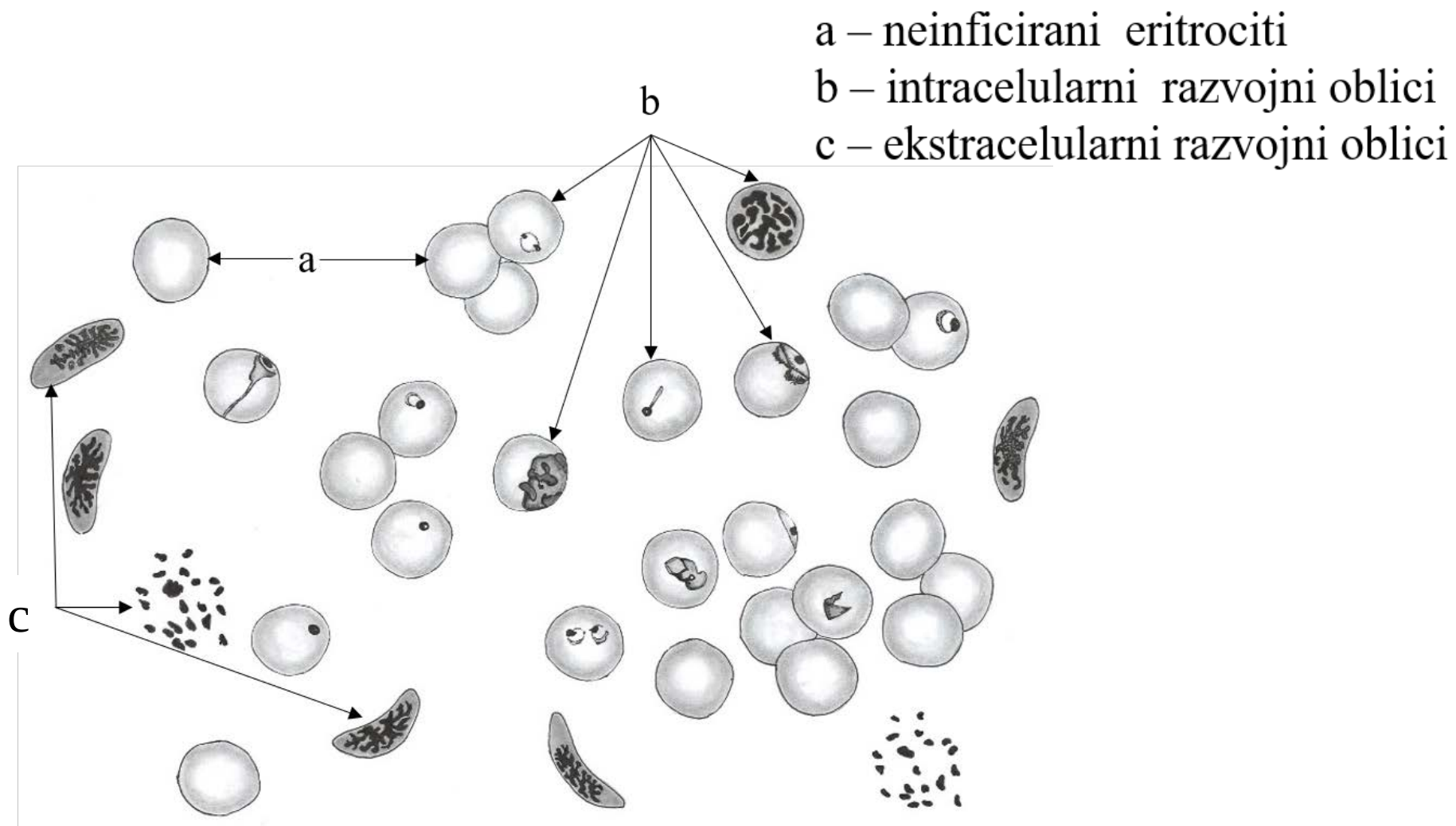
Genus: ***Eimeria***

Species: ***Eimeria sp.***

3. Posmatranje trajnog mikroskopskog preparata i upoznavanje sa građom *Plasmodium* sp.



Razvojni oblici *Plasmodium* sp.
u krvnom razmazu



Šematski prikaz razvojnih oblika
Plasmodium sp. u krvnom razmazu

Taksonomski status objekta:

Phylum: **Apicomplexa**

Classis: **Aconoidasida**

Ordo: **Haemosporida**

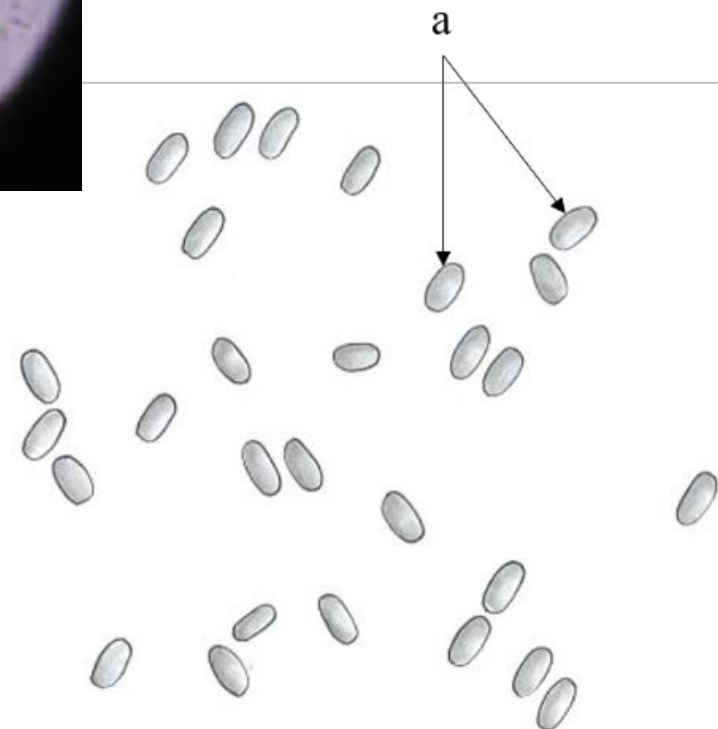
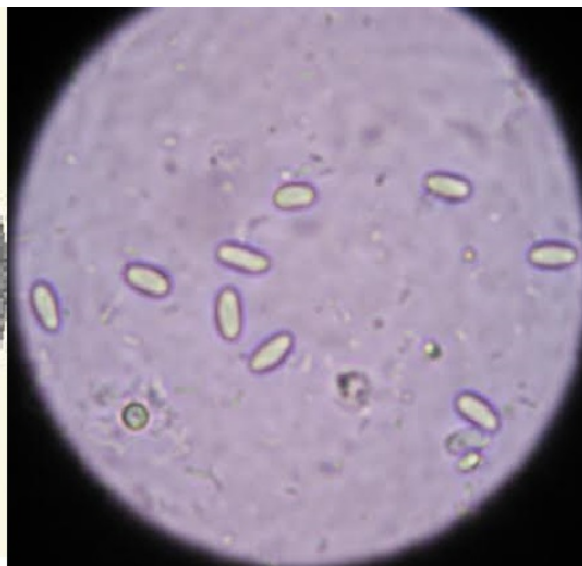
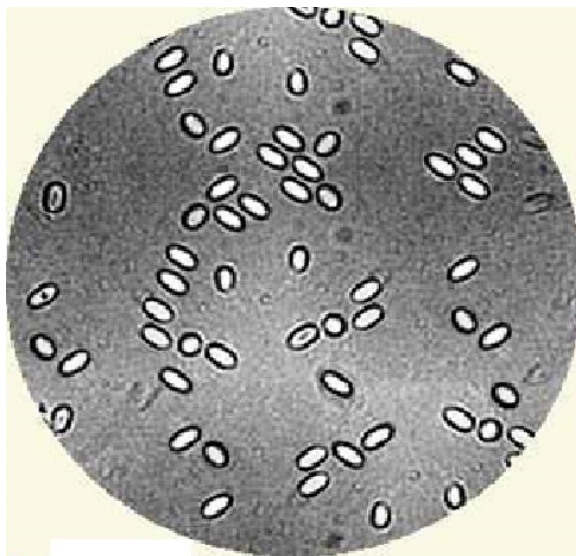
Familia: **Plasmodiidae**

Genus: **Plasmodium**

Species:

Plasmodium sp.

4. Pravljenje macerata medonosnih pčela obolelih od nozemoze, izrada nativnih preparata i posmatranje spora protoza roda *Nosema*



a – spora nozeme

Taksonomski status objekta:

Phylum: **Microsporidia**

Classis: **Microsporea**

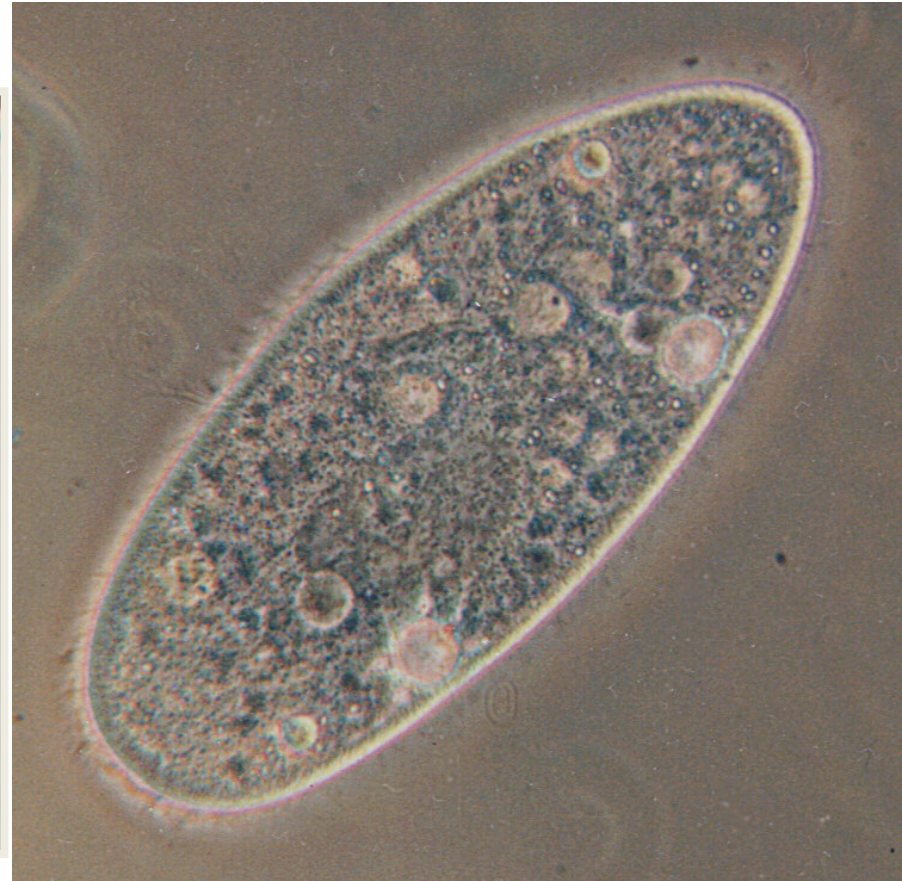
Ordo: **Microsporida**

Fam: **Nosematidae**

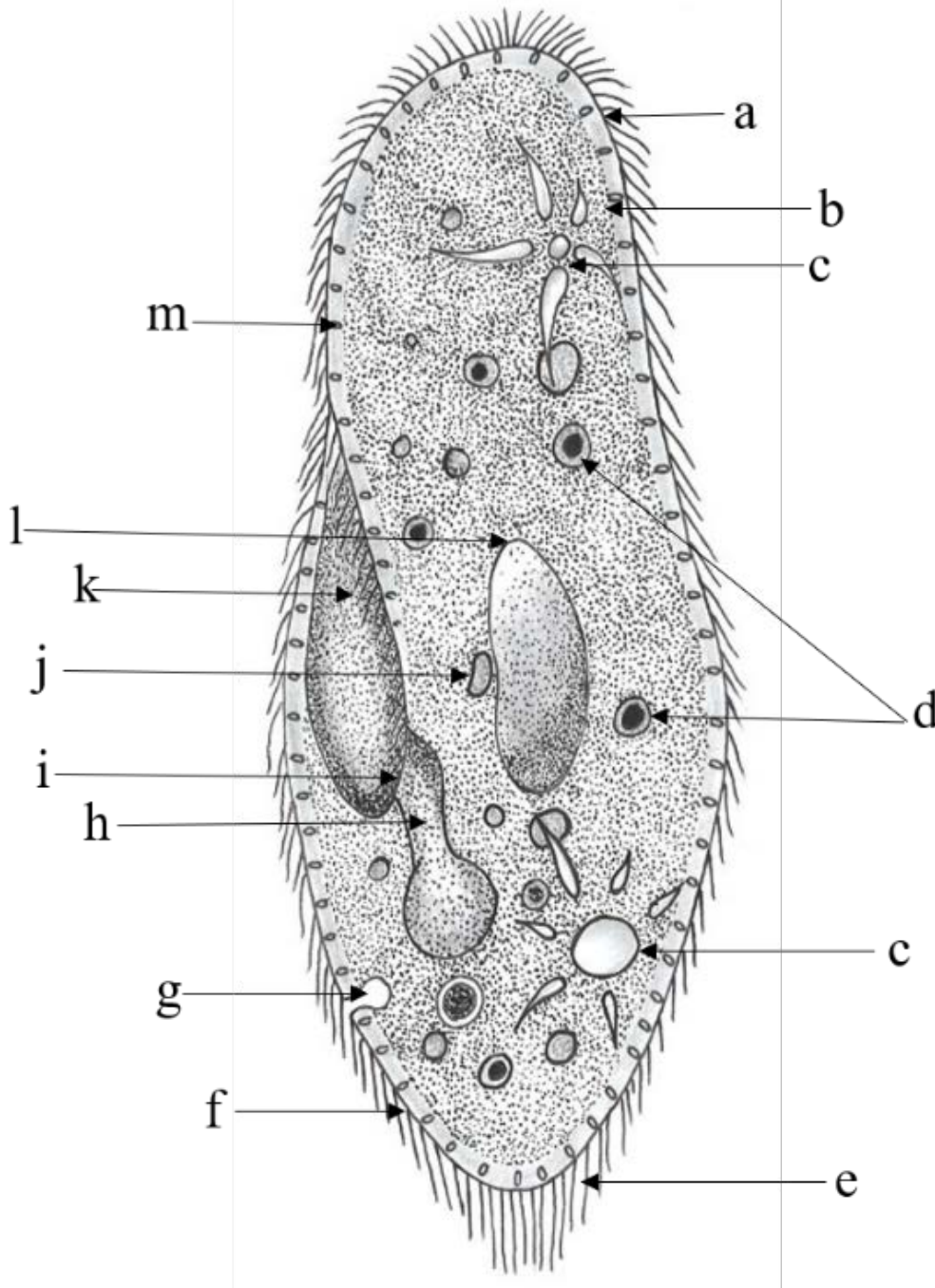
Genus: *Nosema (Vairimoprha)*

Species: *Nosema* sp.

5. *Paramecium* sp. u infuzumu sena



Šematski prikaz
Paramecium sp.



- a – ektoplazma
- b – endoplazma
- c – kontraktilna vakuola
- d – hranljiva vakuola
- e – treplje
- f – pelikula
- g – citopig
- h – citofarinks
- i – citostoma
- j – mikronukleus
- k – vestibularno polje
- l – makronukleus
- m – trihociste

Taksonomski status objekta:

Phylum: **Ciliophora**

Classis: **Holotrichia**

Ordo: **Hymenostomata**

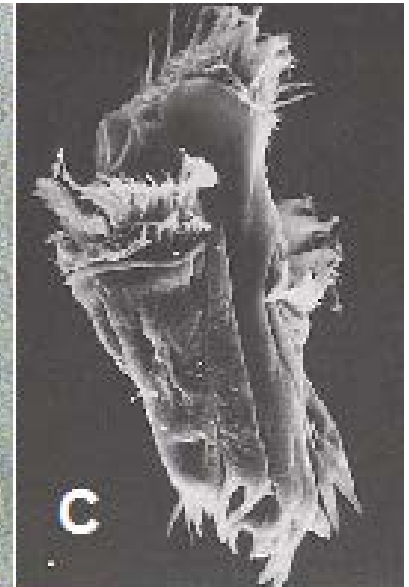
Familia: **Parameciidae**

Genus: ***Paramecium***

Species: ***Paramecium* sp.**

Cilijatne protozoe u buragu preživara

Entodinium sp. (A) *Diplodinium* sp. (B) *Ophryoscolex* sp. (C)



Taksonomski status objekata:

Phylum: **Ciliophora**

Classis: **Spirotricha**

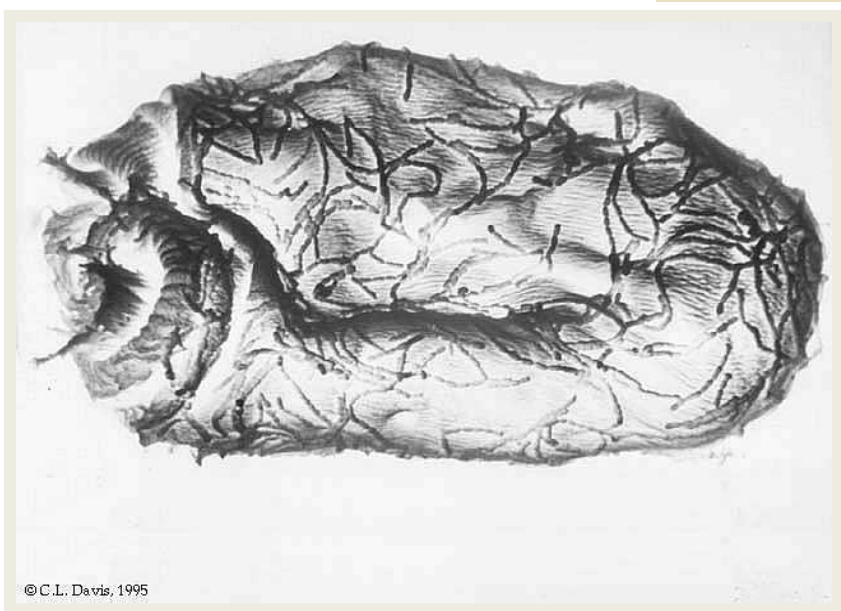
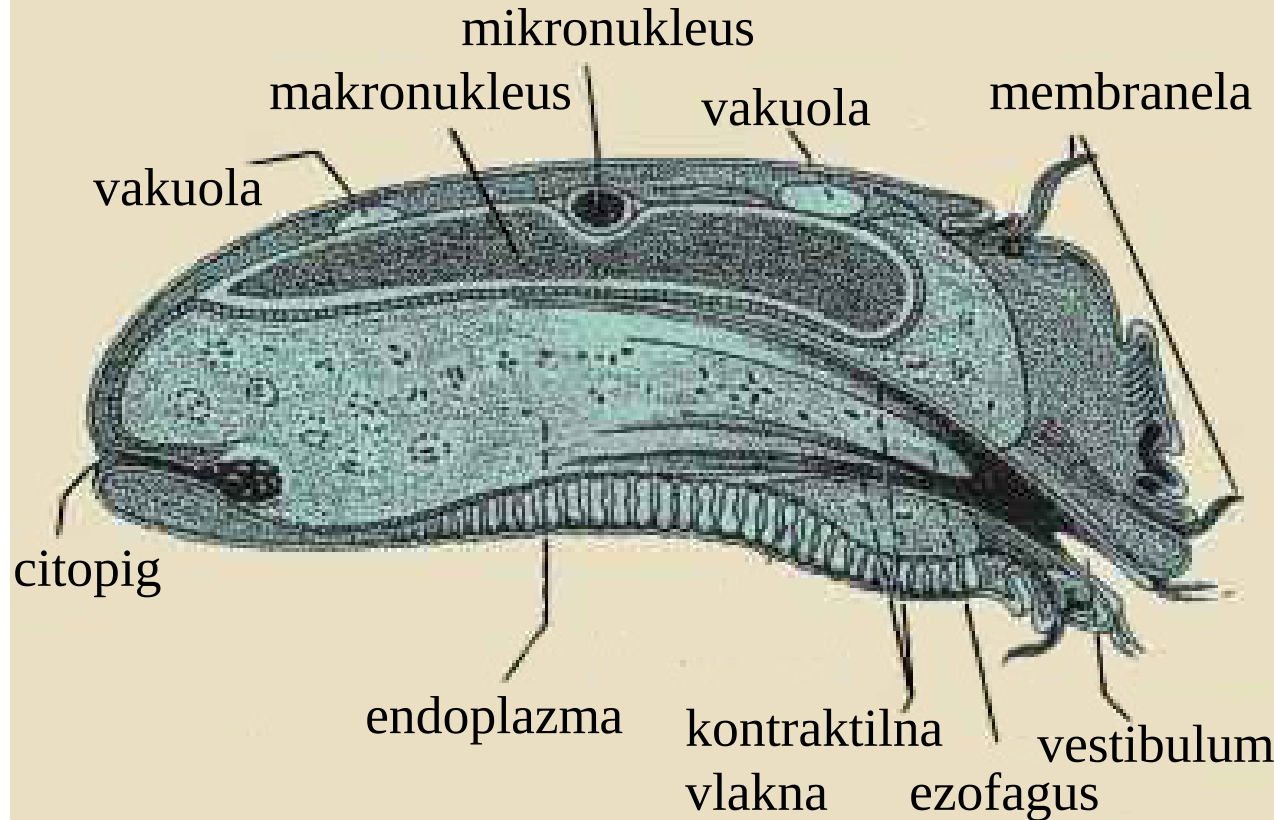
Ordo: **Entodiniomorpha**

Fam: **Ophryoscolecidae**

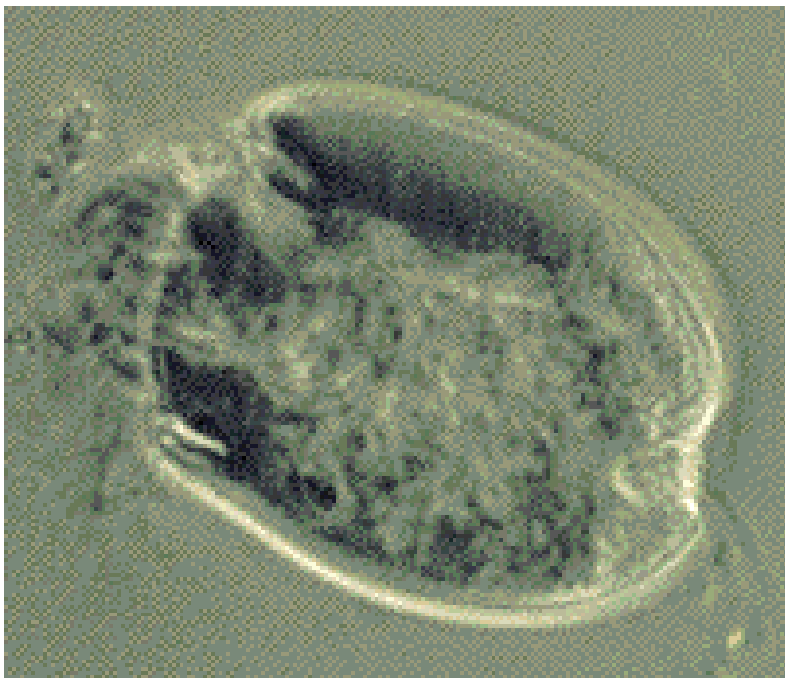
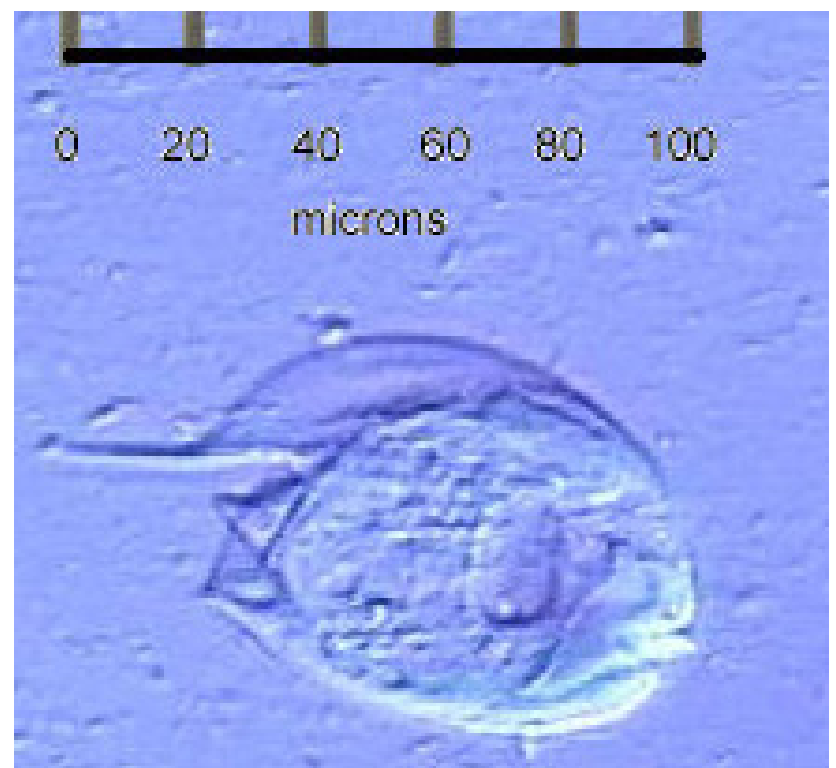
Genera: *Entodinium* sp. (A)

Diplodinium sp. (B)

Ophryoscolex sp. (C)



Protozoe iz sadržaja buraga



Protozoe iz sadržaja buraga