

# Classification of Parasites

## Single celled parasites (Protozoa)

## Multi-celled parasites (helminths)

Amoebae      Ciliates      Flagellates      Apicomplexa

Nematodes (round worms)      Cestodes (tape worms)      Trematodes (flukes)

Balantidium Coli

Microsporae  
**Fungi**

- Entamoeba histolytica
- Blastocystis hominis
- Free-living amoebae
  - Naegleria
  - Acanthamoeba
  - Balamuthia mandrillaris

- Giardia lamblia
- Dientamoeba fragilis
- Trypanosoma
  - cruzi
  - brucei gambiense
  - brucei rhodesiense
- Trichomonas
  - vaginalis / hominis
- Leishmania spp

- 5 Genera:
- Microsporidia
  - Encephalozoon
  - Enterocytozoon
  - Pleitophora
  - Nosema

- Those infecting blood/ lymphatics**
- Lymphatic filariasis
    - Wuchereria bancroft
    - Brugia malayi
    - Brugia timor
  - Loa Loa (Sk + Bl)
  - Mansonella spp
  - Dirofilaria immitis (Sk +Lng)

- Taenia
  - solium
  - saginata
- Echinococcus
  - granulosus
  - multilocularis
- Diphyllbothrium latum
- Spirometra
- Hymenolepis nana

## Multi-celled Parasites- (Ectoparasites)

- Class insecta:**
- Lice
    - Pediculus humanis
    - Phthirus pubis
  - Maggots
  - Fleas

- Class Arachnida:**
- Mites: Sarcoptes Scabei; Leptotrombidium spp; chigger mites (Neotrombicula spp.; Eutrombicula spp.)
- Arcari (Ticks)
- Soft ticks - family Argasidae
- Hard ticks – "Ixodes" "Dermacentor" "Amblyomma"

- Plasmodium (falciparum, vivax, ovale, malariae, knowlesi)
- Babesia spp
- Toxoplasma gondii
- Cryptosporidium parvum / hominis
- Cyclospora cayetanensis
- Cystoisospora belli
- Sarcocystis

- Those infecting skin/ deeper tissues**
- Onchocerca volvulus (Sk)
  - Dracunculus medinensis (Sk)
  - Trichinella spiralis (Sk/Mscl)
  - Toxocara canis & catis (Sk)
  - Gnathostoma spinigerum

- Those Infecting GI tract**
- Ascaris lumbricoides (D + L)
  - Enterobius vermicularis (C)
  - Trichuris trichuria (Co/App)
  - Strongyloides stercoralis (D + L)
  - Nector americanus (D + L)
  - Ancyostoma duodenale (D + L)
  - Trichostrongylus spp
  - Anisakis spp (D + L)

- Those Infecting CNS**
- Angiostrongylus cantonensis
  - Gnathostoma spinigerum
  - Baylisascaris spp.

- Blood Flukes**
- Schistosomiasis
    - mansoni
    - haematobium
    - mekongi
    - Intercalatum
    - japonicum

- Intestinal/hepatic Flukes**
- Liver Fluke: Fasciola hepatica
  - Bile Duct Fluke: Clonorchis sinensis; Opisthorchus viverrini/felineus
  - Intestinal flukes: Fasciolopsis buski; Heterophyes spp; Metagonimus spp

- Lung Flukes**
- Paragonimus spp.
    - westermani

L – Lung  
App - Appendix  
D – Duodenum  
C – Colon  
Sk – Skin  
Mscl – Muscle