

# PARASITES

- Parasitology: the study of parasites.
- Parasite: it is organism living in or on other organism.

## **Parasites can be divided to:**

1. Protozoa.
2. Helminthes.
3. Arthropods.

### — **Protozoa:**

- Single cell (unicellular) eukaryotes.
- They can live as free organisms or parasites.
- They transmitted by:
  - a) Blood sucking insect bites.
  - b) Accidental ingestion.
- It have two stages:
  - a) Cyst: dormant stage outside the body.
  - b) Trophozoite: active stage inside the body.

## **Protozoa are classified into four classes according to their motility:**

- 1) Amoebas: move by pseudo pods (Ex:Entamoeba histolotica).
- 2) Ciliates: move by cilia (Ex:Balantidium coli).
- 3) Flagellates: move by flagella (Ex:Trypanosoma).
- 4) Sporozoa: intracellular parasite, doesn't move it transmit through the blood (Ex:Plasmodium). Blood parasite.

— **Helminthes (worms):**

- Multicellular eukaryotic organisms.
- It has two stages:
  - a) Larval stage (egg): measure 100-200 Mm.
  - b) Adult worms: measure from cm to meters.

**They can classify into:**

- 1) Nematode: Ex. Ascaris.
- 2) Trematode: Ex. Schistosoma.
- 3) Cestode: Ex. Taenia.

— **Arthropods (insects):**

Ex: mosquitoes, bee, flea and flies.

Harmful effects of them:

1. Food poisoning.
2. Discomfort.
3. Cause diseases and transmit diseases.
4. Damage of crops.

Benefit of arthropods:

1. Bees produce honey.
2. Fertilization of plants and flowers.