

Ecological roles of Protists

Plant-like Protists

Harmful:

1. Euglenophytes thrive where _____.
 - _____ can result and are known as **blooms**.
 - When they run out of nutrients, they die and add to the waste matter. This can _____, which will affect fish & other creatures.
2. Red Tide: - blooms of dinoflagellates (Pyrrophyta) occur
 - they produce a toxin that can _____ (clams, mussels)
 - the toxin affects the _____ of humans, fish and other marine animals

Beneficial:

1. Coral can contain dinoflagellates which _____. Coral can live off of the products of photosynthesis and therefore, _____
2. Phytoplankton is an important _____ (whales, shrimp, & squid)
3. Phytoplankton produces _____ for the Earth

Animal-like Protists

Harmful:

1. *Plasmodium* (Sporozoa) causes _____ – passed on by a _____ (vector = method of transfer)
2. *Trypanosomiasis* (Mastigophora/Zoomastigina) – causes _____ – passed on by _____.
3. *Entamoeba* (Sarcodina) – amoeba that lives in the digestive tract and _____. Spread through _____.

Beneficial:

1. Trichonympha (Mastigophora/ Zoomastigina) lives in the intestines of _____ (Termites cannot digest wood without them!= symbiotic)
2. Zooplankton are an important part of the _____

Controlling Pathogenic Protists

By knowing how the protist reproduces, _____. This shows where the organism is _____.

Ex. To control Malaria, _____
– same with Tsetse fly for African Sleeping sickness

Life Cycle of Plasmodium (Malaria)

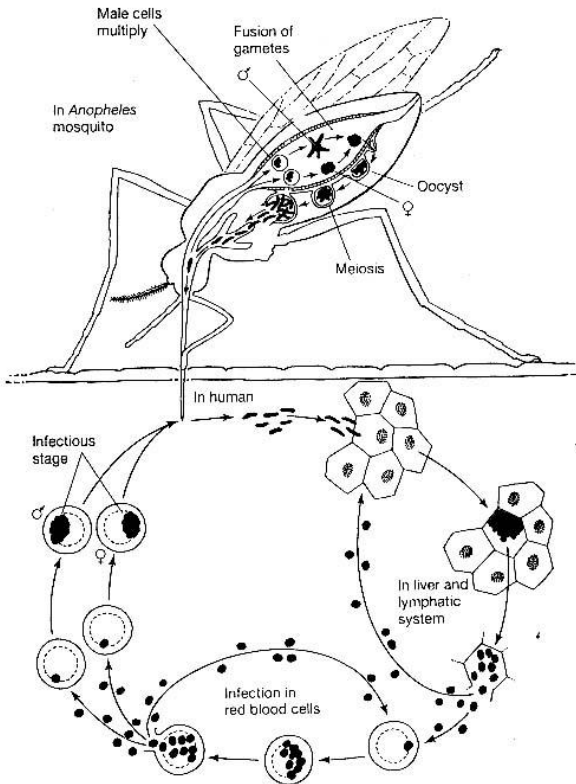


Figure 5.26 Life cycle of the malaria parasite *Plasmodium falciparum*

- _____
& picks up *Plasmodium*
- *Plasmodium* _____

- Mosquito bites human, injecting the *Plasmodium* in its _____
- Infects the _____
_____ (lysis)
- Infects the _____
- Red blood cells _____
releasing *Plasmodium*. Some *Plasmodium* can now _____

- Cycle repeats

Slime Molds = Fungi-like Protists

- 2 parts to their life cycle:
 - a) Produces _____ (reproductive structure).
 - These spores help spread the slime mold to new areas.
 - b) It is able to _____
– like an amoeba.