

## Eukaryotes

## Chapter 12

- I. Background
- II. Fungi
  - A. Mycology
  - B. Energy source
    - 1. chemoheterotrophs
  - C. Structural
    - 1. chitin
    - 2. Yeast
    - 3. Molds
      - a. hyphae
        - 1) septa
      - b. mycelium
      - c. reproduction
- III. Lichens
  - A. Symbiotic
- IV. Algae
  - A. Characteristics
  - B. Examples
    - 1. brown algae
    - 2. red algae
    - 3. green algae
    - 4. diatoms
    - 5. dinoflagellates
    - 6. water molds
  - C. Phytophthora infestans*
- V. Protozoa
  - A. Characteristics
    - 1. reproduction
      - a. schizogony
    - 2. cyst
  - B. Feeding grooves (Excavata)
    - 1. organisms
      - a. *Giardia intestinalis*
      - b. *Trichomonas vaginalis*
  - C. Euglenozoa
    - 1. structure
    - 2. euglenoids
    - 3. hemoflagellates
      - a. *Trypanosoma brucei*
      - b. *Trypanosoma cruzi*
  - D. Amebae
    - 1. *Entamoeba histolytica*
  - E. Apicomplexa
    - 1. structure
    - 2. *Plasmodium*
    - 3. *Toxoplasma gondii*
    - 4. *Cryptosporidium*
  - F. Ciliates

VI. Slime molds

A. Cellular

B. Plasmodial

VII. Helminths

A. Flatworms (platyhelminths)

1. flukes - (trematodes)

2. tapeworms - (cestodes)

B. Roundworms

1. *Trichinella spiralis*

VIII. Arthropods as Vectors

A. vectors