ADVANCED FORMS

III. Animals (well-organized multicellular types grouped into 20 to 25 phyla)

IV. Plants (well-organized multicellular types, usually capable of photosynthesis, placed in two phyla)

3. Synopsis of the Classification of Organisms (under the two-kingdom system)

The following is taken from Paul B. Weisz's work, *Biology* (New York: McGraw-Hill Publishing Co., 1954) Appendix A

THE PLANT KINGDOM

PHYLUM THALLOPHYTA (100,000 species)
- Subphylum Schizophyta
  - Class Bacteria
  - Class Cyanophyceae -- blue-green algae
- Subphylum Algae
  - Class Chiorophyceae -- green algae
    - Order Volvocales -- *Volvox*
    - Order Conjugales -- *Spirogyra*
    - Order Ulotrichales -- *Ulothrlx*
  - Class Rhodophyceae -- red algae
  - Class Phaeophyceae -- brown algae
  - Class Bacillariaceae -- diatoms
  - Class Flagellata -- euglenoids
- Subphylum Fungi
  - Class Myxomycetes -- slime molds
  - Class Phycomycetes -- bread mold
  - Class Ascomycetes -- yeasts, *Penicillum*
  - Class Basidiomycetes -- mushrooms, rusts, smuts

PHYLUM BRYOPHYTA (25,000 species)
- Class Hepaticae -- liverworts
- Class Musci -- mosses

PHYLUM PTERIDOPHYTA (15,000 species)
- Class Lycopodineae -- clubmosses, ground pines
- Class Equisetineae -- horse tails, scouring rushes
- Class Filicineae -- ferns

PHYLUM SPERMATOPHYTA (200,000 species)
- Subphylum Gymnospermae
  - Order Cycadales -- cycads
  - Order Coniferales --pine, fir, spruce
- Subphylum Angiospermae
  - Class Dicotyledoneae -- dicots
    - Subclass Archichiamydeae
      - Order Amentiferae -- oak, birch, walnut, chestnut
      - Order Rosales -- rose, apple, strawberry, pear, peach, cherry, bean, pea, peanut
      - Order Papaverales -- mustard, cabbage, poppy, turnip
      - Order Malvales -- cotton, cocoa, fig, hemp, elm
      - Order Ranales -- avocado, camphor, laurel, magnolia, buttercup, columbine