

Topic 03 – Overview of Plant Taxa (Plant Groups to Know in Lecture)

The classification below is a mix of vernacular (informal, lower-cased) names for higher-level groups along with scientific (formal, upper-cased taxonomic) names for families that I want you to know. I have avoided formal names for groups above the level of order because there is no broad consensus yet on what these should be. The names below are consistent with the classification of APG III (Angiosperm Phylogeny Group 2009).

I. ferns & fern allies or pteridophytes

- A. club-mosses, lycophytes, or lycopods
family Lycopodiaceae
- B. horsetails & scouring-rushes
family Equisetaceae
- C. leptosporangiate ferns
family Polypodiaceae *sensu lato*
- D. whisk ferns
family Psilotaceae
- E. Vascular plant phylogeny

II. seed plants or spermatophytes

- A. gymnosperms
 - 1. cycads
families Cycadaceae and Zamiaceae
 - 2. ginkgos
family Ginkgoaceae
 - 3. conifers
families Pinaceae, Cupressaceae, Taxaceae
- B. angiosperms or flowering plants
 - 1. primitive dicots or basal angiosperms
 - a. water-lilies
family Nymphaeaceae
 - b. magnoliids
families Magnoliaceae, Lauraceae
 - 2. monocots
families Alismataceae, Arecaceae, Liliaceae, Orchidaceae, Poaceae
 - 3. primitive eudicots
family Ranunculaceae
 - 4. core eudicots
 - a. rosids
families Brassicaceae, Fabaceae, Fagaceae, Rosaceae
 - b. asterids
families Asteraceae, Ericaceae, Lamiaceae, Solanaceae
- C. Seed plant phylogeny

Lecture Reading:

1. Plate 1. Reproductive Terminology (pp 978-979) in Rhoads & Block (2007).
2. Plate 2. Leaf Terminology (pp 980-981) in Rhoads & Block (2007).
3. Rhoads & Block (2007) descriptions of all PA-native plant families mentioned.
4. Angiosperm Phylogeny Group. 2009. An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG III.