

Lecture Topic 1 - Introduction to Plant Systematics

I. What is biological systematics?

- A. Definition and objectives
- B. Important products
 - 1. Taxa
 - 2. Phylogenies & phylogenetic methods
 - 3. Monographs & floras (manuals, field guides)

II. Lectuer vs. Lab

- A. Lecture
 - 1. Theory & practice of systematics
 - 2. Topics as outlined in syllabus
 - 3. Differences & distinction between larger groups (e.g. lycopods, ferns & allies, gymnosperms, angiosperms, including basal angiosperms, monocots, basal eudicots, rosid eudicots, asterid eudicots, caryophyllids)
 - 4. Important plant families.
- B. Lab
 - 1. Recognition of species, genera and families
 - 2. Use and construction of taxonomic keys

Lecture readings:

- 1. Introduction (pp 1-7) of Rhoads & Block. 2007.
- 2. Prather A, et al. 2004. Implications of the decline in plant collecting for systematic and floristic research. *Systematic Botany* 29 (1): 216-220.

Lab readings:

- 1. Lab 1 handout.
- 2. Plate 1. Reproductive Terminology (pp 978-979) in Rhoads & Block (2007).
- 3. Plate 2. Leaf Terminology (pp 980-981) in Rhoads & Block (2007).