

Lecture Topic 1 - Introduction to Plant Systematics

I. What is biological systematics?

- A. Definition and objectives
- B. Relation to other fields
 - 1. As an umbrella science
 - 2. As a foundational science
- C. Important products
 - 1. Species
 - 2. Checklists, Floras, Manuals, Field Guides
 - 3. Phylogenetics
 - 4. Monographs
 - 5. Encyclopedic Works

II. Herbaria

- A. Herbarium specimens & important herbaria
- B. Use of specimens
- C. How to make a specimen
 - 1. Collecting
 - 2. Pressing
 - 3. Mounting

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.
- 3. Dirig R. 2009. The art of botanical specimen preparation. Bulletin provided by the author.

Lab readings:

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