

**HSSU Bio. 201 Plants and People**  
**Chapter 9 Study Guide: Diversity of Plant Life**

**Important Terms and Concepts**

Classification

Hierarchical  
Phylogenetic  
Domains  
Bacteria  
Archaea  
Eukarya  
Kingdoms  
Plantae  
Fungi  
Animalia  
Protista  
Autotrophic  
Heterotrophic

Multicellular Algae  
Chara

Bryophytes

Mosses  
Liverworts

Ferns and Fern Allies

Vascular Plants  
Sporangia  
Spores  
Carboniferous Forests

Seed Plants

Gymnosperms

Cycads  
Ginkgo  
Conifers  
Gnetophytes  
Cones

Angiosperms

Flowers  
Fruit  
Carpels  
Dispersal  
Pollination

Identifying Plants

Collecting  
Plant Press  
Notebook  
Plant Press  
Herbarium  
Voucher Specimen  
Mounting  
Filing  
Field Guide  
Flora  
Dichotomous Key

6 Major Plant Families

Poaceae

Spikelet  
Rhizome  
Grain  
Aleurone

Fabaceae

Papilionoid Flower  
Legume  
Root Nodule  
Nitrogen Fixation

Solanaceae

berry  
*Solanum*  
*Capsicum*

Tuber  
Atropine  
Nicotine

Brassicaceae

Siliqua  
Replum  
*Brassica oleracea*

Cucurbitaceae

Pepo  
Apiaceae  
Schizocarp

## **Discussion Questions**

1. List the major groups of land plants and state their major adaptations.
2. What are the advantages of having attractive flowers and fruits to plant reproduction? How do plants attract different pollinators such as bees, butterflies, birds, and bats?
3. What kinds of people need to identify plants? How does one go about finding the correct scientific name of a plant?
4. How does one go about preparing a plant specimen for a herbarium? What kind of work goes on in a herbarium?
5. Describe the main characteristics of the Poaceae, Fabaceae, Solanaceae, Cucurbitaceae, Brassicaceae, and Apiaceae. How can you identify members of these families?