Lab 06 - Asterids, part 2

I. Families to Know on Sight (no keying allowed for lab quizzes or final)

Asteraceae or Compositae (p. 874)

- Small to large herbs (shrubs)
- Lvs alternate to opposite, entire to toothed.
- Head inflorescences subtended by involucre.
- $C^*, pappus C^5, A^2$, connivent anthers, $G^2$, inferior
- “ray” flowers (ray florets), “disc flowers (disk florets)”
- Head “receptacle” flat, convex, concave; surface can be chaffy.
- Involucral bracts variously formed and often diagnostic.
- Fruits achenes in head.

Summary: Small to large herbs with radiate (e.g., sunflower, aster), ligulate (e.g., chicory, dandelion), or discoid (e.g., groundsel, snakeroot) flower-like heads; infructescence a head of small achenes, often with persistent pappus as dispersal aid.

II. Genera to Know (you can write your own key to genera and use on lab final)

A. Asteraceae

1) Ageratina
2) Ambrosia
3) Arctium
4) Chrysanthemum (not in book)
5) Cichorium
6) Cirsium
7) Echinacea
8) Helianthus
9) Senecio
10) Solidago
11) Symphyotrichum
12) Taraxacum
13) Verbesina

III. Some Economic Botany

Asteraceae (Compositae) includes many ornamentals and vegetable plants: Helianthus is the sunflower genus, which is the source of edible sunflowers as well as garden plants and cut flowers; Cirsium is an important genus because of its weeds called thistles; Chrysanthemum (chrysanthemums) and Tagetes (marigolds) are important as ornamentals; Echinacea purpurea is important as an herbal supplement and ornamental; Cynara is the artichoke genus; Cichorium contains chicory, an important weed as well as the source of roots that, when roasted, provide a substitute for or additive to French- and Louisiana-style coffee; Lactuca is the lettuce genus.