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

A. Orchidaceae (orchid family) – p. 153

Diagnostic Summary: More or less succulent herbs often with rosette of leaves, mostly epiphytic in the tropics; flowers irregular (monosymmetric) with lower inner tepal modified into labellum, and single stamen plus pistil fused into column.

B. Arecaceae or Palmae (palm family) – not in book

Diagnostic Summary: Trees or shrubs with unbranched aerial stems terminated by a rosette of large, sheathing, pinnately compound or palmately lobed, plicate leaves; flowers tiny, regular (polysymmetric), aggregated into large, showy, paniculate inflorescences.

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

A. Orchidaceae – p. 153

1) Cypripedium (herbs)
2) Goodyera (herbs)
3) Aplectrum (herbs)

B. Ruscaceae – p. 179 (included in Asparagaceae by APG III)

4) Dracaena (small trees) – not in book
5) Sansevieria (herbs) – not in book

C. Agavaceae – p. 177 (included in Asparagaceae by APG III)

6) Agave (herbs or shrubs)
7) Hosta (herbs)

8) Yucca (herbs, shrubs or trees)
9) Aloe (herbs, shrubs or small trees) – not in book

D. Bromeliaceae – not in book

10) Aechmaea (herbs)

E. Strelitziaceae – not in book

11) Strelitzia (herbs to small trees)

F. Musaceae – not in book

12) Musa (herbs to small trees)

G. Arecaceae or Palmae – not in book

13) Chamaedorea (small trees)
14) Cocos (trees)
15) Serenoa (shrubs to small trees)

III. Some Economic Botany

- The Orchidaceae is the source of vanilla, from species of the genus Vanilla (esp. the Mexican species Vanilla planifolia). The family also is an endless supply of ornamental plants cultivated primarily for their bizarre yet beautiful flowers. They are sought after in the wild so much that they are all (20,000 plus species) protected under the Convention on the International Trade in Endangered Species (CITES).
- Agavaceae / Asparagaceae are the source of Agave, from which ornamentals and tequila are derived, Aloe (e.g., Aloe vera), from which countless medicinal and foods or foodstuffs are derived, Asparagus (asparagus), and Hosta (hosta), from which numerous ornamental garden plants come.
- Bromeliaceae is the source of pineapple (Ananas), Spanish-moss (Tillandsia usneoides) and countless other plants cultivated as ornamental house or, in tropical countries, garden plants.
- Strelitziaceae and Musaceae are the source of the tropical, ornamental bird-of-paradise plant (*Strelitzia reginae*) and bananas (e.g., *Musa acuminata*), respectively. They are members of the order Zingiberales which includes many other ornamental and edible plants such as ginger (*Zingiber officinale*).
- Arecaceae is the source of palms, which supply plants for construction, food, and ornament throughout the tropical and subtropical regions of the world.