

Rosid Eudicots Continued

III. Rosids Part 3

A. Families to Know on Sight

1. Vitaceae - p. 500

Diagnostic Summary: Woody vines (lianas) with simple, palmately-veined leaves or palmately compound leaves, and woody tendrils. Fruit a thin-walled berry.

Generalized Flora Formula: Ca ^[4-5] Co ⁴⁻⁵ A ⁴⁻⁵ G ^[2]; Berry

2. Cucurbitaceae - p. 566

Diagnostic Summary: Herbaceous vines or scrambling herbs with simple, palmately-veined leaves and herbaceous, highly-coiled tendrils. Fruit a thick-walled berry (pepo), capsule or achene.

Generalized Flora Formula: Unisexual: Ca ^[5] Co ^[5] A ^[5] G ^[3], parietal placentation; pepo, capsule, achene

3. Malvaceae – p. 695

Diagnostic Summary: Herbs, shrubs or trees with simple, palmately veined leaves with stellate trichomes beneath. Flowers bisexual, 5-merous, typically with many monadelphous stamens. Fruit a capsule, schizocarp or berry.

Generalized Flora Formula: Ca ^[5] Co ⁵ A ^[many] G ^[3-many]; Epicalyx sometimes present

B. Genera to Know (you can write your own key to genera)

1. Vitaceae – p. 500

1. *Vitis* (lianas)
2. *Parthenocissus* (lianas)

2. Cucurbitaceae – p. 566

3. *Echinocystis* (vines)
4. *Sicyos* (vines)

3. Cannabaceae – p. 659

5. *Celtis* (trees & shrubs)

4. Moraceae – p. 661

6. *Morus* (trees & shrubs)

5. Urticaceae – p. 663

7. *Urtica* (herbs)

6. Malvaceae – p. 695

8. *Hibiscus* (herbs to shrubs)
9. *Abutilon* (herbs)
10. *Tilia* (trees)

7. Oxalidaceae – p. 564

11. *Oxalis* (herbs)

8. Brassicaceae – p. 668

12. *Alliaria* (herbs)
13. *Brassica* (herbs)

C. Economic Botany

- 1) Cucurbitaceae includes many edible or ornamental gourds, squashes and melons, such as: *Cucurbita* (squashes generally, incl. pumpkins, zucchini, acorn squash, etc.), *Cucumis* (melons generally, incl. honeydew, cantelope, & cucumber), *Citrullus* (watermelon). Loofah sponges come from the fibrous pericarp of *Luffa* spp.
- 2) Vitaceae includes the cultivated table and wine grapes of the genus *Vitis*.

- 3) Malvaceae is the source of *Hibiscus* of primarily horticultural importance, of *Theobroma* (cacao, from which chocolate), *Cola* (the historical source of seeds used to flavor and caffeinate cola beverages), *Ochroma* (balsa), *Abelmoschus* (okra), and *Althaea officinalis* (the source of the mucilaginous root extract used since Egyptian antiquity to make marshmallow, the honey-sweetened confection used to treat sore throats).