

# Common medicinal plant families

- Mint
- Parsley/Carrot
- Rose
- Aster

# Lamiaceae

## (Mint family, Labiateae)

- Irregular/bilateral/zygomorphic flower shape
  - Two upper and three lower lobes
  - Petals and sepals fused into tubes
- Two or four stamens
- Fruit: four nutlets (from four-parted ovary)
- Opposite leaves, often on square stems
- Plants often aromatic
- Medicinal tendencies: aromatic, digestive support, stimulating and/or relaxing
- Very safe with respect to toxicity



























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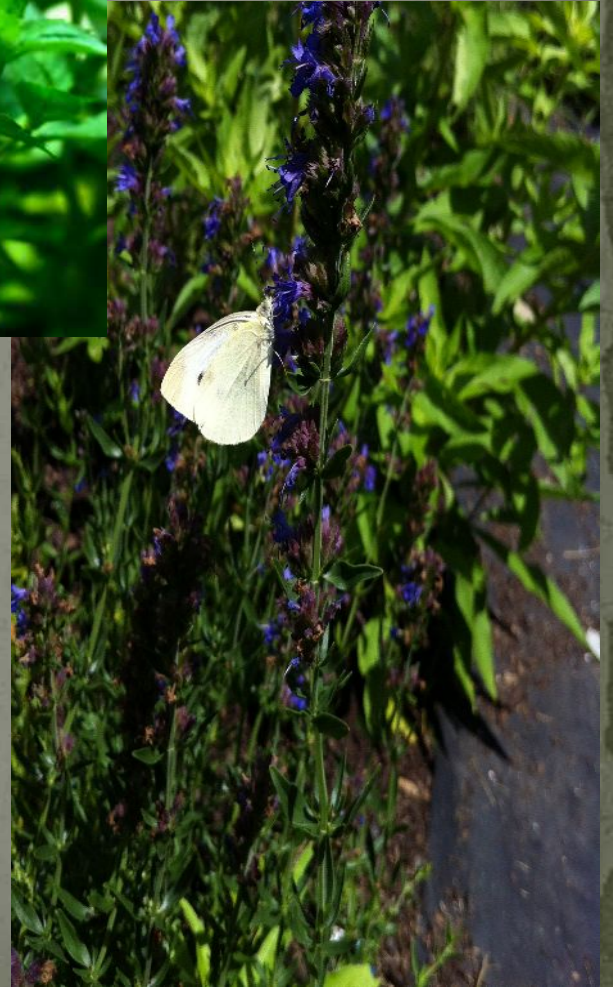




Photo by Lacey Walker









# Apiaceae

## (Parsley family, Umbelliferae)

- Inflorescence a compound umbel
- Leaves usually dissected or deeply lobed, stems often (but not always) hollow
- Individual flowers small with parts in fives, usually white or yellow
- Fruit a schizocarp: splitting into two dry seeds
- In our area: mostly herbaceous perennials and annuals





# Apiaceae

## (Parsley family, Umbelliferae)

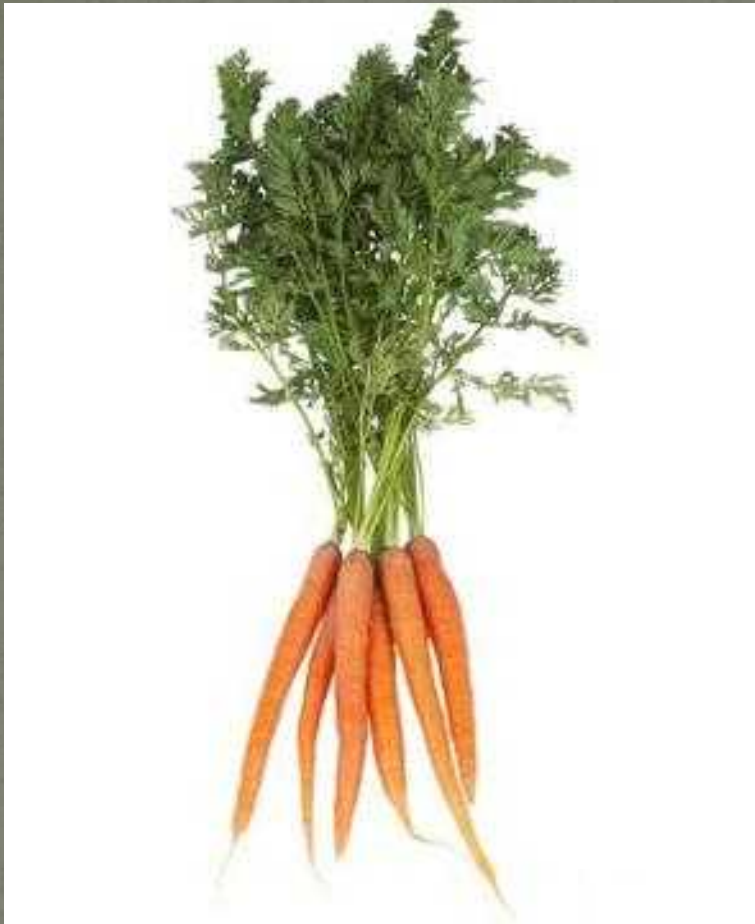
- Many culinary spices and foods: fennel, cumin, cilantro/coriander, anise, dill, carrot, parsnip
- Lots of medicinal plants: angelicas, osha, lomatium, wild carrot, bupleurum
- Medicinal plants tend to be aromatic, carminative, sometimes bitter
- Some genera/species are highly toxic, so treat this family with care! Notable examples are poison hemlock, water hemlock, and giant hogweed











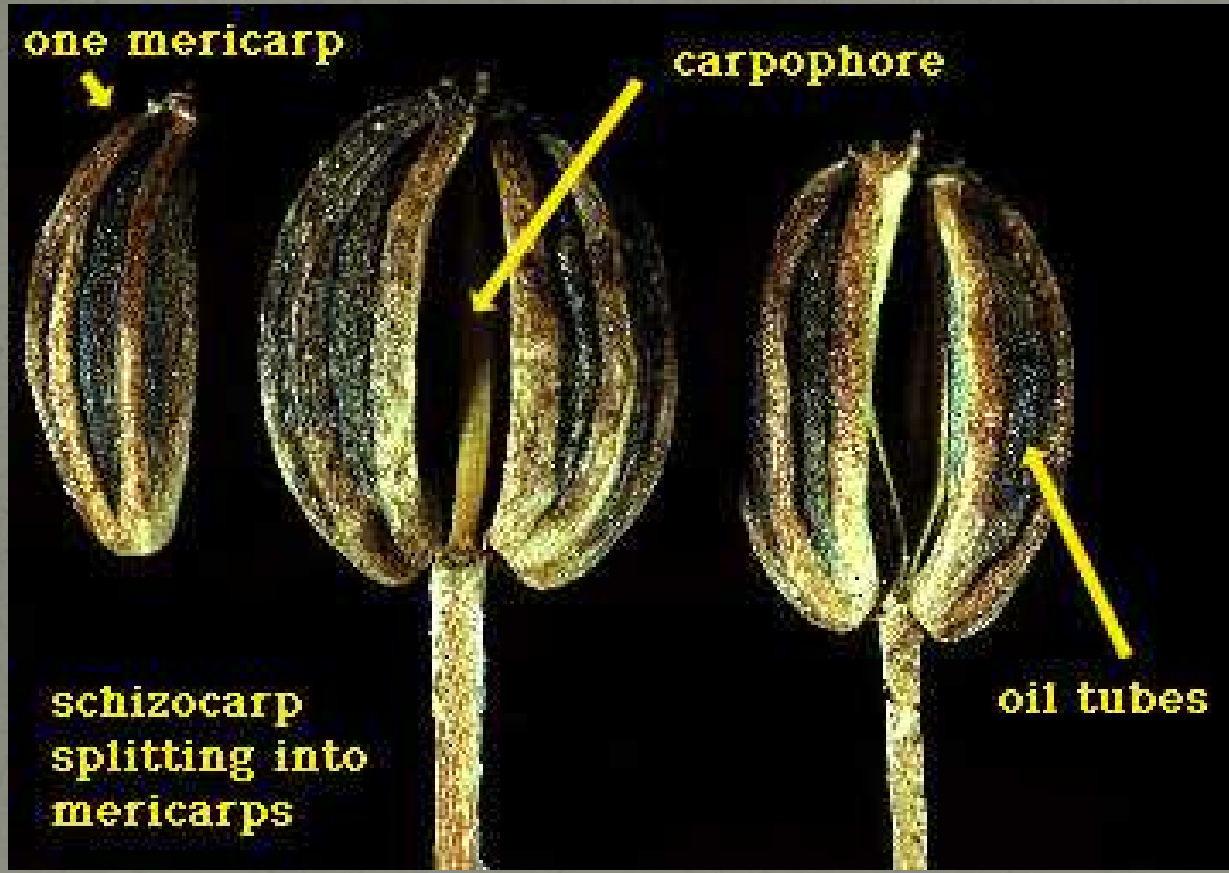












one mericarp

carpopophore

schizocarp  
splitting into  
mericarps

oil tubes







# Rosaceae

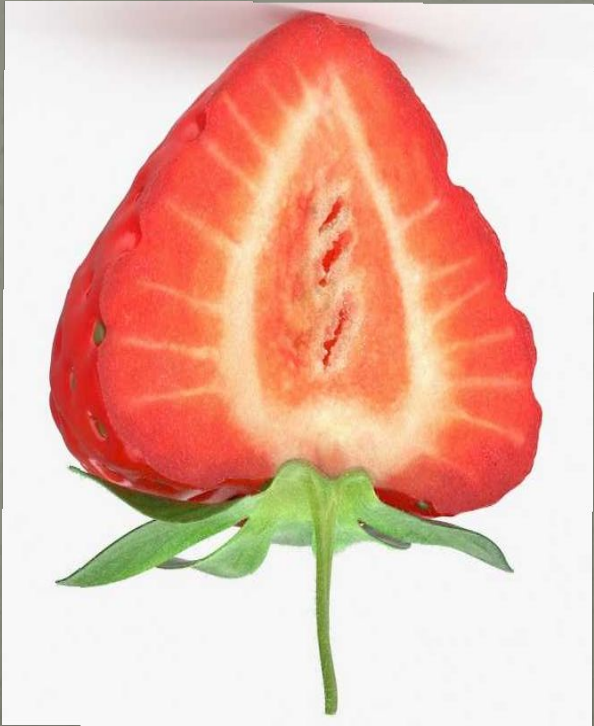
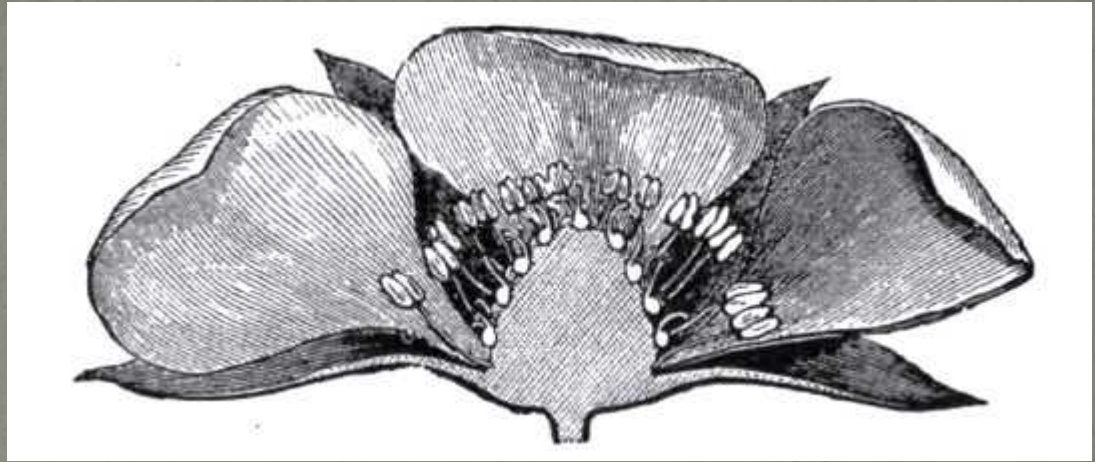
## Rose family



- Flowers with radial symmetry, usually five separate petals (horticultural varieties often have numerous petals)
- Flowers often have numerous stamens
- Leaves often have stipules
- Fruits range from fleshy drupes to dry-seeded
- Many edible fruits: peaches, plums, apples, cherries, pears, almonds, raspberries, strawberries
- Medicinal plants include hawthorn, agrimony, meadowsweet, rose, wild cherry





















# Asteraceae

## Aster family, Compositae

- Flowers arranged on a head or capitulum (often looking like one big flower)
- Flowers have 5 fused petals, symmetry radial (disc flowers) or bilateral (ray flowers)
- On close examination, two-parted style makes a “ram's head”
- Fruit is a dry or oily seed surrounded by pericarp tissue, often with accessory tufts for seed dispersal





# Asteraceae

## Aster family, Compositae

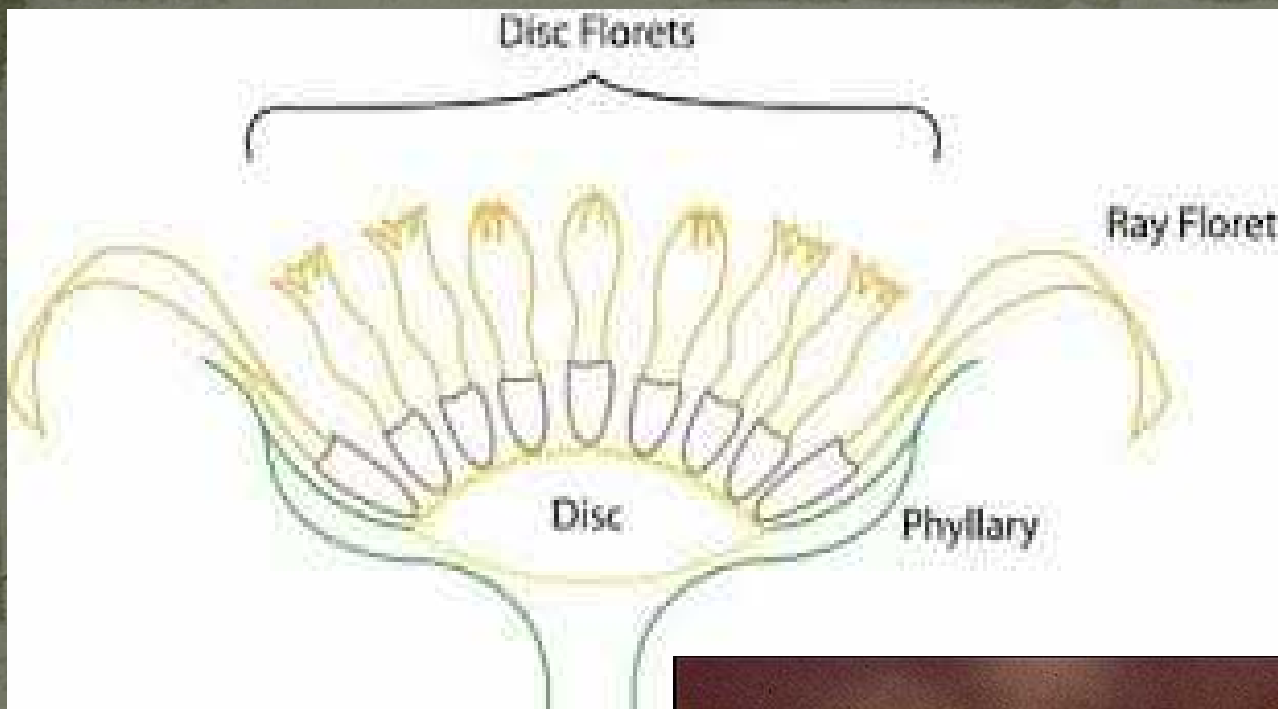
- Food plants include lettuce, artichoke, sunflower
- Medicinal plants include dandelion, burdock, ragweed, calendula, echinacea, grindelia, goldenrod, yarrow, mugwort, arnica
- Difficult family to characterize medicinally-- lots of different activities and compounds: polysaccharides, resins, and aromatics

Stigma -

Pollen -  
from  
Anthers





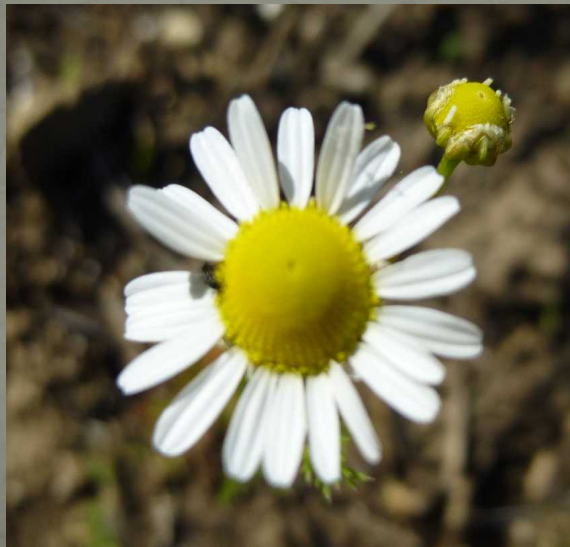


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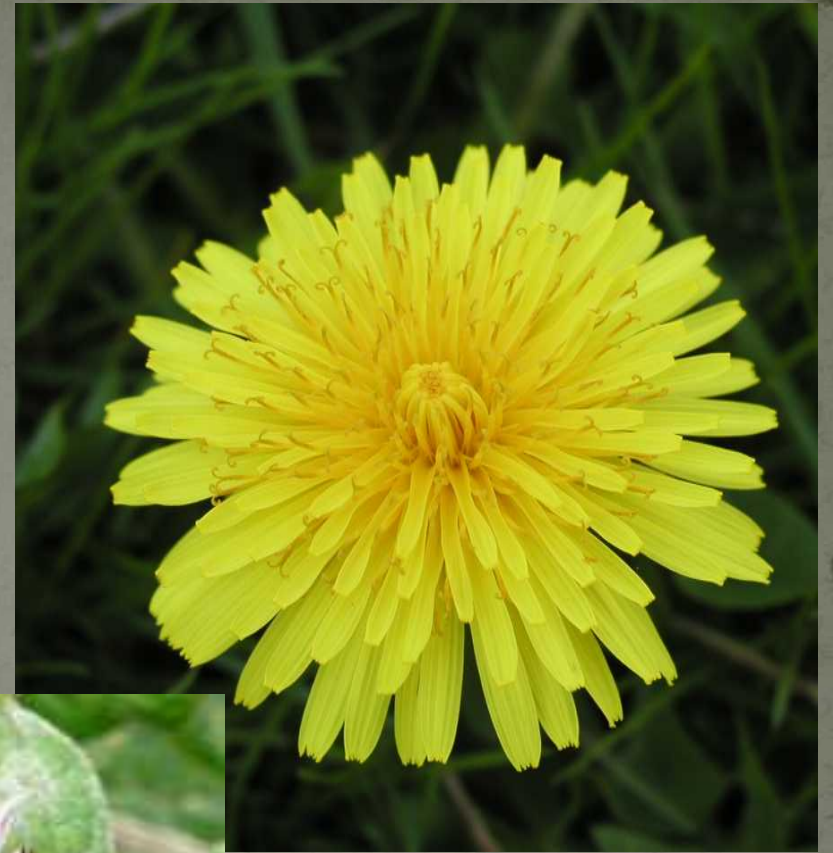


















# A few other families...

Malvaceae

Brassicaceae

Fabaceae

Ranunculaceae



# Malvaceae (Mallow family)

- Numerous stamens united into a column
- 5 separate petals
- Marshmallow, okra, hibiscus, linden, cacao, cheeses, sida, etc



# Brassicaceae (Mustard family)

- 4 petals in cross- or H-shape
- 4 long and 2 short stamens
- Fruit a silique (2-sided capsule with central membrane)
- Mustard, arugula, kale, cabbage, etc; maca





# Fabaceae (Bean family)

- Flowers with 5 separate petals arranged as banner, wings and keel
- Fruit a 2-sutured pod
- Often has compound leaves
- Beans and other pulses; mimosa, astragalus, licorice



# Ranunculaceae (Buttercup family)

- Flower symmetry mostly radial (except *Aconitum*, *Delphinium*)
- Petals often 5 but many species have highly variable petal number
- Flower parts separate, not fused
- Three to many superior ovaries; pistils often with hooked tips
- Range of toxicity; no major food plants, and at least one deadly toxic genus (*Aconitum*). Lots of alkaloids, glycosides, protoanemonin
- Medicinal plants include black cohosh, goldenseal, coptis, yellow root, anemone, black seed

