
Major Plant Families & Tribes

Flowering Plants

Wildland Plant Identification

REM 252

Major Plant Families/Tribes

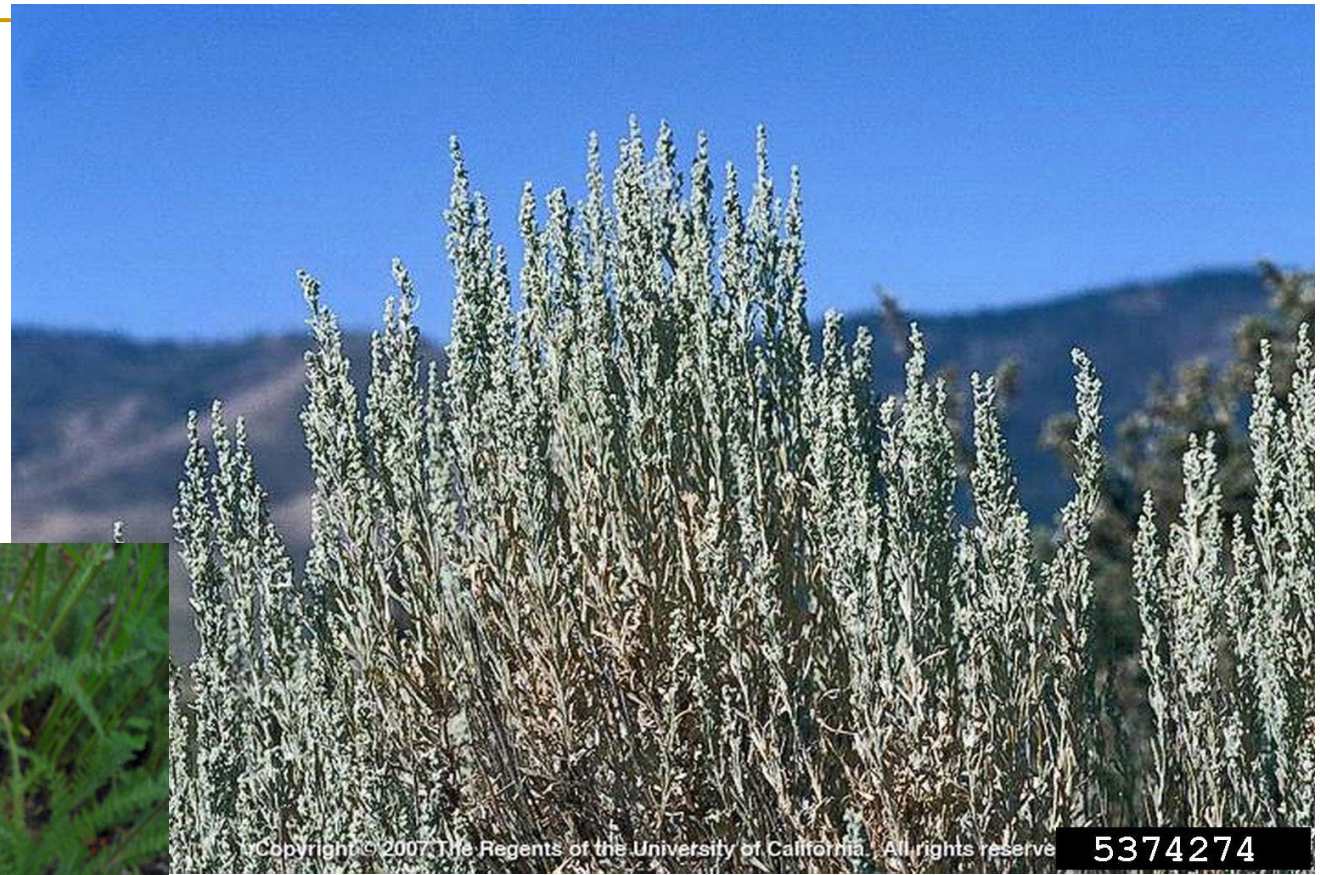
- Plant families have common characteristic
 - Knowing traits of major plant families (or tribes) helps to identify species
 - Learn traits of
 - 8 families (and 3 tribes of aster family) of flowering plants
 - 2 families of grass-like plants
 - 6 tribes of the grass family
-

Asteraceae – Sunflowers & Asters

- Inflorescence a head with many flowers
- Flowers small, tubular or tongue shaped
- Sepals absent
- Petals fused, usually w/ 5 small lobes
- Tribes
 - Anthemideae
 - Heliantheae
 - Astereae

Anthemideae

- The “fragrant” tribe
- Flowers not showy
- Yarrow and sage



Heliantheae

- The “sunflower” tribe
- Flowers showy
- Composite/Head flowers
- Examples
 - Prairie Coneflower, Desert Marigold
Tarbrush/Tarwort



Astereae

- The “aster” tribe
- Small, indistinct flowers
- Examples
 - Missouri Goldenrod, Broom Snakeweed



Pollinators

- This family is very important for rangeland pollinators.
- Grazing can reduce forage plants (i.e., grasses) and can increase forbs and shrubs in the community (i.e., flowering plants for pollinators).
- Herbicides to reduce weedy plants can reduce abundance of other flowering plants.
- DIVERSITY is Important

Asteraceae important for Pollinators



Chenopodiaceae – Goosefoot Family



- Many halophytes (salt loving/tolerant)
- Flowers not showy – No Petals
- Often dioecious with male & female flowers on different plants
- Usually gray in color
- Examples
 - Four-wing saltbush, Winterfat, Greasewood

Chenopodiaceae

- Plant often with Male or Female flowers on different plants
... Diecious



Rosaceae – Rose family

- Showy flowers
- Five petals & sepals
- Many stamen – insect pollinated
- Often bearing fruit



Many pollen-bearing
stamens.
Important for pollinators.



Rosaceae

- Single flower
not inflorescence



- Raceme



- Panicle



Fabaceae - Beans/legumes

- Leaves alternate, compound, sometimes with tendrils
- Flowers
 - ❑ Bilateral symmetry
 - ❑ Corolla of “butterfly” type (wings and keel)
 - ❑ Often elongate/tubular
- Fruit a bean (legume)
- Nitrogen-fixing
- Examples
 - ❑ Catclaw acacia, honey mesquite, tailcup lupine, astragalus



Fabaceae

- Inflorescence type variable
 - Spike
 - *Sometimes raceme*



Fabaceae

- Legumes fix nitrogen & are important of regenerative agriculture



Brassicaceae – Mustards/Capers

- Herbaceous plants w/ mustard oils
- Leaves alternate, simple or lobed often dimorphic (2 shapes on plant)
- Four sepals and four petals
- Usually yellow or white petals
- Inflorescence typically a raceme
 - Mature from bottom to top
- Examples
 - Whitetop, desert princesplume



Salicaceae – Cottonwoods/Willows

- Woody (trees/shrubs)
- Often white bark
- Cottony seed
- Not showy flowers
 - Catkins
 - Sepals, petals absent
 - Wind-dispersed seeds w/ long hairs
- Examples
 - Coyote willow, black cottonwood



Cyperaceae - Sedges

- Herbaceous –Grass Like
- Stems often rhizomatous, upright culms
- Stems often 3-sided (triangular), solid, without nodes
- Inflorescence often divided into male and female sections (monecious)
- Examples
 - Nebraska sedge, Elk sedge



Juncaceae - Rushes

- Herbaceous, often rhizomatous, perennial
- Stems round, solid
- Leaves simple, linear
- Inflorescence a cyme or head
- Flowers small, reduced
- Examples
 - Baltic rush



Poaceae – Grass Family & Tribes

- Variable inflorescence types
 - Panicle



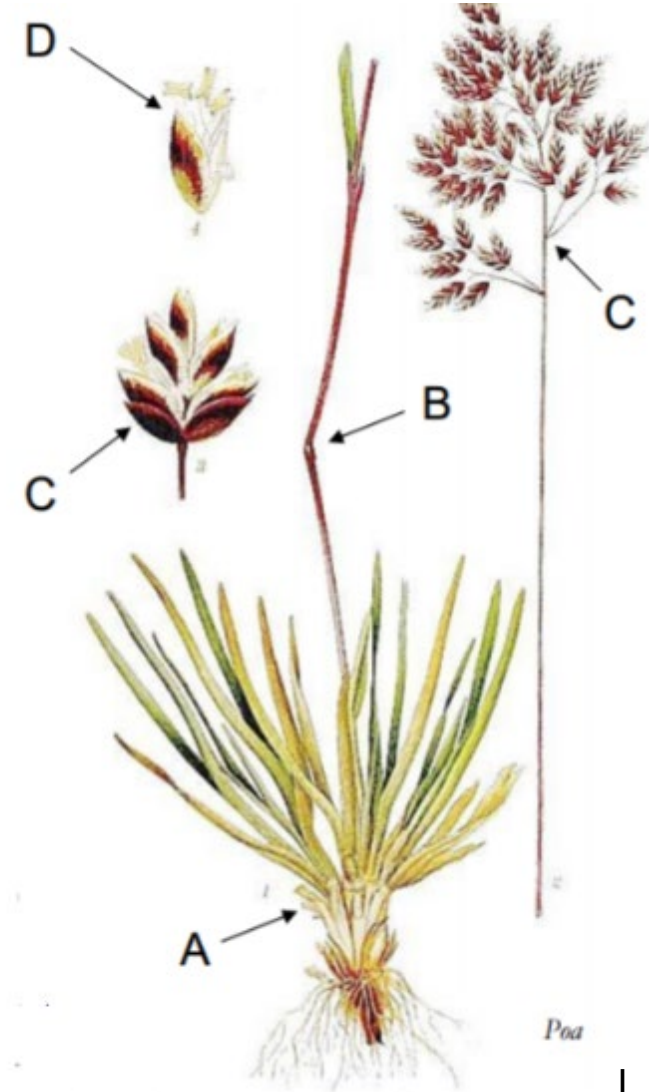
Poaceae – Grass Family & Tribes

- Variable inflorescence types
 - Spike



Poaceae – Grass Family & Tribes

- Variable inflorescence types
 - Panicle
 - Spike
 - Raceme (seldom)
- Stems round, hollow, with nodes
- Leaves linear, sheathing
- Flowers without sepals or petals



Andropogoneae - Sorghum Tribe

- Warm season (C_4) grasses
- Includes Corn, Sorghum, Sugar Cane
- Inflorescences of multiple spikes or racemes
- Spikelets in pairs, one directly attached to the rachis, the other pedicled
- Examples
 - Big Bluestem, Little Bluestem, Indiangrass



Big Bluestem – King of Prairie Grasses



Cynodonteae – Warm-season (C_4) grasses

- Inflorescence a spike or raceme
- May have multiple spikes or racemes
- Spikelets all on one side of the rachis
- Common grasses of arid environments (SW Deserts)
- Examples
 - Blue Grama, Black Grama, Sideoats Grama, Buffalograss, Tobosagrass



Poeae

- Inflorescence usually panicle but can be branched or compressed
- Spikelets have 2 to many florets
- Glumes short and membranous
- Lemmas membranous to leathery
- Examples
 - Bluegrasses, Fescues, Orchardgrass, Reed Canarygrass



Triticeae – Wheat & Rye Tribe

- Inflorescence a spike
- Auricles may be present
- Spikelets laterally compressed, and positioned alternately in 2-opposite rows
- Examples
 - Great Basin Wildrye, Medusahead, Bluebunch Wheatgrass, Crested Wheatgrass



Stipeae - Stipas

- Inflorescence a panicle
- Spikelets single-flowered with awn (short to long)
- Lemmas have either a sharp point or a terminal awn
- Example
 - Purple Needlegrass, Indian Ricegrass, Needle-and-Thread

