

Summary of Plants learned in this lab:

Family	Genus	Species
ANACARDIACEAE	<i>Toxicodendron</i>	<i>radicans</i>
ASTERACEAE	<i>Ambrosia</i>	<i>trifida</i>
ASTERACEAE	<i>Gutierrezia</i>	<i>amoena</i>
CACTACEAE	<i>Opuntia</i>	<i>engelmannii</i>
CYPERACEAE	<i>Cyperus</i>	<i>odoratus</i>
EUPHORBIACEAE	<i>Euphorbia</i>	<i>marginata</i>
FABACEAE	<i>Desmodium</i>	<i>paniculatum</i>
NYCTAGINACEAE	<i>Boerhavia</i>	<i>diffusa</i>
OROBANCHACEAE	<i>Agalinis</i>	<i>heterophylla</i>
POACEAE	<i>Chloris</i>	<i>cucullata</i>
SAPINDACEAE	<i>Cardiospermum</i>	<i>halicacabum</i>
* SCROPHULARIACEAE	<i>Verbascum</i>	<i>thapsus</i>
TYPHACEAE	<i>Typha</i>	<i>latifolia</i>
* VERBENACEAE	<i>Verbena</i>	<i>brasiliensis</i>
VERBENACEAE	<i>Verbena</i>	<i>halei</i>

* not native to Texas

CACTACEAE (Cactus Family) *Opuntia engelmannii*

Prickly Pear, Cholla

The red fruits are called “tunas” and can be fleshy and sweet.



What vegetative plant part are the pads? the spines?

This is the state plant of Texas.

Opuntia sp. serve as host to *Dactylopius coccus*, the cochineal insect (the source of a red dye).



Populations of *Opuntia* are kept in check by the Cactus moth *Cactoblastis cactorum*.

NYCTAGINACEAE (Four-O'Clock Family) *Boerhavia diffusa*

Scarlet Spiderling

This plant gets its specific epithet from its diffuse, spreading growth habit.

What type of inflorescence does this plant have?

What is the leaf arrangement?

leaf complexity?



POACEAE (Grass Family) *Chloris cucullata*

Hooded Windmill Grass, Hooded Crowfoot Grass



“cucullata” comes from Latin meaning “hooded”; Why do you think it was named this?

ASTERACEAE (Sunflower Family) *Gutierrezia amoena*
What leaf shape does this plant have?

Annual Broomweed

leaf arrangement?

What type of inflorescence?

What are the two different flowers in this type of inflorescence called?



OROBANCHACEAE (Broomrape Family) *Agalinis heterophylla*

Prarie Agalinis



“heterophylla” means various-leaved

What is the floral symmetry?

Wow many stamens do these flowers have?

EUPHORBIACEAE (Spurge Family) *Euphorbia marginata*

Snow-on-the-Mountain

Look for the milky sap typical of this family (BE CAREFUL, sap can be irritating to the skin!!).

What leaf arrangement?

What leaf margin?

Look for the cyathia (singular cyathium), small cup-like involucres each containing several staminate flowers and one pistillate flower with a 3-carpellated ovary.

Where does this plant get its specific epithet?



* VERBENACEAE (Vervain or Verbena Family) *Verbena brasiliensis*

Brazilian Vervain



Notice the square stems.



* native to South America

What is the leaf arrangement?

VERBENACEAE (Vervain Family) *Verbena halei*
named for J.P. Hale

Slender Vervain, Texas Vervain, Blue Vervain

What is the leaf shape?

What is the stem shape?

upside-down gingerbread man?



* SCROPHULARIACEAE (Snapdragon Family) *Verbascum thapsus* (native of Eurasia)
Common Mullein, Velvet Dock, Cowboy's Toilet Paper . . .



How do we describe the leaf surface?



Can you identify the male and female parts?

The leaves are used medicinally, including in the form of cigarettes for treating asthma.

TYPHACEAE (Cat-tail Family) *Typha latifolia*

Broadleaf Cat-tail, Common Cat-tail

Cat-tails can filter run-off flowing into lakes keeping the lakes healthy. They also help prevent erosion and provide habitat to several species of birds and other animals.

Rhizomes, young shoots, and pollen are edible.

Is this a monocot or a dicot?



ASTERACEAE (Sunflower Family) *Ambrosia trifida*



The sap is blood red (stain).

What is the leaf arrangement?

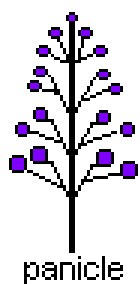
leaf surface?

How do you think this plant got its specific epithet?

Blood Ragweed, Giant Ragweed



FABACEAE (Legume or Bean Family) *Desmodium paniculatum*
 "paniculatum" means flowers in panicles



What is the leaf complexity?

leaf arrangement?

Panicled Tick-Clover



Study the fruits. How do you think the seeds are dispersed?



CYPERACEAE (Sedge Family) *Cyperus odoratus*

Fragrant Flat Sedge



**Sedges have edges,
rushes are round . . .**



Do you think this is a monocot or a dicot? Why?

SAPINDACEAE (Soapberry Family) *Cardiospermum halicacabum*

Common Balloonvine, Heartseed Vine

Greek: *cardia*, heart, and *sperma*, seed, referring to the white, heart-shaped spot on the seed. (?)

Fruits will float, adding dispersal distance.

Can you find the stigmas?

What is the leaf complexity?



ANACARDIACEAE (Sumac or Cashew Family) *Toxicodendron radicans*

Poison Ivy, Poison Oak

Do NOT Touch!!

This plant's habit varies from a low-creeping shrub to an erect shrub to a low- or high-climbing vine.

Causes contact dermatitis in most people due to resinous phenolic compounds commonly known as urushiols.

What is the leaf arrangement?

What is the leaf complexity?



Leaf shape and leaf margin can be quite variable!!

