

Summary of Plants learned in this lab:

Family	Genus	Species
ACANTHACEAE	<i>Justicia</i>	<i>americana</i>
ASTERACEAE	<i>Baccharis</i>	<i>neglecta</i>
ASTERACEAE	<i>Palafoxia</i>	<i>callosa</i>
CONVOLVULACEAE	<i>Ipomoea</i>	<i>cordatotriloba</i>
CUPRESSACEAE	<i>Taxodium</i>	<i>distichum</i>
FABACEAE	<i>Amorpha</i>	<i>fruticosa</i>
FABACEAE	<i>Centrosema</i>	<i>virginianum</i>
FABACEAE	<i>Eysenhardtia</i>	<i>texana</i>
FABACEAE	<i>Neptunia</i>	<i>lutea</i>
FABACEAE	<i>Sesbania</i>	<i>drummondii</i>
ONAGRACEAE	<i>Ludwigia</i>	<i>octovalvis</i>
POLYGALACEAE	<i>Polygala</i>	<i>lindheimeri</i>
PORTULACACEAE	<i>Portulaca</i>	<i>pilosa</i>
RUBIACEAE	<i>Diodia</i>	<i>virginiana</i>
RUTACEAE	<i>Zanthoxylum</i>	<i>hirsutum</i>

* not native to Texas

RUTACEAE (Citrus family) *Zanthoxylum hirsutum*

Prickly-ash, Tickle Tongue, Toothache Tree



shrub or small tree to 5m

Where does this plant get its common name?



Though the prickles are not prominent on the specimen at McKinney Falls, they are typically seen.

ASTERACEAE *Palafoxia callosa*

Small Palafoxia

What is the flower color?

Can you see disk and ray flowers? This is a trick question because there are only disk flowers.



What is the leaf shape?



POLYGALACEAE (Milkwort family) *Polygala lindheimeri*

Shrubby Milkwort

specific epithet named for
Ferdinand Jacob Lindheimer (1809-1879), a German-born, Texas plant collector



Plant surface?



Notice the zig-zag nature of the inflorescence.

Plant was once thought to increase the yield of cow's milk, hence the common name (milk; wort=plant).

CONVOLVULACEAE (Morning-glory family) *Ipomoea cordatotriloba*

Sharp-pod Morning-glory, Wild Morning-glory, Purple Morning-glory

“*cordatotriloba*” = cordate (heart-shaped) and three-lobed



What growth habit does this plant have?



corolla funnelform, purple-rose
rarely white, length varies from
2.8 to 5.5cm



ONAGRACEAE (Evening-primrose family) *Ludwigia octovalvis*

Shrubby Water Primrose

“octovalvis” means eight-valved



Since we don't have a good picture of the leaves, draw them here: (the taxonomic description calls the leaves “narrowly lanceolate to narrowly ovate”)

ACANTHACEAE (Wild Petunia family) *Justicia americana*
“americana” = of America

American Water-willow

leaves glabrous, simple, with margin entire

The leaves are “sessile”. Do you remember what that means?

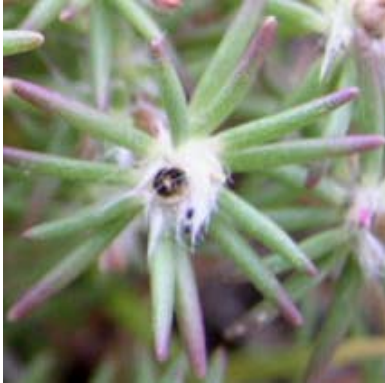


PORTULACACEAE (Purslane family) *Portulaca pilosa*

Shaggy Portulaca



“pilosa” = with long soft hairs



The leaves of *Portulaca* are typically succulent.

“fruits are circumscissile (meaning opening along a circumference) with a bottom valve (like a pot) and an upper valve (like a lid)”

FABACEAE (Legume or Bean family)

- plants herbaceous or woody
- leaves compound
- leaf margins generally entire
- sepals 5, separate or united
- petals 1-5, unequal in most genera
- stamens 5 to many
- pistil 1
- fruit a legume, developed from a one-celled superior ovary with one to many ovules
- fruit generally opening along both sutures



The members of Fabaceae are grouped into subfamilies according to their flowers:

Mimosoideae

Papilionoideae

Caesalpinioideae



FABACEAE *Sesbania drummondii*

Rattlebush, Poison-bean, Coffee-bean



Where does the specific epithet come from?

What is the leaf complexity?



fruits 4-sided and conspicuously 4-winged

fruits are poisonous ☠

FABACEAE *Centrosema virginianum* *
“*virginianum*” = of Virginia

Butterfly pea

The flower is upside-down compared with other Papilionoideae legumes.

What is the growth habit of this plant?

What is the leaf complexity? _____



FABACEAE *Neptunia lutea*

Yellow-puff, Yellow Neptunia

Which subfamily does this plant belong to?

What is the leaf complexity?

FABACEAE *Amorpha fruticosa*
“*fruticosa*” = shrubby or bushy

False Indigo, Indigo-bush *Amorpha*

What is the leaf complexity?



many fruits (legumes) on each infructescence

☠ **poisonous**



RUBIACEAE (Coffee or Madder family) *Diodia virginiana*

Virginia Buttonweed, Large Buttonweed



CUPRESSACEAE (Cypress family) *Taxodium distichum*
one of the few species of Cypress that is deciduous

Some people believe that the “knees” are for gas exchange, but many scientists disagree.

These leaves appear compound, but they are actually simple!

Male and female cones occur on the same plant. What is this called?

Bald Cypress

male cones →



female cones ↓



FABACEAE *Eysenhardtia texana*

Texas Kidneywood, Beebrush



What is the leaf complexity?

Leaves supposedly have the aroma of tangerine rinds, what do you think?



Eysenhardtia is in the Papilionoideae subfamily.

Dyes have been obtained from the wood, and the wood is fluorescent in water. According to one chemist/historian, the wood was soaked in water turning the water orange. This liquid was used as a diuretic (an agent that promotes the excretion of urine) during frontier days. Why? I don't know.

ASTERACEAE *Baccharis neglecta*

Roosevelt weed, New-deal weed

The leaves and flowers are considered dangerous or even fatal to livestock.

This plant has male and female flowers on different individuals. What is this type of plant called?

