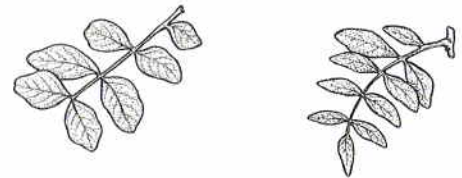
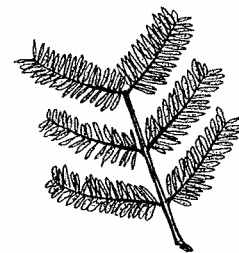


**SECTION 4 -- BROADLEAF-ALTERNATE-
COMPOUND-PINNATE**

<i>Allanthus altissima</i>		Tree-of-Heaven
<i>Albizia julibrissin</i>		Mimosa/Silk Tree
<i>Carya illinoensis</i>		Pecan
<i>Carya ovata</i>		Shagbark Hickory
<i>Ceratonia siliqua</i>		Carob
<i>Cladrastis kentukea</i>		Yellow Wood
<i>Fagus sylvatica</i>		European Beech
<i>Gleditsia triacanthos</i>		Honey Locust
<i>Grevillea robusta</i>		Silk Oak
<i>Gymnocladus dioica</i>		Kentucky Coffee Tree
<i>Juglans californica hindsii</i>		California Black Walnut
<i>Juglans cinerea</i>		Butternut
<i>Juglans regia</i>		English Walnut
<i>Koelreuteria bipinnata</i>		Chinese Flame Tree
<i>Koelreuteria paniculata</i>		Goldenrain Tree
<i>Maackia amurensis</i>		Amur Maackia
<i>Melia azedarach</i>		Chinaberry/Texas Umbrella Tree
<i>Olneya tesota</i>		Desert Ironwood
<i>Pistacia chinensis</i>		Chinese Pistache
<i>Robinia species</i>		Locust family
<i>Schinus molle</i>		California Pepper Tree
<i>Sophora japonica</i>		Japanese Pagoda Tree/Chinese Scholar Tree
<i>Sophora secundiflora</i>		Mescal Bean Tree
<i>Toona sinensis</i>		Toona



COMPOUND PINNATE



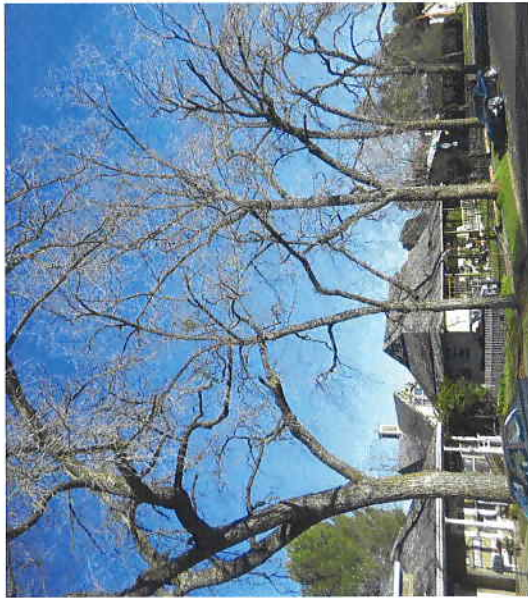
BIPINNATELY COMPOUND

COMMON	NOT SEEN
RARE BUT FOUND	NOT RECOMMENDED

<i>Alnus altissima</i>		Tree-of-Heaven	
DECIDUOUS	COMPOUND	ALTERNATE	BROADLEAF
<p>Average Height: 50'</p> <p>Average Canopy: 50'</p> <p>Shape: Round</p> <p>Leaf: Greenish in fall</p> <p>Flowers: Pink-red and stinky</p> <p>Fruit/Seed: Winged on female</p> <p>Bark: Gray fractured</p> <p>Other Characteristics: Invasive weed tree, holds seeds all winter, large leaf scars, a.k.a. "Tree-from-Hell"</p>			
			
			
			

<i>Albizia julibrissin</i>		Mimosa/Silk Tree	
COMPOUND DECIDUOUS	BIPINNATELY	ALTERNATE	BROADLEAF
<p>Average Height: 40' Average Canopy: 80' Shape: Flat top Leaf: Yellow in fall Flowers: Pink Fruit/Seed: Bean-type pod Bark: Smooth gray</p> <p>Other Characteristics: Invasive with lots of seeds starting new trees</p>			
    			

<p>Average Height: 80' – 100'</p> <p>Average Canopy: 40' – 60'</p> <p>Shape: Broad rounded</p> <p>Leaf: Yellow in fall</p> <p>Flowers: Catkin</p> <p>Fruit/Seed: 1" – 2" Oval nut</p> <p>Bark: Gray furrows</p> <p>Other Characteristics: Edible pecans in fall</p>		Pecan	
		BROADLEAF	ALTERNATE
DECIDUOUS	COMPOUND	<i>Carya illinoensis</i>	

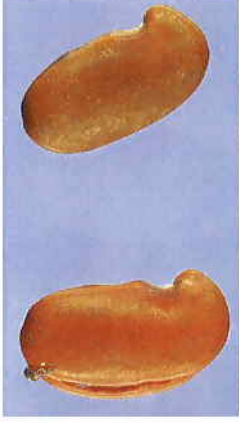










<i>Carya ovata</i>		Shagbark Hickory	
PINNATE DECIDUOUS	COMPOUND	ALTERNATE	BROADLEAF






Average Height: 20' - 35'
 Average Canopy: 20' - 40'
 Shape: Narrow
 Leaf: Yellow in fall
 Flowers: Catkin
 Fruit/Seed: Edible 1" - 2" round nut in 4 segmented husk
 Bark: Gray shedding plates
 Other Characteristics: Usually 5 - 7 leaflets per leaf











Carob		PINNATE EVERGREEN
BROADLEAF	ALTERNATE	
<p><i>Ceratonia siliqua</i></p>		
<p>Average Height: 30'</p> <p>Average Canopy: 30' - 40'</p> <p>Shape: Umbrella</p> <p>Leaf: Shiny, almost round, leathery pairs of leaflets about 2 inches in diameter</p> <p>Flowers: Small red</p> <p>Fruit/Seed: 6" x 1" Pod</p> <p>Bark: Brown, rough</p> <p>Other Characteristics: Edible seed is a substitute for chocolate (without the caffeine)</p>		
    		





<i>Cladrastis kentuckea</i>		Yellow Wood	
DECIDUOUS		BROADLEAF	ALTERNATE
PINNATE		COMPOUND	
<p>Average Height: 30' - 50'</p> <p>Average Canopy: 15' - 25'</p> <p>Shape: Oval</p> <p>Leaf: Yellow in fall</p> <p>Flowers: White</p> <p>Fruit/Seed: 3/4" Pod</p> <p>Bark: Smooth dark gray to almost black</p> <p>Other Characteristics: Fragrant flowers</p>			
			
			
			







<i>Fagus sylvatica</i>		European Beech	
EVERGREEN	DECIDUOUS	ALTERNATE	BROADLEAF
<p>Average Height: 90' Average Canopy: 60' Shape: Pyramidal Leaf: Bronze in fall Flowers: Inconspicuous Fruit/Seed: Nutlets in spinney husk Bark: Light gray, smooth Other Characteristics: Shallow roots</p>			
			
			
			





<i>Gleditsia triacanthos</i>		Honey Locust	
PINNATE	COMPOUND	ALTERNATE	BROADLEAF
<p>Average Height: 35' – 70'</p> <p>Average Canopy: 25' – 35'</p> <p>Shape: Broad top</p> <p>Leaf: Yellow in all</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: Large flat bean pod</p> <p>Bark: Long ridges</p> <p>Other Characteristics: May or may not have big thorns on trunk</p>			
			
			
			

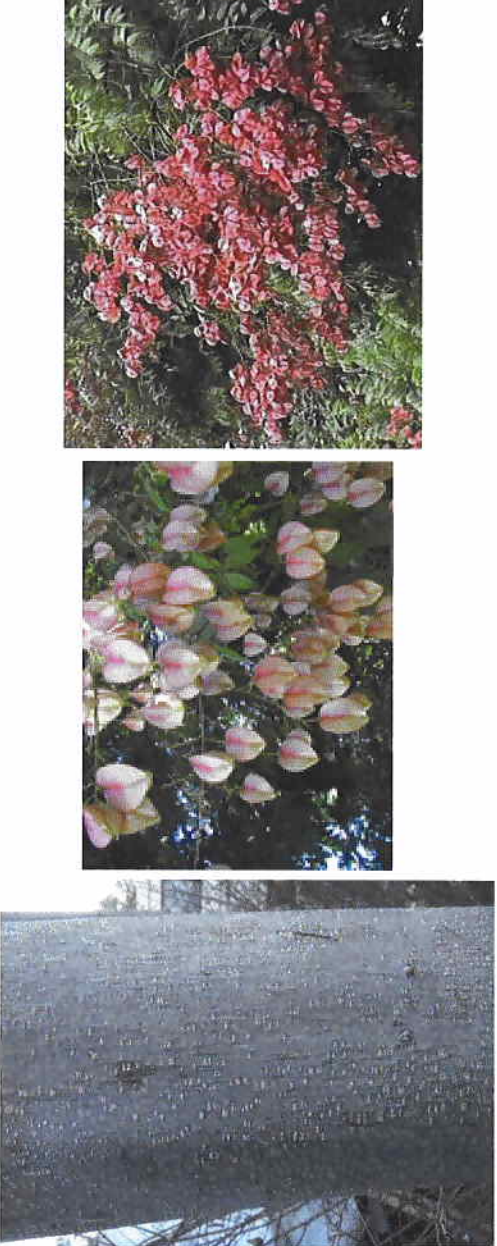
Silk Oak		BROADLEAF	
<i>Grevillea robusta</i>		ALTERNATE	
COMPOUND (Bipinnate)		EVERGREEN	
<p>Average Height: 50' – 60'</p> <p>Average Canopy: 25' – 35'</p> <p>Shape: Broad top</p> <p>Leaf: 5"-15" x 2"-7" Fern like, green top, silver underside</p> <p>Flowers: Golden orange</p> <p>Fruit/Seed: 2 Seeded, 1" long winged and brown</p> <p>Bark: Deep fissures, dark gray</p> <p>Other Characteristics: Native to Australia</p>			
			
			

<i>Gymnocladus dioica</i>		Kentucky Coffee Tree	
COMPOUND	BIPINNATELY	ALTERNATE	BROADLEAF
<p>Average Height: 60' – 100'</p> <p>Average Canopy: 45' – 50'</p> <p>Shape: Broad top</p> <p>Leaf: Yellow in fall</p> <p>Flowers: Creamy-white inconspicuous</p> <p>Fruit/Seed: Large pod</p> <p>Bark: Rough, scaly gray-brown</p> <p>Other Characteristics: Pods on female trees can be messy and can be used as a substitute for coffee</p>			
    			

PINNATE DECIDUOUS		California Black Walnut		
COMPOUND	JUGLANS CALIFORNICA <i>Juglans californica</i> <i>hindsii</i>			
BROADLEAF ALTERNATE		Average Height: 30' – 60' Average Canopy: 30' – 60' Shape: Round-broad Leaf: Yellow-brown in fall Flowers: Catkin Fruit/Seed: Edible 1" diameter round black husk nut Bark: Gray to brown, shallowly fissured, ridges flat topped and scaly Other Characteristics:		

Butternut		<i>Juglans cinerea</i>	
BROADLEAF	ALTERNATE	COMPOUND	DECIDUOUS
<p>Average Height: 50' - 60'</p> <p>Average Canopy: 50' - 80'</p> <p>Shape: Broad</p> <p>Leaf: Yellow brown in fall</p> <p>Flowers: Catkin</p> <p>Fruit/Seed: Edible 3/4" oval nut in green husk</p> <p>Bark: Light, ashy gray, with flat top, shiny ridges, developing diamond shaped patterns</p> <p>Other Characteristics:</p>			
     			

<i>Juglans regia</i>		English Walnut	
DECIDUOUS	COMPOUND	ALTERNATE	BROADLEAF
<p>Average Height: 60'</p> <p>Average Canopy: 60'</p> <p>Shape: Round</p> <p>Leaf: Yellow-brown in fall</p> <p>Flowers: Catkin</p> <p>Fruit/Seed: Edible 1 1/2" round nut inside thick husk</p> <p>Bark: Light, ashy gray, with flattened ridges, developing a diamond shaped pattern</p> <p>Other Characteristics:</p>			
			
			
			

<i>Koelreuteria bipinnata</i>		Chinese Flame Tree	
COMPOUND DECIDUOUS	BIPINNATELY	ALTERNATE	BROADLEAF
<p>Average Height: 20' - 40'</p> <p>Average Canopy: 20' - 40'</p> <p>Shape: Round head</p> <p>Leaf: Yellow in fall</p> <p>Flowers: Yellow</p> <p>Fruit/Seed: 1/8" Seed in 2" lantern</p> <p>Bark: Smooth and light brown when young, becoming ridged and furrowed as the tree matures</p> <p>Other Characteristics: Pink papery lantern</p>			
			

<i>Koelerutera paniculata</i>		Goldenrain Tree	
COMPOUND	BIPINNATELY	ALTERNATE	BROADLEAF
DECIDUOUS			

Average Height:
20' – 35'

Average Canopy:
25' – 40'

Shape:
Round head

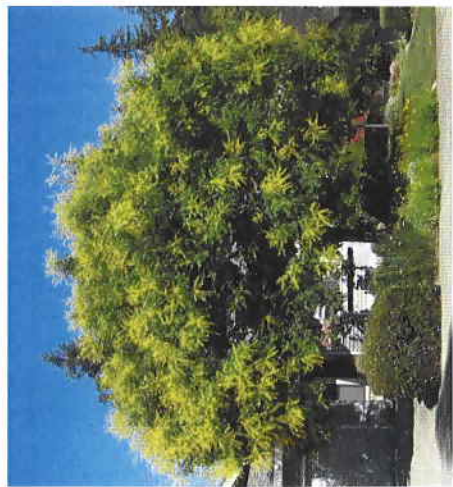
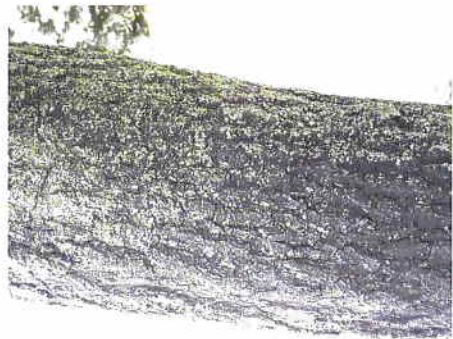
Leaf:
Yellow in fall






Flowers:
Yellow


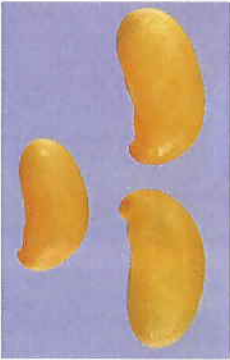



Fruit/Seed:
1/8" diameter seed in 2" lantern

Bark:
Light gray-brown, older branches and trunk with significant ridges and furrows






Other Characteristics:
Brown paper lantern













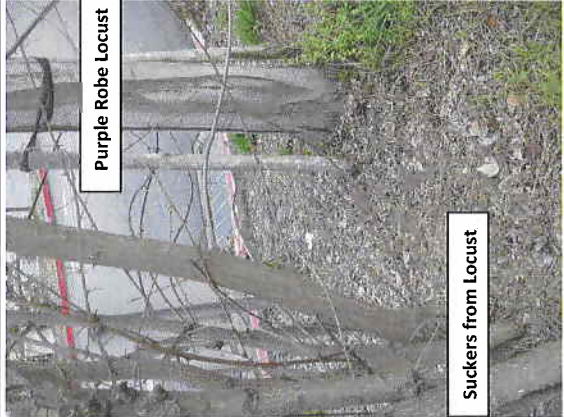
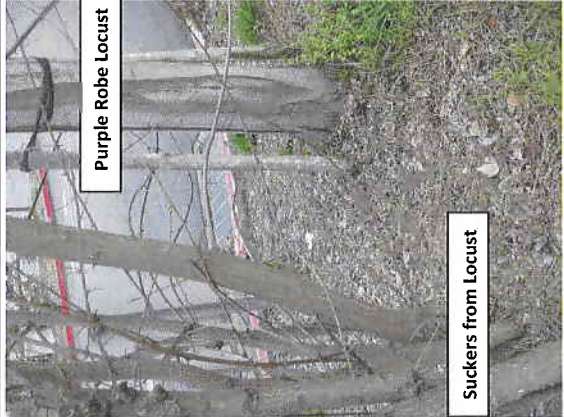
Golden Ball Lead Tree		BROADLEAF ALTERNATE	<i>Leucaena retusa</i>
COMPONENT	BIPINNATELY		
<p>Average Height: 12' - 20'</p> <p>Average Canopy: 12' - 20'</p> <p>Shape: Irregular</p> <p>Leaf: Yellow in fall</p> <p>Flowers: Yellow balls</p> <p>Fruit/Seed: 6' - 10" Bean pod</p> <p>Bark: Gray</p> <p>Other Characteristics: Very drought tolerant</p>			
    			





<i>Maackia amurensis</i>		Amur Maackia	
DECIDUOUS	PINNATE	ALTERNATE	BROADLEAF
COMPOUND		<p>Average Height: 60'</p> <p>Average Canopy: 60'</p> <p>Shape: Round</p> <p>Leaf: Round</p> <p>Flowers: White</p> <p>Silver underside, yellow in fall</p> <p>Fruit/Seed: 2" - 3" Seed pods</p> <p>Bark: Coppery-bronze bark</p> <p>exfoliates on mature trees</p> <p>Other Characteristics: Neat clean attractive form</p>	
			
			
			






<i>Melia azedarach</i>		Chinaberry/Texas Umbrella Tree	
COMPOUND DECIDUOUS	BIPINNATELY	ALTERNATE	BROADLEAF
<p>Average Height: 50'</p> <p>Average Canopy: 30' - 50'</p> <p>Shape: Rounded</p> <p>Leaf: Yellow in fall</p> <p>Flowers: Fragrant lilac</p> <p>Fruit/Seed: ½" Berries (messy)</p> <p>Bark: Deep furrows</p> <p>Other Characteristics: Berries stay on all winter</p>			
			
			
			





<i>Olneya tesota</i>		Desert Ironwood	
PINNATE EVERGREEN	COMPOUND	ALTERNATE	BROADLEAF
<p>Average Height: 33'</p> <p>Average Canopy: 20' – 30'</p> <p>Shape: Vase to erratic</p> <p>Leaf: Bluish green 6" long, 6 – 9 leaflets</p> <p>Flowers: April – June, medium purple – red pink</p> <p>Fruit/Seed: Seed pod, 2" – 4" long</p> <p>Bark: Young: gray and shiny Older: Cracked and broken</p> <p>Other Characteristics: Very hard wood, heavier than water, usually multi-trunk</p>			
    			

<i>Pistacia chinensis</i>		Chinese Pistache	
DECIDUOUS	PINNATE	ALTERNATE	BROADLEAF
<p>Average Height: 30' – 60'</p> <p>Average Canopy: 25' – 55'</p> <p>Shape: Spreading</p> <p>Leaf: Red-orange in fall</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 1/8" Diameter pink and blue seeds on females</p> <p>Bark: Small cracks and larger plates, gray color</p> <p>Other Characteristics: Dependable fall color</p>			
     			

<p><i>Robinia species</i></p>		Locust family	
		BROADLEAF	ALTERNATE
DECIDUOUS	COMPOUND	<p>Average Height: 30' - 75'</p> <p>Average Canopy: 25' - 50'</p> <p>Shape: Oval</p> <p>Leaf: Yellow in fall</p> <p>Flowers: Pale pink to magenta</p> <p>Fruit/Seed: 4" Long bean pods</p> <p>Bark: Large cracks in smooth gray bark</p> <p>Other Characteristics: Mistletoe common, root suckers common, trunk spits also common</p>	
			
			
			
<p>Purple Robe Locust</p>		<p>Suckers from Locust</p>	
<p>Broadleaf mistletoe on Pink Idaho Locust</p>			

<i>Schinus molle</i>		California Pepper Tree	
PINNATE EVERGREEN	COMPOUND	ALTERNATE	BROADLEAF
<p>Average Height: 30' - 50'</p> <p>Average Canopy: 15' - 30'</p> <p>Shape: Weeping</p> <p>Leaf: 7" - 11" x 2" - 4"</p> <p>Flowers: Small white</p> <p>Fruit/Seed: 3/16" Diameter red/green/pink</p> <p>Bark: Rough, gray, twisted</p> <p>Other Characteristics: Usually persistent hard pepper berries in clusters of 100's</p>			
   			

<p>Average Height: 50' - 70'</p> <p>Average Canopy: 50' - 70'</p> <p>Shape: Umbrella</p> <p>Leaf: Yellowish in fall</p> <p>Flowers: Yellow-white clusters</p> <p>Fruit/Seed: 2' - 3 1/2" Pods</p> <p>Bark: Gray ridged</p> <p>Other Characteristics: Twigs bright green in spring, medium green in summer, and dark green in winter</p>		<p>Japanese Pagoda Tree/ Chinese Scholar Tree</p>		
		<p><i>Sophora japonica</i></p>		
				

<i>Sophora secundiflora</i>		Mescal Bean Tree	
EVERGREEN	PINNATE	ALTERNATE	BROADLEAF
<p>Average Height: 15' - 25'</p> <p>Average Canopy: 10' - 15'</p> <p>Shape: Irregular</p> <p>Leaf: Usually 9 leaflets in compound leaf</p>		<p>Flowers: Violet-blue drooping clusters</p> <p>Fruit/Seed: 1" - 8" Pods with brown or red poisonous seeds</p> <p>Bark: Dark, small cracking</p> <p>Other Characteristics: Maybe multi or single stem</p>	
			
			

<i>Toona sinensis</i>		Toona	
PINNATE DECIDUOUS	COMPOUND	ALTERNATE	BROADLEAF
<p>Average Height: 50'</p> <p>Average Canopy: 30'</p> <p>Shape: Round head</p> <p>Leaf: Rose-colored new growth</p> <p>Flowers: Pendulous white flower cluster</p> <p>Fruit/Seed: Star-shaped seed capsules</p> <p>Bark: Smooth gray with large flakes</p> <p>Other Characteristics: Foliage is fragrant</p>			
