California Black Walnut

Genus/species: *Juglans californica*

Family: Juglandaceae

Distribution: Southern California

- W Santa Barbara Co. southeastward to NW San Diego Co.
- SW San Bernardino Co. and NW Riverside Co.
- Possibly naturalized in San Luis Obispo and Monterey Cos.

Comments: California Black Walnut, also known as California Walnut or Southern California Black Walnut, is a rather small tree up to about 30 feet in height usually found in the foothills up to an elevation of 4500 feet but typically below 2500 feet. There may be several trunks, making it appear bushy. Bark is generally furrowed. Best development occurs in areas closer to the coast. This tree is commonly found in moist soils, often near streams. The compound leaves are up to about a foot long, each having some 9 to as many as 19 leaflets. Male flowers release large quantities of wind-borne pollen in the spring from catkins, and female flowers are produced in small clusters at the tip of the newly-formed twigs. The nuts are formed inside round fruit approximately an inch in diameter. However, the hulls do not split open; the fruit are released as the hull decomposes or are opened by squirrels and other animals. The shell of the nut is rather smooth compared to other species of walnuts.
Black Walnut

Genus/species  *Juglans nigra*

Family  Juglandaceae

Distribution  Eastern US
- S New York southward to E North Carolina and NW Florida
- NW Florida westward to SE Texas
- SE Texas northward to north central Nebraska and SE South Dakota
- SE South Dakota eastward to S New York
- Scattered locations in S New England
- Absent from much of Pennsylvania, Lower Mississippi Valley, and Gulf and South Atlantic coastal region

Comments  Black Walnut is a widespread large tree commonly found on well-drained soils near streams. It has compound leaves up to two feet long, each having some 15 to 23 leaflets. Male flowers release large amounts of wind-borne pollen in the spring from catkins, and female flowers are produced in small clusters at the tip of the newly-formed twigs. The nuts are formed inside round fruit approximately two inches in diameter. However, the hulls do not split open; the fruit are released as the hull decomposes or are opened by squirrels and other animals. The wood of this tree is prized for the manufacturing of furniture and other items such as rifle stocks.
Western Sycamore

Genus/species  *Platanus racemosa*

Family:  Platanaceae

Distribution  California  North central to south central California, especially coastal two thirds of state

Comments  Western Sycamore (also known as California Sycamore) is a tree of flood plains and of moist gullies and canyons. In the southern part of its range it is found from near sea level to over 4000 feet, but northward it is restricted to low elevations. It becomes a large tree easily recognized by its light-colored bark that comes off in large flakes as the tree matures. The leaves look much like oversized maple leaves, with three to five large lobes, but they have a distinct scent and brownish “fuzz” that is easily rubbed off. Leaf-like stipules can sometimes be seen at the bases of the leaves. Male and female flowers are produced in separate round clusters; the males flower heads produce large quantities of wind-borne pollen before falling from the tree while the female flower heads, arranged in a row of 3 to 7 on a stalk, enlarge to become seed balls almost an inch in diameter that eventually disintegrate and scatter the seeds.

The closely-related Arizona Sycamore (*Platanus wrightii*) has somewhat more strongly indented leaves and is found in Arizona and New Mexico.
## Eastern/American Sycamore

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<th>Genus/species</th>
<th><em>Platanus occidentalis</em></th>
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**Comments**  
Eastern Sycamore is a common tree in flood plains along rivers but occasionally grows in drier areas in disturbed soil. It is easily recognized by its light-colored bark that comes off in large flakes as the tree matures. The leaves look much like oversized maple leaves but they have a distinct scent and a brownish “fuzz” that is easily rubbed off. Male and female flowers are produced in separate round clusters. The male flower heads produce substantial quantities of wind-borne pollen before falling from the tree, and the female flower heads enlarge to become seed balls over an inch in diameter that eventually disintegrate and scatter the seeds.
Sweet Gum

Genus/species  *Liquidambar styraciflua*
Family  Hamamelidaceae

Distribution  Eastern US
- E Texas eastward to central Florida
- Florida northward to SE Connecticut
- Connecticut southwestward to SE Illinois and E Texas
- Absent from much of Appalachian region

Comments  Sweet Gum is a very distinct species that becomes a large tree under suitable growing conditions, which typically involve moist soils. The leaves are rather star-shaped with their five or seven lobes. Flowers develop in the early spring, with male flowers in small clusters that soon fall from the tree, and female flowers in rounded clusters that ripen into a prickly ball over an inch in diameter. The rather abundant pollen is spread by wind.
White Poplar

Genus/species  *Populus alba*

Family  Salicaceae

Distribution  Cultivated and/or naturalized in most of United States

Comments  White Poplar was brought to North America during colonial times from Eurasia for the ornamental qualities of its rather shallow-lobed leaves, which are dark green above but whitish on the undersides. Although this species becomes a medium-sized tree, it tends to spread aggressively by means of suckers arising from the roots, thus producing a “grove”; for this reason it is considered weedy, especially in the eastern part of the US. On young trees the bark is smooth and greenish-white but on mature trees it becomes grayish with distinct ridges. The male flowers, borne on catkins, are formed in the early spring before the leaves develop and they release their wind-borne pollen; the female catkins (on separate trees from the male) develop seeds after fertilization. As is true of all members of this genus, fluffy down is attached to the seeds that produced in the spring soon after pollination. These seeds are released in late spring or early summer, each blown about due to its attached “cotton”.

![Image of White Poplar](image1)

![Image of White Poplar](image2)

![Image of White Poplar](image3)

![Image of White Poplar](image4)
Yellow Pine

Genus/species  
*Pinus echinata*

Family  
Pinaceae

Distribution  
Eastern US  
- E Texas eastward to N Florida  
- N Florida northward to S New Jersey  
- S New Jersey westward to S Illinois  
- S Illinois southward to E Texas  
- Absent from Lower Mississippi Valley

Comments  
This tree is also known as Shortleaf Pine in the southern parts of its range because it has markedly shorter leaves than the associated Loblolly, Longleaf or Slash Pines that are also used for timber. However, its range extends further inland and northward where these longer-leaved species do not grow, so the name Yellow Pine is more meaningful in such areas. This species becomes a straight, tall tree in forests but is more spreading if grown in the open.

The yellowish-green leaves are about 3 or 4 inches long, somewhat twisted and in pairs. The tiny yellowish male cones produce their abundant wind-blown pollen in the spring and the rather prickly (*echinata* = prickly) female cones are about 2 to 3 inches long.
Western White Pine

Genus/species: *Pinus monticola*

Family: Pinaceae

Distribution: Western US
- NW Washington eastward to NW Montana
- NW Montana southwestward through N Idaho and central Oregon to N and E California
- N California northward to NW Washington

Comments: Western White Pine is an important western timber tree, and it is found from near sea level in the northern part of its range up to 12,000 feet or more in the Sierra Nevada. Its needles are very flexible, appearing bluish-green and are from about 2 to 4 inches long in bundles of five. Its rather narrow female cones are not prickly. It becomes a large tree up to 150 feet or more with a trunk approaching 10 feet in diameter, and makes its best growth in moderately moist but well-drained soil. Disturbed areas, such as those that have recently experienced a forest fire, provide suitable habitat for the establishment of this tree. Western White Pine may grow alone or in combination with several other species of trees, most of these also being coniferous. It provides food and cover for many kinds of wildlife. The wind-blown pollen is produced in rather large quantities from small male catkins in the spring, and the female or seed cones, which may reach 11 inches in length, ripen after their second summer of growth.
Virginia/Scrub Pine

Genus/species  *Pinus virginiana*

Family  Pinaceae  (includes spruces, hemlocks, firs, larches and others)

Distribution  Eastern US  W Long Island southward to NE South Carolina
NE South Carolina westward through central Alabama
to NE Mississippi
NE Mississippi northward to S Indiana
S Indiana eastward through central Pennsylvania
to Long Island

Comments  This pine grows to be a rather thin, scraggly tree and aggressively establishes itself on poor, dry upland soils. Its twisted needles are in pairs and about 5 to 8 cm long. The mature female cones are rather prickly and from about 4 to 8 cm long. In the spring, its yellow or pinkish male cones produce copious amounts of wind-blown pollen, and the female flowers (*i.e.*, immature cones) appear along the sides of the young shoots.
Slash Pine

Genus/species  \textit{Pinus elliottii}

Family  Pinaceae

Distribution  Southeastern US

- SE Louisiana northeastward to SE South Carolina
- SE South Carolina southward to N Florida
- N Florida westward to SE Louisiana
- Most of peninsular Florida

Comments  Slash pine looks like a tree that “can’t decide whether it wants to be a loblolly pine or a longleaf pine”. Its long light green needles are usually grouped in pairs and are about 8 to 10 inches long. Its purple (male) pollen cones, which release large quantities of wind-blown pollen, develop in the early spring and the dark brown (female) seed cones, about 5 inches long, are attached to the twigs by means of a short, thick stalk.

This species is cultivated inland and north of its natural range; such trees are sometimes damaged severely by ice storms. It is also widely planted for wood and turpentine. Trees in extreme southern Florida and the Florida Keys are considered to be the variety \textit{densa}.
Ponderosa Pine

Genus/species    *Pinus ponderosa*

Family       Pinaceae

Distribution  Western US

W Washington southward to SW California
SW California eastward to W Texas
W Texas northward to SW North Dakota
SW North Dakota westward to W Washington

Comments    This tree is occasionally called Western Yellow Pine. Although it is widely distributed in the western half of the US, there are many areas within this range where the species is lacking. Larger specimens are tall, narrow trees growing to well over 100 feet with a trunk that may exceed 4 or 5 feet in diameter, and the pointed top may become somewhat flattened. The bark is reddish-brown and plated, with smaller sections shaped like jigsaw puzzle pieces often falling off. There are at least two different races of this species; trees in the western part of its range, such as in California, tend to be much taller with longer leaves than those from the eastern part such as in the foothills of the Rocky Mountains. Although somewhat variable, the dark yellow-green leaves are usually in groups of three and are range from about 4 to 8 inches in length. The abundant wind-blown pollen is released from tiny male cones in the spring, and the female cones, purplish when immature, grow to about 3 to 5 inches long and about 2.5 to 3 inches wide.
Longleaf Pine

Genus/species   Pinus palustris
Family          Pinaceae
Distribution    Southeastern US
                SE Virginia southward to S Florida
                Florida westward to E Texas
                E Texas to north central Alabama
                North central Alabama eastward to SE Virginia

Comments        Longleaf pine is typically found in dry sandy areas of the coastal plains and sand hills, but grows up in some of the mountains of Alabama and western Georgia. Young trees form a large tuft of foliage called the “grass stage” before growing upward. In the spring, the elongated buds look like white “candles” before the new leaves develop. The leaves are bright green, often a foot in length and are grouped in 3s. The purplish male (pollen) cones are about 2 inches long and develop in clusters in the spring, releasing large quantities of wind-blown pollen. The female (seed) cones may be 8 or more inches long. Longleaf pine has both the longest needles and the largest seed cones of all conifers of the eastern US.
Loblolly Pine

Genus/species  

*Pinus taeda*

Family  

Pinaceae

Distribution  

Southeastern US  

Central Florida westward to eastern Texas  

Eastern Texas through Gulf Coast states, Georgia  

and South Carolina to central North Carolina  

Central North Carolina northward along Atlantic  

Coastal Plain to southern Delaware  

Absent from Lower Mississippi Valley

Comments  

Loblolly pine is cultivated well outside its natural range for its wood and as an ornamental, thus obscuring its natural distribution. It is the most common pine in much of its range, and grows in a variety of habitats, often “pioneering” in old fields. It avoids very wet areas as well as extremely dry soils.

This species has thin yellow-green needles in bundles of 3 and are usually about 12 to 18 cm long. The tiny male (pollen) cones are orange-yellow and appear in clusters in the spring, and they release large quantities of wind-blown pollen. The female (seed) cones mature at about 10 to 15 cm long.
Eastern White Pine

Genus/species: *Pinus strobus*

Family: Pinaceae

Distribution: Eastern US

- N Georgia northward along mountains to New Jersey, including E Tennessee and E Kentucky
- Throughout Pennsylvania, New York and New England
- E Ohio, NE Iowa, and most of Michigan, Wisconsin and Minnesota

Comments: This is the only native eastern “soft” pine. Its needles are very flexible, appearing bluish-green and in bundles of 5. Its rather narrow female cones are not prickly. It can become a large tree and does best in moderately moist but well-drained soil, and is often cultivated as an ornamental. Its wind-blown pollen is produced in rather large quantities from small male catkins in the spring, and the female or seed cones ripen after their second summer of growth.
Pepper Tree

Genus/species  *Schinus molle*

Family  Anacardiaceae

Distribution  Southwestern US  California southeastward to W Texas

Comments  Introduced and naturalized in California and occasionally other areas in the southwestern US, this Pepper Tree is native to Peru. Pepper Tree has hanging compound leaves with narrow leaflets an inch or two long, and the tiny, green, rather inconspicuous male and female flowers are produced on separate trees in the summer. The small pinkish-red fruit are less than a fourth of an inch in diameter and hang in clusters in the fall and winter; these have been used in many kinds of herbal and folk medicine.

There are other species in this genus, such as the Brazilian Pepper Tree (*Schinus terebinthifolius*) that has become naturalized in Florida.
Pecan

Genus/species  
*Carya illinoensis*

Family  
Juglandaceae

Distribution  
South central US; introduced into eastern US

- S Mississippi northward to extreme SW Ohio
- Ohio northwestward to S Wisconsin
- Wisconsin southward through central Missouri and
  - SE Kansas to central Texas
- Texas eastward to S Mississippi
- Introduced into many eastern states and Hawaii

Comments  
This hickory is famous for its tasty nuts. As the most commercially-important nut-bearing tree in the US, Pecan has been introduced into several eastern states, particularly southwestern Georgia, and other parts of the world. The species has become naturalized in many areas and many cultivars developed. Its wood is of use in making furniture and other items. Pecan is typically found in rich moist soils of bottomlands, particularly of the Mississippi River and other rivers that drain into it. The trees can grow to be 200 feet tall in the wild, but cultivated trees usually branch near the base and spread, reaching a fraction of that height. The compound leaves, with their 9 to 17 leaflets, typically exceed a foot in length with the leaflets being 3 to 8 inches long. The numerous male flowers are borne in catkins in the spring near the base of the new growth (often after most other trees have bloomed) while the relatively few female flowers appear near the ends of the twigs. The abundant pollen is spread by the wind. The nuts, usually in groups of 3 to 6, are inside husks that split at maturity and are about 1 ½ to 2 inches long.
Russian Olive

Genus/species   *Elaeagnus angustifolia*

Family          Elaeagnaceae

Distribution   Most of US except for southeastern area from Arkansas and Louisiana eastward to North Carolina and Florida, although uncommon in remaining eastern US

Comments       Russian Olive, also known as Oleaster, is native to southern Europe and central Asia. It is a shrub or small tree that was introduced to North America as an ornamental and windbreak for the north central part of the US, and may grow to 25 feet in height and of similar breadth. It is extremely hardy, thriving in severe continental climates and the silvery hairs on the young twigs, buds and undersides of its leaves make it an attractive species. However, its hardiness has served to make it invasive and weedy, especially along watercourses of the Great Plains. The leaves are usually from about an inch and a half in length to almost 4 inches, but less than a third as wide; they remain on the tree until late autumn. Branches may be somewhat thorny. Older twigs are chocolate brown in color. The small cream-colored flowers appear in the spring and have a strong fragrance, and the small fruits (about a half inch in length) mature in the autumn.
Olive

Genus/species  *Olea europaea*

Family  Oleaceae

Distribution  California, S Arizona, New Mexico, Texas and Hawaii; introduced from eastern Mediterranean region

Comments  Olive is a large shrub or small evergreen tree cultivated for thousands of years in the Mediterranean Region, where it is native. It was introduced into the US, but nearly all commercial production of fruit and oil is done in California. It is also used for landscaping purposes, and in Hawaii (Maui, Hawaii and Kauai) it has become naturalized; such introductions result in additional cases of allergy. Its small, narrow dark green leaves approach 2 inches in length but less than half an inch wide, and are arranged in pairs. The tiny fragrant whitish flowers are produced at the ends of the twigs in clusters. The fruits, typically about an inch long, develop and ripen about 6-8 months after flowering.
White Oak

Genus/species  *Quercus alba*

Family  Fagaceae

Distribution  
- Eastern US
  - SE Minnesota eastward to S Maine
  - S Maine southward to N Florida
  - N Florida westward to E Texas
  - E Texas northward to E Minnesota

Comments  
White Oak is a component of many kinds of forests, especially those that have moderately moist soil and have been allowed to mature over a long period of time. The rather light-gray bark is composed of thick flakes, and the distinctive bluish-green leaves have rounded lobes. White Oak becomes a large, rounded tree. The abundant wind-borne pollen is shed from catkins in the spring, and the female flowers ripen into acorns in the fall of the same year.
## Western White Oak

**Genus/species**  
*Quercus garryana*

**Family**  
Fagaceae

**Distribution**  
West Coast of US  
West-central California northward to NW Washington  
Columbia River Valley of Oregon and Washington  
Southern Sierra Nevada of California

**Comments**  
Western White Oak (also known as Oregon White Oak or Garry Oak) may form open woodlands in the rather dry interior valleys or grow in relatively closed forests with other kinds of trees in areas closer to the coast. (However, it is not found in the forests closest to the coast.) It can become a large tree. It has rather thick lobed leaves that are dark green above and a lighter bluish-green below. The acorns, which mature in one season, are fairly large and almost round with a cap covering a small portion at the base. As is true of all the oaks, the flowers bloom in the spring and the abundant pollen is spread by wind. The male flowers form on catkins while the rather inconspicuous female flowers develop at the bases of the leaves.
# Water Oak

**Genus/species**  
*Quercus nigra*

**Family**  
Fagaceae

**Distribution**  
Southeastern US  
- E Texas eastward to central Florida  
- Central Florida northward to S New Jersey  
- S New Jersey southwestward to SE Missouri  
- SE Missouri southwestward to E Texas

**Comments**  
Water Oak typically grows to become a medium-sized or large tree along streams of the Piedmont areas and in the flood plains of the Coastal Plain of the southeastern US. However, it prefers well-drained soils within these areas and often grows with a mixture of pines and hardwoods. It is also often used as a street tree within its range. The small leaves, some of which may remain on the trees well into the winter, typically have slight lobes near their ends although those on immature trees are often more distinctly lobed. The male flowers, which form in the early spring on numerous catkins, release their abundant wind-borne pollen; the inconspicuous female flowers take two years to ripen into the small, rounded acorns. Branches of this species are often attacked by mistletoe in some areas.
Virginia Live Oak

**Genus/species**  Quercus virginiana

**Family**  Fagaceae

**Distribution**  SE and SC US

- Extreme SE Virginia southward along coast to S Florida
- Florida westward to central Texas

**Comments**  This tree is called “live oak” because of its having evergreen leaves in areas of the country where nearly all other large oaks are deciduous. It is sometimes referred to as southern live oak or Virginia live oak to distinguish it from other evergreen species of oaks, mostly those found in California. It is widely-planted in areas inland of its natural range because of its broad crown of dark green evergreen leaves, sometimes festooned with Spanish moss. It has a distinctly checkered dark gray bark on a short, sometimes rather gnarled, trunk. The thick leathery leaves are usually oval, occasionally with a short pointed lobe or two. The branches mostly grow sideways and, on large old trees, may hang down enough to touch the ground. The abundant wind-borne pollen is released from male catkins in the spring; the rather inconspicuous female flowers mature into acorns at the end of the season.
Scrub Oak

Genus/species  
**Quercus dumosa**

Family  
Fagaceae

Distribution  
California  
West central southward to southwestern California

Comments  
Scrub Oak, also known as California Scrub Oak, is usually a shrub, rarely becoming a small tree. According to some authorities, there are as many as four distinct but very similar species “lumped” together under this name, each having somewhat different ecological requirements ranging from the bluffs along the Pacific Coast to the edges of the deserts. In any case, Scrub Oak is a member of the white oak group and its acorns ripen in the same year that pollination occurs. Male flowers are formed in catkins and their abundant wind-borne pollen fertilizes the female flowers inconspicuously located along the twig near the bases of the developing leaves. The leaves are small, often somewhat wrinkled, and have short rather pointed lobes. The caps of the acorns cover only a small portion of the nut.
Red Oak

Genus/species  *Quercus rubra*

Family  Fagaceae

Distribution  Eastern US
SE Oklahoma northward to N Minnesota
N Minnesota eastward to N Maine
N Maine southwestward to NE North Carolina and S Alabama
S Alabama northwestward to SE Oklahoma

Comments  Red Oak, also known Northern Red Oak, is an eastern species typically found in deep, fine soils found in valleys and protected slopes. Stands may develop composed mostly of this species. The leaves have pointed lobes and are typically smooth underneath. The acorns, which mature in two seasons, are medium-sized (about ¾ inch or so long) with a cap covering just the base of the nut. As is true of all the oaks, the flowers bloom in the spring, with the male flowers forming on catkins and releasing abundant wind-borne pollen and the rather inconspicuous female flowers forming at the bases of the leaves. The bark on mature trees is broken into small dark scales while younger trees and branches have smooth, gray bark. On some trees “transitional” areas where the smooth bark is cracking to form the mature bark may appear somewhat like vertical stripes.
### Post Oak

**Genus/species**  
*Quercus stellata*

**Family**  
Fagaceae

**Distribution**  
Southeastern US

- SE and west central Texas northeastward to SE Iowa
- SE Iowa eastward to SE Massachusetts
- SE Massachusetts southward to central Florida
- Central Florida westward to Texas

**Comments**  
Post Oak is a component of many kinds of forests and woodlands, especially those that have rather dry soil. It ranges from the sandy pinelands of the East Coast to the “Cross Timbers” of Texas, Oklahoma and Kansas where it is very abundant. Its rather light-gray bark is composed of thick flakes, and the distinctive leaves are often cross-shaped. Post Oak becomes a rather large tree in the East but is smaller in the westernmost parts of its range. Flowers are produced in the spring, the male on catkins and the female along the twigs. The abundant pollen is dispersed by wind. The acorns mature in one season.
California White Oak

Genus/species  *Quercus lobata*

Family  Fagaceae

Distribution  California  North central southward to southern California

Comments  California White Oak, also known as Valley Oak, is a picturesque species that often forms open woodlands against the grassy hills and valleys of the coastal ranges of central California and along some of the rivers and streams of the north central part of the state, including the Sacramento River. This tree can get to be very large—over 100 feet in height with a trunk of 6 feet or more in diameter—with light gray finely-ridged or plated bark and branches that droop from a spreading crown. The rather thick leaves with rounded lobes are deciduous. The flowers are produced in the spring, with the male on hanging catkins and the female along the twigs. The abundant pollen is disseminated by the wind. The female flowers develop into the impressive pointed acorns that mature in one season and may be two inches long.
California Live Oak

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<td></td>
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**Comments**
California Live Oak, also known as Coast Live Oak, is a picturesque species that often forms open woodlands against the grassy hills and valleys of the coastal ranges of central and southern California. This tree is often gnarled, having large branches or even trunks that grow at unexpected angles. The dense crown of this oak may be wider than the height. The small, rather holly-like thick evergreen leaves are mostly concave underneath with short points. The flowers are produced in the spring, with the male on hanging catkins and the female along the twigs. The abundant pollen is carried by wind. The latter develop into pointed acorns, about an inch long, that mature in one season.
California Black Oak

Genus/species  Quercus kelloggii

Family  Fagaceae

Distribution  Southwestern Coast of US  SW Oregon southward to SW California

Comments  California Black Oak is an important member of the mixed forests of both the coastal ranges and the Sierra Nevada of California, with smaller populations in southern California. It is typically found at middle elevations (about 3500 to 7500 feet) along with several species of conifers, often in rocky sites, but occasional trees can be found from about 1000 to nearly 9000 feet. The trunk may be a couple feet in diameter, with rough dark-colored bark, and the tree may be some 70 feet tall. The leaves are broad and up to about 10 inches long having wide lobes with sharp points. The acorns, which mature in two seasons, are rather large (sometimes over inch long) and broad, with a cap covering almost half the nut. As is true of all the oaks, the flowers bloom in the spring, with the male flowers forming on pendulant catkins and the rather inconspicuous female flowers at the bases of the leaves. The abundant pollen is spread by the wind. The autumn leaves add color that contrasts with the green of the associated pines and other conifers.
Bur Oak

Genus/Species: Quercus macrocarpa

Family: Fagaceae

Distribution: Central US
- Central Texas northward to North Dakota and SE Montana
- North Dakota eastward to NW New York
- NW New York southwestward to central Arkansas, extending through E Oklahoma to central Texas
- Smaller areas in Pennsylvania and New England states

Comments: Bur Oak is a characteristic species of the central US. It tends to grow on flood plains in the southern part of its range while being more of an upland species northward, often growing in open woodlands or prairies. It gets to be a medium-sized to large tree, depending upon location. The dark green leaves are lighter underneath and have rounded lobes; often, the leaves have a distinct indentation about halfway on each side, making them look as though they had been “pinched” in the middle. Flowers are produced in the spring, the male on catkins and the female along the twigs. The abundant pollen is dispersed by wind. The acorns have a distinct “fringe” at the edge of the cup (accounting for another common name—Mossy Cup Oak), and they are usually large (often exceeding an inch in diameter), especially in the southern part of their range, and mature in one season.
Black Oak

Genus/species  *Quercus velutina*

Family  Fagaceae

Distribution  Eastern US  E Texas northward to central Iowa and S Wisconsin  
S Wisconsin eastward to S Maine  
S Maine southward to coastal South Carolina and W Florida  
W Florida westward to E Texas

Comments  Black Oak is an eastern species typically found in rather dry soils such as those on sunny hillsides and ridges. The leaves have pointed lobes and are typically “fuzzy” underneath, especially early in the season, but this becomes reduced to the areas around the veins. The acorns, which mature in two seasons, are medium-sized (about ¾ inch long) with a cap covering almost half the nut. As is true of all the oaks, the flowers bloom in the spring, with the male flowers forming on catkins, producing abundant wind-dispersed pollen, and the rather inconspicuous female flowers located at the bases of the leaves. The bark on mature trees is broken into small dark plates.
Arizona/Gambel Oak

Genus/species  Quercus gambelii

Family  Fagaceae

Distribution  Western US  S Nevada northeastward to N Utah and southcentral Wyoming Southcentral Wyoming southward to W Texas W Texas through SE and central Arizona to S Nevada

Comments  This oak is the “white oak” of the southern Rocky Mountain region. It is usually a small tree or a large shrub, and it grows in foothills and canyons, sometimes covering an entire hillside. It is typically found below or in the lowest forest zones of the mountains, sometimes in the ponderosa pine belt. Its leaves have rounded lobes, dark green on top and lighter underneath, and the acorns, which mature in one season, are relatively small. Pollination, achieved by wind, takes place in the early spring, the male flowers being on catkins and the female developing from the bases of the leaves.
White Mulberry

**Genus/species**  *Morus alba*

**Family**  Moraceae

**Distribution**  Introduced into US from eastern Asia; widely planted; naturalized in both eastern and western US except Arizona and Nevada

**Comments**  This small tree, native to China, was introduced into the US as part of an attempt to establish the silkworm industry. It has shiny leaves that are often lobed, and male and female flowers appear in the spring, usually on separate trees. Pollen is spread by wind. Each fruit, about an inch long, contains several small sections, and these mature in summer, sometimes white but often to a pale pink or even a darker shade of red. This species also tends to hybridize with the red mulberry.
Red Mulberry

Genus/species  *Morus rubra*

Family  Moraceae

Distribution  Eastern US  
Central Texas eastward to S Florida
S Florida northward to New Jersey
New Jersey westward to SE Minnesota
SE Minnesota southwestward to central Texas
Scattered localities in Pennsylvania, New York and New England

Comments  This is the only native mulberry throughout its range except for the extreme southwestern part. It is a relatively small or medium-sized tree, sporadically distributed in lowland areas and flood plains. Leaves vary in size but may exceed four inches in length, and may be entire or have one or two lobes; the undersides are lighter than the upper surfaces. Male and female flowers are produced on separate trees in the spring, pollination is achieved by wind, and the fleshy fruits ripen during the summer when they are eagerly sought by wildlife.
Mesquite

Genus/species:  *Prosopis glandulosa*

Family:  Mimosaceae (=Fabaceae in part)

Distribution:  Southcentral and SW US  
- NW Louisiana and E Texas northwestward to W Oklahoma and SW Kansas  
- SW Kansas southwestward through central New Mexico to SE Arizona  
- SE Arizona northwestward to SW Utah, S Nevada and S California  
- S California southeastward to S and E Texas

Comments:  The species, sometimes called Honey Mesquite, includes a form called Western Honey Mesquite and covers extensive acreage in Texas and the southwestern US. Its presence in Louisiana and Kansas is due to introductions. It is a large shrub or small tree, occasionally up to 30 feet in height, with a rather thin crown of branches (sometimes spiny, particularly younger, vigorous ones) with pendulant yellowish-green leaves. These leaves, often over 6 inches long, are bipinnately compound; each leaf typically is divided into one pair of leaflets, with each leaflet in turn having some 7 to 18 pairs of “subleaflets”, each being less than an inch in length and about an eighth of an inch wide. The white or cream-colored flowers are in cylindrical clusters about a half-inch in diameter and up to 2 inches long, and their abundant nectar makes them attractive to bees when they bloom in late spring or early summer. Seeds are inside slender brownish-orange “legumes” or pods up to 7 inches long but barely a fourth of an inch in width; while still immature, these are sometimes eaten by people and animals, including wildlife.
Melaleuca

Genus/species: Melaleuca quinquenervia

Family: Myrtaceae

Distribution: Florida, California central and southern Florida coastal southern California

Comments: This small exotic tree, introduced from Australia where it is known as Paperbark, has aggressively established itself throughout much of the area between the center of Florida and Lake Okeechobee by forming dense pure stands, especially in moist areas, where it is sometimes called Cajeput Tree or Punk Tree. It also can be found in extreme southern Florida, and it is cultivated in coastal southern California.

Melaleuca has leaves about 2 to 4 inches long and not wider than an inch. The white flowers, which are comprised mostly of long conspicuous stamens but no petals, are in clusters resembling a bottlebrush, and mature to form small seed capsules. The bark is mottled and pinkish-white to pale yellow and resembles layers of thin paper weathering from the tree. Its pollen is apparently unimportant from the standpoint of human allergy but important for canine allergy.
Sugar/Hard Maple

**Genus/species**  *Acer saccharum*

**Family**  Aceraceae

**Distribution**  Eastern US  
- Minnesota eastward to Maine
- Maine southwestward to W North Carolina
- W North Carolina westward to E Kansas
- E Kansas northward through E Iowa to Minnesota

**Comments**  Sugar Maple is widely planted as an ornamental. It likes rich, well-drained soils. It is tapped for its sweet sap from which syrup and sugar are made. The leaf is the inspiration for the Canadian Maple Leaf emblem. Flowers form in the spring and the paired seeds ripen during the summer.

Closely-related species include the Black Maple (*Acer nigrum*) of the Midwest, the Bigtooth Maple (*Acer grandidentatum*) of the Rocky Mountain area, the Southern Sugar Maple (*Acer barbatum*) and the Chalk (Whitebark) Maple (*Acer leucoderme*).
## Soft/Silver Maple

<table>
<thead>
<tr>
<th><strong>Genus/species</strong></th>
<th><em>Acer saccharinum</em></th>
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</thead>
<tbody>
<tr>
<td><strong>Family</strong></td>
<td><em>Aceraceae</em> (all maples, including box elder, and Chinese <em>Dipteronia</em>)</td>
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<tr>
<td><strong>Distribution</strong></td>
<td>Eastern US</td>
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<td></td>
<td>E Oklahoma northward to Minnesota</td>
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<td></td>
<td>Minnesota eastward to Maine</td>
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<td>Maine southward to NW Florida</td>
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<td>Absent from much of Atlantic Coastal Plain</td>
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<td></td>
<td>Scattered localities in Louisiana</td>
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**Comments**

Silver maple grows rapidly and is found in wet areas such as floodplains. It is often used in landscaping but is brittle and often becomes hollow due to decay. The flowers are produced in early spring before the leaves, and the seeds, with their attached wings, are the largest of any of the American maples. Autumn leaves are generally yellow.
Red Maple

Genus/species  *Acer rubrum*

Family  *Aceraceae*  (all maples, including box elder, and Chinese *Dipteronia*)

Distribution  Eastern US  E Texas northward to Minnesota  
               Minnesota eastward to Maine  
               Maine southward to S Florida  
               Absent from Iowa, N Missouri and central Illinois

Comments  This is a common deciduous tree found in many kinds of forests, but favoring those that are rather moist. It is prized as an ornamental. This tree earns the name “red” because the following are of this color: young twigs, flowers, winged pairs of seeds, immature leaves, autumn leaves. The flowers form in the early spring before the leaves, and they are at least partially insect-pollinated.