

American Elm

Ulmus americana

American elm is a medium to large deciduous tree with a vase-shaped, broad-rounded crown. It is native to eastern and central North America. Insignificant small green flowers appear in spring before the foliage emerges. Flowers give way to single-seeded wafer-like samaras (each tiny seed is surrounded by a flattened oval-rounded papery wing). Rough-textured, ovate-elliptic, dark green leaves (to 6" long) have toothed margins and asymmetrical bases. Leaves typically turn an undistinguished yellow in fall.

Grow in average, medium moisture, well-drained soils in full sun. Prefers rich, moist loams. Adapts to both wet and dry sites. Generally tolerant of urban conditions. Development of varieties that are resistant to Dutch elm disease is ongoing.

Disease resistant varieties such as *Ulmus americana* 'Valley Forge' are promising but not totally immune to Dutch Elm Disease.
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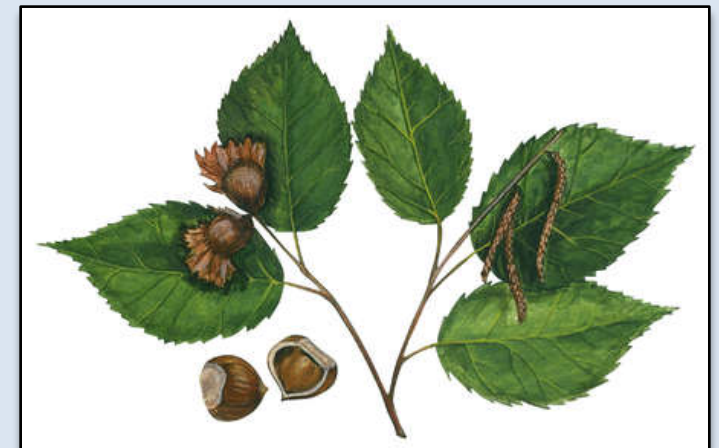
American Hazelnut

Corylus americana

American hazelnut is deciduous, rounded trained tree which typically grows 16' tall. Monoecious (separate male and female flowers on the same plant). In spring, male flowers appear in showy, 2-3" long, yellowish brown catkins and female flowers appear in small, reddish, inconspicuous catkins. Small, egg-shaped, 1/2" long, edible nuts (maturing July-August) which are encased in leafy, husk-like, ragged-edged bracts. Nuts are similar in flavor to the European filbert, and may be roasted and eaten or left for the squirrels and birds. Ovate, double-toothed, dark green leaves (3-6" long). Fall color is quite variable, ranging from orange, rose, purplish red, yellow and green.

Easily grown in average, medium, well-drained soil in full sun to part shade. Prompt removal of root suckers will help maintain plant appearance.

No serious insect or disease problems.

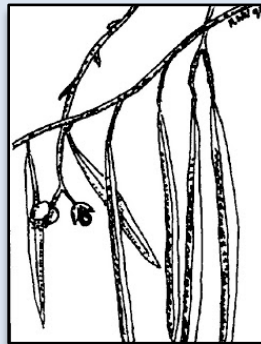


Australian Willow

Geijera parviflora

Attractive evergreen tree with an upright, oval silhouette and rough dark gray bark. The main inner branches are composed of strong, wind-resistant wood and are directed upward, while the outer smaller branches are somewhat pendulous. This gives a decided weeping habit to older trees while younger trees are more oval shaped. This characteristic, combined with the thin, narrow, three to six-inch-long, aromatic olive-green leaves that droop from the branches, gives the tree much the same effect as a Weeping Willow. Short panicles of small, creamy-white flowers that appear in early spring and sometimes again in early fall are not very showy and have a mild musky odor.

Plant in full sun and irrigate occasionally to little. Cold hardy to 15-20°F (USDA zones 9-11). A perfect choice for large or small parking lot islands, near a deck or patio, screen, specimen or as a residential street tree.



Avocado

Persea americana

The Avocado is a fast-growing subtropical tree. Trees are usually quite dense in foliage and often have a spreading growth form. The crushed leaves of Mexican varieties have an anise-like smell. Flowering occurs during winter, prior to vegetative growth flush. There are both type A and type B flowers. Type A flowers are receptive to pollen in the morning, then release pollen the following afternoon, while type B flowers release pollen in the morning and are receptive to pollen the following afternoon. Fruit set is best when plants are cross pollinated between types A and B. Some cultivars set fruit every other year, some set fruit yearly.

Avocado trees are fairly hardy. Mexican types tend survive temperatures as low as 20F. Avocados grow best in light, loose, even partially sandy soil. Do not expose the roots to flooding conditions. Watering should be eased up on through the cool winter season. Overwatering can cause root rot. Fertilize older trees four times a year.



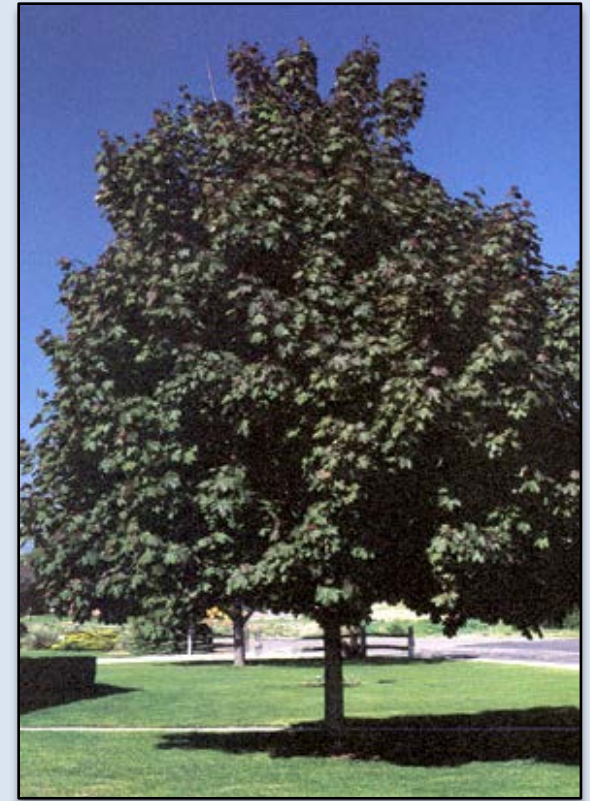
Black Maple

Acer nigrum

Its name comes from bark that is dark gray or black, with deep furrows. Black maple generally has darker leaves that are mostly 3-lobed, droopy at the edges, and hairy underneath, and leafy stipules at the bases of many of the leaf petioles. Dark green leaves (to 6" wide) turn beautiful shades of yellow, orange and red in fall. Pale yellowish green flowers appear in clusters in spring. Flowers give way to clusters of paired samaras (to 1" long) that mature in late summer.

it does occur in a wide range of soil and moisture conditions. However, growth is best in deep, rich, moist, well-drained soils.

No serious insect or disease problems.



Black Walnut

Juglans nigra

Black walnut is a large deciduous tree with an oval to rounded crown. Mature trees characteristically have long trunks, often with an absence of lower branching. Fissured, sharply ridged, dark gray-black bark forms diamond patterns. Features odd-pinnate compound leaves each with 13-23 oblong to lanceolate leaflets. Fall color is an undistinguished yellow. Female flowers give way to edible nuts, each being encased in a yellow-green husk. Nuts mature in autumn.

Prefers moist, organically rich, well-drained soils in full sun. Although young trees will sometimes it usually takes 20 years before a tree will produce a large crop of nuts.

No serious insect or disease problems. Black walnut roots produce chemicals called juglones which are very toxic to plants such as azaleas, rhododendrons, blueberries, peonies, tomatoes, peppers and potatoes. Most of the toxicity is limited to within the drip line of the tree.



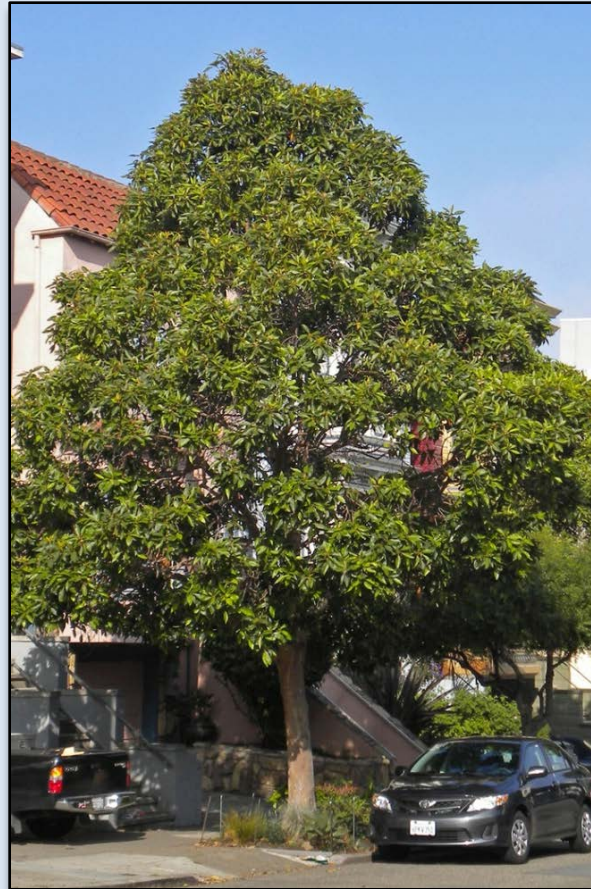
Brisbane Box

Lophostemon confertus

An upright, evergreen fast growing tree which produces a beautiful, dense symmetrical rounded head with large glossy lance-shaped leaves. Starting at a young age, attractive reddish brown bark peels off to reveal a lighter grayish color underneath. Lateral clusters of feathery white flowers bloom in the spring and summer and attract pollinators. Flowers develop into woody capsules by late summer.

Plant in full sun while providing ample water in a well-drained soil, once established it is very drought tolerant. Frost sensitive when young but cold and frost hardy at maturity to 25 degrees F. Perfect choice for a lawn specimen, street planting, park tree, wind break or screen.

Chlorosis is sometimes a problem if the soil is poor.



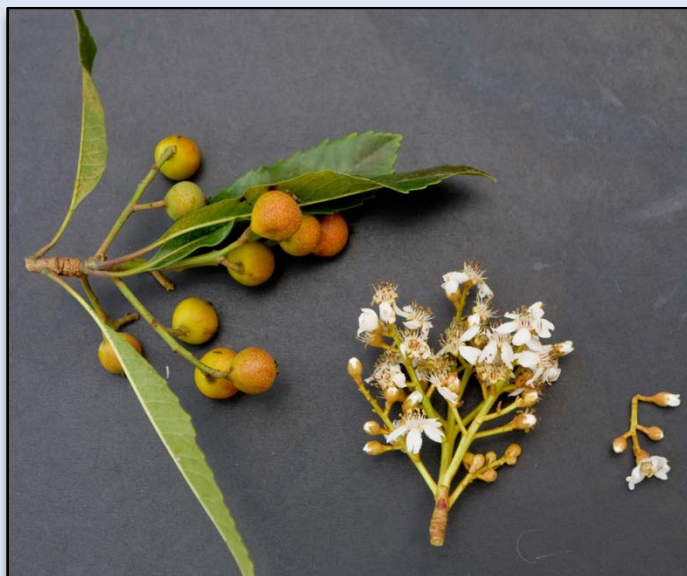
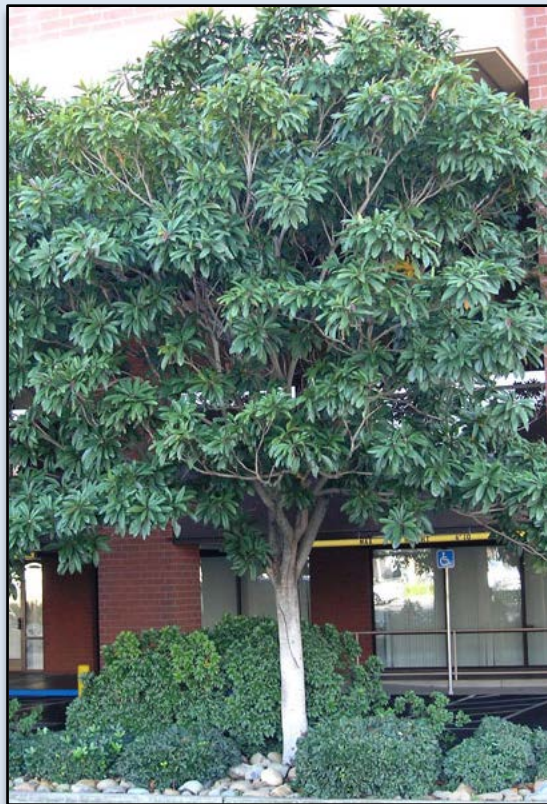
Bronze Loquat

Eriobotrya deflexa

Bronze Loquat is more often planted than Japanese Loquat. The large, eight-inch-long leaves are a bright red-bronze or coppery color when young and maintain this color for a considerable period of time but eventually turn dark green. The small white, fragrant flowers are produced on terminal panicles in spring and are followed by small, inedible fruits. Although shrubby it can easily be trained into a small tree form and used for a small shade tree near a deck or patio.

It looks best with regular pruning to maintain its shape, and regular deep watering to promote healthy growth. It may require regularly scheduled light top-trimming (but not necessarily shearing) of vigorous top shoots to maintain its height below 25'. It is not drought tolerant.

Attracts Birds, Butterflies, Desert Conditions, Coastal Conditions



California Pepper

Schinus molle

An evergreen tree with rough twisted dark gray bark and a wide weeping habit, spreading as wide as tall. It has bright green pinnately compound leaves that are 5 to 12 inches long with many 1 to 2 inch long narrow leaflets. The 1/8 inch wide fragrant whitish-yellow flowers bloom in branched pendulous panicles in summer and female trees (it is dioecious with male and female flowers on separate trees) producing 1/3 inch wide red berries in the fall into winter. This plant is most commonly called "California Pepper" because it is found so commonly throughout the state, both because it has been planted and also reseeded, and this has led many to believe it native but it actually comes from the Southern Andes.

Plant in full sun and irrigate very little or not at all. Hardy to around 10°F. This tree tolerates many adverse conditions, like poor soil, wind, and drought. The oils in the leaf litter deter other plants beneath the canopy.



Carolina Laurel Cherry

Prunus caroliniana

A dependable, easily-grown, North American native, Cherry-Laurel is densely foliated with glossy, dark evergreen leaves. Cherry Laurel properly trained to a central leader will make a good small to medium-sized street tree. The tree usually maintains a good central leader and small diameter, strong lateral branches following one or two proper pruning's before the tree is 8 to 10-years-old. With age the bark becomes almost black.

It grows in most conditions but does not like high temperatures or hot, dry locations. Preferring ample moisture while young, Cherry Laurel is otherwise well-suited to sun or shade locations in any average, well-drained soil. Once established, it is salt- and drought-tolerant requiring little or no irrigation. Over-irrigating can cause chlorosis and death. Do not plant in wet, soggy areas. The tree adapts well to soils with high pH. Clay soil is fine as long as water doesn't stand after it rains.



Camphor Tree

Cinnamomum camphora

Moderately slow-growing evergreen tree. This popular species develops a large trunk and branching structure to eventually form a large rounded crown. The fragrant, glossy, rounded foliage emerges with an attractive pink tinge maturing to a chartreuse green and is accented with inconspicuous yellow flowers in spring, followed by clusters of shiny black fruit in summer. Leaf, flower and fruit drop can be considerable. This species is smog tolerant and well-suited for larger areas, and is especially attractive in rainy weather where its trunk and branches appear nearly black when wet.

Requires moderate to little water once established, and a well-drained soil is essential for this species to thrive. Prefers a full to partial sun exposure.



Chinese Evergreen Elm

Ulmus parvifolia

An excellent tree that is surprisingly under-used, Chinese Elm possesses many traits which make it ideal for a multitude of landscape uses. A fast growing, deciduous or evergreen tree, Chinese Elm forms a graceful, upright, rounded canopy of long, arching, and somewhat weeping branches which are clothed with two to three-inch-long, shiny, dark green, leathery leaves. Some specimens grow in the typical vase-shaped elm form. The tree is evergreen in the southern extent of its range. The showy, exfoliating bark reveals random, mottled patterns of grey, green, orange, and brown, adding great textural and visual interest, especially to its winter silhouette. Chinese Elm is an ideal shade, specimen, street or parking lot tree. They look very nice planted in a grove or along a street.

It is usually resistant to Dutch Elm Disease and phloem necrosis. Cankers may develop on young trunks where soil is excessively wet. These occur on nursery and landscape trees.

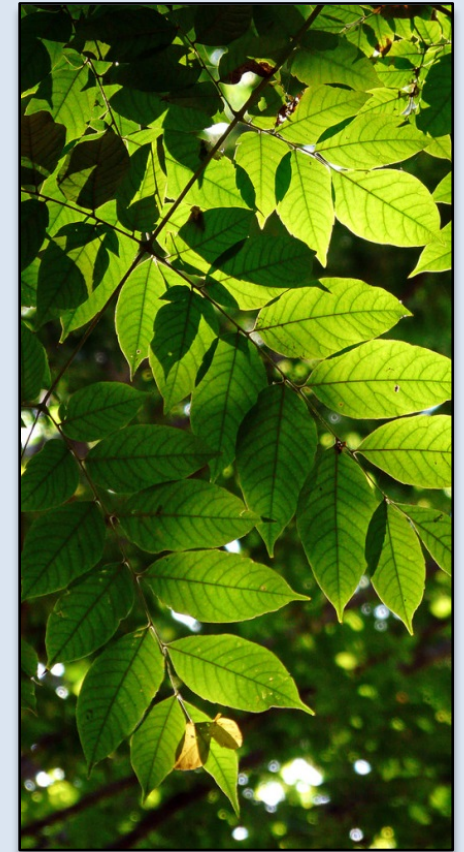


Chinese Flame Tree

Koelreuteria integrifolia

A yellow carpet of fallen petals, delicate leaflets which cast a mosaic of welcoming shade, and large clusters of persistent rose-colored, papery capsules all help to make Chinese flame-tree a very popular landscape tree. This broad-spreading, deciduous tree eventually takes on a flat-topped, somewhat irregular silhouette. The small, fragrant, yellow flowers appear in very showy, dense, terminal panicles in early summer, and are followed in late summer or fall by large clusters of the two-inch-long "Chinese lanterns" that have a pink color after drying. The bark on Chinese flame-tree is smooth and light brown when young, becoming ridged and furrowed as the tree matures. It has upright branches and has twice compound leaves.

This is a tough tree which should be grown in full sun on any well-drained soil, in sand or heavy clay, and should receive moderate watering. The tree becomes leggy and thin in partial shade. When well-established, it tolerates wind, air pollution, salt, heat, and drought.



Chinese Fringe Tree

Chionanthus retusus

Chinese fringetree is native to China, Korea and Japan. This plant is noted for its profuse spring bloom of fragrant white flowers. May be grown as a small tree. Terminal clusters of mildly fragrant, pure white flowers with fringe-like petals in late spring. Plants are primarily dioecious (separate male and female plants). Male flowers are slightly showier. Female flowers give way to clusters of olive-like fruits which ripen to a dark bluish black in late summer/fall and are a good food source for birds and wildlife. Exfoliating gray-brown bark is attractive in winter.

Easily grown in average, medium moisture, well-drained soil in full sun to part shade. Best flowering occurs in full sun. Prefers deep, moist, fertile, acidic soils. Tolerant of air pollution and adapts well to urban settings. Intolerant of prolonged dry conditions.

No serious insect or disease problems. Some susceptibility to mites, scale and borers.



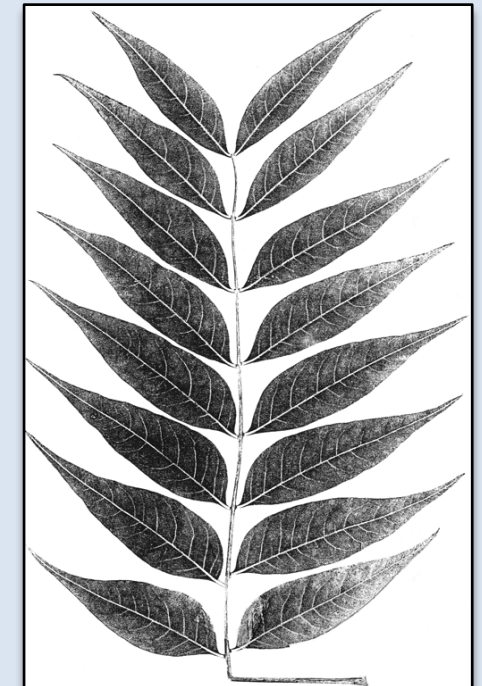
Chinese Pistache

Pistacia chinensis

Chinese pistache is a small deciduous tree with an oval rounded crown. Foliage consists of compound, even-pinnate, dark green leaves (to 10" long), each leaf typically having 10-12 lanceolate leaflets (to 4" long). Foliage is aromatic when bruised. Fall color is variable but often appears in quality shades of yellow, orange and red. Trees are dioecious (separate male and female trees), with flowers appearing in April in visible but somewhat inconspicuous green panicles. Gray-brown bark peels to reveal salmon inner bark.

Grow in moist, organically rich, well-drained soils in full sun. Tolerates light shade, but best in full sun. Tolerates heat, drought and a wide range of soils. Proper pruning in early years is necessary to create a symmetrical tree with good form.

No serious insect or disease problems. Susceptible to verticillium wilt.



Chinese tallow
Triadica sebifera

Chinese Tallow Tree has become a popular shade tree, for its spectacular fall color. Single trunk trees grown in lawns with more moisture are taller, and more upright. Multi-trunk trees grown in moderately dry garden settings broaden, and gain less height. Native to China and Japan. The leaves are alternately arranged along the stems. These leaves are relatively broad with very pointed tips. They have dark green upper surfaces and pale green undersides, but turn yellow or reddish in color before they are shed in autumn. New growth in spring is often also reddish-tinged. Produces separate male and female flowers on the same plant in spring. These tiny yellowish colored flowers are arranged in elongated clusters. The fruit is a three-lobed capsule that is green when young and turns brown at maturity. It splits open in late summer or autumn to reveal three whitish seeds.

It thrives in warm climates with adequate moisture. It needs ample water for fast growth. It is resistant to oak root fungus.



Chitalpa

x *Chitalpa tashkentensis*

Chitalpa is a rapid-growing, deciduous tree with a dense, spreading, oval crown. It is an inter-generic hybrid cross between desert willow (*Chilopsis linearis*) and southern catalpa (*Catalpa bignonioides*). It was first hybridized in Tashkent (capital of Uzbekistan). Lanceolate leaves are dull green above, fuzzy underneath, and taper at both ends. Bell-shaped, pink to white, catalpa-like flowers bloom in upright racemes in summer.

Best grown in deep, moderately fertile, medium moisture, well-drained soils in full sun to part shade. Although drought tolerant, trees generally perform best with consistent and even moisture.

No serious insect or disease problems. Powdery mildew can be a problem where trees are planted in too much shade. Additional disease problems include verticillium wilt, root rot and leaf spots. Watch for aphids, mealybugs, scale and whiteflies.



Coast Live Oak
Quercus agrifolia

Coast live oak is native to California and Baja. It is a beautiful drought-resistant evergreen tree. The bark of young trees is smooth. With age, it develops deep furrows, ridges, and a thick bark. The inner bark and cork layers are thick. Open-grown crowns are broad and dense, with foliage often reaching the ground. In open areas trunks are usually 4 to 8 feet tall; at this height, primary branches originate and grow horizontally. Coast live oak begins flower and fruit production during stem elongation in the spring. In late spring new growth emerges and sheds all the foliage at the same time.

Coast live oak occurs in a Mediterranean climate characterized by mild, wet winters and hot, dry summers. Coast live oak develops extensive horizontal root branches and surface-feeding roots. Plant in full sun to partial shade. Cold hardy to <math><15^{\circ}</math> F.



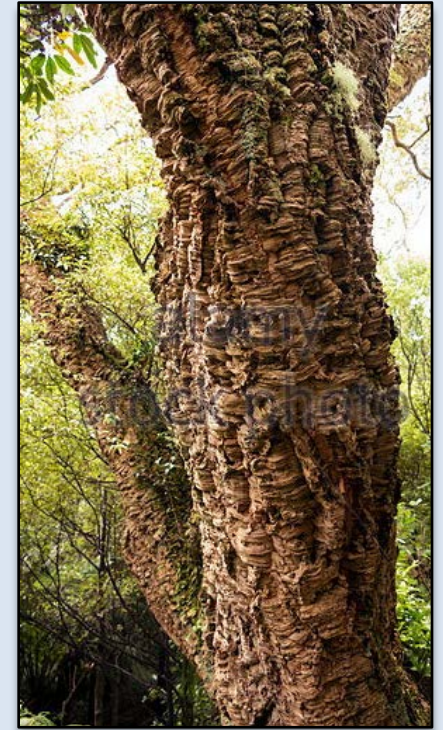
Cork Oak

Quercus suber

Cork oak is a medium sized evergreen oak that is native to the central and western Mediterranean region. Bark from this oak is commercially harvested and processed to produce a variety of products including wine bottle corks. Regardless of commercial value, this is an ornamentally attractive oak. Leathery, wavy-toothed, ovate, shiny dark green leaves are gray-tomentose below. Thick, rough, deeply fissured, corky bark with reddish-brown furrows has a unique beauty, particularly on older trees. Over time, bark will grow to as much as 12" thick. Insignificant monoecious flowers appear in spring in male catkins and in short-stalked female clusters.

Cork Oak is best grown in acidic, dry to medium, well-drained loams in full sun. Tolerates drought. Avoid wet, poorly-drained soils.

Oaks in general are susceptible to a large number of diseases and insects but are generally tolerant of low populations and less severe diseases.



Crape myrtle

Lagerstroemia indica

A long period of striking summer flower color, attractive fall foliage, and good drought-tolerance all combine to make Crape-Myrtle a favorite small tree for either formal or informal landscapes. It is highly recommended for planting in urban and suburban areas. The flowers are brightly-colored and crinkly and look like they are made of crepe paper. They are available in shades from palest pink or lilac to deep pinky-red or purple, and white. In this part of the world they bloom from July to October. They are also among the longest-blooming trees. The leaves turn attractive shades of yellow, peach, orange or red in autumn. The exfoliating bark is beautifully mottled and multi-colored, especially on certain cultivars. The crape myrtle gets by on low water once established.

Thrives in moderately fertile and well-drained soil.

Dieback, powdery mildew, aphids, scale insects, mealybugs, and whiteflies.



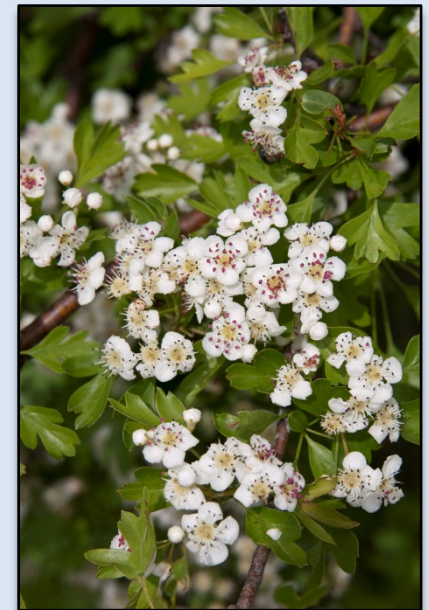
English Hawthorne

Crataegus laevigata

English hawthorn is a small, low-branching, deciduous tree that is noted for its profuse spring bloom. It typically grows 15-20' tall with a rounded crown. Straight to zigzag, thorny stems are clad with 3 to 5-lobed, dark green leaves. No fall color. White 5-petaled flowers in clusters (corymbs) bloom in mid spring. Flowers are followed by red fruits (pomes to 1/2" long) in fall. Many cultivars of English hawthorn, some featuring double flowers, are available in commerce today with flower colors including pink, rose, red and white.

Best grown in moist but well-drained soils in full sun.

Hawthorns are susceptible to a large number of insect and disease problems. Powdery mildew, fire blight, cankers and apple scab may also occur. Insect pests include borers, caterpillars, lacebugs, leafminers and scale.



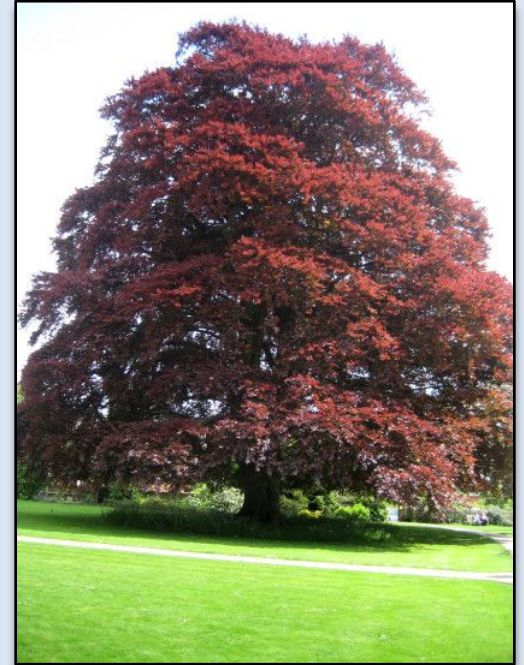
European Beech

Fagus sylvatica

European beech is a large deciduous tree with a dense, upright-oval to rounded-spreading crown. It is native to woodlands in central and southern Europe. Trunks have distinctive bark that is thin, smooth and gray. Ovate to elliptic, lustrous dark green leaves have wavy mostly toothless margins and prominent parallel veins. Foliage turns golden bronze in fall. Monoecious yellowish green flowers bloom in April-May, the male flowers in drooping, long-stemmed, globular clusters and the female flowers in short spikes. Female flowers give way to triangular nuts enclosed by spiny bracts. Beechnuts ripen in fall and are edible.

Best grown in deep, rich, moist but well-drained soils in full sun to part shade. Intolerant of wet and poorly drained soils. Reportedly tolerates a wider range of soils than American beech.

No serious insect or disease problems. Beech scale is an occasional problem.



Evergreen Pear

Pyrus kawakamii

Moderately fast-growing, semi-evergreen to deciduous tree. Nearly evergreen in mild climates. Initially upright-growing, this highly popular species eventually forms a rounded dome of slightly-drooping branches, adorned with highly-glossy medium green leaves that turn an attractive purplish-red in the cool of winter. Prized for both its handsome foliage and profusion of showy, fragrant white flowers that provide an eye-catching display from late-winter to early-spring. This species seldom fruits, though clusters of small bronze-green fruit occasionally appear in late summer. A popular choice for warmer western climates that is well-suited as a small courtyard, patio, lawn or street tree.

Tolerates heat and a variety of soil types, growing best in full sun with regular watering in a well-drained soil.



European Hornbeam

Carpinus betulus

Carpinus betulus commonly called European hornbeam is a medium-sized, deciduous tree with a pyramidal to oval-rounded crown. Ovate, sharply-toothed, dark green leaves are clean and attractive throughout the growing season with little susceptibility to foliar diseases. Foliage turns an undistinguished yellow to orange in fall. Monoecious flowering catkins form in early spring before the foliage emerges. Male catkins are yellowish and female catkins are greenish. Fruits are small nutlets in 3-lobed bracts that appear in drooping 5" long clusters in summer. Trunks have smooth gray bark and distinctive muscle-like fluting.

Easily grown in medium moisture, well-drained soils in full sun to part shade. Needs little pruning when grown as a tree, but responds well to hard pruning if grown as a hedge.

No serious insect or disease problems.



Fern Pine

Podocarpus gracilior

This graceful-looking species is best-suited for mild climates and forms a dense rounded head of finely-divided, slightly-pendulous foliage, featuring narrow leaves that emerge light gray-green and mature to shades of bright and dark-green creating a fern-like appearance. Beautiful and highly popular in milder western climates, this species is well-suited as a street, patio, courtyard or screening tree. It is a large slow growing tree.

It is low maintenance and resistant to pest and disease, can handle mild drought and is salt tolerant.



Freeman Maple

Acer x Freemanii

Acer x freemanii, commonly called Freeman maple, is a hybrid of red maple (*A. rubrum*) and silver maple (*A. saccharinum*). The Freeman maple cultivars commonly sold in commerce today reportedly combine some of the best features of both parents, namely, solid structure, attractive form and showy fall color (from red maple) and adaptability and rapid growth (from silver maple). Oliver M. Freeman of the National Arboretum made the first controlled crosses between red maple and silver maple in 1933. Edward Murray named this hybrid cross in 1969 in honor of Oliver M. Freeman.

Easily grown in average, medium to wet, well-drained soils in full sun to part shade. Prefers moist, acidic soils with good drainage. Established trees have some tolerance for drought conditions.

No serious insect or disease problems. Young plants are susceptible to leafhoppers and scale.



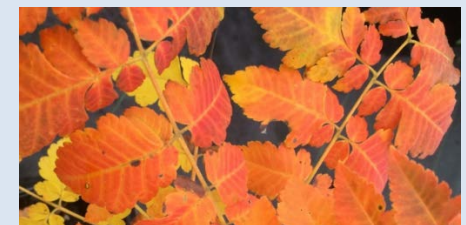
Golden Rain

Koelreuteria paniculata

Golden raintree is a small, open-branching, irregularly-shaped, deciduous tree with a rounded crown. Features pinnate or bipinnate, feathery, compound leaves each leaf having 7-17 irregularly lobed leaflets. Leaves emerge pinkish bronze to purplish in spring, mature to a bright green in summer and turn yellow (quality variable) in fall. Bright yellow flowers (1/2" wide) appear in early summer in long, terminal, panicles. Falling blossoms may or may not resemble "golden rain", but the fallen blossoms often form an attractive golden carpet under the tree. Flowers give way to interesting, brown, papery seed capsules which somewhat resemble Chinese lanterns.

Easily grown in average, dry to medium, well-drained soil in full sun. Adapts to a wide range of soils. Tolerates drought and many city air pollutants.

No serious insect or disease problems. Some susceptibility to root rot, leaf spot and canker.

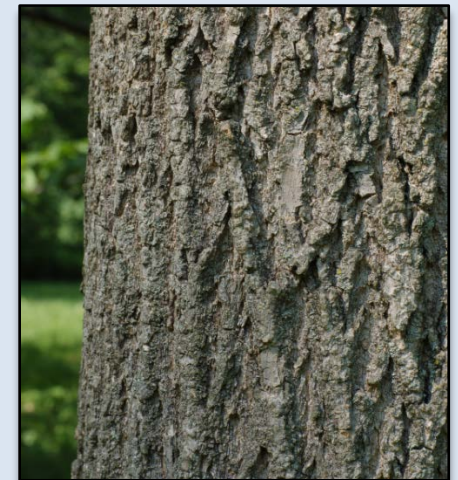


Green Ash

Fraxinus pennsylvanica

Fraxinus pennsylvanica, commonly called green ash is a medium sized tree. Young trees are pyramidal in shape, gradually maturing to a more rounded but usually irregular crown. Green ash is similar in appearance to white ash. Green ash is primarily dioecious (separate male and female trees). Clusters of apetalous purplish male and female flowers appear on separate trees in April-May after the foliage emerges. Features odd-pinnate compound leaves, each with 5-9 leaflets. Foliage turns yellow in fall, with the quality of the fall color often varying considerably from year to year. Gray-brown bark develops distinctive diamond-shaped ridging on mature trees.

Easily grown in average well-drained soils in full sun. Prefers consistently moist, humus loams, but established trees demonstrate adaptability to a wide range of soils and growing conditions. Female trees produce abundant seed crops in some years, and may freely self-seed.



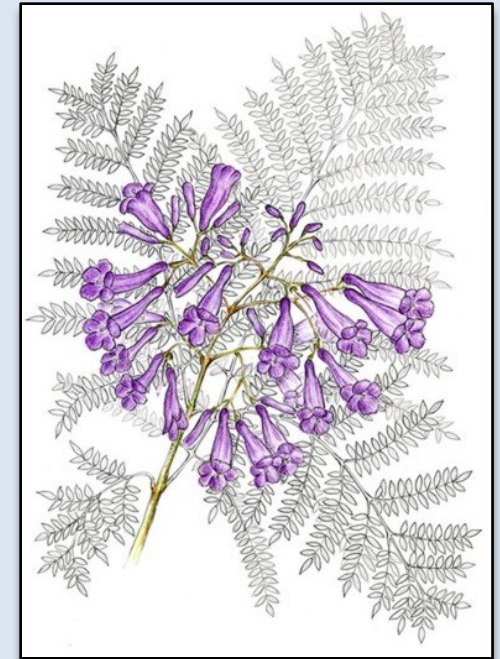
Jacaranda

Jacaranda mimosifolia

Native to Argentina and Bolivia, jacaranda is a deciduous tree. In tropical and subtropical climates, it puts on a spectacular flowering display in spring to summer wherein blue-purple flowers cover the tree with bloom, forming pools of blue on the ground as they fall. Flowers (to 2" long) appear in 12-inch terminal panicles in spring and early summer. Flowers give way to flattened 2-inch capsules, each containing numerous winged seeds. Features large bipinnate compound fern-like leaves (to 18" long) with tiny 1/2-inch leaflets.

Winter hardy to USDA Zones 10-11 (possibly 9b). Established trees will usually withstand occasional temperatures down to about 20 degrees F. Best in sandy, fertile, well-drained soils in bright light. Likes heat and humidity. Keep soils evenly moist year around, and never allow soils to dry out.

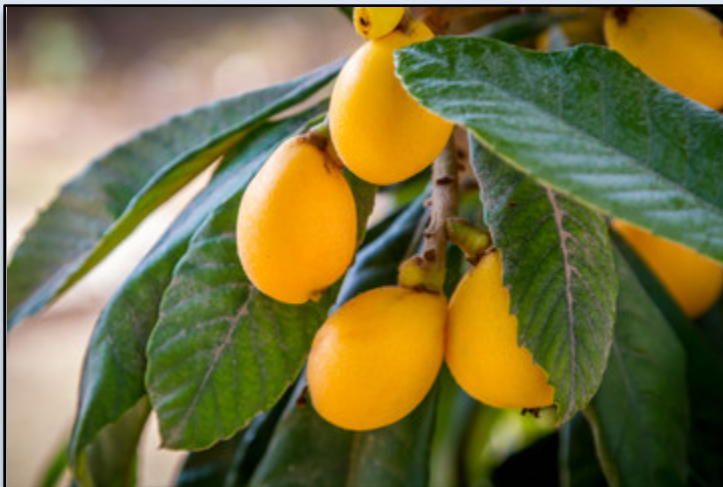
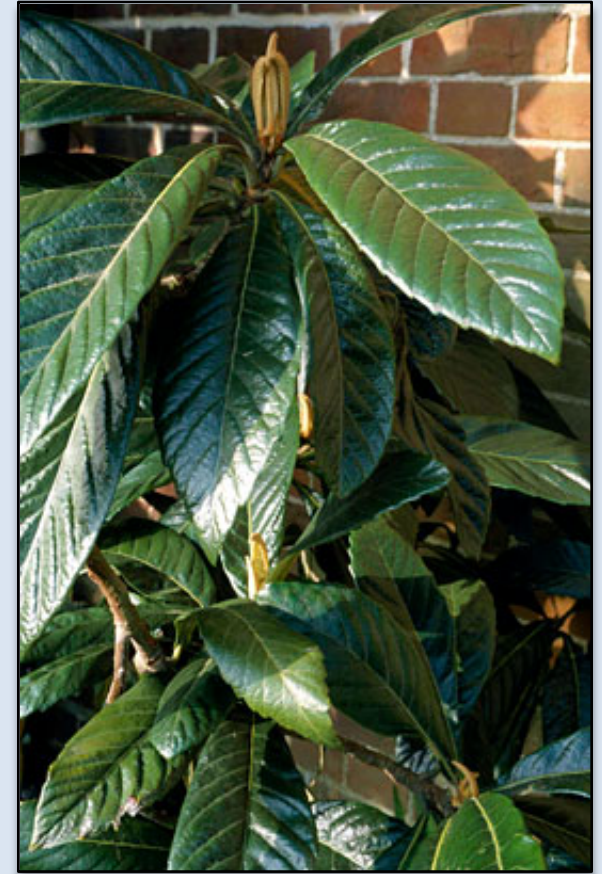
No serious insect or disease problems. Watch for aphids and whiteflies on indoor plants.



Japanese Loquat
Eriobotrya japonica

A tree of moderate size, the loquat has a rounded crown, short trunk, and woolly new twigs. The evergreen leaves, mostly whorled at the branch tips, are elliptical-lanceolate to obovate lanceolate, dark-green and glossy on the upper surface, whitish-or rusty-hairy beneath, thick, stiff, with conspicuous parallel, oblique veins, each usually terminating at the margin in a short, prickly point. Sweetly fragrant flowers, borne in rusty-hairy, terminal panicles, are white and 5-petalled. The fruits, in clusters of 4 to 30, are oval, rounded or pear-shaped, 1 to 2 in long, with smooth or downy, yellow to orange, sometimes red-blushed, skin, and white, yellow or orange, succulent pulp, of sweet to subacid or acid flavor.

Loquats grow well on a variety of soils of moderate fertility, from light sandy loam to heavy clay but need good drainage. Loquat trees are drought tolerant, but they will produce higher quality fruit with regular, deep watering.



Kentucky Coffee Tree

Gymnocladus dioicus

Kentucky coffeetree or coffeetree is a tall deciduous tree with rough, scaly gray-brown bark and large bipinnate compound leaves. It is native to the Midwest, with an irregular open oval to obovate crown. Leaflets are blue-green in summer, turning an undistinguished yellow in fall. Larger trees typically cast light shade. As the specific epithet suggests, the species is dioecious (separate male and female trees). Greenish white flowers appear in late spring (May-June). Male flowers in clusters to 4" long. Female flowers in panicles to 12" long. Female flowers are fragrant. Trees are late to leaf out in spring and are one of the first to drop leaves in the fall.

Best grown in moist, organically rich, well-drained soils in full sun. Tolerates poorer soils and drought. Avoid heavy clays however. Also adapts well to urban conditions. Suckers to form colonies in the wild.

No serious insect or disease problems.



Lilly of the Valley Tree

Crinodendron patagua

Chilean lily-of-the-valley tree (*Crinodendron patagua*) is a small, evergreen tree with small, shiny leaves somewhat like a live oak. In spring, it produces masses of delicate, white one-inch-long, bell-shaped flowers. Its attractive, evergreen foliage, upright form, and narrow profile make this plant a good screen or patio tree.

Reliably heat and drought tolerant, it has been grown with irrigation every two weeks, but also tolerates twice-weekly irrigation.

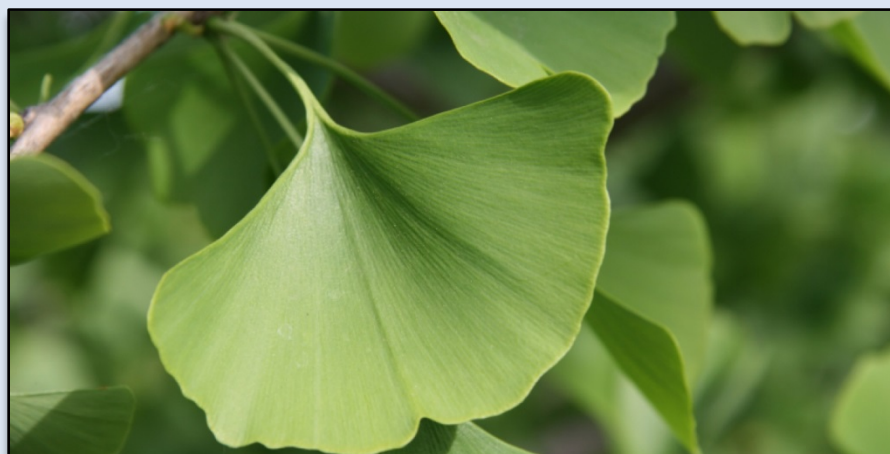


Maidenhair Tree

Ginkgo biloba

Maidenhair Tree is a long-lived, deciduous tree. There are separate male and female trees. Due to a foul odor produced by the crushed female fruit only male trees are grown for street tree plantings. Greenish catkins occur on the male tree. Old trees sometimes produce downward growing protuberances or aerial roots from the trunks and lower branches, known as chi-chi. These can reach the ground and take root. Hailed as "undoubtedly one of the most distinct and beautiful of all deciduous trees," the ginkgo certainly stands out. Unique, fan-shaped leaves turn a stunning yellow color in the fall.

It can tolerate many urban conditions including heat, air pollution, salt and confined spaces. And it establishes easily.



Mayten Tree

Maytenus boaria

A very attractive evergreen tree with a rounded crown and weeping and pendulous branches of small bright green leaves that are held perpendicular to the stem. Tiny yellow flowers that appear in winter are inconspicuous and sometimes followed by small brown capsules containing red seeds. This plant makes it a good substitute for the Weeping Willow and unlike the water thirsty willow, the Maytens roots are not invasive. Avoid cultivating around the tree and promote deep rooting. The Mayten Tree is native to waterways in arid and semiarid regions of Chile, Argentina and Peru.

Plant in full sun and irrigate deeply and infrequently to encourage the roots to grow deeply.

It is cold hardy to around 20 degrees F. Mature Mayten trees seem to resent heavy pruning.

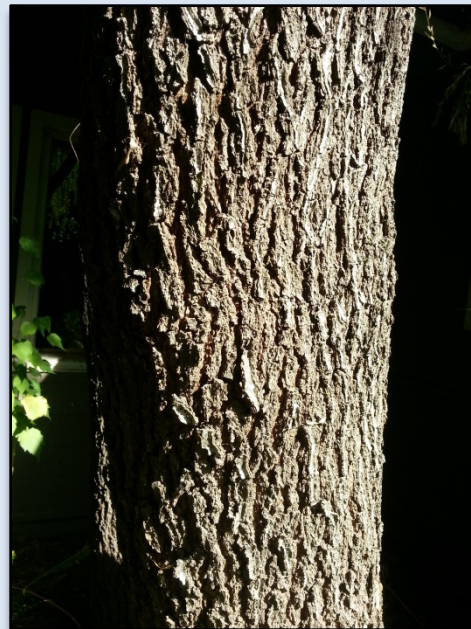
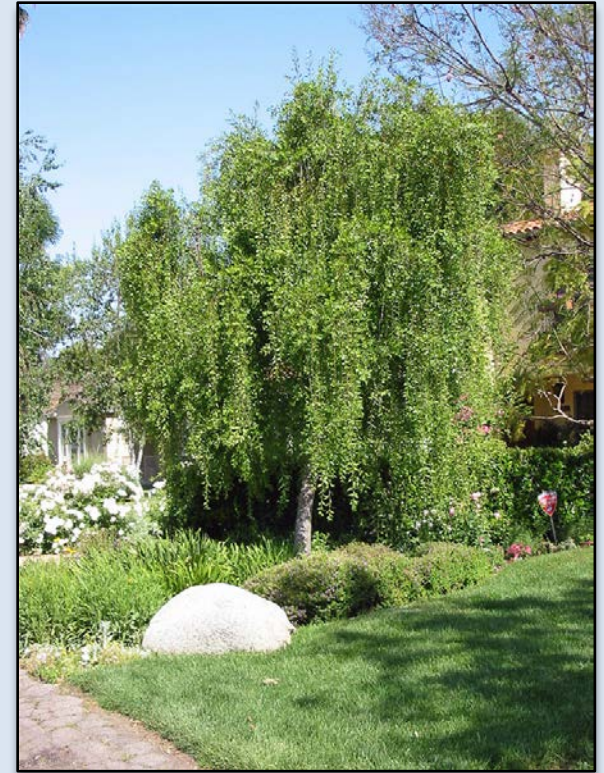


Fig. 306.
Maytenus boaria Molina.
Fruit-cluster, leaf, $\times 1$.

Ornamental Pear

Pyrus calleryana

It is an upright-branched ornamental tree. It grows pyramidal to columnar in youth, but tends to become oval to spreading with age. It is noted for its early profuse spring bloom, quality glossy green foliage and often excellent fall color. It produces small, inedible, greenish-yellow fruits (to 1/2" diameter) which are of little practical value or ornamental interest. The specific epithet and common name honor Joseph Callery, a French missionary, who discovered and collected this plant. Narrow-oval, glossy dark green leaves (to 3" long) dance in the breeze due to long petioles. Leaves turn attractive reddish-purple to bronze-red in fall. Five-petaled, creamy white flowers (each to 3/4" wide) in dense corymbs appear in profusion in early spring.

Adaptable to a wide range of soil conditions. Generally tolerant of urban conditions. Prune as needed in winter.

Susceptible to Fire blight.



Persimmon (American)

Diospyros virginiana

Persimmon is deciduous tree with a rounded oval crown. It is one of the easiest trees to identify in winter because of its distinctive thick, dark gray bark that is broken into rectangular blocks. Plants are usually dioecious (separate male and female trees), but some trees have perfect flowers. Fragrant, white to greenish-yellow flowers bloom in late spring, with the male flowers appearing in clusters and the female flowers appearing solitary. Edible persimmon fruits (1-2" in diameter) mature in fall to an orange to reddish-purple color, and may persist on the tree into winter. Ovate to elliptic leaves are glossy dark green above, and turn yellowish-green (infrequently reddish purple) in autumn..

Easily grown in average, dry to medium, well-drained soils in full sun to part shade. Drought tolerant. Promptly remove root suckers. Female trees need a male pollinator in order to set fruit.

No serious insect or disease problems.



Pomegranate

Punica granatum

Pomegranates are exotic fruits that grow on a small tree or shrub 15 to 20 ft. tall, which has shiny foliage and a long flowering season. The tree is very long lived. It is sensitive to frost in fall and spring and does not mature well in cool climates. Fruits crack with first fall rains. Propagated from cuttings. Requires only a short chilling period. Resistant to oak root fungus (*Armillaria mellea*).

The tree tolerates wet, heavy soils but performs better in deep, well-drained loams.

Not attacked by codling moth or twig borers.

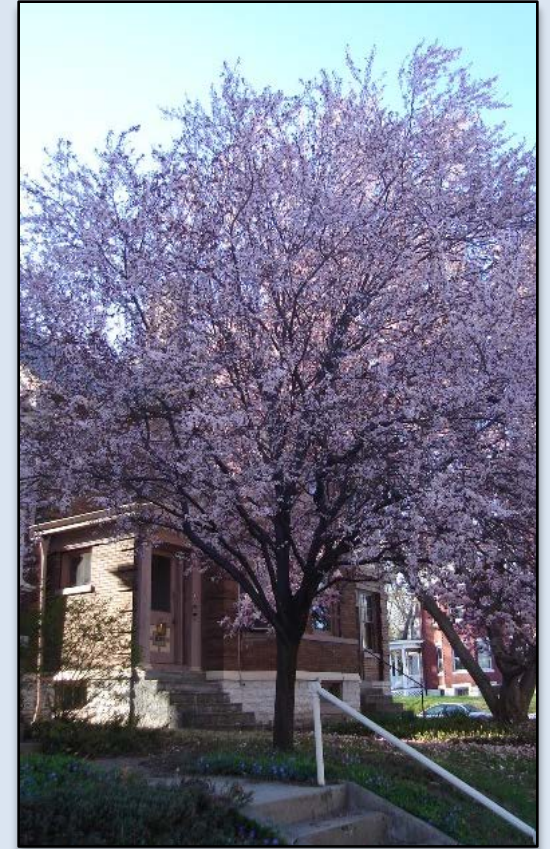


Purple-leaf Plum

Prunus cerasifera

Purple leaf plum is a small deciduous tree that is commonly planted for its deep reddish-purple leaves and white/pale pink flowers that are among the first to appear in spring. Although it is short lived, it is fast growing and great for use as a specimen, street or shade tree. The scientific name for this species is *Prunus cerasifera* and it falls under the Rosaceae family. Many of the stone fruits are also part of the *Prunus* genus.

Prefers full sun for the desired purple leaf effect as a focal point tree. When grown in shade, the leaves will pale to nearly green. Tolerates many different soil types, but the planting site should be well-drained.



Queensland kauri

Agathis robusta

A tall upright growing conifer with thick, opposite or spirally-arranged leathery elliptic leaves. The vertically straight trunk, often with a spiral twist, has light grey-brown bark that flakes off to expose a lighter layer below. This species is monoecious with separate male and female cones on the same tree. The male (pollen) cones are narrow reddish brown and cylindrical, 2 to 3 inches in length and erect when held on the tree but curled slightly when dropped to the ground. The 4 to 6 inch tall rounded seed cones, held erect in the high branches, are initially green and mature to brown when they begin falling apart while they are still held on the tree.

Plant in full sun and give regular to occasional irrigation. It is noted as hardy to Sunset Zone 15



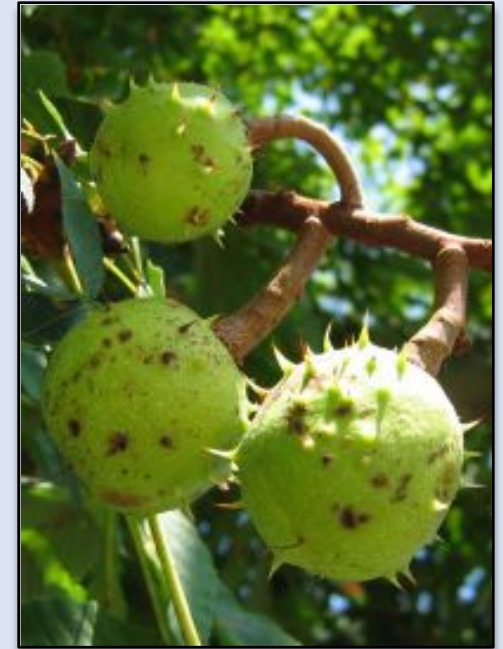
Red Horse Chestnut

Aesculus x carnea

Aesculus × carnea, commonly called red horse chestnut, is a hybrid (*A. hippocastanum* × *A. pavia*) that was discovered in Europe in 1812. It is a small, oval to rounded, deciduous tree and is perhaps best noted for its attractive red flowers. It features dark green palmate compound leaves with 5 (less frequently 7) spreading ovate-oblong leaflets. Leaflets have doubly-toothed margins. Fall color is somewhat undistinguished. Very showy red flowers appear in upright terminal panicles (to 6-8" long) in mid-spring. Flowers are followed by slightly prickly husky capsules.

Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Prefers moist, fertile soils. Foliage tends to scorch and generally depreciate in dry conditions.

Leaf blotch can be a significant problem. Powdery mildew and leaf spots may also occur.



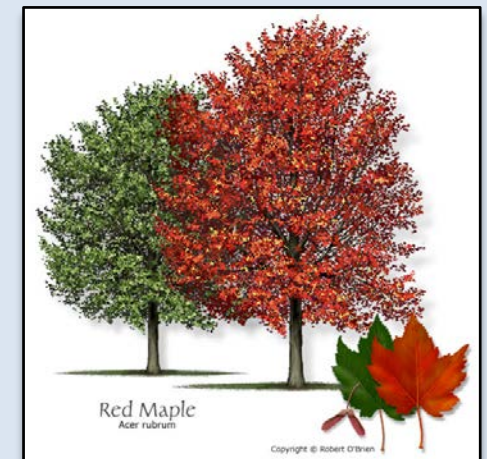
Red Maple

Acer rubrum

Acer rubrum is a medium-sized, deciduous tree with a rounded to oval crown. Emerging new growth leaves, leafstalks, twigs, flowers, fruit and fall color are red or tinged with red. Quality of red fall color on species plants is variable. Leaves (to 2-5" long) have 3 principal triangular lobes (sometimes 5 lobes with the two lower lobes being largely suppressed). Lobes have toothed margins and pointed tips. Leaves are medium to dark green above and gray green below. Flowers on a given tree are primarily male or female or monoecious and appear in late winter to early spring before the leaves. Fruit is a two-winged samara.

Easily grown in average, medium to wet, well-drained soil in full sun to part shade. Tolerant of a wide range of soils, but prefers moist, slightly acid conditions. Very cold hardy.

No serious insect or disease problems. Watch for aphids, leafhoppers, borers, scale and caterpillars.



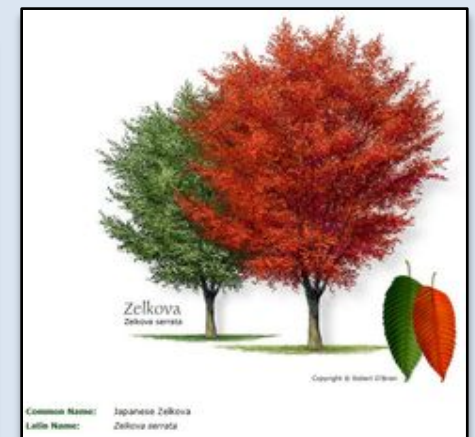
Saw-Leaf Zelkova

Zelkova serrata

Zelkova serrata is a medium to large deciduous tree with a spreading, generally upward-branching, vase-shaped crown. It is noted for its graceful shape, clean foliage, attractive bark and resistance to Dutch elm disease. Insignificant small green flowers appear in spring as the foliage emerges. Flowers give way to small, non-showy, ovate, wingless drupes that ripen in autumn. Oblong-elliptic medium green leaves with coarse, ciliate marginal teeth and acuminate tips. Fall color is variable, ranging from undistinguished yellow to attractive shades of yellow-orange to red-brown. Smooth gray bark in youth exfoliates with age to reveal orange-brown inner bark.

Easily grown in average, medium wet, well-drained soils in full sun. Established trees tolerate some drought. Prefers rich, moist loams. Generally tolerant of urban conditions.

No serious insect or disease problems. Highly resistant to Dutch elm disease.

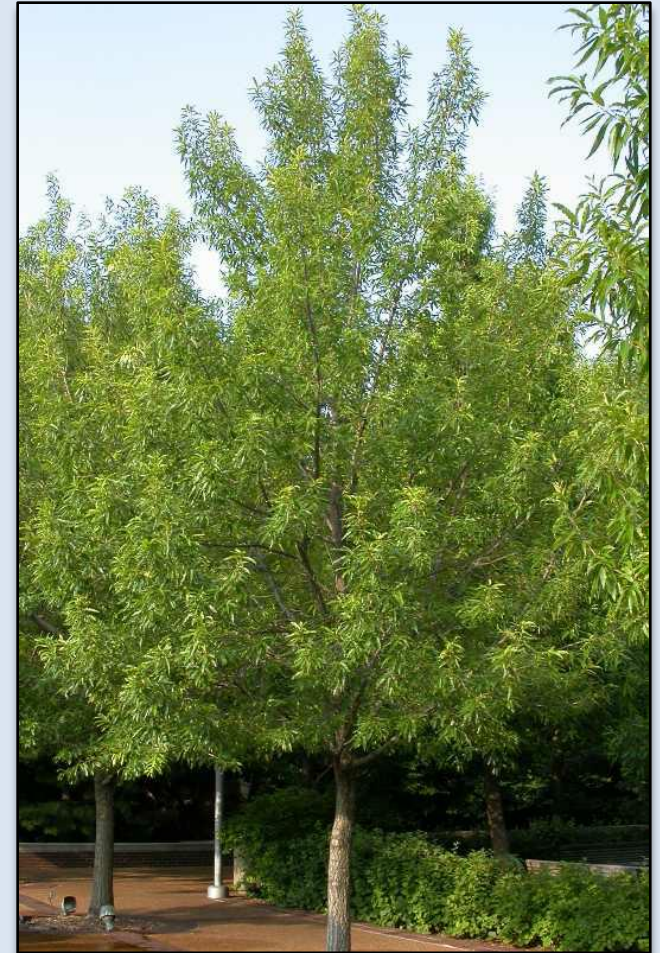


Sawtooth Oak

Quercus acutissima

Sawtooth oak is a medium sized deciduous oak of the white oak group with a broad-spreading, rounded crown. Gray to black bark develops corky ridging with age. Insignificant monoecious yellowish-green flowers in separate male and female catkins appear in spring as the leaves emerge. Fruits are oval acorns with spiny, scaly cups that extend to approximately 2/3 the acorn length. Acorn crops can be quite abundant and are an important source of food for wildlife. Oblong to lance-shaped, chestnut-like, glossy dark green leaves (to 7" long) have bristle-tipped marginal teeth at the terminal point of each parallel vein. Fall color is variable.

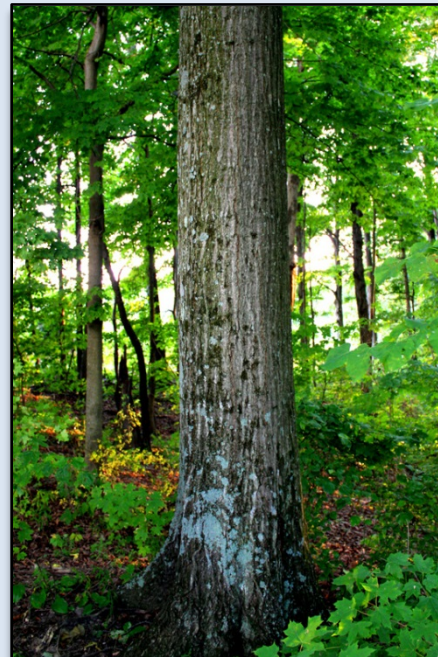
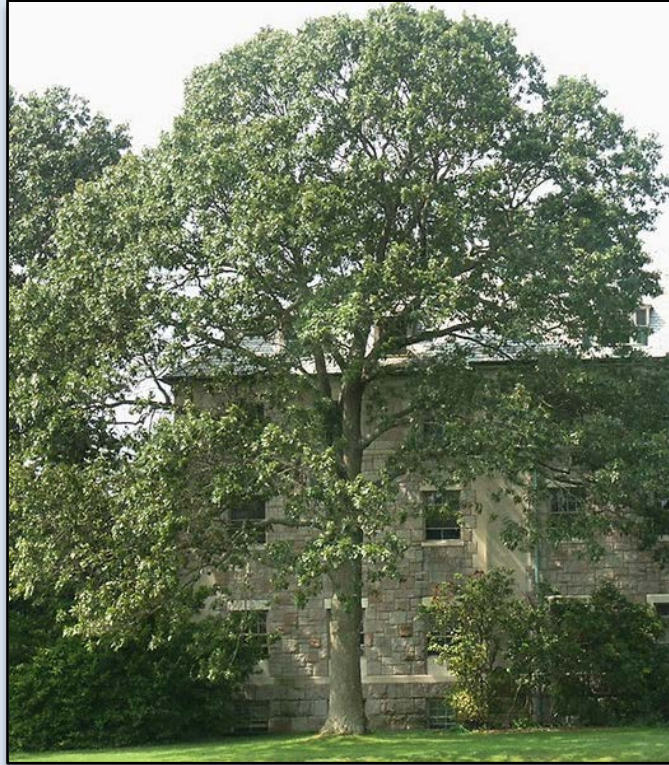
Chlorosis is common in neutral to alkaline soils and can damage the tree. Otherwise, sawtooth oak is considered to be a low-maintenance.



Scarlet Oak

Quercus rubra

Scarlet Oak is a dramatic tree. The bark is dark brown, nearly black, and broken into ridges and furrows. All oaks have simple, alternate leaves and have 7, 9 or 11 unequal lobes; each lobe usually has three pointed teeth with little bristles on the tips. The leaves turn red or orange in the fall and usually persist on the trees until early winter. All oaks have both male and female flowers on the same trees. The male flowers are slender pendulous catkins, conspicuous in early spring, and the female flowers are inconspicuous little spikes. As the leaves are unfolding, spring winds blow pollen from the red oak's long yellowish staminate catkins onto the tiny greenish pistillate flowers.



Silver Linden

Tilia tomentosa

Silver Linden is noted for its attractive foliage, which is glossy green above and silvery-white below. The foliage flutters in the slightest breeze, showcasing the silver and green leaf colors. This is a medium to large deciduous tree with upright branching and a broad-columnar habit. Fragrant pale yellow flowers in drooping cymes appear in late spring to early summer (June-July). Ovate, shiny, dark green leaves (to 4" long) with acuminate tips and serrate margins are densely covered beneath with silvery-white hairs. Fall color is an undistinguished pale green to pale yellow.

Easily grown in average, dry to medium, well-drained soils in full sun to part shade.

No serious insect or disease problems. Mites can be troublesome in dry periods.



Sour Gum

Nyssa sylvatica

Sour gum is a slow-growing, deciduous tree. A stately tree with a straight trunk and rounded crown. Primarily dioecious (separate male and female trees). Small, greenish-white flowers appear in spring on long stalks (female flowers in sparse clusters and male flowers in dense heads). Although flowers are not showy, they are an excellent nectar source for bees. Flowers give way to oval, 1/2" long fruits which are technically edible but quite sour. Fruits mature to a dark blue and are attractive to birds and wildlife. Spectacular scarlet fall color.

Easily grown in average, medium to wet soils in full sun to part shade. Prefers moist, acidic soils. Tolerates poorly-drained soils but also tolerates some drought.

No serious insect or disease problems.



London Plane/Sycamore

Platanus x acerifolia

London planetree is a hybrid cross between American sycamore (*P. occidentalis*) and Oriental planetree (*P. orientalis*). The signature feature of this huge tree is its brown bark which exfoliates in irregular pieces to reveal creamy white inner bark. Mature trees typically display mottled white bark. The large 3-5 lobed medium to dark green leaves have coarse marginal teeth. Small, non-showy, monoecious flowers appear in small rounded clusters in April. Fruiting balls gradually disintegrate as fall progresses.

Easily grown in average, medium to wet, well-drained soils in full sun. Tolerates light shade. Prefers consistently moist soils. Generally tolerant of most urban pollutants.

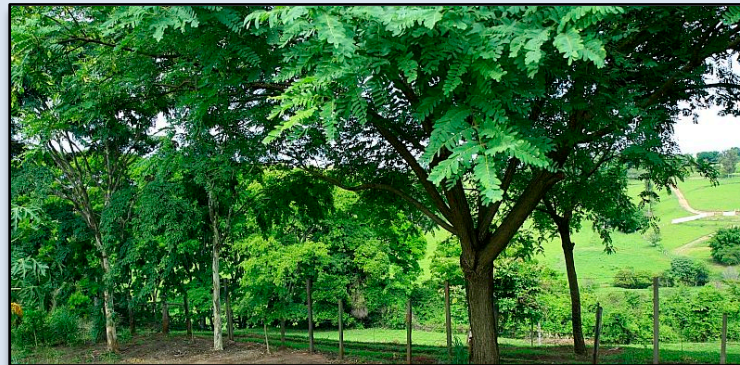
Canker Stain, Powdery Mildew and Anthracnose can be issues for this tree.



Tipu Tree
Tipuana tipu

The tipu is a large, flat-topped shade tree that quickly grows to 15-20 feet tall. Then the tree slows its growth, increasing its size by about 40 percent over its lifetime. The lime-green oblong leaflets symmetrically arranged down a central spine lend the tipu's foliage the tropical look of a miniature palm while multitudes of tiny golden yellow flowers create a cheery atmosphere in the summer months. The tree carries a full canopy of vibrant green foliage through the winter months but then curiously becomes briefly deciduous in late spring, shedding its leaves while most other deciduous trees are leafing out.

Prefers full sun, lots of space and ample water when young, but it becomes exceptionally drought-tolerant with age. It can withstand freezes into the mid- to low 20s.



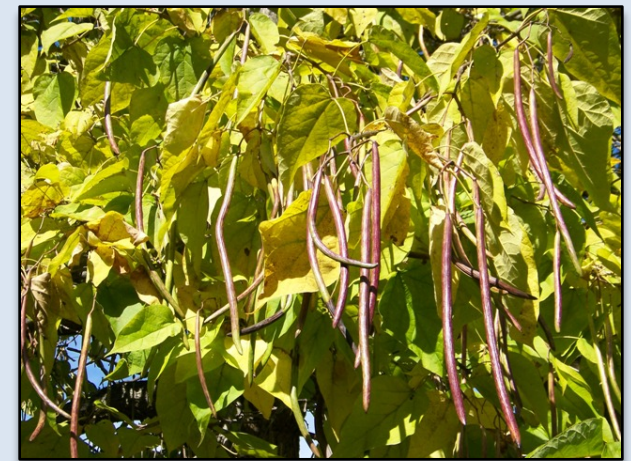
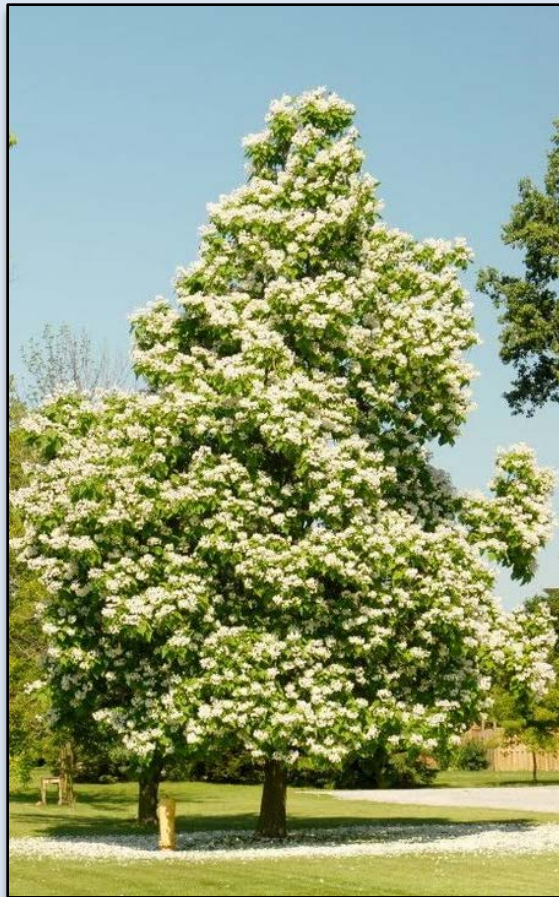
Western Catalpa

Catalpa speciosa

Catalpa speciosa is a medium to large, deciduous tree with an irregular, open-rounded to narrow-oval crown. Leaves are light green to yellow green above and densely pubescent below. Bell-shaped, orchid-like white flowers (to 2" long) with purple and yellow inner spotting appear in panicles in late spring. Flowers give way to long slender green seedpods (12-22" long). The seedpods mature in fall to dark brown. Abundant pods are produced every 2 to 3 years. Bark of mature trees is fissured, prominently ridged and pale gray-brown.

Easily grown in average, medium to wet, well-drained soils in full sun to part shade. Tolerant of a wide range of soil conditions including both wet and dry soils.

No serious insect or disease problems.



White Ash

Fraxinus americana

Fraxinus americana, commonly called white ash, is native to eastern North America. Young trees are pyramidal in shape, gradually maturing to a more rounded crown. White ash is primarily dioecious (separate male and female trees). Clusters of apetalous purplish male and female flowers appear on separate trees in April-May before the late-to-emerge foliage. Fertilized female flowers give way to drooping clusters of winged samaras (to 2" long) that ripen in fall and may persist on the tree throughout winter. Foliage turns yellow with purple shading in fall. Gray bark develops distinctive diamond-shaped ridging on mature trees.

Best grown in moist, organically rich, well-drained loams in full sun. Moderate drought tolerance. Generally tolerant of urban conditions.

