

Trees Suitable for Planting in Lawns in Contra Costa County

The Contra Costa Master Gardener Office is frequently asked to provide suggestions for trees that are suitable for planting in lawns in our area. Before selecting a tree, there are many things to be considered. First, is it to be used as a landscape accent, providing blossoms or fall color; or is its purpose to provide shade for the home and garden? If the tree were to be planted near the house, a deciduous tree would provide shade in the hot summer months and allow the sun to warm the house during the winter. Is the size appropriate for the lot area? The size of the tree canopy and height of tree are important factors to consider. A tree should not get more than 50% higher than the highest part of the house, unless it is planted as far away as its ultimate height. A tree reaching 100 feet should be at least 75 feet away; a 20-foot tree should be at least 15 feet away

What is the overall shape of the tree? Will it grow up and destroy a view? How much litter and leaf drop to expect? Would the roots be invasive in the lawn or adjacent flowerbeds or clog a septic tank or sewer line? To what diseases and pests is the tree susceptible? Is the tree compatible with the soil pH? Can the tree sustain the frequent watering that is necessary to maintain a lawn? Can the lawn sprinklers be located so that the trunk of the tree will not be hit, so that water on the trunk will not promote crown rot? Is the tree appropriate for use in the Sunset Garden zone of the city in which it is to be planted? All of these items are very important considerations; the initial investment may be small, but it costs thousands to rip out a tree and start over

The U.S.D.A. Hardiness Map indicates that Contra Costa, as well as most of Central and Southern California, is listed as Zone 9. However, there are great variations in climate; heat, moisture, fog, and freezing; within this zone; therefore, it is more appropriate to use the Sunset zone definitions which are listed below by cities in Contra Costa: Zone 14 includes most of the central and the eastern parts of the county. Zones 15, 16 and 17 include more moist air, summer fog and coastal thermal belts. Though most of the trees listed are compatible in all zones in Contra Costa, some cannot take the heat of Zone 14 and others dislike the cool air and fog of Zones 16 and 17

Sunset Zones by Contra Costa City [1]

<u>City/Zone</u>	<u>City/Zone</u>	<u>City/Zone</u>	<u>City/Zone</u>	<u>City/Zone</u>
Alamo/14-15	Antioch/17	Bay Point/17	Bethel Island/14	Blackhawk/15
Brentwood/14	Byron/14	Clayton/15	Clyde/17	Concord/15
Crockett/17	Danville/14-15	Diablo/15	Discovery Bay/14	El Cerrito/17
El Sobrante/15	Hercules/15-17	Kensington/17	Knightsen/14	Lafayette/14
Martinez/15	Moraga/ 15	Oakley/14	Orinda/15-16	Pacheco/14
Pittsburg/17	Pleasant Hill/14	Richmond/17	Rodeo/17	San Pablo/17
San Ramon/15	Walnut Creek/14-15			

The following is a listing and a brief description of trees that can be used for lawn planting, divided into deciduous and evergreen trees appropriate to the various zones located in Contra Costa County.

Deciduous Trees

Acer palmatum. Japanese Maple. Zones 14, 15, 16, 17. Slow growing to 20 ft. Leaves airy and delicate. Young spring growth is red; summer, green; fall, scarlet, orange or yellow. Many varieties available. Resistant to oak root fungus. Is primarily an under-story tree, protect from hot sun and dry winds, best planted in northern exposure and in areas with summer fog. Susceptible to verticillium wilt.

Celtis australis. European Hackberry. Zones 14, 15, 16. Moderate grower to 40 feet in 14-15 years. Tolerates most soils, takes sun, wind, smoke, dust, drought, and roots not invasive. Branches upright, dark green leaves 2-5 inches long.

Celtis sinensis. Chinese Hackberry. Zones 14, 15, 16. Fast to moderate grower. Takes sun, wind, smoke, dust. Smaller tree and leaves than European Hackberry.

Cladrastis lutea Yellowwood Tree (Rare). Zones 14, 15, 16. Slow growing to 30-35 ft. Broad rounded head. Leaves divided, 8-12 inch long, bright green in summer, yellow in fall. Blooms after 10 years with wisteria-like blossoms. Susceptible to verticillium wilt.

Crataegus lavigata English Hawthorne. Zones 14, 15, 16, 17. Moderate grower to 18-25 ft. with 15-20 ft. spread. Paul's Scarlet a favorite with clusters of double rose to red flowers in spring. Attracts bees and birds. Susceptible to fire blight. Fruit can be messy.

Diospyros kaki. Oriental persimmon. Zones 14, 15, 16. Moderate growth to 25-30 ft. with 30-40 ft. spread. Likes moist well drained soil. Leaves turn yellow, orange, and scarlet in fall. Good ornamental and shade tree as well as fruit bearing.

Ginkgo biloba. Maidenhair Tree. Zones 14, 15, 16, 17. Slow grower to 35-50 ft. Light green fan shaped leaves spring and summer, changing to gold in fall. Drops leaves all at once, making a gold carpet. Plant only male trees as females produce smelly, messy fruit. Not bothered by pests or disease. Resistant to oak root fungus. Susceptible to anthracnose. Tolerant to smog.

Gleditsia triacanthos. Honey Locust. Zones 14, 15, 16. Large, fast growing spreading to 50-60 ft. with 50-60 ft. spread. Lacy looking. Leaves leaf out late and drop early fall, giving grass sun in spring and fall. Not good for dense shade. Tolerant of alkaline conditions, heat, cold wind. Flowers inconspicuous producing pods 1-1/2 ft. long, filled with sweetish pulp, and hard seeds. Do not plant near walks or driveways, as roots will heave pavement. Trunks and branches are thorny and pods are messy. There are several varieties of G. t. inermis that have few pods. Tree subject to galls, mistletoe, root rot fungus.

Koelrueteria bipinnata. Chinese Flame Tree. Zones 14, 15, 16, 17. Slow to moderate growth 20-40-ft., spreading. 1-2 ft. long leaves divided into many oval leaflets, hold onto tree until December, then turn yellow for a short time. Seed capsules 2 in. long orange, red, or salmon, showy in late summer and fall, in large clusters resembling little Japanese lanterns. Roots not invasive. Beetles or scale occasional problems.

Koelrueteria paniculata. Goldenrain Tree. Zones 14, 15, 16, 17. Slow to moderate growth to 20-35 ft., with 10-40 ft. spread. Leaves to 15 in., with 7-15 lobed leaflets, 1-3 in. long. Flowers in summer 8-14 in. long. Prune to shape. Susceptible to verticillium wilt, beetle, scale. Plant bugs can be pests.

Laburnum anagyroides Goldenchain Tree. Zones 14, 15, 16, 17. Grows 20-30 ft. tall. Upright growth with bright green leaves divided into three leaflets. Blooms in spring with yellow, sweet pea-shaped flowers in hanging clusters like wisteria. Prune regularly. Remove seed-pods as they are poisonous and also drain the plant's strength. Tree subject to suckering and to chlorosis in sandstone or alkaline soils; use iron to correct. Susceptible to oak root rot and spider mites.

Liriodendron tulipifera. Tulip Tree. Zones 14, 15, 16, 17. Large, fast growing to 60-80 ft. with a spread to 40 ft. Flowers not produced until the tree is 10-12 years old, and not showy as they are produced high up on the tree. Tree forms a tall, pyramidal crown. Leaves turn from bright yellow green to bright yellow in fall. Good for a large lawn area. Spreading root system makes it hard to garden under. Limbs can become brittle with age. Resistant to oak root fungus, susceptible to verticillium, anthracnose, root rot and fusarium. Aphids and scale are insect pests.

Magnolia acuminata. Cucumber Tree. Zones 14, 15, 16, 17. Large, reaches a height of 60 -80 ft. with a 25 ft. spread. Provides dense shade. Hardy to cold; dislikes hot, dry winds. Aphid, scale and spider mite are pests.

Magnolia cordata. Yellow Cucumber Tree. Yellow Magnolia. Zones 14, 15, 16, 17. Slow growing to 35 ft. with a 35 ft. spread. Flowers bloom after 12 yrs.; they are large chartreuse yellow with a mild lemon scent.

Magnolia fraseri. Zones 14, 15, 16, 17. Large, grows to 50 ft. with a 20-30 ft. spread. Bloom 10-12 yrs. With creamy to yellowish white blossoms. Produces rose red 5-in. long seed capsules in summer. Susceptible to aphid, scale and spider mite.

Magnolia globosa. Zones 14, 15, 16, 17. Grows to 20 ft. with 20-ft. spread. Bloom in 10 yrs with white, fragrant, cupped or globe shaped blooms in June.

Magnolia kobus. Kobus Magnolia. Zones 14, 15, 16, 17. Grows to height of 30 ft. with a 20 ft. spread. Blooms in 15 years, flowers white, to 4 in. across. Susceptible to scale.

Magnolia Kosar-De Vos Hybrids. Zone 14, 15, 16, 17. Grows to 12 ft. with spread to 15 ft. Flowers bloom in 4-5 yrs. Color and shape of blooms varying with variety.

Magnolia loebneri. Zones 14, 15, 16, 17. Growth slow to 12-15 ft.; can reach 50 ft. with 12-15 ft. spread. Blooms in 3 yrs., narrow, strap-shaped petals. Flower shape and color varying with variety. Susceptible to aphid, scale and spider mites.

Malus. Flowering crabapple. Zones 14, 15, 16, 17. Handsome, showy, and are the least troublesome of flowering trees. Growth slow to moderate to 30-60 ft. tall, which varies with variety. Diseases and pests are few. Many varieties are available which differ in structure, foliage, and flowers. Consult Sunset for a description of each variety.

Metasequoia glyptostroboides. Dawn Redwood. Zones 14, 15, 16, 17. Large, moderate growth to 90 ft. with a 50 ft. spread. Foliage turns light brown in autumn, and then falls. Leaves are soft, light green. Likes moist drained soil. Resistant to oak root fungus.

Nyssa sylvatica. Sour Gum, Tupelo, Pepperidge. Zones 14, 15, 16, 17. Growth is slow to moderate reaching a height of 30-50 ft., spreading to 15-25 ft. Shape is pyramidal when young, becoming irregular with age. Leaves dark green, glossy 2-5 in. long, turning copper red in fall. Good in any soil. It is one of the best lawn trees for fall color.

Pistachia chinensis. Pistache. Zones 14, 15, 16. Large, moderate growth to 60 ft. with a spread of 30-60ft. Foliage turns beautifully in fall with scarlet, crimson, orange and yellow tones. Grows in moderately alkaline soil. Resistant to oak root fungus. Subject to verticillium wilt. Needs good drainage.

Pseudolarix amabilis. Golden Larch. Zones 14, 15, 16, 17. Slow growing to 40-70 ft., with an equal spread. Shelter from cold winds. Needs a spacious lawn.

Quercus cocinea. Scarlet Oak. Zones 14, 15, 16, 17. Large. Moderate to rapid growth to 60-80 ft. high with 35-40 ft. spread. Likes rich deep soil, fairly pest free, best oak for fall color. Resistant to verticillium wilt.

Quercus palustris. Pin Oak. Zones 14, 15, 16, 17. Large. Fast, broad, pyramidal growth to 50-80 ft. with 25-40 ft. spread. Turns scarlet in fall, but brown leaves tend to hang on all winter. Resistant to verticillium wilt. Susceptible to scale.

Quercus rubra. Red Oak. Zones 14, 15, 16, 17. Large. Fast growth to 60-80 ft. with 40-50 ft. spread. Red, brown, orange color in Fall. Has deep roots, which make it good to garden under. High branching habit makes for open shade. Resistant to verticillium wilt. Susceptible to antracnose, root rot, aphids, caterpillars, galls.

Sapium sebiperum. Chinese Tallow Tree. Zones 14, 15, 16. Fast grower to 35-40 ft. with 20-40 ft. spread. Provides light to moderate shade. Leaves poplar-like. Good fall color. Interior branches subject to dieback. Self-pruning, requires very little exterior pruning to shape. Do not plant in lawns that slope into wet areas, as it will produce seedlings, which might become invasive. Resistant to oak root fungus.

Sophora japonica. Japanese Pagoda Tree. Zones 14, 15, 16, 17. Moderate grower to 20-40 ft. with spread of 20-40 ft. takes sun, cold, drought, dust, and smoke. Flowers long, open in 8-12 in. cluster, July to Sept. Susceptible to verticillium wilt, spider mites. Resistant to oak root fungus.

Tillia cordata. Little Leaf Linden. Zones 14, 15, 16, 27. Slow to moderate growth to 30-50 ft. with 30-50 ft. spread. Pyramidal form. Small, fragrant, yellowish flowers in July, which attract bees, aphids and mildew. Susceptible to root rot, may get aphids.

Tillia euchlora. Crimean Linden. Zones 14, 15, 16, 17. Slow to moderate growth to 25-30 ft. with 15-30 ft. spread. Form is broader, shade and foliage less dense than *T. cordata*. Attracts bees, aphids and mildew. Susceptible to verticillium.

Tipuana tipu. Tipu Tree. Zones 14, 15, 16. Grows to 25-40 ft. tall with 30-60 ft. spread. Blooms late spring to early summer with apricot to yellow sweet pea-like flowers. Seed-pods follow. Not good in strongly alkaline soil. Hardy to 25° F.

Evergreen Trees

Crinodendron hookerianum. Zones 16, 17. Grows to 12-15 ft. tall with equal spread. Produces 1- inch long red flowers in late spring, early summer. Needs cool summers, high humidity. Subject to spider mites.

Elaeocarpus decipiens. Japanese Blueberry Tree. Zones 14, 15, 16, 17. Grows to 20-60 ft. tall, with 20-30 ft. wide. Blooms in summer, producing tiny, scented white flowers in clusters; followed by blue-black fruits resembling olives. Needs rich, well-drained soil. Requires little pruning.

Magnolia delavayi. Zones 14, 15, 16, 17. Grows to 20-30 ft. with a spread to 20 ft. blooms in 4-5 yrs. Produces dull creamy white flower 6-8 in. wide, blooming in summer. Flowers shatter upon opening. Beautiful foliage with glossy leaves 8-14 in. long, 5-8 in. wide, giving a tropical look. Pests are: aphid, scale, spider mite.

Metrodideros excelsus. New Zealand Christmas Tree. Zones 16, 17. Grows to 30 ft. with equal spread. Produces big clusters of dark red flowers over branch ends in late spring and early summer. Susceptible to root rot.

Pinus contorta. Beach Pine, Shore Pine. Zones 14, 14, 16, 17. Fast grower to 20-35 ft. with 20-25 ft. spread. Grows in a compact, pyramidal form. It is hardy anywhere but not good in hot, dry areas. One of the best small pines for small gardens. Can be used in containers. Resistant to verticillium. Susceptible to oak root fungus, root rot and pine pitch canker.

Pinus nigra. Austrian Black Pine. Zones 14, 15, 16, 17. Slow to moderate growth to 35-50 ft. with 25-40 ft. spread. Grows in a dense pyramidal shape. Takes adverse conditions. Is a good ornamental. Resistant to oak root fungus and verticillium. Susceptible to aphids.

Pinus wallichiana. Himalayan White Pine. Zones, 15, 16, 17. Slow to moderate growth to 30-50 ft. tall, 15-30 ft. wide. Good form and color. Needs a big lawn. Resistant to verticillium. Aphids may be a pest.

Pittosporum rostrifolium. Queensland Pittosporum. Rare. Zones 14, 15, 16, 17. Slow grower to 15-35 ft. Flowers in spring. Fruit showy fall thru winter. Fruit dropping creates a litter problem. Resistant to oak root fungus. Aphids and scale are pests.

Pittosporum undulatum. Victorian Box. Zones 16, 17. Zones 14, 15, protect from frost. Hardy to 30° F. Moderately fast growth to 15 ft., slow to 30-40 ft. high, with equal width. Makes a single or multi-trunked dome shaped tree of great beauty. Fruit dropping creates a litter problem. Strong roots become invasive with age. Aphids and scale are pests.

Quercus ilex. Holly Oak. Zones 14, 15, 16, 17. Large. Moderate growth to 40-70 ft. with 40-70 ft. spread. Takes sun, wind, drought. Lacks openness of coast live oak. Can be pruned to shape. Resistant to oak root fungus and verticillium wilt. Susceptible to anthracnose and root rot. Pests are scale and spider mite.

Quercus virginiana. Southern Live Oak. Zones 14, 15, 16, 17. Large, moderate grower to 40-80 ft. Needs deep, rich, moist soil. Resistant to verticillium wilt. Susceptible to oak root fungus and root rots.

Quercus wislizenii. Interior Live Oak. Zones 14, 15, 16. Large, grows 30-75 ft. tall, broader than tall. Handsome tree for big lawns. Susceptible to crown rot, mistletoe, root rot, powdery mildew. Pests are coddling moth, white fly.

Quillaja saponaria. Soapbark Tree. Zones 14, 15, 16, 17. Grows 30-45 ft. tall with 15-20 ft. spread. Resembles a weeping coast live oak. Responds to pruning. Good narrow screening tree. Bark produces saponin, a lather-producing chemical, used in Chile for washing and cleaning.

Thuja plicata. Western Red Cedar. Zones 14, 15, 16, 17. Large. Grows in pyramidal shape 50-100 ft. tall. Trees are beautiful in large lawn, but lower branches spread broadly. Variety "Green Giant" grows 3-5 ft. per year, reaching 30-50 ft. tall, 10-20 ft. wide. May be sheared. Susceptible to oak root rot, root rots. Pests are: borer, leaf miner and spider mite.

Trees Not Recommended for Planting in Lawns

Albezia. Silk Tree. Mimosa. Invasive, messy leaves, flowers, pods.

Betula. Birch. Require ample water at all times and a regular feeding program. Intolerant of drought. Susceptible to aphids that drip honeydew. Bronze birch borers are becoming a problem in Northern California. Very sensitive to lawn pre-emergences such as: “Weed and Feed”.

Catalpa bignoniaceae. Weak branched, messy, short lived.

Cedrus deodora. Deodar Cedar. Fast growing. Produces prodigious amounts of pollen, catkins, and cone-scales. Planted in lawn, it soon overpowers area.

Cinnamomum camphora. Camphor Tree. Handsome tree. Not many pests but subject to root rot, verticillium wilt. Roots are very competitive and not recommended for small lawns.

Fraxinus modesto. Modesto Ash. Leaves become scorched and unsightly looking in spring following a wet winter. This is caused by fungus disease, anthracnose. Also, aphids, bugs, mistletoe, and branches spit due to narrow crotch. Lawns do poorly underneath.

Note: *F. holotricha* “Moraine”, *F. oxycarpa* “Raywood”, and *F. uhdei* -“Shamel Ash” are offered as substitutes for Arizona and Modesto Ash. Consider carefully before planting, because a serious pest, the ash/lilac borer, attacks and may kill young trees. Control is difficult once the borer is inside the tree.

Liquidamber styraciflua. Sweet gum. Surface roots in lawn will present a problem.

Morus alba. Fruitless Mulberry. Grown for quick shade. It produces pollen in prodigious amounts and is subject to sooty canker disease. Subject to chlorosis and bacterial blight. Produces heavy surface roots.

Plantanus acerfolia. London Plane Tree. Susceptible to spider mite, powdery mildew, anthracnose. Leaves drop all summer, roots invasive.

Prunus sp . Flowering Cherry. Beautiful trees but require fast draining and well aerated soil. Subject to crown rot.

Sequoia sempervirens. Coast Redwood. Loves being in or near a lawn for the water, but overpowers the lawn in 10-20 years.

Ulmus parvifolia. Chinese Elm. Siberian Elm. Roots systems aggressive, subject to bark beetles, leafhoppers, aphids and scale. Dutch Elm disease is now a problem in California. Branch crotches are narrow and easily split.

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References:

U/C/ Cooperative Extension Sacramento County. Sacramento Area Landscape Trees

Sunset New Western Garden Book 2001 Edition

National Arboretum: Book of Outstanding Garden Plants.

Water-Conserving Plants & Landscapes for the Bay Area.

^[1]**Sunset New Western Garden Book 2001 Edition**