

SHADE AND ORNAMENTAL TREES FOR KERN COUNTY LANDSCAPES

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Farm and Home Advisors
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A decorative graphic consisting of a wavy, horizontal band with a yellow-to-orange gradient and a blue outline, positioned above the University of California logo.

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Sunset New Western Garden Book

Botanical Name	Common Name	Area ¹	Mature Size ²	Rate of Growth ³	Longevity ⁴	BVOC Emissions ⁵	Overall Rating ⁶	Features	Faults
<i>DECIDUOUS TREES</i>									
<i>Acer palmatum</i>	Japanese Maple	VP, M	S	M	M	N	2	Fall colors	Not tolerant to heat, drought
<i>Acer saccharinum</i>	Silver Maple	V, M	L	F	M	N	2	Yellow fall color	Sunburn, chlorosis
<i>Albizia julibrissin</i>	Mimosa	V, M, D	S	F	S	N	2	Foliage, flowers	Litter, sunburn, borers
<i>Alnus rhombifolia</i>	White Alder	V, M, R	M	F	M	N	2	Provides deep shade	Caterpillars, scale, borers
<i>Alnus vulgaris</i>	Black Alder	V, M, R	M	F	M	N	2	Provides deep shade	Caterpillars
<i>Bauhinia purpurea</i>	Orchid Tree	VP	M	S	M	U	2	Flowers	Damaged by cold temps
<i>Betula alba</i>	European Birch	V, M, R	S	M	S	N	3	Bark, pendulous growth habit	Borers, dieback, short life
<i>Betula nigra</i>	River Birch	V, M, R	S	M	M	N	2	Cinnamon bark	Limited to ideal sites
<i>Carya illinoensis</i>	Pecan	V, M, D	L	M	L	L	2	Nuts	Aphids, zinc deficiency, nuts
<i>Catalpa bignonioides</i>	Catalpa	V, M, D	M	F	M	L	3	Large leaves, flowers	Litter, dieback
<i>Celtis occidentalis</i>	Common Hackberry	V, D	M	M	L	N	3	Bark	Difficult to establish
<i>Celtis sinensis</i>	Chinese Hackberry	V	M	M	L	U	1	No significant pests	Few
<i>Cephalanthus occidentalis</i>	Buttonwillow	V, M, D	S	M	S	L	1	Flowers, dried flowers	Few
<i>Cercidium floridum</i>	Blue Palo Verde	V, DP	S	F	S-M	L	2	Green bark, yellow flowers	May be injured by cold
<i>Cercis canadensis</i>	Eastern Redbud	M	S	M	S-M	L	1	Buds and flowers	Pods
<i>Cercis occidentalis</i>	Western Redbud	V, M, R	S	M	S	L	2	Buds and flowers, CA native	Pods
<i>Chilopsis linearis</i>	Desert Willow	V, M, D	S	M	M	L	1	Midsummer flowers	Few
<i>Cotinus coggygria</i>	Smoke Tree	V, M, D	S	M	M	N	1	Fine-textured flowers	Few
<i>Diospyros kaki</i>	Persimmon	V	M	S	M	N	2	Fruit, fall colors	Difficult to establish
<i>Elaeagnus angustifolia</i>	Russian Olive	V, M, D	S	M	M	N	1	Foliage, bark, cold tolerance	Few
<i>Fraxinus oxycarpa</i>	Raywood Ash	V, M, D	M	F	M	N	1	Maroon fall color	Dieback reported in N. California surface roots
<i>Fraxinus uhdei</i>	Shamel Ash	V, M, D	L	F	L	N	1	Yellow fall color	Bentley ash moth

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<i>Fraxinus velutina</i>	Arizona Ash	V, M, D	M	F	M	N	2	Yellow fall color	Anthraco-nose, Bentley ash moth, borers
<i>F.v. 'Modesto'</i>	Modesto Ash	V, M, D	M	F	M	N	3	Yellow fall color	Anthraco-nose, Bentley ash moth, borers
<i>Ginkgo biloba</i>	Ginkgo	V, M, D	L	M	L	N	1	Growth habit, fall color	Use male tree to avoid odor
<i>Gleditsia triacanthos inermis</i>	Thornless Honey Locust	V, M, D	M	M	M	N	1	Fine-textured foliage	Litter, pod gall midge (some varieties)
<i>Jacaranda acutifolia</i>	Jacaranda	VP	M	F	M	N	2	Fine-textured foliage, flowers	Damaged by cold temps
<i>Koelreuteria paniculata</i>	Goldenrain Tree	V	S	S	L	L	1	Flowers, pods	Litter, slow growth
<i>Lagerstroemia indica</i>	Crape Myrtle	V	S	S-M	L	N	1	Summer flowers, fall colors	Few
<i>Liquidambar styraciflua</i>	Liquidambar, Sweetgum	V, M	L	M	L	H	1	Fall colors	Use seedless variety to avoid fruit
<i>Liriodendron tulipifera</i>	Tulip Tree	V, M	M	S-M	M	L	2	Tulip-like flowers	Sunburn, not drought tolerant
<i>Magnolia soulangiana</i>	Saucer Magnolia	V, M	S	M	L	L	1	Shape, large spring flowers	Few
<i>Malus ioensis</i>	Crabapple	M	S	M	M	N	2	Spring flowers, fruit	Borers, sunburn, scab disease
<i>Melia azedarach</i>	Texas Umbrella Tree	V, D	S-M	F	M	U	1	Tolerates poor soil	Brittle wood, litter, berries
<i>Morus alba 'Fruitless'</i>	Fruitless Mulberry	V, M, D	L	F	L	N	1	Tolerates heat and poor soil	Often pruned incorrectly
<i>Pistacia chinensis</i>	Chinese Pistache	V, M, D	M	S-M	L	M	1	Fall colors	Use male tree to avoid fruit
<i>Platanus acerifolia</i>	London Plane Tree	V, M, D, R	L	F	L	M	1	Exfoliating bark	Anthraco-nose, mites, lacebugs, litter
<i>Platanus racemosa</i>	California Sycamore	V, M, D, R	L	F	L	M	1	Exfoliating bark, CA native	Anthraco-nose, mites, lacebugs, litter
<i>Populus alba</i>	White Poplar	V, M, D	M	F	S	H	2	White undersides of leaves	Borers, invasive suckers, "cotton"
<i>Populus balsamifera</i>	Balm of Gilead	M	S-M	F	M	H	2	Fragrant leaves	Borers, invasive suckers
<i>Populus fremontii</i>	Fremont Cottonwood	V, M, D	L	F	M	H	2	CA native, drought tolerant	Borers, invasive suckers, "cotton"
<i>Populus nigra italica</i>	Lombardy Poplar	V, M, D	M	F	S	H	3	Columnar shape	Borers, invasive suckers, trunk canker, short life
<i>Prunus cerasifera 'Krauter Vesuvius'</i>	Purple-Leaf Plum	V, M, D	S	M	M	N	1	Purple foliage	Borers, fruit drop
<i>Prunus persica</i>	Flowering Peach	V, M, D	S	M	S	N	2	Flowers, no fruit	Borers, no fruit

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<i>Pyrus calleryana</i>	Evergreen Pear	V, M, D	M	M	M	N	2	Early flowers, fall color	Fireblight
P.c. 'Bradford'	Bradford Pear	V, M, D	M	F	M	N	1	Early flowers, fall color	Fireblight
P.c. 'Aristocrat'	Aristocrat Pear	V, M, D	L	F	M	N	2	Early flowers, fall color	Fireblight (do not use north of Kern Co.)
<i>Pyrus kawakamii</i>	Evergreen Pear	V, M, D	S-M	M	M	N	1	Flowers, growth habit	Few
<i>Quercus coccinea</i>	Scarlet Oak	V, M	M	M	L	H	2	Fall color	Chlorosis
<i>Quercus douglasii</i>	Blue Oak	V, M	M	S	L	H	2	CA native, not usually planted	Root rot
<i>Quercus lobata</i>	Valley Oak	V, M	L	F	L	H	1	CA native, OK w/irrigation	Few
<i>Quercus palustris</i>	Pin Oak	V, M	M	F	L	H	2	Fall color	Chlorosis
<i>Quercus robur</i>	English Oak	V	M	M	L	H	1	Growth form	Few
<i>Quercus rubra</i>	Red Oak	V, M	M	M	L	H	2	Fall color	Chlorosis
<i>Robinia ambigua</i>	Idaho Locust	V, D	M	F	M	M	2	Flowers, drought tolerant	Aggressive roots
<i>Sapium sebiferum</i>	Chinese Tallow Tree	V, M, D	M	F	M	N	1	Fall color	Small cream-colored berries
<i>Ulmus parvifolia</i>	Chinese Elm	V, D	L	F	M	N	1	Bark	Occasional unknown vascular wilt, seeds
<i>Ulmus pumila</i>	Siberian Elm	V, M, D	L	F	M	N	2	Tolerates heat, cold, poor soil	Elm leaf beetle, seeds
<i>Vitex agnus-castus</i>	Chaste-Tree	V, M, D	S	M	L	N	1	Summer flowers	Litter of flowers, twiggly growth
<i>Zelkova serrata</i>	Sawleaf Zelkova	V, M, D	L	M	L	N	1	Fall colors, elm-like appearance	Spider mites
<i>Zizyphus jujuba</i>	Jujube, Chinese Date	V, M, D	S	M	L	N	1	Zigzag branches, edible fruit	Litter of fruit

BROAD-LEAVED EVERGREEN TREES

<i>Acacia melanoxylon</i>	Black Acacia	V	M	F	S	N	3	Tolerates heat	Pod litter, brittle, chlorosis
<i>Araucaria araucana</i>	Monkey-Puzzle	V	L	M	L	U	3	Unusual foliage and form	Large fruit that can fall and cause injury
<i>Araucaria bidwillii</i>	Bunya-Bunya	V	L	M	L	U	3	Unusual foliage and form	Scale

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<i>Arbutus unedo</i>	Strawberry Tree	V	S	S	L	N	2	Flowers, fruit, red bark	Slow growth
<i>Brachychiton populneus</i>	Bottle Tree	V	M	S-M	M	L	2	Trunk shape	Brittle wood, litter
<i>Callistemon viminalis</i>	Weeping Bottlebrush	V	S	S	M	M	1	Flowers, pendulous shape	Few
<i>Ceratonia siliqua</i>	Carob, St. John's Bread	V	M	M	L	M	1	Compound leaves, fruit	Litter of pods (female trees)
<i>Cinnamomum camphora</i>	Camphor Tree	V	M	S	L	N	2	Form	Chlorosis
<i>Citrus aurantifolia</i> 'Bearss'	Bearss Lime	VP	S	M	L	M	2	Fruit	Scale, root rot, sensitive to cold
<i>Citrus limon</i>	Lemon	VP	S-M	M	L	M	2	Fruit, check varietal adaptability	Scale, root rot
<i>Citrus nobilis</i>	Tangerine	VP	S-M	M	L	M	2	Fruit, check varietal adaptability	Scale, root rot
<i>Citrus paradisi</i>	Grapefruit	VP	M	M	L	M	2	Fruit, check varietal adaptability	Scale, root rot
<i>Citrus sinensis</i>	Orange	VP	M	M	L	M	2	Fruit, check varietal adaptability	Scale, root rot
<i>Eriobotrya japonica</i>	Loquat	V	S-M	M	M	N	2	Fruit	Fireblight, litter
<i>Eucalyptus</i> (many species)	Eucalyptus	V, D	M-L	F	L	H	2	Very fast growth, firewood	Litter, borers, lerp psyllid, large size
<i>Grevillea robusta</i>	Silk Oak	V	L	F	M	L	2	Foliage, flowers	Litter, brittle wood, large size
<i>Ligustrum lucidum</i>	Japanese Privet	V, M, D	S-M	F	L	N	2	Foliage, flowers	Few, usually grown as a shrub
<i>Magnolia grandifolia</i>	Magnolia	V	M-L	M	M	L-M	2	Foliage, flowers	Root rot, decline
<i>Parkinsonia aculeata</i>	Mexican Palo Verde	VP, DP	S	M	M	L	3	Flowers, green bark	Litter of pods and flowers
<i>Photinia serrulata</i>	Chinese Photinia	V	S	M	L	N	1	Spring flowers	Few
<i>Prunus caroliniana</i>	Carolina Cherry	V	S-M	F	M	N	1	Spring flowers	Borers
<i>Prunus lyonii</i>	Catalina Cherry	V	S	F	M	N	1	Spring flowers	Borers
<i>Quercus agrifolia</i>	Coast Live Oak	V	L	M	M	H	3	CA native	Leaf galls, root rot, decline
<i>Quercus ilex</i>	Holly Oak	V	M	M	L	H	1	Foliage	Few
<i>Quercus suber</i>	Cork Oak	V	M-L	M	L	N	1	Cork bark	Few
<i>Quercus virginiana</i>	Southern Live Oak	V	M	M	L	H	1	Form	Few
<i>Quercus wislizenii</i>	Interior Live Oak	V, M	L	S	L	H	2	CA native, not usually planted	Galls, root rot

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<i>NEEDLE-EVERGREEN TREES</i>									
<i>Abies concolor</i>	White Fir	M>6000 ft.	L	S-M	L	L	3	Pyramidal shape	Few where naturally growing
<i>Casuarina cunninghamiana</i>	Beefwood, She-oak	V, D	M	F	L	U	2	Windbreak plant, drought tolerant	Few
<i>Cedrus atlantica</i>	Atlas Cedar	V, M	L	S-M	L	L	2	Growth form	Few
<i>Cedrus deodara</i>	Deodar Cedar	V, M, D	L	F	L	L	1	Growth form	Few
<i>Cedrus libani</i>	Cedar of Lebanon	V, M	L	S-M	L	L	2	Growth form	Few
<i>Cupressocyparis leylandii</i>	Leyland Cypress	V, M, D	S	F	S	L	3	Pyramidal screen	Disease kills at 12 – 15 years
<i>Cupressus arizonica</i>	Arizona Cypress	V, M, D	S	F	M	L	2	Bark, bluish foliage, drought tolerant	Seridium canker kills branches where trees are stressed
<i>Cupressus forbesii</i>	Tecate Cypress	V, M, D	S-M	M	L	L	1	Dense foliage	Few
<i>Cupressus sempervirens</i>	Italian Cypress	V, M, D	M	M	L	L	1	Columnar shape	Few
<i>Libocedrus decurrens</i>	Incense Cedar	M	M	M-F	L	U	2	Fragrant wood	Few, shorter life in V or D
<i>Picea pungens</i>	Colorado Spruce	M>5000 ft.	M	S-M	M	L-M	3	Shape, color	Canker at low elevations
<i>Pinus canariensis</i>	Canary Island Pine	V	L	F	M	L	1	Shape	Needle litter
<i>Pinus eldarica</i>	Mondell Pine	V, D	M	F	M	M	2	Tolerates heat and drought	Possible unidentified disease
<i>Pinus halepensis</i>	Aleppo Pine	V, M, D	M-L	F	L	L	1	Tolerates heat and drought	Few
<i>Pinus nigra</i>	Austrian Pine	M>4000 ft.	M	M	M	L	1	Dense, full foliage	Few in proper site
<i>Pinus pinea</i>	Italian Stone Pine	V	M-L	M	L	L	1	Round shape	Few
<i>Pinus thunbergii</i>	Japanese Black Pine	V	S	M	M	L	3	Angular growth	Borers, sunburn
<i>Sequoiadendron gigantea</i>	Giant Sequoia	M>5000 ft.	L	M	L	N	3	Size	Few if in proper site
<i>Sequoia sempervirens</i>	Coast Redwood	V, M	L	F	S-L	N	3	Size, shape	Not well adapted to Valley conditions despite being widely planted. Browning of foliage is common
<i>Tamarix aphylla</i>	Athel Tree	V, D	L	F	M	N	3	Windbreak, very drought tolerant	Very invasive

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Tamarix parvifolia	Tamarisk	V, D	S-M	M	M	N	2	Screen, very drought tolerant	Invasive with irrigation
Thuja orientalis	Chinese Arborvitae	V, M, D	M	S-M	L	L	1	Screen	Scale, sooty mold
<i>PALMS AND OTHER SUBTROPICALS</i>									
Chamaerops humilis	Mediterranean Fan Palm	V	S	M	M	U	1	Multi-trunk form	Few
Phoenix canariensis	Canary Island Date Palm	V	M	F	M-L	L-M	1	Form, large fronds	Damaged by cold temps
Syagrus romanzoffianum	Queen Palm	V	S-M	M	M	L-M	2	Trunk, leaves	Yellows fronds after a cool winter
Trachycarpus fortunei	Windmill Palm	V	S	M	L	U	1	Trunk	Few
Washingtonia filifera	California Fan Palm	V	L	F	L	L-M	1	Fan leaves, CA native	Dead leaves harbor rodents
Washingtonia robusta	Mexican Fan Palm	V	L	F	L	L-M	1	Fan leaves, narrow trunk	Dead leaves harbor rodents

¹Geographic areas where tree is adapted: V = Valley, M = Mountain, D = Desert, R = Riparian
 VP = Valley, Protected/Warm Winter Locations (e.g. Bakersfield College Area)
 DP = Desert, Protected Locations

²Mature Size: L = Large ~ > 50 ft., M = Medium ~ 20-50 ft., S = Small ~ < 20 ft.

³Rate of Growth: F = Fast, M = Medium, S = Slow
 Growth rates are relative and assume plants are irrigated.
 In general, deciduous trees grow faster than needle evergreens or palms.

⁴Longevity: L = Long ~ > 30 yr, M = Medium ~ 15-30 yr, S = Short ~ < 15 yr
 In general, tree lifespan tends to be shorter in Kern County than what would be expected in the northern and eastern U.S., both for individual species and the urban forest as a whole.

⁵BVOC emissions contribute to photochemical smog.
 N = Negligible, L = Low, M = Medium, H = High, U = Unknown

⁶Rating: General adaptability to irrigated conditions in the geographic areas indicated for planting. Varietal differences may be important.
 1 = Well-adapted 2 = Plant after consideration 3 = Serious limitations; plant with caution