



Front Range Tree Recommendation List®

This revised Front Range Tree Recommendation List was developed through the collaborative efforts of 16 individuals each representing a different aspect of Colorado's Green Industry. Green Industry organizations represented included American Society of Landscape Architects (ASLA); Colorado Nursery and Greenhouse Association (CNGA); municipal arborists representing the Colorado Tree Coalition and International Society of Arboriculture, Colorado State University (CSU) Extension, Denver Botanic Gardens (DBG), Colorado State Forest Service (CSFS) and Colorado Arborists and Lawn Care Professionals (CALCP). Based on the committee's collective education, knowledge and experience over 211 trees or varieties were evaluated and rated, resulting in a single reference list for professionals to use and share with customers or residents.

The purpose of this project was to update and expand an original list creating a Front Range Tree list for use by Green Industry professionals based on decades of actual experience growing and caring for trees in our area. The list is intended to assist those involved in the buying, growing, selling, selection, siting and specification of trees, with the ultimate goal of a healthy, diverse and geographically appropriate landscape and urban forest. The ratings apply to the Colorado Front Range, generally defined as the region from Colorado Springs to the Wyoming border and from the foothills to the eastern plains.

The initial list of evaluated trees was based on a compilation of six 2023 Front Range Nursery Catalogs plus recommendations from committee members. The group evaluated each tree based upon five different critical factors and eight cautionary cultural factors along with three other categories. After evaluating each tree based on these critical, cautionary and other categories, each tree was placed in one of four categories or placed in a non-recommended list.

RECOMMENDED

A tree is recommended if it has consistently displayed no serious vitality issues related to any of the critical factors.

RECOMMENDED FOR MOST SITES

A tree in this category is generally recommended for most sites but may have one vitality issue to one of the critical factors or have a cautionary problem.

CONDITIONALLY RECOMMENDED

A tree is conditionally recommended if it has consistently displayed serious vitality issues related to one or more critical factors and one or more cautionary factors. Some of these critical and cultural factors can be mitigated through proper horticultural care.

TREES WITH POTENTIAL

A tree with potential is often offered for sale and has the potential to do well here (USDA Hardiness Zone Rating of 5 or below) but the committee felt it has less than ten years of experience growing and maintaining a significant population of the trees in this area. The intention is to move these trees into one of the other categories based upon collective experience of list users.

NOT RECOMMENDED

A tree is not recommended if it has consistently displayed overwhelming vitality issues related to several of the critical factors or can be expected to do poorly under normal circumstances.

Also added to this revised list is the category of Colorado Native. Under water use, low water use would designate it is a xeric or water wise woody plant.

When using this list to assist in tree selection for a specific planting location, a site analysis relating to cultural factors,

including a soil test to determine pH, texture and composition should be performed. We assume the list users are aware of the physical attributes of these trees (mature size, fall color, growth habit, texture, flowers, fruit etc.) or have access to that information.

The Front Range Tree Recommendation List® is downloadable on the websites of CNGA, ASLA, CTC, CALCP, ISA, CSU Extension, and Colorado State Forest Service, the hard copy document was paid for with contributions from some of the collaborating organizations and nurseries.

COMMITTEE MEMBERS:

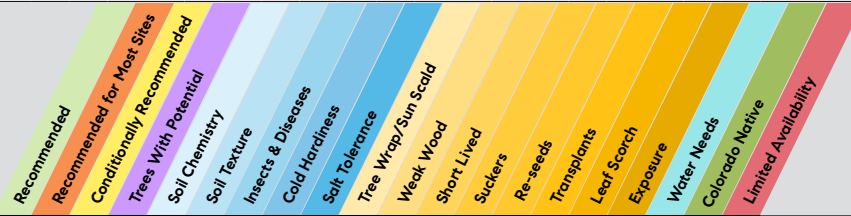
- Landscape Architects – ASLA – Don Godi
- Nursery person – CNGA – Stan Brown, Matt Ruud, Keith Williamson, David Dickey, Debi Borden-Miller
- CSU Representatives – CSU Extension – Jim Klett, David Staats, Eric A. Hammond, Alison O'Connor and Daniel Burcham
- Municipal Arborists – CTC, CALCP and ISA – Luke Killoran, City of Lakewood; Ben Rickenbacker, City and County of Denver; Freddie Haberecht, City of Fort Collins
- Denver Botanic Gardens – Elena Shtern
- Colorado State Forest Service (CSFS) – Kamie Long



COLORADO STATE UNIVERSITY
EXTENSION



DECIDUOUS ALPHA — BOTANICAL



Plant Nomenclature from <i>World Flora Online</i>															COMMENTS			
Botanical Name	Variety or Common Name	RATING	CRITICAL			CAUTIONARY						OTHER		COMMENTS				
Acer	Maple																	
<i>Acer campestre</i>	Hedge	X				X									I-m	X	Variable hardness from seed; prone to winter dieback in hard early freezes	
<i>Acer tataricum</i> subsp. <i>ginnala</i>	Amur/Ginnala – ‘Flame’	X		X			X		X			X			I-m		Can develop chlorosis in alkaline soils	
<i>Acer glabrum</i>	Rocky Mountain	X			X										m-h	X	Prefers more moisture	
<i>Acer grandidentatum</i>	Bigtooth	X													I-m	X	X	
<i>Acer saccharum</i> subsp. <i>grandidentatum</i>	Bigtooth – ROCKY MOUNTAIN GLOW®, HIGHAND PARK®	X					X								I-m		X	Tree forms
<i>Acer griseum</i>	Paperbark			X			X					X		X	m		X	Needs a protected site; does not transplant well when bare-rooted
<i>Acer miyabei</i>	Miyabe	X					X			X					I-m			Variable hardness
<i>Acer negundo</i>	Boxelder ‘Sensation’	X							X						I-m	X		Tolerant of alkaline soils; male tree so no boxelder bugs
<i>Acer platanoides</i>	Norway – ‘Columnare’, ‘Crimson King’, ‘Crimson Sentry’, ‘Deborah’, EMERALD LUSTER®, ‘Emerald Queen’, ‘Fairview’, ‘Royal Red’	X							X					X	m			<i>Acer platanoides</i> is prone to sunscald and leaf scorch in hot dry sites
<i>Acer rubrum</i>	Red – ‘Autumn Flame’, REDPOINTE®, RED SUNSET®		X	X			X	X							m			Chlorosis; <i>Acer rubrum</i> needs an acidic soil
<i>Acer saccharum</i>	Sugar – GREEN MOUNTAIN®, LEGACY®, FALL FIESTA®	X			X	X		X	X						m			<i>Acer saccharum</i> prefers well drained, neutral to acidic soils
<i>Acer saccharum</i>	Sugar – Caddo ‘John Pair’, ‘Autumn Splendor’, FLASH FIRE®	X					X		X					X	I-m			Tolerant of alkaline soils
<i>Acer tataricum</i>	Tatarian	X								X		X			I-m		X	
<i>Acer tataricum</i>	Tatarian HOT WINGS®	X								X		X			I-m			Plant Select®
<i>Acer truncatum</i> x <i>platanoides</i>	NORWEGIAN SUNSET®, CRIMSON SUNSET®, PACIFIC SUNSET®			X			X		X						I-m		X	Prone to winter dieback and early hard freezes
Aesculus	Buckeye/Horsechestnut																	
<i>Aesculus glabra</i> var. <i>arguta</i>	Texas Buckeye (Western Buckeye)		X												I-m		X	More heat tolerant than the species
<i>Aesculus glabra</i>	Ohio Buckeye	X					X				X		X		m			Some chlorosis; prone to leaf scorch in hot dry sites
<i>Aesculus hippocastanum</i>	Common Horsechestnut	X					X	X					X		m		X	
<i>Aesculus flava</i>	Yellow Buckeye	X											X		m		X	
<i>Aesculus</i> x <i>carnea</i>	‘Briotti’, Fort McNair’			X			X	X	X				X		m		X	
Alnus	Alder																	
<i>Alnus glutinosa</i>	European			X		X									m-h		X	
<i>Alnus incana</i> subsp. <i>tenuifolia</i>	Thinleaf/ Mountain	X				X				X		X			m-h	X		Leaf miner; leaf scorch in hot dry sites
Amelanchier	Serviceberry																	
<i>Amelanchier alnifolia</i>	Saskatoon	X								X					I-m			Large shrub; best used as multi-stem
<i>Amelanchier canadensis</i>	Shadblow	X								X					I-m		X	Best used as multi-stem
<i>Amelanchier laevis</i>	Allegheny			X						X					m		X	Available in tree or shrub form
<i>Amelanchier</i> x <i>grandiflora</i>	‘Autumn Brilliance’	X			X					X					m			Available in tree or shrub form; prefers acid soil; develops chlorosis in alkaline soils; prone to basal suckering.
Betula	Birch																	
<i>Betula nigra</i>	River – HERITAGE®		X	X		X	X			X					m-h			Develops chlorosis in alkaline soils; bronze birch borer
<i>Betula occidentalis</i>	Rocky Mountain/ Water	X				X				X					m-h	X		Best as a multi-stem
<i>Betula pendula</i>	European White – ‘Gracilis’		X			X				X					m-h			Bronze birch borer
<i>Betula platyphylla</i>	Asian White – ‘Whitespire’, DAKOTA PINNACLE®, PARKLAND PILLAR®		X			X				X					m-h			Bronze birch borer

DECIDUOUS ALPHA — BOTANICAL

Recommended
Recommended for Most Sites
Conditionally Recommended
Trees With Potential
Soil Chemistry
Soil Texture
Insects & Diseases
Cold Hardiness
Salt Tolerance
Tree Wrap/Sun Scald
Weak Wood
Short Lived
Suckers
Re-seeds
Transplants
Leaf Scorch
Exposure
Water Needs
Colorado Native
Limited Availability

Plant Nomenclature from *World Flora Online*

COMMENTS

Botanical Name	Variety or Common Name	RATING	CRITICAL	CAUTIONARY	OTHER	COMMENTS	
Carpinus	Hornbeam						
<i>Carpinus betulus</i>	European – ‘Frans Fontaine’		X	X	X m	Needs protected site	
<i>Carpinus betulus</i>	‘Fastigiata’	X		X	X m	Needs protected site	
<i>Carpinus caroliniana</i>	American hornbeam		X	X	X m	Moderate water,needs protected site	
Carya	Hickory						
<i>Carya illinoensis</i>	Pecan		X		X X m	Not reliable fruit set	
Catalpa	Catalpa					Fall cleanup consideration for all species	
<i>Catalpa ovata</i>	Chinese		X	X	I-m	X	
<i>Catalpa speciosa</i>	Northern/ Western, HEARTLAND®	X		X	I-m		
Celtis	Hackberry						
<i>Celtis occidentalis</i>	Common Hackberry, PRAIRIE SENTINEL®	X		X	X	I-m	Weak Wood; Animal Damage; Nipple Gall cosmetic
Cercis	Redbud					All species need protected site	
<i>Cercis canadensis</i>	Eastern	X		X	X m	Northern seed source	
<i>Cercis canadensis</i>	Eastern – ‘Alba’, ‘Forest Pansy’		X	X	X m	X	
<i>Cercis canadensis</i>	‘Ruby Falls’		X	X	X m		
Cercidiphyllum	Katsura						
<i>Cercidiphyllum japonicum</i>	Katsura Tree		X		m	X	Needs protected site
Cladrastis	Yellowwood						
<i>Cladrastis kentukea</i>	American Yellowwood	X		X X	X m	X	
Cornus	Dogwood						
<i>Cornus controversa</i>	Giant – ‘June Snow’		X		X m	X	
<i>Cornus mas</i>	Cornelian Cherry, ‘Golden Glory’	X			m	X	Best used as multi-stem
Corylus	Hazelnut						
<i>Corylus colurna</i>	Turkish Filbert/Hazelnut	X			X	I-m	X
Crataegus	Hawthorn						
<i>Crataegus crus-galli</i>	Cockspur var. <i>inermis</i>	X		X	I-m		Plant Select®
<i>Crataegus ambigua</i>	Russian	X		X	I		
<i>Crataegus douglasii</i>	River/Douglas	X	X	X	m X	X	Rust is an issue
<i>Crataegus laevigata</i>	English – ‘Crimson Cloud’	X	X		m	X	Fire blight
<i>Crataegus mollis</i>	Downy	X	X		I-m	X	Rust
<i>Crataegus x mordenensis</i>	‘Toba’	X	X	X	m		
<i>Crataegus phaenopyrum</i>	Washington	X	X		m		Fire blight
<i>Crataegus viridis</i>	Green – ‘Winter King’	X			I-m		Preferred Hawthorn for CO
Fagus	Beech						
<i>Fagus sylvatica</i>	European Beech, ‘Riversi’, ‘Dawcyk Purple’		X	X	X m	X	Best in well drained soils
Ginkgo	Ginkgo						
<i>Ginkgo biloba</i>	Ginkgo/ Maidenhair Tree, ‘Princeton Sentry’, ‘Autumn Gold’	X	X	X	X m	X	Plant male cultivar; slow to establish
Gleditsia	Honeylocust						
<i>Gleditsia triacanthos</i>	Thornless Common – NORTHERN ACCLAIM®	X	X	X	I-m	X	Wrap young trees
<i>Gleditsia triacanthos</i>	Thornless Common – IMPERIAL®, SHADEMASTER®, SKYLINE®	X	X	X	I-m		Wrap young trees
<i>Gleditsia triacanthos</i>	Thornless Common – SUNBURST®	X	X	X	I-m		Wrap young trees; overplanted variety

DECIDUOUS ALPHA — BOTANICAL

Recommended
 Recommended for Most Sites
 Conditionally Recommended
 Trees With Potential
 Soil Chemistry
 Soil Texture
 Insects & Diseases
 Cold Hardiness
 Salt Tolerance
 Tree Wrap/Sun Scald
 Weak Wood
 Short Lived
 Suckers
 Re-seeds
 Transplants
 Leaf Scorch
 Exposure
 Water Needs
 Colorado Native
 Limited Availability

Plant Nomenclature from *World Flora Online*

COMMENTS

Botanical Name	Variety or Common Name	RATING	CRITICAL	CAUTIONARY	OTHER	COMMENTS
Gymnocladus	Coffeetree					
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree	X			I-m	Pods on female messy
<i>Gymnocladus dioicus</i>	Kentucky Coffeetree – ESPRESSO®, DECAF®, SKINNY LATTE™, PRAIRIE TITAN™	X			I-m	Seedless cultivars
Koelreuteria	Chinese lantern tree					
<i>Koelreuteria paniculata</i>	Goldenraintree	X		X	I	Reseeds aggressively
Liquidambar	Sweetgum					
<i>Liquidambar styraciflua</i>	American Sweetgum		X	X	m	X Needs a well drained soil; Protected placement
Liriodendron	Tuliptree					
<i>Liriodendron tulipifera</i>	Tuliptree	X		X	m	X
<i>Liriodendron tulipifera</i>	Tuliptree, EMERALD CITY®		X	X	m	
Maackia	Maackia					
<i>Maackia amurensis</i>	Amur Maackia		X		I-m	X
Maclura						
<i>Maclura pomifera</i>	Osage Orange 'White Shield'		X		I-m	X Use thornless, seedless variety; dieback can be an issue
Magnolia	Magnolia					
<i>Magnolia acuminata</i>	Cucumber tree		X		m	X
<i>Magnolia x soulangiana</i>	Saucer	X		X	m	Exposure & elevation affect flowering; needs protected placement
Malus	Fruit Apple					All varieties subject to codling moth & fireblight
<i>Malus</i> varieties	HoneyCrisp, McIntosh, Red Delicious, Sweet Sixteen, Zestar	X	X		m	
Malus	Crabapple					Fireblight possible in all varieties
<i>Malus</i> 'Adirondack'	Adirondack	X	X		I-m	X Upright branching
<i>Malus</i> x 'Branzam'	BRANDYWINE®	X	X		I-m	Large messy fruits
<i>Malus</i> x 'Coralcole'	CORALBURST®	X			I-m	Disease resistant
<i>Malus</i> 'Dolgo'	Dolgo	X	X		I-m	X Messy fruit
<i>Malus</i> 'Gladiator'	Gladiator	X	X		I-m	Columnar form; purple leaf
<i>Malus</i> 'Indian Magic'	Indian Magic	X	X	X	I-m	Poor structure
<i>Malus</i> 'Louisa'	Louisa	X	X		I-m	Weeping form
<i>Malus</i> 'Prairiefire'	Prairiefire	X	X		I-m	
<i>Malus</i> 'Prairie Rose'	Prairie Rose		X		I-m	X Fruitless
<i>Malus</i> 'Radiant'	Radiant	X			I-m	
<i>Malus</i> 'Red Barron'	Red Barron	X	X		I-m	Upright form
<i>Malus</i> 'JFS-KW5'	ROYAL RAINDROPS®	X			I-m	
<i>Malus sargentii</i>	Sargent	X	X		I-m	Shrubby form; higher resistance to fireblight
<i>Malus sargentii</i> 'Tina'	Sargent Tina	X			I-m	Dwarf form; higher resistance to fireblight
<i>Malus</i> 'Spring Snow'	Spring Snow	X	X		I-m	Fruitless
<i>Malus</i> 'Thunderchild'	Thunderchild	X			I-m	
Morus	Mulberry					
<i>Morus alba</i>	White Mulberry 'Chaparral'	X	X	X	m	Weeping form; some dieback

DECIDUOUS ALPHA — BOTANICAL

Recommended
 Recommended for Most Sites
 Conditionally Recommended
 Trees With Potential
 Soil Chemistry
 Soil Texture
 Insects & Diseases
 Cold Hardiness
 Salt Tolerance
 Tree Wrap/Sun Scald
 Weak Wood
 Short Lived
 Suckers
 Re-seeds
 Transplants
 Leaf Scorch
 Exposure
 Water Needs
 Colorado Native
 Limited Availability

Plant Nomenclature from <i>World Flora Online</i>																COMMENTS		
Botanical Name	Variety or Common Name	RATING			CRITICAL				CAUTIONARY				OTHER					
Ostrya	Hophornbeam																	
<i>Ostrya virginiana</i>	American Hophornbeam				X												X	X
Phellodendron	Corktree																	
<i>Phellodendron amurense</i>	Amur corktree				X			X									m	X
Platanus	Planetree																	
<i>Platanus x acerifolia</i>	London Planetree 'EXCLAMATION!®'		X				X	X		X						X	m-h	Anthracnose
<i>Platanus occidentalis</i>	American sycamore		X				X	X		X						X	m-h	X Anthracnose
Populus	Poplar (cottonwood)																	
<i>Populus angustifolia</i>	Narrowleaf		X				X			X	X	X					l-m	X Vigorous suckering; forms colonies. Use in native areas only
<i>Populus deltoides</i>	Eastern		X				X			X	X	X					m-h	Too big for small yards; Choose male cultivar
<i>Populus deltoides</i> subsp. <i>monilifera</i>	Plains 'Jeronimus'	X															m	X Too big for small yards; Choose male cultivar
<i>Populus tremula</i> 'Erecta'	Upright European, Aspen			X			X			X	X						m	Unique form; prone to many diseases and insects
<i>Populus tremuloides</i>	Quaking Aspen			X			X			X	X						m	X Better at 7800' +; chlorosis at lower elevations; prone to many diseases & insects
<i>Populus tremuloides</i>	PRAIRIE GOLD®				X		X			X	X						m	Reported to do better at lower elevations
<i>Populus x acuminata</i>	Lanceleaf	X								X	X						m	X Too big for small yards; Plant male cultivar
<i>Populus x acuminata x sargentii</i>	Highland		X				X			X	X						m	X Too big for small yards
Prunus	Fruiting types																	
<i>Prunus armeniaca</i>	Apricot-Chinese	X														X	m	X Great ornamental; seldom sets fruit along the Front Range
<i>Prunus armeniaca</i>	Apricot 'Moongold', 'Moorpark'	X															m	X Great fall color; seldom sets fruit along the Front Range
<i>Prunus cerasus</i> 'Evans Bali'	Sour Cherry- Evans Bali		X														m	Sour cherry
<i>Prunus avium</i> 'Bing'	Bing		X				X									X	m	X Seldom sets fruit along the front range; needs a cross pollinizer
<i>Prunus avium</i> 'Stella Compact'	Stella Compact		X				X									X	m	X Seldom sets fruit along the front range
<i>Prunus cerasus</i>	Cherry – 'Montmorency', 'North Star'	X					X										m	North Star = dwarf form 10' x 10'
<i>Prunus persica</i> 'Elberta', 'Polly', 'Red Haven'	Peach – Elberta, Polly, Red Haven		X				X									X	m	Unreliable fruit set along the front range
<i>Prunus persica</i> 'Reliance', 'Veteran', 'Contender'	Peach – Reliance, Veteran, Contender		X				X									X	m	Later blooming; more reliable fruit set
<i>Prunus</i> 'Mount Royal'	Plum – Mount Royal	X															m	Self fruitful plum
<i>Prunus salicina</i> 'Santa Rosa'	Plum – Santa Rosa	X					X									X	m	Needs a cross pollinizer
<i>Prunus</i> 'Stanley'	Plum- Stanley	X					X									X	m	Self-fertile plum
<i>Prunus</i> 'Superior'	Plum-Superior	X					X									X	m	Needs a cross pollinizer
<i>Prunus</i> 'Toka'	Plum – Toka		X				X									X	m	Needs a cross pollinizer
Prunus	Ornamental types																	
<i>Prunus cerasifera</i> 'Newport'	Newport Plum (Kankakee strain)		X				X			X							m	Upright form; borers
<i>Prunus cerasifera</i> 'Newport'	Newport Plum		X				X			X							m	Rounded form; borers
<i>Prunus cerasifera</i> 'Frankthrees'	Plum – MT. ST. HELENS®		X				X			X							m	Sport of 'Newport'
<i>Prunus maackii</i>	Amur Chokecherry			X			X									X	m	X Root diseases if too wet; Susceptible to frost cracking
<i>Prunus nigra</i> 'Princess Kay'	Plum 'Princess Kay'		X							X							l-m	Plant Select® variety; suckers when mature
<i>Prunus padus</i>	European Birdcherry	X								X						X	m	Some breakage after storms; prolific flowering

DECIDUOUS ALPHA — BOTANICAL

- Recommended
- Recommended for Most Sites
- Conditionally Recommended
- Trees With Potential
- Soil Chemistry
- Soil Texture
- Insects & Diseases
- Cold Hardiness
- Salt Tolerance
- Tree Wrap/Sun Scald
- Weak Wood
- Short Lived
- Suckers
- Re-seeds
- Transplants
- Leaf Scorch
- Exposure
- Water Needs
- Colorado Native
- Limited Availability

Plant Nomenclature from World Flora Online

Plant Nomenclature from World Flora Online		RATING	CRITICAL	CAUTIONARY	OTHER	COMMENTS	
Botanical Name	Variety or Common Name						
Prunus		Ornamental types					
<i>Prunus padus</i>	European Birdcherry – SUMMER GLOW®, 'Merlot'	X		X	m	X Red leaf form; good alternative to Canada Red; some breakage after storms;	
<i>Prunus sargentii</i>	'Pink Flare'		X		X m		
<i>Prunus virginiana</i>	Common Chokecherry – 'Canada Red', 'Schubert'	X	X	X X X	l-m	Tree form suckers; best as shrub	
<i>Prunus x fontanesiana</i>	Plum – Des Fontaines		X		m	X Zone 3 ornamental cherry; long lived for a <i>Prunus</i>	
<i>Prunus x 'P002S' (PP25,767)</i>	Prunus- SUCKER PUNCH®	X			l-m	X Plant Select® variety; suckers less than Canada Red	
Pyrus		Pear					All Pyrus subject to Fireblight
<i>Pyrus</i>	Pear – 'Bartlett', 'Early Gold', 'Golden Spice', 'Luscious', 'Parker', 'Summercrisp'	X	X		l-m	Fruiting varieties; Needs a cross pollinizer.	
<i>Pyrus calleryana</i>	Callery – 'Aristocrat', CHANTICLEER® (aka 'Cleveland Select'), 'Autumn Blaze', 'Redspire'	X			l-m	Ornamental varieties	
<i>Pyrus calleryana</i>	Jack™	X	X		l-m	Rounded, compact habit	
<i>Pyrus calleryana</i>	Callery – 'Capital', JAVELIN®	X	X		l-m	Narrow form	
<i>Pyrus ussuriensis</i>	Ussurian – 'Prairie Gem', 'Mt. Frost'	X	X		l-m	X More cold hardy than <i>P. calleryana</i>	
Quercus		Oak					
<i>Quercus acutissima</i>	Sawtooth		X X		l-m	X	
<i>Quercus alba</i>	White	X	X X	X	l-m	X Develops chlorosis in alkaline soils	
<i>Quercus bicolor</i>	Swamp White	X	X	X	m	Can develop some chlorosis in alkaline soils	
<i>Quercus buckleyi</i>	Texas Red	X		X	l	X Many seed sources not predictably hardy	
<i>Quercus gambelii</i>	Gambel	X	X	X	l	X Shrubby habit; susceptible to galls.	
<i>Quercus imbricaria</i>	Shingle		X X	X	l-m	X X Develops chlorosis in alkaline soils	
<i>Quercus macrocarpa</i>	Bur	X	X		l-m	Susceptible to galls	
<i>Quercus macrocarpa</i>	'Urban Pinnacle'	X	X		l-m	Narrow form; susceptible to gamble oak borer	
<i>Quercus muehlenbergii</i>	Chinkapin	X			l-m	X	
<i>Quercus robur</i>	English	X	X		l-m	Susceptible to gamble oak borer	
<i>Quercus robur</i>	English 'Columnaris'	X	X X		l-m	Susceptible to gamble oak borer	
<i>Quercus robur x macrocarpa</i>	HERITAGE®	X			l-m	Most resistant to galls; vigorous growth	
<i>Quercus rubra</i>	Red	X	X	X	m	Develops chlorosis in alkaline soils	
<i>Quercus shumardii</i>	Shumard	X			l-m	From a northern source	
<i>Quercus undulata</i>	Wavyleaf	X			l	X X Shrubby habit	
<i>Quercus alba x robur</i>	CRIMSON SPIRE®, STREETSPIRE®	X			l-m	Columnar forms	
<i>Quercus robur x bicolor</i>	REGAL PRINCE®, KINDRED SPIRIT®	X			l-m	KINDRED SPIRIT® most narrow columnar oak	
Salix		Willow					All species susceptible to aphids and cankers
<i>Salix alba</i>	Niobe Weeping – 'Tristis'	X	X	X	h		
<i>Salix alba</i>	Russian Golden – 'Vitellina'	X	X	X	h	X	
<i>Salix amygdaloides</i>	Peachleaf	X	X	X	l-m	X X More common as a multistem	
<i>Salix x 'Prairie Cascade'</i>	Prairie Cascade, Weeping	X		X	h		
Styphnolobium (Sophora)		Pagodatree					
<i>Styphnolobium (Sophora) japonica</i>	Japanese Pagodatree, Millstone™	X	X X	X X	X m	X Canker	

DECIDUOUS ALPHA — BOTANICAL

- Recommended
- Recommended for Most Sites
- Conditionally Recommended
- Trees With Potential
- Soil Chemistry
- Soil Texture
- Insects & Diseases
- Cold Hardiness
- Salt Tolerance
- Tree Wrap/Sun Scald
- Weak Wood
- Short Lived
- Suckers
- Re-seeds
- Transplants
- Leaf Scorch
- Exposure
- Water Needs
- Colorado Native
- Limited Availability

Plant Nomenclature from <i>World Flora Online</i>																			COMMENTS
Botanical Name	Variety or Common Name	RATING			CRITICAL				CAUTIONARY						OTHER				
Sorbus		Mountain-ash																	Fireblight possible on all species
<i>Sorbus intermedia</i>	Swedish Whitebeam			X						X							m	X	
<i>Sorbus aucuparia</i>	European	X				X				X							m		
<i>Sorbus aucuparia</i>	European – CARDINAL ROYAL®	X				X				X							m		
<i>Sorbus x hybrida</i>	Oak Leaf			X						X							m	X	More resistant to fireblight
Syringa		Lilac																	
<i>Syringa reticulata</i> subsp. <i>pekinensis</i>	Peking – ‘Summer Charm’	X															l-m		Attractive copper-colored peeling bark
<i>Syringa reticulata</i>	Japanese – ‘Ivory Silk’	X															l-m		
Tilia		Linden																	
<i>Tilia americana</i>	American- American Sentry™, ‘Redmond’	X						X						X			m		Less preferred by Japanese beetle
<i>Tilia cordata</i>	Littleleaf – GREENSPIRE®	X				X		X						X			m		Preferred by Japanese beetle
<i>Tilia cordata x mongolica</i>	‘Harvest Gold’			X				X						X			m	X	
<i>Tilia tomentosa</i>	Silver – ‘Sterling Silver’	X						X						X			m		More resistant to Japanese beetle
<i>Tilia x flavescens</i>	‘Glenleven’	X						X						X			m		
Ulmus		Elm																	Selected for Dutch Elm Disease resistance
<i>Ulmus americana</i>	American – ‘Valley Forge’, ‘New Harmony’, ‘Princeton’		X			X											l-m		Scale
<i>Ulmus davidiana</i>	David, GREENSTONE®, CHOICECITY®	X															l-m	X	Elm leaf beetle resistant
<i>Ulmus davidiana</i> var. <i>japonica</i>	ACCOLADE® (‘Morton’)	X						X									l-m		No scale; elm leaf beetle resistant
<i>Ulmus davidiana</i> var. <i>japonica</i>	NORTHERN EMPRESS®			X													l-m	X	Hardy; dwarf; purple fall color
<i>Ulmus davidiana</i> var. <i>japonica</i>	‘Prospector’		X														l-m	X	Holds leaves late
<i>Ulmus japonica x U. pumila</i> ‘New Horizon’	‘New Horizon’			X													l-m		Fast grower
<i>Ulmus minor x U. parvifolia</i>	‘Frontier’		X				X										l-m	X	Subject to early fall frost
<i>Ulmus x ‘Morton Glossy’</i>	TRIUMPH® Elm	X				X											l-m		Elm leaf beetle; No scale
Xanthoceras		Yellowhorn																	
<i>Xanthoceras sorbifolium</i>	Yellowhorn- CLEAR CREEK™			X													l-m	X	Plant Select®
Zelkova		Zelkova																	
<i>Zelkova serrata</i>	Japanese Zelkovia ‘Musashino’			X		X								X	m		X		

CONIFER ALPHA — BOTANICAL

- Recommended
- Recommended for Most Sites
- Conditionally Recommended
- Trees With Potential
- Soil Chemistry
- Soil Texture
- Insects & Diseases
- Cold Hardiness
- Salt Tolerance
- Tree Wrap/Sun Scald
- Weak Wood
- Short Lived
- Suckers
- Re-seeds
- Transplants
- Leaf Scorch
- Exposure
- Water Needs
- Colorado Native
- Limited Availability

Plant Nomenclature from <i>World Flora Online</i>																				COMMENTS	
Botanical Name	Variety or Common Name	RATING			CRITICAL			CAUTIONARY						OTHER							
<i>Pinus heldreichii</i>	Bosnian	X																m			
<i>Pinus heldreichii</i>	Bosnian – ‘Emerald Arrow’	X																m		Narrow form; often listed as <i>P. leucodermis</i> (synonym)	
<i>Pinus monophylla</i>	Singleleaf Pinyon		X															i	X		
<i>Pinus mugo</i>	Mugo – ‘Tannenbaum’	X																l-m			
<i>Pinus nigra</i>	Austrian ‘Oregon Green’	X																m		Some Zimmerman pine moth	
<i>Pinus nigra</i>	Austrian – ‘Arnold’s Sentinel’, ‘Frank’		X															m		Columnar forms	
<i>Pinus ponderosa</i>	Ponderosa	X							X									l-m	X		
<i>Pinus strobus</i>	Eastern White			X		X		X										X	m	X	Soil chlorosis; wind damage
<i>Pinus strobiformis</i>	Southwestern White	X																l-m	X		
<i>Pinus sylvestris</i>	Scotch		X				X											m		Pine wilt nematode (PWN)	
<i>Pseudotsuga</i>		Douglas-fir																			
<i>Pseudotsuga menziesii</i> var. <i>glauca</i>	Rocky Mountain Douglas fir	X						X										m	X		
<i>Sequoiadendron</i>		Giant Sequoia																			
<i>Sequoiadendron giganteum</i>	Giant Sequoia – ‘Hazel Smith’				X	X	X											X	m-h	X	
<i>Taxodium</i>		Baldcypress																			
<i>Taxodium distichum</i> ‘Mickelson’	Baldcypress – SHAWNEE BRAVE™		X				X												m-h	X	
<i>Thuja</i>																					
<i>Thuja occidentalis</i>	Eastern Arborvitae – ‘Emerald’, ‘Techny’, ‘Degroots Spire’, ‘North Pole’		X				X											X	m-h		Needs protected area; susceptible to winter burn
<i>Thuja standishii</i> x <i>Thuja plicata</i>	Green Giant		X															X	m-h	X	Needs protected area

