Small trees suitable for city environment plantings under low overhead utility wires or in restricted spaces

**VERY DRY** 



# Species: Acer buergerianum

(ay'ser ber-jer-ee-ay'num)

Trident Maple

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree < 30 feet Height: 20' - 25' Leaves: Deciduous

Shape: round

Ornamental Other: tolerates moderate

drought

## **Environmental Characteristics**

Light: Full sun Hardy To Zone: 6a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil

**Environmental Other:** 

#### Insect Disease

none serious

#### **Bare Root Transplanting**

Any

#### Other

transplant in spring or fall, native to China

#### Moisture Tolerance

**VERY WET** 

Occasionally saturated or very wet soil

Consistently moist, well-drained soil

Consistently moist, dry soil

Occasional periods of dry soil

1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Acer buergerianum

Showing **1-2** of **2** items.

Cultivar Name	Notes
Aeryn	yellow and light orange fall color; exfoliating bark; 35-40' tall by 30' wide
Street Wise	easily trained to single leader, new growth emerges reddish purple



Acer buergerianum - Leaves



Acer buergerianum - Leaves



Acer buergerianum - Leaves



Acer buergerianum - Leaves



Acer buergerianum - Bark



Acer buergerianum - Habit



Acer buergerianum - Habit



Acer buergerianum - Leaf, Fall Interest



Acer buergerianum - Bark



# Species: Acer campestre

(ay'ser kam-pess'tree)

Hedge Maple

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree > 30 feet, Tree < 30 feet

Height: 25' - 35' Leaves: Deciduous Shape: round

Ornamental Other:

#### **Environmental Characteristics**

Light: Full sun Hardy To Zone: 5a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Environmental Other: Known to naturalize

or become invasive in some areas

CU Structural Soil™: Yes

#### **Insect Disease**

Relatively pest free

#### Bare Root Transplanting

Easy

#### Other

Native to Europe, Middle East and North Africa.

# VERY WET Occasionally saturated or very wet soil 1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Acer campestre

## Showing **1-17** of **17** items.

Cultivar Name	Notes
Carnival	'Carnival' - variegated foliage
Elegant	'Elegant' - compact, ascending habit; vigorous uniform growth
Elsrijk	'Elsrijk' - narrow crown, mildew-resistant
Evenley Red	'Evenley Red' - superior red fall color
Field Maple	'Field Maple' - more uniform habit than species
Jade Patina	'Jade Patina' - dark green leaves, more deeply indented than species; exceptional cold tolerance, not affected by frost cracking
Louisa Red Shine	'Louisa Red Shine' - leaves emerge red and fade to reddish-green
Metro Gold	'Metro Gold' (a.k.a. Panacek) - superior gold fall foliage; upright, narrow form; tighter shape than 'Queen Elizabeth'
Queen Elizabeth	'Queen Elizabeth' - more upright, vigorous, Japanese beetle resistant [zone 6b - 7b]
Nanum	'Nanum' (a.k.a. Compactum) - semi-dwarf, dense compact, bulbous habit; often grafted on a standard trunk
Postelense	'Postelense' - foliage emerges yellow and matures to green
Pulverentum	'Pulverentum' - variegated foliage
Royal Ruby	'Royal Ruby' - new foliage is purplish-red
Schichtel's Upright	'Schichtel's Upright' - upright habit
Schwerinii	new purple foliage that turns green
St. Gregory	vigorous; pyramidal growth with strong central leader; new foliage reddish-green that turns to a rich dark green
William Caldwell	fastigiate shape, foliage turns orange / red in autumn where planted on acid soils, not yellow as with species



Acer campestre - Habit, Fall Interest



Acer campestre - Leaves



Acer campestre - Leaves



Acer campestre - Habit



Acer campestre - Habit



Acer campestre - Habit



Acer campestre - Fruit



Acer campestre - Leaves



Acer campestre - Buds



# Species: Acer miyabei

(ay'ser mi-YA-bee-eye) Miyabe Maple

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree > 30 feet, Tree < 30 feet

Height: 35'-45', Width: 30'

Leaves: Deciduous

Shape: upright oval to rounded, can have open or dense branching, low branching

Ornamental Other: prefers full sun,

tolerates partial shade

#### **Environmental Characteristics**

Light: Full sun, Part shade

Hardy To Zone: 5a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

CU Structural Soil™: Yes

#### **Insect Disease**

none of significance

#### **Bare Root Transplanting**

Easy

#### Other

easy to transplant B&B or < 2� caliper bare root

# VERY WET Occasionally saturated or very wet soil 1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Acer miyabei

Showing **1-2** of **2** items.

Cultivar Name	Notes
Rugged Ridge	'Rugged Ridge' - more deeply furrowed corky bark than species
State Street	'State Street' (a.k.a. Morton) - hardy to zone 4; upright oval form; good uniform branching; dark green foliage; good golden yellow fall color; possibly fast growing



Acer miyabei trunk



Acer miyabei foliage



Acer miyabei habit



Acer miyabei - Bark



Acer miyabei - Leaf



Acer miyabei - Habit



# Species: Acer saccharum

(ay'ser sak-kar'um)

Sugar Maple; Rock Maple; Hard Maple

#### **Cultivar Information**

Large tree except for 'Sugar Cone', which is a dwarf ,<30'.

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree > 30 feet, Tree < 30 feet

Height: 60' - 75' (spread variable), some

cultivars less than 30' Leaves: Deciduous

Shape: upright oval to mounded; dense

foliage

Ornamental Other:

#### **Environmental Characteristics**

Light: Full sun

Hardy To Zone: 3b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Environmental Other: Intolerant of compacted soil and urban stresses.

#### **Insect Disease**

few problems unless sited too close to roads and highways; leaf scorch and verticillium wilt; dieback under stress

#### **Bare Root Transplanting**

Easy

#### Other

native to North America (eastern Canada south to Texas); easy to transplant; sap is boiled down to make maple syrup

#### Moisture Tolerance

**VERY WET** 

1	Occasionally saturated or very wet soil			stently r -drained		Occas	ional per dry soil	iods of	Prolon	iged peri dry soil	ods of
1	2	3	4	5	6	7	8	9	10	11	12

**VERY DRY** 

# Cultivars for Acer saccharum

## Showing **1-14** of **14** items.

Cultivar Name	Notes
Adirondak	'Adirondak' (a.k.a.'Adizam') - columnar; turns Golden-Orange and holds late
Bonfire	'Bonfire' - broadly oval, vigorous, bright orange fall foliage
Commemoration	'Commemoration' - oval form; orange-gold in fall; leaves slow to drop
Endowment	'Endowment' - columnar form; bright yellow fall color
Goldspire	'Goldspire' - narrowly pyramidal; foliage turns golden in fall
Legacy	'Legacy' - glossy, thick leaves; drought resistant
Majesty	'Majesty' - large thick leaves; thick branching structure
Seneca Chief	'Seneca Chief' - Muscle like bark
Sugar Cone	'Sugar Cone' slow growing, dwarf (<30') with tight conical canopy, looks like a cartoon-tree when mature
Apollo	'Apollo' (a.k.a. 'Barrett Cole') - semi-dwarf; grows to 30' tall x 10' wide; narrow, columnar form; yellow-orange to red fall color; resistant to Japanese beetle
Autumn Fest	'Autumn Fest' - grows to 50' tall $x$ 35' wide; upright oval form; it is faster growing with a more upright shape than typical of sugar maples
Belle Tower	'Belle Tower' (a.k.a. 'Reba') - grows to 45' tall $\times$ 18' wide; columnar oval form; orange-yellow form; Japanese beetle resistant; adapted to heat and humidity
Flashfire	'Flashfire' - grows to 45' tall x 40' wide; broadly oval form; bright red early fall color bearing Sugar Maple for the South; improved mildew resistance
Green Mountain	Oval to round form, 50'-60' feet tall. Vigorous growth with leathery dark green leaves and mixture of red and yellow fall color. Zone 4.



Acer saccharum 'Sugar Cone'



Acer saccharum - Flowers



Acer saccharum - Bark



Acer saccharum - Habit, Fall Interest



Acer saccharum - Leaf



Acer saccharum - Habit



Acer saccharum - Habit



Acer saccharum - Leaves, Bark



Acer saccharum - Buds



# Species: Acer tataricum ssp. ginnala

(ay'ser tah-ta-ri'cum ssp. gi-nay'lah)

Amur Maple

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### Ornamental Characteristics

Size: Tree < 30 feet

Height: 15' - 18' (equal spread)

Leaves: Deciduous

Shape: multi-stem large shrub or small

tree; often rounded

Ornamental Other: One of the most adaptable and cold-hardy maples. Grows in full sun or light shade. Known to naturalize or become problematically

invasive in some areas.

#### **Environmental Characteristics**

Light: Full sun, Part shade

Hardy To Zone: 3a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil

Environmental Other: fragrant, creamy white flowers in April/May; wings of fruit turn red in Aug/Sept; leaves turn from rich dark green to excellent shades of yellow,

orange and red

#### Insect Disease

relatively free of problems; occasionally verticillium wilt, bacterial blight, or other maple diseases and insects

#### Bare Root Transplanting

Easy

#### Other

limb up to expose smooth gray bark for an artistic, sculptural landscape effect . Invasive in the Northeast

#### Moisture Tolerance **VERY WET VERY DRY** Occasional periods of Prolonged periods of Occasionally saturated Consistently moist, or very wet soil well-drained soil dry soil dry soil 1 10 11 3 12

# Cultivars for Acer tataricum ssp. ginnala

## Showing **1-9** of **9** items.

Cultivar Name	Notes
Durand Dwarf	'Durand Dwarf' - dwarf, shrubby
Embers	'Embers' - bright red fruits and fall color
Emerald Elf	'Emerald Elf' - compact, rounded, slow-growing
Flame	'Flame' - red fruits and fiery red fall color
Red Fruit	'Red Fruit' - brilliant red fruit
Red Rhapsody	'Red Rhapsody' (a.k.a. 'Mandy') - lustrous dark leaves, brilliant red fall color
Rugged Charm	'Rugged Charm' - grows to 28' tall x 15' wide; compact upright oval form; yellow-orange to red fall color; clusters of white flowers in May; red samaras
Beethoven	Narrow, columnar tree, ht 20-25', width 10'. Central leader. Red samaras. Fall color red and yellow Zone 4.
Mozart	Oval tree, 15-20' tall and 15' wide with central leader. Red samaras. Red and yellow fall color. Zone 4.



Acer tataricum ssp. ginnala -Leaves, Fruit



Acer tataricum ssp. ginnala - Fruit



Acer tataricum ssp. ginnala -Habit



Acer tataricum ssp. ginnala -Leaves, Fall Interest



Acer tataricum ssp. ginnala -Leaves, Fall Interest



Acer tataricum ssp. ginnala -Leaves, Fall Interest



Acer tataricum ssp. ginnala -Leaves



Acer tataricum ssp. ginnala - Bark Acer tataricum ssp. ginnala - Leaves, Fall Interest



# Species: Amelanchier spp.

(am-ell-lang'kee-er)

Serviceberry; Shadblow

#### **Cultivar Information**

A particularly diverse genus with many confusingly similar species. Both shrub and tree forms exist and multi-stem or single stem varieties are available. All species produce edible fruits, however some are more palatable/productive than others. A. alnifolia is a shrub form species with cultivars that are particularly cold hardy (generally to Zone 2 or 3).

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree < 30 feet

Height: 6' to 25' with spread 10'-20'

Leaves: Deciduous

Shape: small tree or large multi-stem

shrub

Ornamental Other: full sun to part shade

#### **Environmental Characteristics**

Light: Full sun, Part shade

Hardy To Zone: 3b

Soil Ph: Can tolerate acid to neutral soil

(pH 5.0 to 7.4)

Environmental Other: white flowers in early spring; edible globular berries; good

fall color

#### Insect Disease

Cedar-apple rust, fireblight, leaf spot, and

mites

#### Bare Root Transplanting

Moderately difficult

#### Other

Native to Eastern N. America

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of or very wet soil well-drained soil dry soil dry soil 9 1 8 10 11 12

# Cultivars for Amelanchier spp.

## Showing **1-21** of **21** items.

Cultivar Name	Notes
La Paloma	A. 'La Paloma' - drooping racemes; spring foliage emerges red; excellent fall color; small tree-form, to 13'
Northline	'Northline' - free suckering; early bearing; reaches 6-8 feet; heavy yield of large, delicious berries
Martin	'Martin' - early blooming; to 10'; produces large fruit with excellent flavor and uniform ripening
Regent	'Regent' - compact grower, to generally 4 to 6'; tolerates harsh, dry, or alkaline conditions when mature
Smokey	'Smokey' - most popular commercial variety; the flavor standard against which other cultivars are judged; produces a high yield of large fruits that have the highest sugar/acid ratio; to 8'
Standing Ovation	'Standing Ovation' (a.k.a. 'Obelisk') - uniform, columnar habit; spring foliage emerges red
Thiessen	'Thiessen'- vigorous, moderately suckering; to 15'; produces the largest berries of all varieties
Autumn Brilliance	'Autumn Brilliance' - to 15 - 25'; multi-stem, upright, dense habit; little suckering; tolerates a wide range of soils and some drought; supposedly resists leaf spot
Ballerina	'Ballerina' - possibly an A. lamarkii selection; upright habit; spreading branches; flowers are pendulous; spring foliage is bronze-colored, maturing to a dark glossy green in summer and turning a dark bronze-purple in the fall; to 15 - 20'; resistant to leaf spot and fire blight
Cole's Select	'Cole's Select' - low, vase-shaped shrub; multi-stemmed; 15' x 15' at maturity
Cumulus	'Cumulus' - moderately columnar; upright,oval, pyramidal habit; to 15 - 25'
Princess Diana	'Princess Diana' - grows to 25' $\times$ 15'; available both in multi-stemmed or single trunk-type forms; resistant to leaf spot fungus; long lasting fall color
Robin Hill	'Robin Hill' - flowers open pink and fade to white
Rubescens	'Rubescens' - pink flowering
Spring Flurry	'Spring Flurry' - an Amelanchier laevis selection; grows to 28' tall x 20' wide; upright oval form; orange fall color; central leader supports strongly upward-oriented scaffold branches

Cultivar Name	Notes
Reflection	'Reflection' (a.k.a.'Refzam') - oval, upright form; vigorous habit; similar ornamental traits as species; grows to 25' tall $\times$ 20' wide
Majestic	'Majestic' - possibly an A. laevis cultivar; narrow form; vigorous growth; long, drooping racemes with many white flowers; new foliage dark, reddish orange color becoming thick and dark green, as they mature; resistant to heat and humidity; reaching twice the height of prior known A. laevis trees during the same growth period
Prince William	'Prince William' - possibly an A. laevis $x$ A. canadensis hybrid; multi-stemmed, shrubby form; not exceeding 10'; spring foliage emerges red; good fruit set; multi-colored fall leaves
Rainbow Pillar	'Rainbow Pillar' (a.k.a. 'Glenform') - possibly a A. canadensis cultivar; shrubby form; upright, narrow habit; to 20' tall
Spring Glory	'Spring Glory' (a.k.a. 'Sprizam') - possibly an A. canadensis cultivar; compact, upright habit; to 12' tall and 8'-10' wide; orange/yellow fall color
Tradition	'Tradition' (a.k.a.'Trazam') - possibly an A. canadensis cultivar; maintains a central leader; to 25'-30' tall; good early bloom



Amelanchier spp. - Habit, Fall Interest



Amelanchier spp. - Flowers



Amelanchier spp. - Habit



Amelanchier spp. - Habit



Amelanchier spp. - Bark



Amelanchier spp. - Habit



Amelanchier spp. - Immature Flowers



Amelanchier spp. - Flowers



Amelanchier spp. - Leaves



# Species: Betula nigra

(bet'you-lah nye'grah)

River Birch; Red Birch

#### **Cultivar Information**

Most *Betula nigra* culivars are medium to large trees **except for 'Fox Valley**' which is a dwarf tree approximately 15' tall.

\* See specific cultivar notes on next page.

#### Ornamental Characteristics

Size: Tree > 30 feet, Tree < 30 feet Height: 40' - 70' (spread 40' - 60')

Leaves: Deciduous

Shape: pyramidal-oval to rounded

Ornamental Other:

#### **Environmental Characteristics**

Light: Full sun Hardy To Zone: 3b

Soil Ph: Can tolerate acid to neutral soil

(pH 5.0 to 7.4)

Salt Tolerance: Tolerates salty soil Environmental Other: Medium to fast growth. best in consistently moist acid soil

#### Insect Disease

resistant to bronze birch borer; leaf spot can cause defoliation; susceptible to leaf miner

#### **Bare Root Transplanting**

Moderately difficult

#### Other

native to US, from Massachusetts south to Florida, west to Kansas and Minnesota

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of well-drained soil or very wet soil dry soil dry soil 9 1 10 11 12

# Cultivars for Betula nigra

## Showing **1-9** of **9** items.

Cultivar Name	Notes
City Slicker	'City Slicker' - vigorous; drought tolerant; white bark
Dura-Heat	'Dura-Heat' - closely spaced leaves; cold hardy
Graceful Arms	'Graceful Arms' - semi-weeping form
Heritage	'Heritage' (a.k.a. Cully) - superior; vigorous; salmon bark
Shiloh Splash	'Shiloh Splash' - white variegated foliage
Summer Cascade	'Summer Cascade' - Weeping; semi-dwarf, 6-8' tall and wide
Suwanee	'Suwanee' - more lustrous leaves; salmon white bark
Tecumseh Compact	'Tecumseh Compact' - shrubby form with graceful semi-arching branches
Fox Valley	'Fox Valley' (a.k.a 'Little King) - dwarf,dense & compact with branches to the ground



Betula nigra - Bark



Betula nigra - Bark



Betula nigra - Habit



Betula nigra Fruit ED



Betula nigra - Habit



Betula nigra - Leaf



Betula nigra - Leaves



Betula nigra - Habit



Betula nigra - Bud



# Species: Carpinus caroliniana

(kar-pine'us ka-ro-lin-ee-ay'nah)

American Hornbeam; Blue Beech; Ironwood; Musclewood

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree < 30 feet

Height: 30'

Leaves: Deciduous

Shape: round, spreading

Ornamental Other: prefers shaded, moist

soils

#### **Environmental Characteristics**

Light: Part shade Hardy To Zone: 3b

Soil Ph: Can tolerate acid to neutral soil

(pH 5.0 to 7.4)

#### Insect Disease

relatively trouble free, little maintenance,

ice storms can be a problem

#### **Bare Root Transplanting**

Difficult

#### Other

transplant in spring; somewhat slower to establish, Native to Eastern N. America

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of or very wet soil well-drained soil dry soil dry soil 1 9 10 11 12

# Cultivars for Carpinus caroliniana

## Showing **1-4** of **4** items.

Cultivar Name	Notes
Ball O' Fire	a.k.a. 'J.N. Globe' - compact, globe form; superior fall color; matures to 15' x 15'
Firespire	a.k.a. 'J.N. Upright' - tight upright habit; notable orange red fall color; mature to 20' tall by 10' wide
Native Flame	oval, upright form; notable bright red fall color
Palisade	narrow, upright form; dense, tidy habit; grows 25' tall and 12' wide



Carpinus caroliniana - Bark



Carpinus caroliniana - Habit



Carpinus caroliniana - Bark



Carpinus caroliniana - Leaves, Fruit



Carpinus caroliniana - Bark



Carpinus caroliniana - Bark



Carpinus caroliniana - Leaves



Carpinus caroliniana - Buds



Carpinus caroliniana - Habit, Fall Interest



# Species: Cercis canadensis

(ser'sis kan-ah-den'sis)

Eastern Redbud

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree < 30 feet, Shrub > 8 feet Height: 20' - 35' (spread 20' - 35')

Leaves: Deciduous

Shape: picturesque horizontal branching

habit

Ornamental Other: Single stem or multi

stemmed forms available.

#### **Environmental Characteristics**

Light: Full sun, Part shade

Hardy To Zone: 5b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Environmental Other: tolerant of shade

and heat

CU Structural Soil™: Yes

#### **Insect Disease**

canker and verticillium wilt can cause damage

#### **Bare Root Transplanting**

Moderately difficult

#### Other

native to eastern and south-central U.S.

# VERY WET Occasionally saturated or very wet soil 1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Cercis canadensis

## Showing **1-13** of **13** items.

Cultivar Name	Notes
Ace of Hearts	'Ace of Hearts' - compact habit; semi-glossy, notably heart-shaped leaves; zig-zag stems; dense dome-shaped canopy which typically requires no pruning
Alba	'Alba' - white flowers
Appalachian Red	'Appalachian Red' - dark reddish pink flowers
Flame	'Flame' - double-flowered variety
Forest Pansy	'Forest Pansy' - purplish foliage- less cold hardy
Hearts of Gold	'Hearts of Gold' - new leaves emerge red then turn to chartreuse; older foliage fades to green
Lavender Twist	'Lavender Twist' (a.k.a. 'Covey') - weeping form; contorted, arching branches
Northern Strain	'Northern Strain' - more cold hardy, to zone 5a
Rising Sun	'Rising Sun' - Similar to 'Hearts of Gold', slightly more colorful; new foliage emerges red then fades to orange, yellow and finally green
Royal White	'Royal White' (a.k.a. 'Royal') - white flowering; more compact, earlier blooming, more floriferous, and produces larger flowers than 'Alba'
Ruby Falls	'Ruby Falls' - weeping form; purple foliage
Silver Cloud	'Silver Cloud' - oddly irregular, splotchy variegating
Withers Pink Charm	'Withers Pink Charm' - brighter pink flowers than species





Cercis canadensis at Chanticleer Gardens



Cercis canadensis 'Alba' - Habit, Flowers



Cercis canadensis - Flowers



Cercis canadensis 'Alba' - Flowers Cercis canadensis - Flowers



Cercis canadensis - Habit



Cercis canadensis - Leaf



Cercis canadensis - Fruit



# Species: Cornus mas

(kore'nus mass)

Corneliancherry Dogwood; Cornelian Cherry

#### **Cultivar Information**

There are many cultivars of this plant. Particularly in Europe it is used as a food plant and many high-yield fruiting cultivars exist there, occasionally some are available in the U.S.

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree < 30 feet

Height: 18' (spread 15' - 20')

Leaves: Deciduous

Shape: rounded; multi-stem, occasionally

grown a single stem Ornamental Other:

#### **Environmental Characteristics**

Light: Full sun, Part shade

Hardy To Zone: 5a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

CU Structural Soil™: Yes

#### Insect Disease

pest free

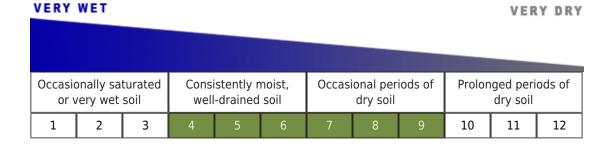
#### **Bare Root Transplanting**

Easy

#### Other

Native Central and Southern Europe and Western Asia.

#### Moisture Tolerance



# Cultivars for Cornus mas

## Showing **1-13** of **13** items.

Cultivar Name	Notes
Alba	'Alba' - white fruits
Aurea	'Aurea' - gold to chartreuse mature foliage
Flava	'Flava' - yellow fruits
Golden Glory	'Golden Glory' - upright form; heavy bloomer; widely available in the trade, probably not as hardy as other forms
Nana	'Nana' - dwarf, to three feet tall
Variegata	'Variegata' - white variegated foliage
Aureo-Elegantissima	`Aureo-Elegantissima' (a.k.a. 'Elegantissima', 'Tricolor')- leaves bordered in yellow, green and pink
Fructu Violaceo	`Fructu Violaceo' - purple fruits
Macrocarpa	`Macrocarpa' - larger fruits
Spring Glow	`Spring Glow' - low chilling requirement; beautiful flowers; leathery foliage; useful for getting fruit set in southern climes
Elegant	'Elegant' - improved fruit set
Pioneer	'Pioneer' - heavy fruit set
Redstone	'Redstone' - improved heavier fruit set





Cornus mas - Bark



Cornus mas - Buds



Cornus mas - Habit



Cornus mas - Buds



Cornus mas - Leaves



Cornus mas - Leaves, Fruit



Cornus mas - Habit



Cornus mas - Flowers



# Species: Cotinus obovatus

(koe-tie'nus ob-oh-vay'tus)

American Smoketree

#### **Cultivar Information**

This species has almost no cultivars and any that exist are rare. It has a lot of potential, particularly for creating cultivars with superior fall color, improved urban hardiness; improved form; and superior panicle color/yield. Keep an eye out for new varieties in the future.

\* See specific cultivar notes on next page.

#### Ornamental Characteristics

Size: Tree < 30 feet. Shrub > 8 feet

Height: 20' - 30; (variable spread)

Leaves: Deciduous

Shape: upright, oval/rounded shrub, more

tree-like than C. Coggygria

Ornamental Other:

#### **Environmental Characteristics**

Light: Full sun

Hardy To Zone: 5b

Soil Ph: Any

Environmental Other: blue-green leaves turn intense yellow, orange, red, purple in

fall;

CU Structural Soil™: Yes

#### Insect Disease

none serious; weak wood susceptible to

ice damage

#### Bare Root Transplanting

Difficult

#### Other

Native to South and Midwest US, Difficult to Transplant

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of well-drained soil or very wet soil dry soil dry soil 1 2 3 12

# Cultivars for Cotinus obovatus

## Showing **1-2** of **2** items.

Cultivar Name	Notes
Red Leaf	'Red Leaf' - superior, reliable fall color
Grace	Hybrid with C.coggygria, but much more tree like than the European smokebush.  Marroon to purple foliage. Can be specified as multi-stemmed or single stemmed.















Cotinus obovatus - Bark



Cotinus obovatus - Leaves, Fall Interest



Cotinus obovatus - Habit, Fall Interest



# Species: Crataegus crus-galli

(kra-tee'gus kruss-gal'eye

Cockspur Hawthorn

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree < 30 feet Height: 20' - 25' Leaves: Deciduous

Shape: round

Ornamental Other: tolerant of a wide range of soils except poorly drained ones

#### **Environmental Characteristics**

Light: Full sun Hardy To Zone: 4a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil Environmental Other: white flowers, bright red persistent fruit, strongly horizontal branching pattern; thorns

CU Structural Soil™: Yes

#### Insect Disease

Susceptible to cedar-hawthorn rust, leaf blight, lacebug

#### **Bare Root Transplanting**

Moderately difficult

#### Other

transplant B & B, somewhat slow to establish, native to East and Midwest US and Canada

#### Moisture Tolerance **VERY WET VERY DRY** Prolonged periods of Occasionally saturated Consistently moist, Occasional periods of well-drained soil or very wet soil dry soil dry soil 11 1 9 10 12

# Cultivars for Crataegus crus-galli

# Showing **1-2** of **2** items.

Cultivar Name	Notes
Crusader	'Crusader' (a.k.a. 'Cruzam') - thornless; said to be particularly disease resistant
Inermis	'Inermis' - thornless variety



Crataegus crus-galli - Fruit



Crataegus crus-galli - Leaves



Crataegus crus-galli - Thorn



Crataegus crus-galli - Habit



Crataegus crus-galli - Habit



Crataegus crus-galli - Habit



Crataegus crus-galli - Flowers



Crataegus crus-galli - Leaf



Crataegus crus-galli - Fruit



# Species: Crataegus phaenopyrum

(kra-tee'gus fee-no-pye'rum)

Washington Hawthorn

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### Ornamental Characteristics

Size: Tree < 30 feet Height: 20' - 30' Leaves: Deciduous

Shape: round

Ornamental Other: tolerant of a wide range of soils except poorly drained ones

## **Environmental Characteristics**

Light: Full sun Hardy To Zone: 4b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil Environmental Other: white flowers; thorns; reddish-purple fall color; bright,

glossy red persistent fruit CU Structural Soil™: Yes

#### Insect Disease

resistant to cedar-hawthorn rust; less susceptible than other hawthorns to disease; susceptible to lacebug

# Bare Root Transplanting

Difficult

# Other

transplant in spring; somewhat slow to establish, native to Eastern and Midwest US

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of or very wet soil well-drained soil dry soil dry soil 9 1 3 10 11 12

# Cultivars for Crataegus phaenopyrum

# Showing **1-3** of **3** items.

Cultivar Name	Notes
Fastigiata	'Fastigiata' - fastigiate form; columnar habit; to 30' tall x 20' wide
Princeton Sentry	'Princeton Sentry' - fastigiate form; columnar habit, to 30' tall $x$ 20' wide; nearly thornless
Vaughn	'Vaughn' (a.k.a. x 'Vaughnii') - hybrid with C. crus-galli; profuse, long-lasting red fruit; susceptible to rust



Crataegus phaenopyrum -Flowers



Crataegus phaenopyrum - Fruit



Crataegus phaenopyrum -Leaves, Fruit



Crataegus phaenopyrum - Rust



Crataegus phaenopyrum - Thorn Crataegus phaenopyrum - Bark





Crataegus phaenopyrum - Thorns Crataegus phaenopyrum -



Leaves, Fruit



Crataegus phaenopyrum - Habit, Fall Interest



# Species: *Crataegus viridis* 'Winter King'

(kra-tee'gus veer'ih-dis ...)

Winter King Hawthorn

#### Ornamental Characteristics

Size: Tree < 30 feet Height: 20' - 30' Leaves: Deciduous

Shape: oval

Ornamental Other:

#### **Environmental Characteristics**

Light: Full sun Hardy To Zone: 5a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil Environmental Other: thorns; white flowers; purple and scarlet fall color; bright red persistent fruit, outstanding for

size and retention in winter CU Structural Soil™: Yes

## Insect Disease

resistant to cedar-hawthorn rust; less susceptible than other hawthorns to disease

# **Bare Root Transplanting**

Moderately difficult

# Other

transplant in spring; somewhat slow to establish, Native to East and Midwest US

#### Moisture Tolerance **VERY WET VERY DRY** Occasional periods of Occasionally saturated Prolonged periods of Consistently moist, or very wet soil well-drained soil dry soil dry soil 9 11 1 2 3 10 12



Crataegus viridis 'Winter King' -Leaves, Flowers



Crataegus viridis 'Winter King' -Habit, Fall Interest



Crataegus viridis 'Winter King' -Leaves, Flowers



Crataegus viridis flowers



Crataegus viridis 'Winter King' -Habit



Crataegus viridis 'Winter King' -Habit, Flowers



Crataegus viridis 'Winter King' -Habit



Crataegus viridis 'Winter King' -Habit



Crataegus viridis 'Winter King' -Leaves, Fruit



# Species: Gleditsia triacanthos

(gleh-dit'si-ah try-a-kan'thos)

Common Honeylocust; Honey Locust

#### **Cultivar Information**

The straight species of this tree posses large thorns. Most of the cultivars are selected from the var. inermis( thornless) variety. The 'Imperial' cultivar is <30'.

\* See specific cultivar notes on next page.

## Ornamental Characteristics

Size: Tree > 30 feet, Tree < 30 feet

Height: 30' - 70' (variable spread), some

cultivars<30'

Leaves: Deciduous

Shape: ovate; fine texture; graceful habit

Ornamental Other:

## **Environmental Characteristics**

Light: Full sun

Hardy To Zone: 4b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil Environmental Other: Full sun and

drought tolerant.

CU Structural Soil™: Yes

## Insect Disease

Overuse has created many insect problems; honeylocust plant bug, honeylocust borer, midge pod gall, webworm and spider mites

# Bare Root Transplanting

Easy

## Other

Native to central United States.

# VERY WET Occasionally saturated or very wet soil 1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Gleditsia triacanthos

# Showing **1-9** of **9** items.

Cultivar Name	Notes
Moraine	'Moraine' - graceful, umbrella-like habit; thornless
Shademaster	'Shademaster' - vase-like shape; upright, symmetrical habit; to 40' tall; produces some pods; superior drought tolerance; thornless
Skyline	'Skyline' (a.k.a. 'Skycole') - cold-hardy form; reduced fruiting; unusual upright growth habit; broadly pyramidal form; 40' tall and wide; thornless
Sunburst	'Sunburst' (a.k.a. 'Suncole') - golden yellow new foliage turns bright green; more susceptible to insect problems; thornless
var. inermis	var. inermis - thornless variety
Christie	'Christie' (a.k.a. Halka) - sturdy-trunked form; round-headed crown with less drooping branches; to 40' tall and wide; rarely fruits
Imperial	'Imperial' (a.k.a. 'Impcole') - relatively dwarf mature size; to 30' tall; compact spreading habit; produces few pods; thornless
Spectrum	'Spectrum' (a.k.a.'Speczam') - early spring bright yellow foliage, purportedly holds its golden hue later into the season than other gold-foliaged forms; habit is rounded; to 35' tall and wide
Rubylace	'Rubylace' - bronze-red foliage



Gleditsia triacanthos - Leaves, Thorns



Gleditsia triacanthos - Bark



Gleditsia triacanthos - Fruit



Gleditsia triacanthos - Habit, Fall Interest



Gleditsia triacanthos - Bud



Gleditsia triacanthos - Leaves



Gleditsia triacanthos - Habit



Gleditsia triacanthos - Fruit



Gleditsia triacanthos - Leaves



# Species: Koelreuteria paniculata

(kol-rew-teer'ee-ah pan-ik-u-lay'tah)

Golden-rain Tree; Varnish Tree

#### **Cultivar Information**

\* See specific cultivar notes on next page.

## **Ornamental Characteristics**

Size: Tree < 30 feet Height: 30' - 40' Leaves: Deciduous

Shape: round

Ornamental Other: tolerates heat

## **Environmental Characteristics**

Light: Full sun Hardy To Zone: 5b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil Environmental Other: yellow flower clusters in mid-summer; specify straight trunk and good branch structure or tag at

nursery

CU Structural Soil™: Yes

# Insect Disease

No diseases listed

# Bare Root Transplanting

Easy

# Other

somewhat weak wooded; transplant in spring, Native to China, Japan, Korea.

# VERY WET Occasionally saturated or very wet soil 1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Koelreuteria paniculata

# Showing **1-3** of **3** items.

Cultivar Name	Notes
Rose Lantern	'Rose Lantern' - pink fruits
September	'September' - later flowering
Summerburst	'Summerburst' - foliage more glossy than species; better symmetry and heat resistance than species



Koelreuteria paniculata as a street tree



Koelreuteria paniculata - Leaves, Habit, Fall Interest



Koelreuteria paniculata - Bark



Koelreuteria paniculata - Bark



Koelreuteria paniculata - Habit



Koelreuteria paniculata - Fruit



Koelreuteria paniculata - Panicle



Koelreuteria paniculata - Leaves, Fruit



# Species: Maackia amurensis

(mak'ee-ah a-moor-en'sis)

Amur Maackia

#### **Cultivar Information**

\* See specific cultivar notes on next page.

# **Ornamental Characteristics**

Size: Tree < 30 feet

Height: 20' - 30' (equal or wider spread)

Leaves: Deciduous

Shape: small, round headed tree

Ornamental Other: prefers sun; fixes atmospheric nitrogen; adaptable

## **Environmental Characteristics**

Light: Full sun

Hardy To Zone: 4a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil Environmental Other: white pea-like flowers in June/July; shiny amber bark peels and curls; leaflets emerge with grayish pubescence turning to rich green

CU Structural Soil™: Yes

#### Insect Disease

none serious

# **Bare Root Transplanting**

Easy

# Other

easy to transplant, Native to Manchuria

# Moisture Tolerance VERY WET

Occasionally saturated or very wet soil			istently r -drained		Occasi	ional per dry soil	iods of	Prolon	iged peri dry soil	ods of	
1	2	3	4	5	6	7	8	9	10	11	12

**VERY DRY** 

# Cultivars for Maackia amurensis

# Showing **1-3** of **3** items.

Cultivar Name	Notes
MaacNificent	'MaacNificent' - vigorous; upright branching; symmetrical vase shape; foliage shows silvery pubescence in spring
Starburst	'Starburst' - denser and more uniform and vigorous than the species
Summertime	'Summertime' - slightly smaller than species, height of 18-20', width of 12-15'



Maackia amurensis - Bark



Maackia amurensis - Bark



Maackia amurensis - Flowers



Maackia amurensis - Habit



Maackia amurensis - Leaves



Maackia amurensis - Habit



Maackia amurensis - Habit



Maackia amurensis - Habit



Maackia amurensis - Habit



# Species: Malus spp.

(may'lus flo-ri-bun'dah)

Flowering Crabapple

#### **Cultivar Information**

This is a genus with a wide variety of species, varieties, and cultivars. Plants in this genus are generally very susceptible to a wide variety of pests and diseases including but not limited to: fire blight, scab, cedar-apple rust; aphids, etc. Below are a selection f the more pest and disease resistant selections found within this genus. Keep in mid that crabapples are some of these most popular small flowering trees in the trade and new varieties and cultivars are in near constant selection.

\* See specific cultivar notes on next page.

# Ornamental Characteristics

Size: Tree < 30 feet

Height: 20'

Leaves: Deciduous

Shape: round

Ornamental Other: full sun for best flower

and fruit

# **Environmental Characteristics**

Light: Full sun

Hardy To Zone: 4b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil

CU Structural Soil™: Yes

## Insect Disease

cedar-apple rust; scab and mildew;

fireblight; Japanese Beetles

# **Bare Root Transplanting**

Easy

# VERY WET VERY DRY Occasionally saturated or very wet soil 1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Malus spp.

# Showing **1-33** of **33** items.

Cultivar Name	Notes
Adams	'Adams' - 20' high and wide; round form; profuse flowering; deep pink buds and flowers; 5/8", persistent red fruit; foliage green with a red tint
Adirondack	'Adirondack' - grows to 18' high x 12' wide; vase-like form; carmine buds that open to white flowers; $1/2$ ", bright red fruit; dark green leathery foliage
American Salute	'American Salute' (a.k.a. 'Amsalzam) - grows to 18' high x 10' wide; upright oval form; rose red buds and flowers; $3/8$ ", cherry red fruit; maroon-red foliage
American Triumph	'American Triumph' (a.k.a. 'Amertrizam') - grows to 20' high x 12' wide; upright columnar form; dark red buds and flowers; dark red/burgundy fruit; reddish-purple foliage
Jackii	'Jackii' - M. baccata cultivar; hardy to zone 3a; grows to 20' high and wide; round form; white-pink bud open early to fragrant white flowers; 3/8" deep purple-red fruit; glossy green foliage
Cardinal	'Cardinal' - grows to 16' high x 22' wide; broad spreading habit; pink buds open to bright pink to red flowers; $1/2$ ", deep red often sparse fruits; glossy dark purple-red foliage
Centurion	'Centurion' (a.k.a. 'Centsam')- grows to 20' high x 15' wide; narrow oval form; dark red buds open to rose red; $5/8$ " bright red persistent fruit; reddish foliage changing to green
Dolgo	'Dolgo' - grows to 30' high x 25' wide; oval form; white buds and flowers; 1.5" fruit, bright red edible fruit; glossy green foliage
Donald Wyman	'Donald Wyman'- grow to 20' high x 22' wide; round form; pink buds open to abundant white flowers; $3/8$ ", bright red persistent fruit; dark green foliage
Doubloons	'Doubloons' - grows to 18' high x 16' wide; dense oval habit; carmine buds open to double white flowers; $3/8$ " persistent yellow fruit; deep green foliage
Liset	'Liset' - grows to 15'high and wide; columnar habit; crimson bud open to large pink- red flowers; 1/2", dark red fruit; reddish foliage aging to greenish-bronze
Prairiefire	'Prairiefire' - grows to 20' high x 18' wide; oval, round with age; crimson buds open to pink-red flowers; $1/2$ ", persistent orange-red fruit; reddish aging to green red
Professor Sprenger	'Professor Sprenger' - grows to 20' high and wide; oval form, round with age; pink buds open to fragrant white flowers; 1/2" persistent, orange-red fruits
Purple Prince	'Purple Prince' - grows to 20' high and wide; round habit; carmine buds open to rose red flowers; 3/8", persistent maroon fruit; purple foliage aging to greenish-bronze

Cultivar Name	Notes
Red Jewel	'Red Jewel' (a.k.a. 'Jewelcole') - grows to 15' high x 12' wide; oval from; pink to white buds open to white flowers; $1/2$ " persistent bright red fruit
Robinson	'Robinson' - grows to 25' high and wide; oval form; crimson buds open to deep pink flowers; 3/8", dark glossy red fruit; reddish aging to bronze green
Royal Raindrops	'Royal Raindrops' (a.k.a. JFS-KW5) - grows to 20' high x 15' wide; upright spreading habit; pink buds that open to bright pinkish red flowers; 1/4", persistent red fruit; purple, cut-leaf foliage, turns orange red in fall
Sentinel	'Sentinel' - grows to 18' high x 12' wide; narrow oval habit; red buds open to to singe white flowers; $1/2$ ", persistent bright red fruit; dark green glossy foliage
Snowdrift	'Snowdrift' - grows to 20' high and wide; round, upright, dense, spreading form; pink buds that open to single white flowers; 3/8", persistent orange fruit; bright green glossy foliage
Strawberry Parfait	'Strawberry Parfait' - grows to 18' high x 22' wide; vase-like form; red buds open to large pink flowers; $3/8$ ", yellow fruit; reddish foliage aging to green
Sugartyme	'Sugartyme' (a.k.a. 'Sutyzam') - $18'$ high x $15'$ wide; oval habit; pink buds open to fragrant white flowers; $1/2"$ , persistent red fruit
Calocarpa	x zumi 'Calocarpa' - grows to 20' high x 22' wide; round form; deep red buds open to white flowers; $3/8$ ", persistent bright red fruit
Coralburst	'Coralburst' (a.k.a. 'Coralcole') - grows to 15' high and wide; compact habit; dense, rounded form; coral pink buds open to double, rose flowers; 1/2", bronze fruits; mildly susceptible to scab; excellent resistance to most other major diseases
Firebird	'Firebird' - dwarf M. sargentii selection; grows 8' high x $10'$ wide; rounded spreading form; red buds open to white flowers; $3/8"$ , more persistent bright red fruits than any other natural dwarf crabapple
Golden Raindrops	'Golden Raindrops' (a.k.a. 'Schmidtcutleaf') - $20$ 'high x $15$ ' wide; upright vase-like habit; profuse, white buds and flowers; $1/4$ ", tiny golden yellow fruit; fine textured, deeply cut foliage
Harvest Gold	'Harvest Gold' (a.k.a. 'Hargozam') - grows to 22' high x 18' wide; upright, vase-shaped form; white buds and flowers; $1/2$ ", persistent yellow fruit; fair scab and fire blight resistance; good cedar-apple rust and mildew resistance
Pink Princess	'Pink Princess' (a.k.a. 'Parrsi') - M. sargentii selection; dwarf, grows to 8' tall x 12' wide; low, spreading form; purple foliage, becoming bronze green; rose pink flowers; 1/4", deep red fruit; excellent resistance to scab, fireblight, cedar-Apple Rust, mildew
Purple Prince	'Purple Prince' - grows to 20' tall and wide; rounded from; purple foliage, becoming bronze green; rose red flowers; 3/8" - 1/2", maroon fruit; excellent resistance to scab, cedar-apple rust; good resistance to fireblight and mildew

Cultivar Name	Notes
Royal Raindrops	'Royal Raindrops' - grows to 20' tall x 15' wide; upright spreading form; purple, cutleaf foliage; orange-red fall color; bright pinkish red flowers; 1/4", persistent red fruit; excellent resistance to scab and cedar-apple rust; good resistance to fireblight and mildew
American Spirit	'American Spirit' - rounded form; red buds open to rose-red flowers; produces clusters of persistent red fruits; superior disease resistance; typically matures to 15-18' tall and wide
Madonna	'Madonna' - upright habit; pink buds open to double white flowers; produces golden- red fruits; green foliage emerges bronze; superior disease resistance; grows to $20'$ tall $\times\ 10'$ wide
Silver Drift	'Silver Drift' - rounded habit; red buds open to white flowers; small persistent red fruits; disease resistant; grows to 20' tall
Malus floribunda	Species with good disease resistance and wider than tall form



Malus spp. - Flowers



Malus spp. - Flowers



Malus spp. - Fruit



Malus spp. - Leaves



Malus spp. - Habit



Malus spp. - Habit



Malus spp. - Habit, Flowers



Malus spp. - Habit, Flowers



Malus spp. - Immature Fruit



# Species: Ostrya virginiana

(os'tri-ah ver-jin-i-ay'nah)

Hop Hornbeam

## **Ornamental Characteristics**

Size: Tree > 30 feet, Tree < 30 feet

Height: 30' - 50' Leaves: Deciduous

Shape: oval

Ornamental Other: tolerates light shade

# **Environmental Characteristics**

Light: Full sun, Part shade

Hardy To Zone: 3b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Environmental Other: slow growing; dark green leaves turn yellow/brown in fall and

drop early; attractive grayish brown exfoliating bark; distinctive fruit

resembles that of hops, hence the name

# Insect Disease

pest free

# Bare Root Transplanting

Difficult

## Other

slow to recover from transplanting; transplant in spring, Native to Eastern N. America

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of or very wet soil well-drained soil dry soil dry soil 9 10 1 11 12



Ostrya virginiana - Leaves, Fruit



Ostrya virginiana - Leaves



Ostrya virginiana - Bark



Ostrya virginiana - Habit



Ostrya virginiana - Bark



Ostrya virginiana - Fruit



Ostrya virginiana - Catkins



Ostrya virginiana - Catkins



Ostrya virginiana - Leaf



# Species: Parrotia persica

(pah-rote'ee-ah purr'sih-kah)

Persian Parrotia

## **Cultivar Information**

Several cultivars exist for this species, most are rare.

\* See specific cultivar notes on next page.

#### Ornamental Characteristics

Size: Tree < 30 feet

Height: 20' - 40' (spread 15' - 30')

Leaves: Deciduous

Shape: oval/rounded; single stem tree or

large multi-stem shrub

Ornamental Other: full sun to light shade;

withstands heat and cold

#### **Environmental Characteristics**

Light: Full sun, Part shade

Hardy To Zone: 5a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Environmental Other: leaves emerge red/purple/bronze, turn green, then yellow/orange/red in fall; small maroon flowers in late winter; exfoliating bark is

cream/gray/green/brown CU Structural Soil™: Yes

## Insect Disease

none

# **Bare Root Transplanting**

Easy

# Other

native to Iran; transplant B & B or from container

# Moisture Tolerance

**VERY WET** 

Occasionally saturated or very wet soil				istently r -drained		Occas	ional per dry soil	iods of	Prolor	iged peri dry soil	ods of
1	2	3	4	5	6	7	8	9	10	11	12

**VERY DRY** 

# Cultivars for Parrotia persica

# Showing **1-5** of **5** items.

Cultivar Name	Notes
Pendula	'Pendula' - weeping; dome-shaped form
Horizontalis	'Horizontalis' - semi-weeping, with a wide-spreading horizontal branching pattern; good fall color
Vanessa	'Vanessa' - upright, columnar habit; reddish new growth tips and good fall color
Ruby Vase	'Ruby Vase' - new leaves ruby-red; upright vase-shaped habit; grows to 30' high x 12' wide
Biltmore	'Biltmore' - superior bark and habit



Parrotia persica - Bark



Parrotia persica - Buds



Parrotia persica - Habit



Parrotia persica - Bark, Habit



Parrotia persica - Habit



Parrotia persica - Flowers



Parrotia persica - Bark



Parrotia persica - Habit



Parrotia persica - Habit, Fall Interest



# Species: Prunus 'Accolade'

# Flowering Cherry 'Accolade'

# **Ornamental Characteristics**

Size: Tree < 30 feet

Height: 20'-25', width 15'-25'

Leaves: Deciduous

Shape: rounded to vase-shaped,

spreading

Ornamental Other:

## **Environmental Characteristics**

Light: Full sun Hardy To Zone: 5a

Soil Ph: Can tolerate acid to neutral soil

(pH 5.0 to 7.4)

Salt Tolerance: Tolerates salt spray

## Insect Disease

Prunus have many potential problems; â€~Accolade' is reportedly more resistant than most

# **Bare Root Transplanting**

Easy

# Other

cross: P. sargentii x P. subhirtella

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of well-drained soil or very wet soil dry soil dry soil 1 2 3 9 10 11 12



Prunus 'Accolade' - Flowers



Prunus 'Accolade' - Flowers



Prunus 'Accolade' - Flowers



Prunus 'Accolade' - Habit, Flowers



Prunus 'Accolade' - Flowers



# Species: Prunus virginiana

(prue'nus ver-jin-i-ay'nah)

Chokecherry

#### **Cultivar Information**

All varieties produce, fruit which is very astringent, hence the common name. Fruit may be used in sauces, jellies and preserves, however. Fruits are very attractive to wildlife.

\* See specific cultivar notes on next page.

#### Ornamental Characteristics

Size: Tree < 30 feet

Height: 20' - 35' (spread 18' - 25')

Leaves: Deciduous

Shape: small tree or large shrub; oval-

rounded crown
Ornamental Other:

#### **Environmental Characteristics**

Light: Full sun

Hardy To Zone: 3a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

# Insect Disease

VERY SUSCEPTIBLE to eastern tent caterpillar and black knot fungus. In areas where these are a problem, this plant shouldn't be used.

# Bare Root Transplanting

Easy

## Other

native to Canada and northern U.S.; suckers heavily

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of or very wet soil well-drained soil dry soil dry soil 2 3 9 10 11 12

# Cultivars for Prunus virginiana

# Showing **1-8** of **8** items.

Cultivar Name	Notes
Schubert	'Schubert' - pyramidal habit; grows to 20-30' tall; foliage emerges green in spring, gradually maturing to dark purple by early summer; white flowers in racemes in spring give way in summer to clusters of reddish fruit which mature in fall to a dark purple
Canada Red	'Canada Red' - small white flowers in hanging clusters 3-5" long are produced in spring; green leaves in the spring, which turn dark purple by mid-summer; grows to a height of 20-25' but less in spread
Boughen's Chokeless	'Boughen's Chokeless' - non-astringent fruit
Copper Schubert	'Copper Schubert' - copper leaves
Mini-Schubert	'Mini-Schubert' - compact, purple leaved form
Robert	'Robert' - red-purple leaves
Bailey Select	'Bailey Select' - oval form; vigorous; straight gun-grey trunk; foliage emerges green, matures to purple giving a two-tone effect early in the summer; large white flowers; small black fruit that attracts birds
Purple Jewel	'Purple Jewel' - hardy non-fruiting form; larger leaves than other cultivars; new growth turns a deep wine red, with gorgeous, soft, blue-mauve undersides



Prunus virginiana 'Canada Red' -Habit



Prunus virginiana 'Canada Red' -Habit



Prunus virginiana - Leaf



Prunus virginiana - Flowers



Prunus virginiana - Habit



Prunus virginiana - Flowers



Prunus virginiana - Leaves



Prunus virginiana - Flowers



Prunus virginiana - Fruit



# Species: Prunus 'Snow Goose'

# **Snow Goose Cherry**

# **Ornamental Characteristics**

Size: Tree < 30 feet

Height: 20'

Leaves: Deciduous

Shape: upright when young, spreading

with age

Ornamental Other: profuse white flowers;

orange fall color

# **Environmental Characteristics**

Light: Full sun

Hardy To Zone: 5a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

# **Insect Disease**

resistant to common cherry foliage

diseases

# Bare Root Transplanting

Any

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of or very wet soil well-drained soil dry soil dry soil 1 2 3 8 9 10 11 12



Prunus 'Snow Goose' - Habit



Prunus 'Snow Goose' - Habit, Fall Interest



Prunus 'Snow Goose' - Bark, Leaves, Fall Interest



# Species: Robinia pseudoacacia

(roe-bin'ee-ah sue-doe-a-kay'see-ah)

**Black Locust** 

#### **Cultivar Information**

Variable size and shape. Globe <30'. 'Purple Robe,' 'Pyramidalis,' 'Globosum,' 'Bessoniana' are easy to transplant bare root.

\* See specific cultivar notes on next page.

#### **Ornamental Characteristics**

Size: Tree > 30 feet, Tree < 30 feet

Height: 40' - 70' (spread 20' - 35'), some

cultivars <30'

Leaves: Deciduous

Shape: open irregular

Ornamental Other: good in very difficult reclamation sites; tolerates intermittent flooding and drought; fixes atmospheric

nitrogen

#### **Environmental Characteristics**

Light: Full sun

Hardy To Zone: 4b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil

Environmental Other: white, fragrant flowers in late spring; dark gray ropy bark; dark bluish green pinnately compound

leaves

CU Structural Soil™: Yes

## Insect Disease

borers can be a serious problem; leaf miners may also be problematic

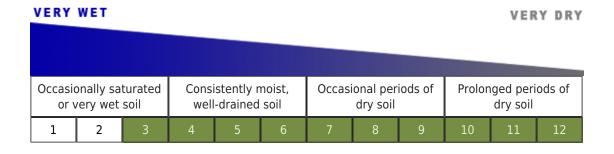
# Bare Root Transplanting

Easy

# Other

native to east-central U.S. (Pennsylvania to Iowa, south to Georgia and Oklahoma); widely used in Europe as a street tree. Prohibited as INVASIVE in New York State

#### Moisture Tolerance



# Cultivars for Robinia pseudoacacia

# Showing **1-11** of **11** items.

Cultivar Name	Notes
Bessoniana	'Bessoniana' - small; compact; well-branched; oval; spineless
Globe	'Globe' - small, spineless, <30'
Frisia	'Frisia' (a.k.a. 'Aurea') - foliage emerges golden yellow, dulls in summer heat; red spines on new shoots; vigorous grower to 30' - 50' tall
Idaho	'Idaho' - possibly an R. $x$ ambigua selection; tolerates difficult cultural conditions; cold tolerant to zone 3-4; rosy-pink blooms; grows to 40' tall $x$ 30' wide
Purple Robe	'Purple Robe' (a.k.a. 'Rouge Cascade', 'Casque Rouge', 'Pink Cascade', 'Red Cascade') - possibly an R. x ambigua selection; compact rounded form; rose-pink flowers; grows to a 40' tree; new growth emerges bronzy-red and retains some undertones of this color into summer; forms fewer seeds than the species; flowers slightly earlier in the season
Pyramidalis	'Pyramidalis' (a.k.a. 'Fastigiata') - strongly upright, fastigiate, spineless form; grows to 50' tall x 15' wide
Semperflorens	'Semperflorens' - sporadic bloom after the initial late-spring flush
Umbraculifera	'Umbraculifera' - dense, umbrella-like, dwarf form; grows to 20' tall; produces few or no thorns; flowers very sparsely; prone to damage from ice and borer insects
Twisty Baby	'Twisty Baby' (a.k.a. 'Tortuosa', 'Lace Lady') - twisted, contorted branches and stems; often grafted; usually do not exceed 10' in height; flowering is sparse or non-existent
Chicago Blues	'Chicago Blues' (a.k.a. 'Benjamin') - upright form with an oblong crown; thornless; blue-green foliage; grow to 50' tall x 35' wide
Inermis	'Inermis' - thornless variety



Robinia pseudoacacia - Habit



Robinia pseudoacacia - Bark



Robinia pseudoacacia - Leaves, Fruit



Robinia pseudoacacia - Leaves



Robinia pseudoacacia - Habit



Robinia pseudoacacia - Habit



Robinia pseudoacacia - Habit



Robinia pseudoacacia - Habit



Robinia pseudoacacia - Fruit



# Species: Sorbus alnifolia

(sore'bus al-ni-fo'lee-ah)

Korean Mountain Ash

#### **Cultivar Information**

\* See specific cultivar notes on next page.

#### Ornamental Characteristics

Size: Tree < 30 feet

Height: 40' - 50' (spread 20' - 30')

Leaves: Deciduous

Shape: pyramidal-round

Ornamental Other: full sun

# **Environmental Characteristics**

Light: Full sun, Part shade

Hardy To Zone: 4b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Environmental Other: attractive flowers and persistent red-orange fruit; orangered fall color; beechlike foliage emerges bright green, turns to dark green and then

yellow, golden, orange in fall

CU Structural Soil™: Yes

#### Insect Disease

susceptible to fireblight and borer

# **Bare Root Transplanting**

Easy

## Other

transplant in spring or fall, native Korea, China and Japan

#### Moisture Tolerance **VERY WET VERY DRY** Occasionally saturated Consistently moist, Occasional periods of Prolonged periods of well-drained soil or very wet soil dry soil dry soil 1 9 10 11 12

# Cultivars for Sorbus alnifolia

Showing **1-1** of **1** item.

Cultivar Name	Notes
Redbird	'Redbird' (a.k.a. 'Skyline') - upright-columnar form; red, persistent fruit; yellow fall color



Sorbus alnifolia - Bark



Sorbus alnifolia - Flowers



Sorbus alnifolia - Habit



Sorbus alnifolia - Habit



Sorbus alnifolia - Habit



Sorbus alnifolia - Leaves



Sorbus alnifolia - Habit



Sorbus alnifolia - Fruit



Sorbus alnifolia - Flowers



# Species: Syringa reticulata

(si-ring'gah reh-tick'you-lay-tah) Japanese Tree Lilac

#### **Cultivar Information**

\* See specific cultivar notes on next page.

## **Ornamental Characteristics**

Size: Tree < 30 feet

Height: 25' - 30' (spread 15' - 25')

Leaves: Deciduous Shape: oval tree

Ornamental Other: slow growing

## **Environmental Characteristics**

Light: Full sun Hardy To Zone: 3a

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Salt Tolerance: Tolerates salty soil Environmental Other: large, cream colored flowers in late June; suitable for large containers; lustrous brown bark with horizontal lenticels similar to cherry bark;

slow growth rate

CU Structural Soil™: Yes

## Insect Disease

resistant to powdery mildew; borers and scale may be problematic in warmer regions

# **Bare Root Transplanting**

Easy

# Other

transplant in spring or fall, native to Northern Japan

# VERY WET Occasionally saturated or very wet soil 1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Syringa reticulata

# Showing **1-7** of **7** items.

Cultivar Name	Notes
Summer Snow	'Summer Snow' - round, compact, 16', heavy flowering
Chantilly Lace	'Chantilly Lace' - leaves variegated with a pale creamy yellow perimeter
Cameo Jewel	'Cameo Jewel' - variegated form with yellow-cream splashed foliage
Ivory Silk	'Ivory Silk' - rounded form; stocky branch structure; blooms heavily, even when young; grows to 25' tall
Snowdance	'Snowdance' (a.k.a. 'Bailnce') - heavy blooming; flowers annually and begins flowering at an earlier age than the species; large, fragrant panicles of creamy white blooms; sterile variety produces no untidy, brown seedheads; lustrous, dark green foliage is slightly larger and darker than species
Snow Cap	'Snow Cap' (a.k.a. 'Elliott') - round compact form; uniform habit; freely blooming; large, fragrant, creamy-white flowers; grows to 15'-20' tall x 10'-12' wide in 10 years
Regent	'Regent' - canopy grows more narrowly than other S. reticulata selections; grows vigorously; produces abundant white flower clusters in summer; grows 25 - 30' tall $x$ 15' wide



Syringa reticulata - Bark



Syringa reticulata - Flowers



Syringa reticulata - Flowers



Syringa reticulata - Leaves, Fruit



Syringa reticulata - Habit



Syringa reticulata - Leaf



Syringa reticulata - Habit



Syringa reticulata - Fruit



Syringa reticulata - Buds



# Species: Zelkova serrata

(zel-koe'vah ser-ray'tah)

Japanese Zelkova; Saw-leaf Zelkova; Keaki Tree

#### **Cultivar Information**

Mostly tall trees except 'Schmidtlow' (Wireless) and 'City Sprite', which are <30.'

\* See specific cultivar notes on next page.

#### Ornamental Characteristics

Size: Tree > 30 feet, Tree < 30 feet Height: 60' - 80', some cultivars < 30'

Leaves: Deciduous

Shape: vase

Ornamental Other:

# **Environmental Characteristics**

Light: Full sun Hardy To Zone: 5b

Soil Ph: Can tolerate acid to alkaline soil

(pH 5.0 to 8.0)

Environmental Other: narrow crotch angles and poor branch attachment can cause splitting when older; dark green leaves turn yellow, bronze or reddish purple; cherrylike bark becomes gray and

exfoliating when mature CU Structural Soil™: Yes

## Insect Disease

No diseases listed

# Bare Root Transplanting

Moderately difficult

## Other

transplant in spring, native to Japan, Korea, Northern China, Taiwan

# VERY WET Occasionally saturated or very wet soil 1 2 3 4 5 6 7 8 9 10 11 12

# Cultivars for Zelkova serrata

# Showing **1-9** of **9** items.

Cultivar Name	Notes
Green Vase	'Green Vase' - upright vase; fast grower; golden-orange fall color
Halka	'Halka' - upright vase-like form; most elm-like; better branch attachment; yellow fall color
Village Green	'Village Green' - vase; shorter than other cultivars; fast grower; rusty red fall color
Musashino	'Village Green' - vase-like form; shorter than other cultivars; fast grower; rusty red fall color
Schmidtlow	'Schmidtlow' (a.k.a. 'Wireless') - vase-shaped form; grows to 30' tall
City Sprite	'City Sprite' (a.k.a. 'JES-KW1') - oval to vase-shaped form; grows to 30' tall
Goshiki	'Goshiki' - variegated form, leaves splashed or dusted with creamy white
Variegata	'Variegata' - variegated form with white rimmed leaves; weak grower
Spring Grove	'Spring Grove' - vase-shaped, tight branching form; a rival for 'Village Green'; ornamentally superior; dark green leaves with red fall color; attractive peeling bark; grows to 80' tall x 60' wide



Zelkova serrata - Fruit



Zelkova serrata - Bark



Zelkova serrata - Leaves, Fall Interest



Zelkova serrata - Habit



Zelkova serrata - Habit



Zelkova serrata - Leaf



Zelkova serrata - Fruit



Zelkova serrata - Habit



Zelkova serrata - Leaves